Header 1

Header 2

Header 3

Header 4

Header 5

Body Text

- Bullet Point
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    3. Number List Indent

The Outline

1. Section 1
    A. Item 1
    B. Item 2
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            a. subber item 1
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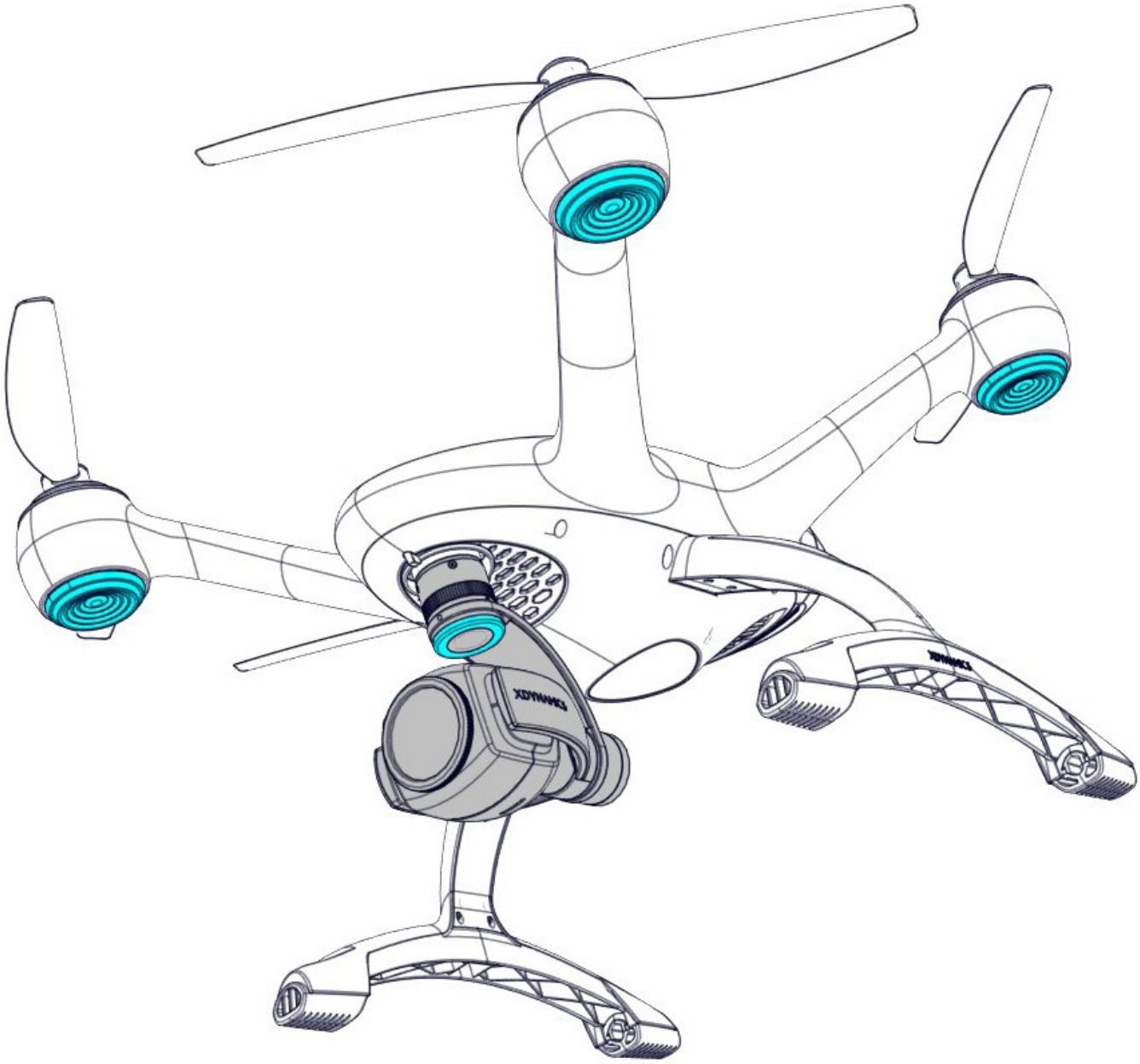
                iii. subbest item 3
        3. sub item 3
2. Section 2
    A. sub item 1
    B. sub item 2

EVOLVE

User Manual V1.0

BY XDYNAMICS



Using This Manual

Legends within this User Manual

Within this manual the following Legends are used:

 Safety Warning

 Important

 User Hints and Tips

 Reference

Requirements before First Flight

Read the following information before using the Evolve Product -

1. Evolve User Manual (This document)
2. What's in the box
3. Quick Start Guide
4. Legal Disclaimer and User Safety Guidelines
5. Battery Safety guidelines

For further information we suggest visiting our Evolve website

LEGAL NOTICE REQUIRED HERE

Website

Please visit the safety page and related documentation related to the Evolve Product -

http://www.xdynamics.com/product/Evolve

To find more information, tips, and troubleshooting, please browse our comprehensive articles at -

http://www.xdynamics.com/product/Evolve/info

On-Line Video Tutorials

http://www.xdynamics.com/support/videos

Security Disclaimer

Security of information for drone products has become a major concern for UAS operators that do not wish for their flight information and collected imagery to be accessed by outside entities or governments. Most leading drone manufactures do not have the ability to secure this type of information. A typical consumer drone sends all the Meta data information, such as aircraft position history and copies of all video and photography files, to unsecured cloud accounts. Some drone manufactures require the operator/owner of the drone to create an on line cloud account before the drone can be activated. This cloud account downloads all the information history from the drone every time the system is connected to the internet or when a firmware update is performed regardless if the operator/owner gives consent. This raises serious security concerns for UAS operators that fly their drones near security sensitive locations, such as military installations and airports.

XDynamics uniquely offers secure drone products not available by many other drone manufactures. We understand the need for secure drone systems and will never download secured or private Meta data information without the consent of our customers. XDynamics believes in guarding our customers privacy and will continue to strive for more secure drone products in the future.

THIS NEEDS TO BE CONFIRMED.

CHECK WITH LAWYERS IF ANY ADDITIONAL SECURITY INFORMATION FROM A LEGAL STANDPOINT IS REQUIRED

Contents

About This Manual

What is in the Document

We will get you started quickly by creating an XDynamics account and making sure the Evolve Ground station and Drone can connect to our server to download any latest updates and get your product registered before your first flight.

Product Information Section

Product Description

Within this section, the Evolve Drone and Ground Station are explained and the individual components listed. The Evolve Drone and Ground Station form a powerful system offering a true ultra low latency FPV video downlink with 4K local video recording, combined with an out the box, ready to use fully integrated dual screen controller.

Key Features

FHD Ultra Low Latency Live View

Evolve drone delivers incredible wireless live view performance including: 1080p Full HD video at 60 frames per second, with the latency as low as 10 milliseconds. With ultra low latency transmission over distances up to 600 meters, videographers can capture the intended shots and never miss a critical shot. It is ideal for video production of TV commercials, documentaries, feature movies and other applications that require delay-free control of a camera and drone.

Dual-Screen Drone Controller

Aerial photography and filming experience with XDynamics Evolve begins at your fingertips. Drawing inspiration from handheld game consoles, the foldable remote controller holds two separate high brightness screens in the palm of your hand, a 7" FPV viewfinder and a 5" multi-touch control panel, which is complemented with uncluttered buttons and thumbstick stick gimbals.

Smart Pilot System (SPS)

The Evolve by XDynamics boasts the world's most advanced dual screen pilot assistant system, an integrated system which combines all the required assistant functions under a single interface.

- Drone Radar: know where your drone is.
- Alert Centre: fully understand your drone status.
- Map Preloading: ensure you can view your map at flight.
- Dual Screen Editing: retouch your aerial images and edit your footages more conveniently.

Key Features Continued

Ultra-Precise Positioning System

Combined with algorithms and a comprehensive suite of positioning tools, including a GNSS module that supports GPS/QZSS, GLONASS, Galileo and BeiDou navigation systems, covering 99% of the world, as well as advanced optical flow and LiDAR sensors, Evolve provides position tracking with the higher precision than general drones with ultrasonic or visual sensors.

Flight Battery 6700mAH Lithium Polymer battery providing flight times of up to 16 Minutes.

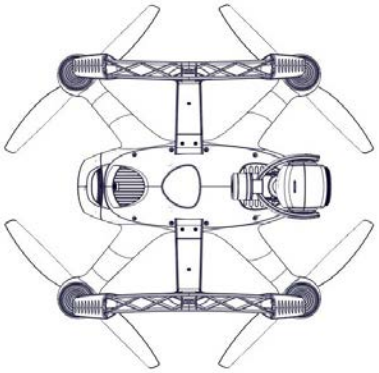
4K Camera with Sony CMOS Sensor

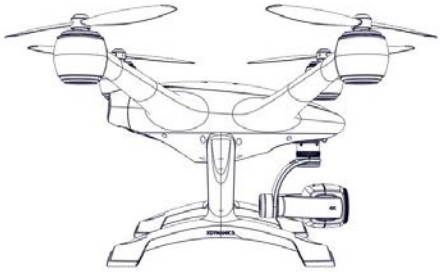
Equipped with a set of 21mm f/2.8 lens and Sony CMOS image sensor, with effective pixels of 12.4M, Evolve supports video capture at 4K@24fps, 2.7K@60fps, 1080p@120fps and 720p@240fps, accommodating to various scenarios and themes, from peaceful landscape to dynamic sport shorts. It supports RAW image file output (DNG format) and records video at 60Mbit/s, preserving sufficient data for post-production.

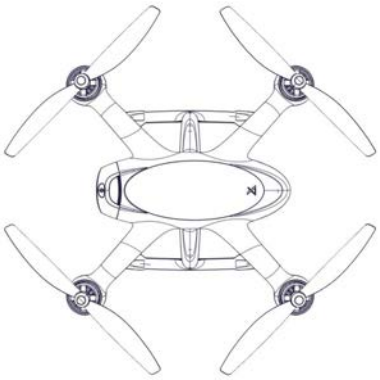
Drone Annotated Diagram

Detailed Schematic of the Evolve Aircraft

1. Propellers – 2 CW and 2 CCW
2. Motor
3. LED Light
4. Gimbal
5. 4K Camera LED Status
6. 4K Camera
7. Battery
8. Battery display
9. Battery release latch (Top)
10. Top Illuminated X Logo
11. Rear LED Indicator
12. FPV RF Heatsink
13. Optical Flow camera
14. USB Connection port
15. Pairing Button
16. Camera SD Data Card
17. Lidar (Altitude sensor)
18. Battery release latch (Lower)



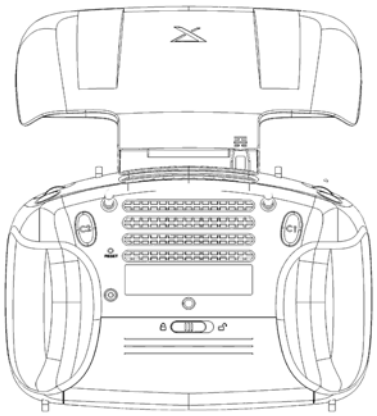


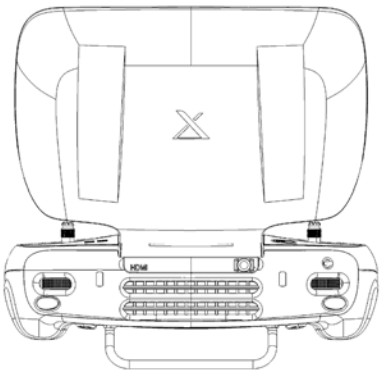


Remote Controller Annotated Diagram

Detailed Schematic of the Evolve Remote Controller

1. Selfi Camera
2. FPV Display 7" Screen
3. Proximity and Ambient Light sensor
4. Power Button and LED Indicator
   a. Blue = Battery Level is enough
   b. Amber = Recharge Battery
5. Control Stick (Left)
6. Control Stick (Right)
7. Land immediately button
8. Camera Exposure Wheel
9. Photo? / Video Button?
10. Customisable user Button B1
11. Customisable user Button B2
12. Gimbal Pan Control Wheel
13. Mode Select Switch
    a. G - GPS Mode
    b. C - Custom Mode
    c. A – Attitude Mode
14. Lanyard points
15. USB Connector
16. HDMI Output
17. Return Home Button
18. 5"Touch Screen
19. Microphone
20. Lanyard points
21. Reset Switch
22. External Power to Battery Charger
23. Battery Connector
24. Tripod Thread, (Standard Camera Thread)
25. Micro SD Storage Card
26. Desk Stand / Carrying Handle





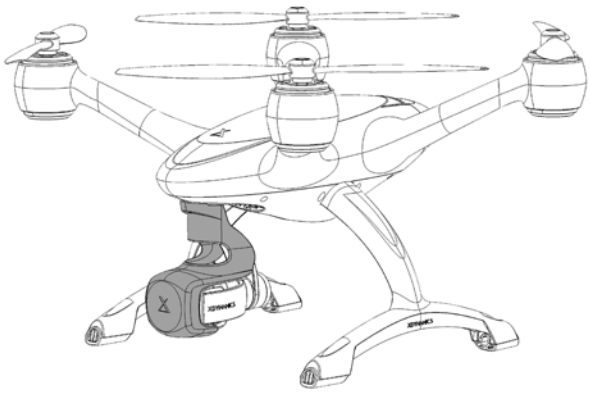
Aircraft Section

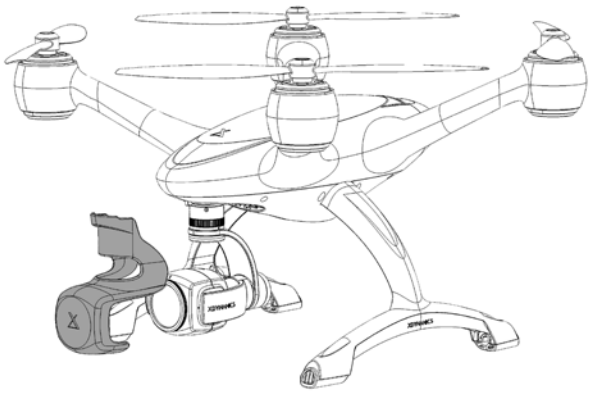
Preparing Drone for Flight

For the first Flight of the Evolve be sure to have a level surface available that is clear of obstacles and loose debris. Ensure that there are no overhead structures or trees that might interfere with the Evolve connecting to GPS satellites. Do not place the Evolve on metal surfaces or with metal near bye (metal interferes with the internal compass of the flight system and can cause directional errors). For the first flights of the Evolve be sure to fly in low wind conditions (below 10kt) and high visibility. Avoid flying in low visibility (like heavy fog) and rainy conditions.

Removing Camera Protector

See diagram for removing the camera protector -





Inserting Drone Battery

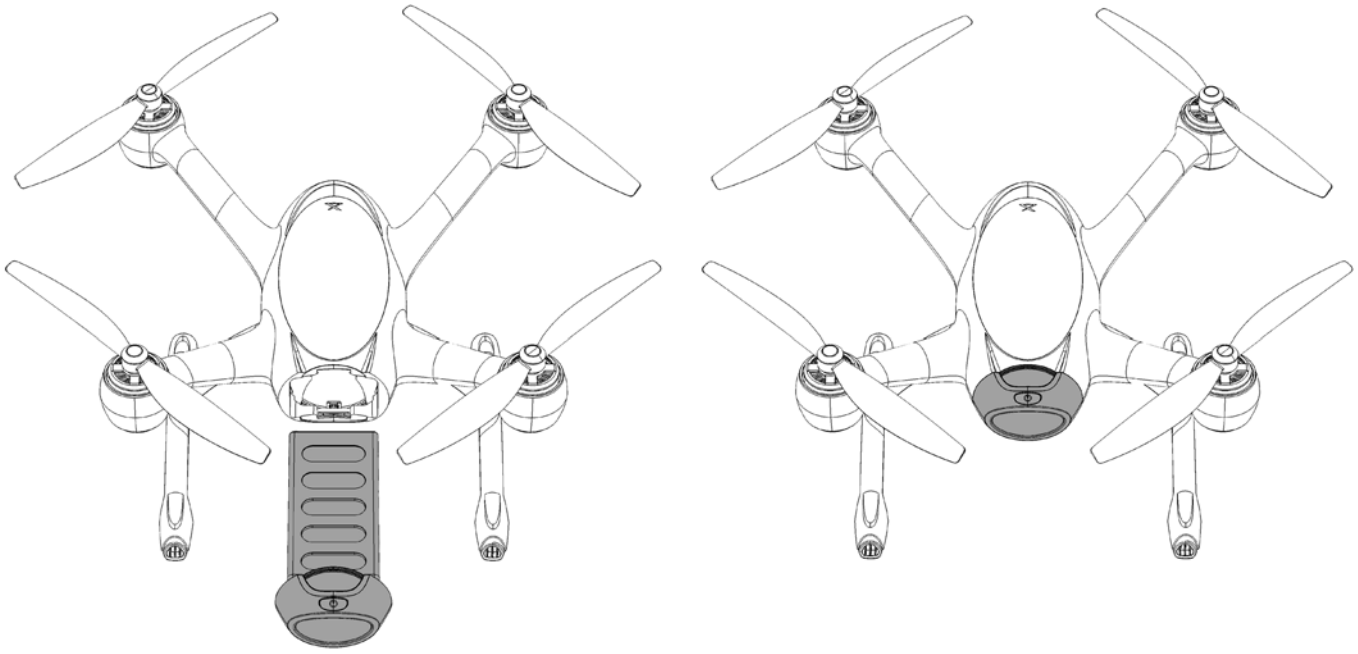
Be sure the aircraft battery is fully charged (Refer to Charging the Drone Battery Section).

The drone battery contains a contact lubricant suitable for electronic connectors.

The grease is white in appearance and can be seen on the Drone power connector and Drone battery. The lubricant is designed to last the life of the Drone and improve electrical performance. The white appearance is normal.

The user MUST not attempt to replace the grease with any other product. No attempt should be made to remove the lubricant.

See diagram for battery installation below -



Steps for drone battery installation -

1. First ensure the battery is turned OFF
2. Then ensure the orientation of the battery is with the OLED display of the battery is pointing upwards
3. Insert by pushing the battery gently into the drone until the two latches of the battery engage into the drone.

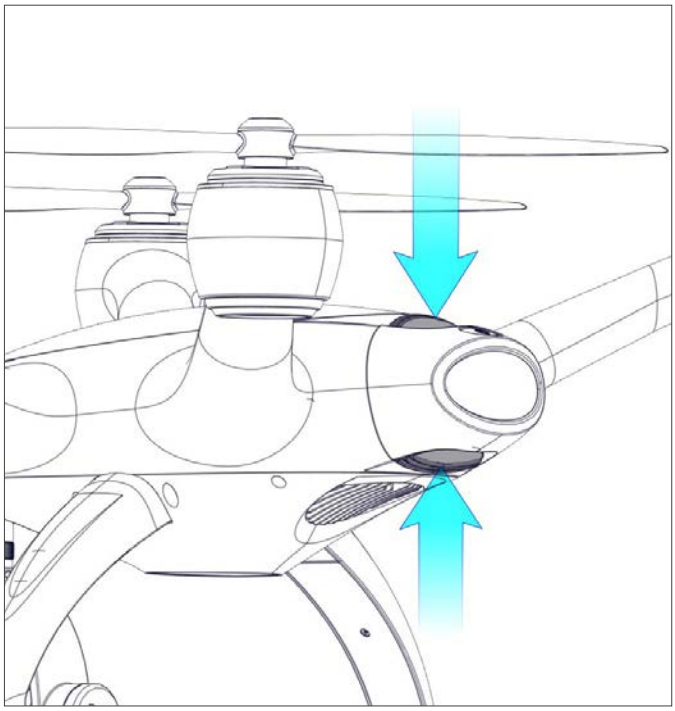
Removing the Drone battery

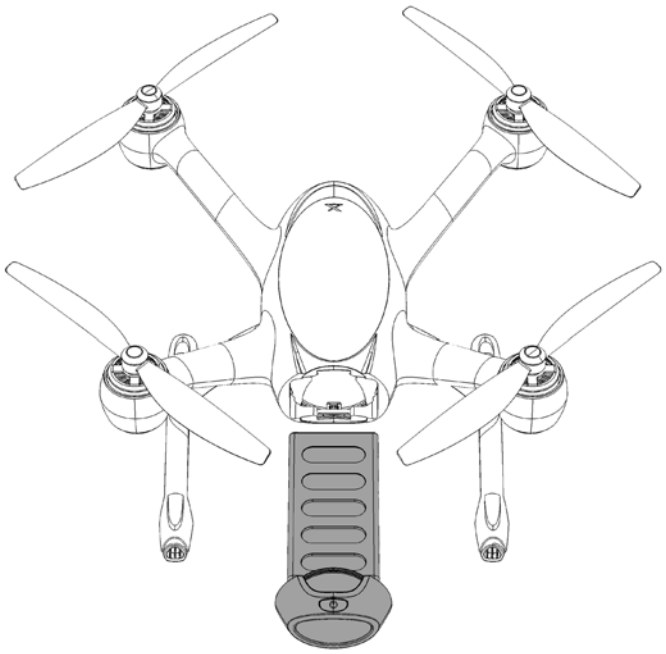
Remove the battery by squeezing the battery mechanical latches and pulling the battery out of the drone.

Ensure the Drone battery is turned OFF before inserting or removing it from the Drone or battery charger.

When removing the battery from the Drone allow the battery to cool to room temperature before charging the battery with the supplied charger.

See diagram for removing the drone battery below -





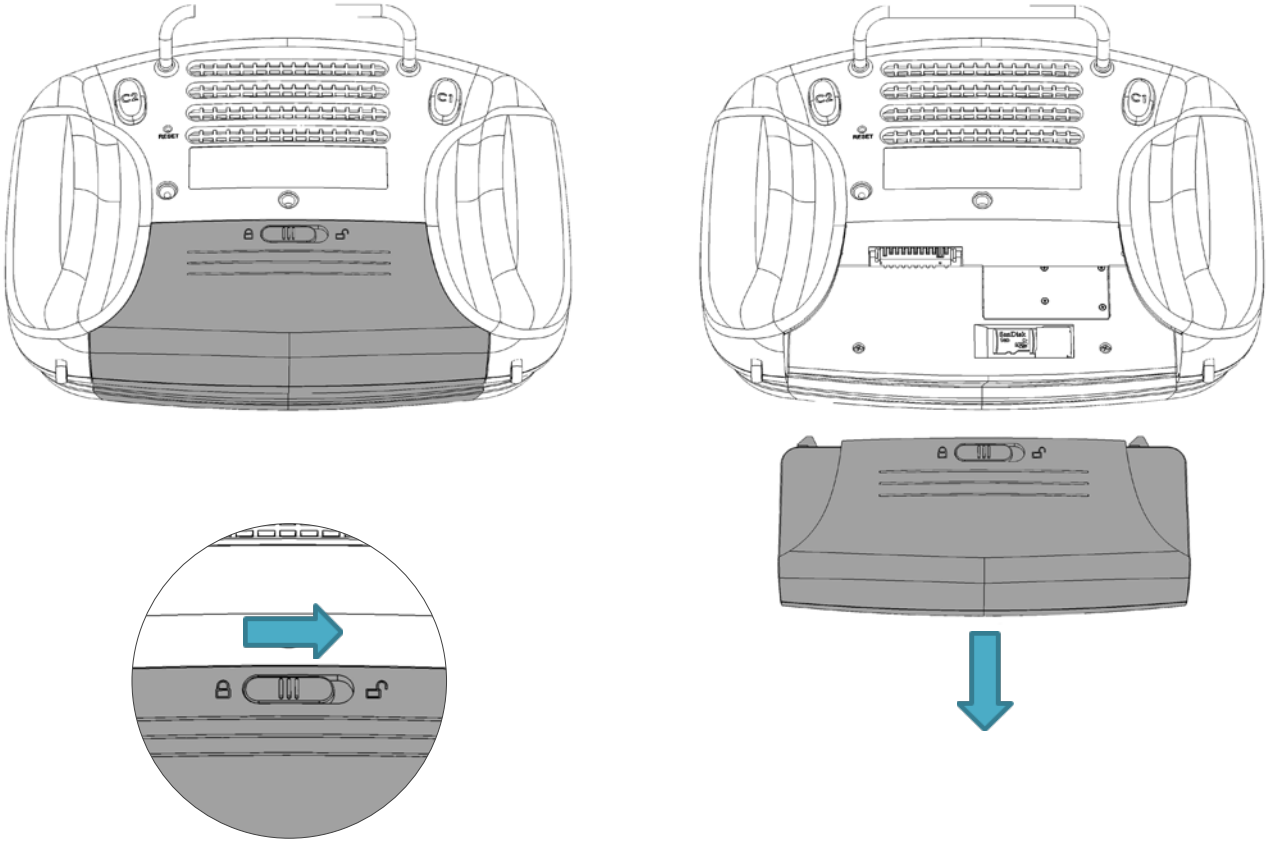
Steps for removing the drone battery -

1. First ensure the battery is turned OFF
2. Squeeze the top and bottom latches to disengage the lock.
3. Remove by firmly gripping and pulling the battery from the drone.

Removing the Drone battery

Remove the battery by squeezing the battery mechanical latches and pulling the battery out of the drone.

See diagram for battery installation below -



Steps for preparing the Remote Controller -

1. First ensure the battery is turned OFF
2. Slide the latch to the right to disengage the lock.
3. Remove by firmly gripping and pulling the battery from the ground station.

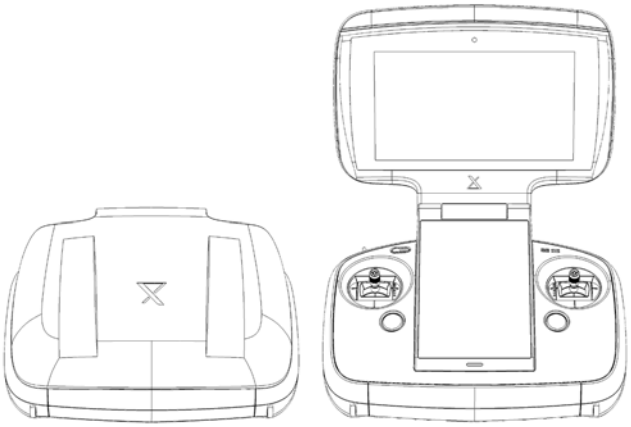
Turning On the Remote Controller

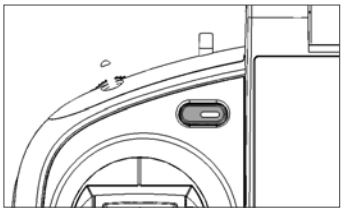
When powering on the Remote Controller be sure to provide at least 3 to 6ft of separation between the controller and the aircraft. (If the controller and aircraft are too close together the system may not properly connect).

Press and release the power switch and then press and hold the switch until the Remote Controller screens come on (this double press procedure assures that accidental power up will not happen). While the controller is initializing power on the aircraft battery (Refer to Turn On/Off Aircraft).

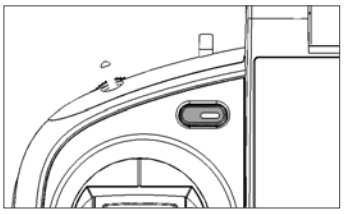
It is important to power on the controller and then the aircraft, in that order, to achieve a proper RC connection.

See diagram for turning on the Remote Controller below -





1. Quick press – Long Press Power Button



2. Blue Light Indicates Device Power On

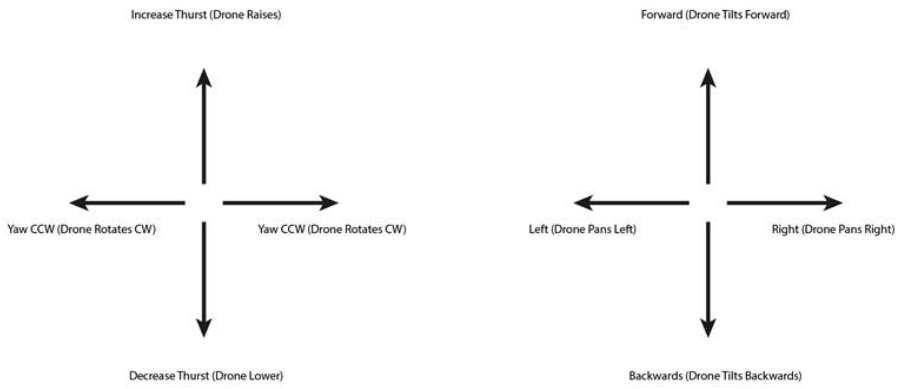
See diagram for Remote Controller screen below -

Press 'Begin' on the Evolve home screen to complete connection as instructed by the upper screen notice.

Aircraft Flight Control

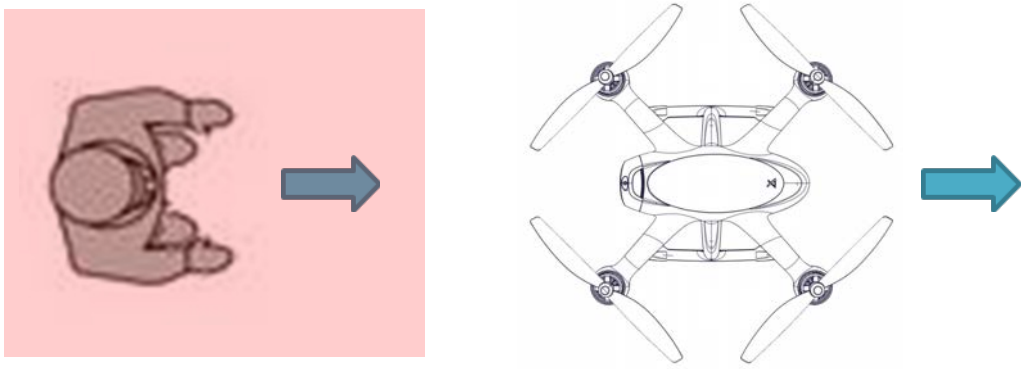
Flight control of the Evolve is accomplished by manipulating the control sticks on the ground controller. Proper orientation must always be considered when flying the drone. A basic rule of thumb when remote piloting an aircraft is to realize that when the aircraft's nose, or front end, is facing the pilot the control inputs for roll and yaw are backwards. This disorientation is the leading cause of all drone accidents that are due to pilot error. Therefore, it is very important to practice piloting in the proper orientation. This includes -

- Positioning the drone's nose, or front end, away from the pilot
- Be sure to stand at least 6ft directly behind the drone and keep the nose pointed away from you
- Fly in an open area free of obstacles such as trees, power lines, and buildings
- Make sure you are flying in GPS mode (The drone will automatically hold position when the control sticks are released)
- Insure all spectators are standing behind you



Drone and Pilot Orientation

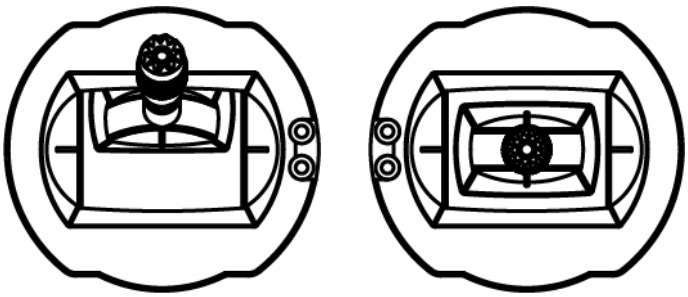
Ensure operator and drone both face forward in the same direction prior to launch.

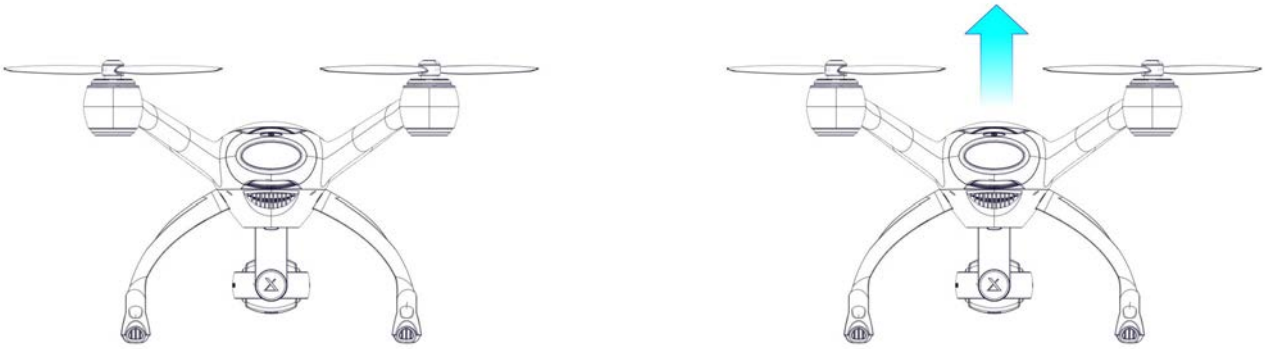


Throttle – Increase (Drone raises up)

Move left thumbstick up

Keep right thumbstick centred

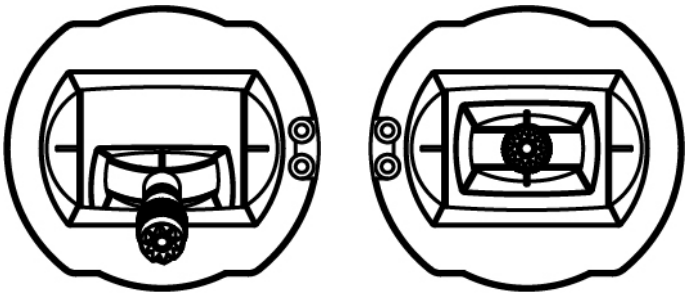


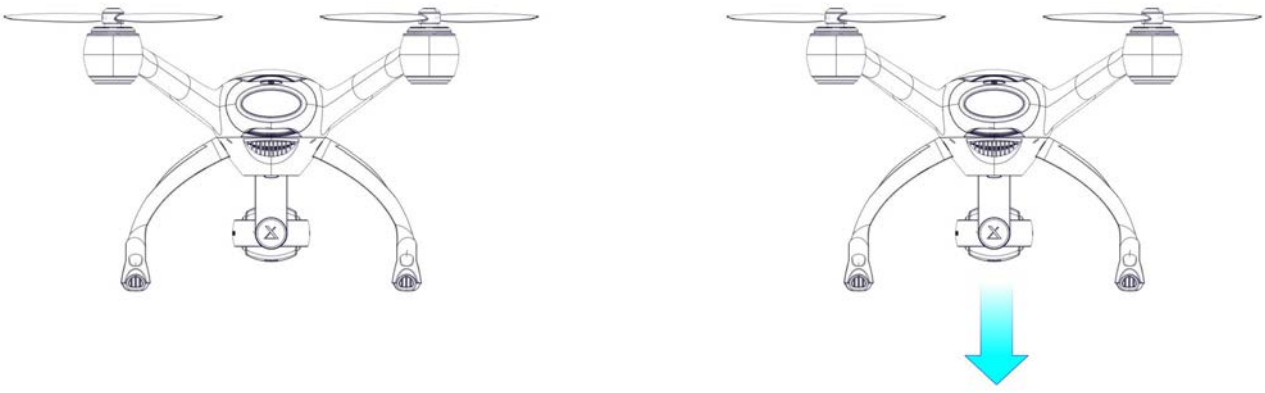


Throttle – Decrease (Drone lowers down)

Move left thumbstick down

Keep right thumbstick centred

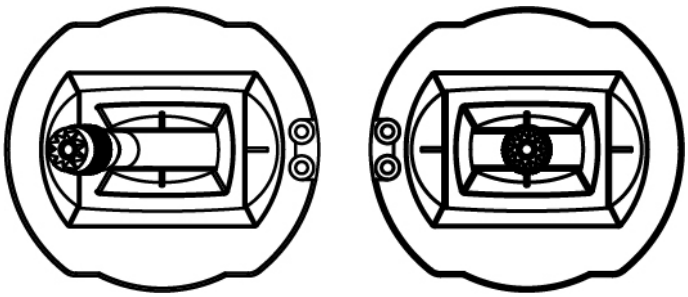


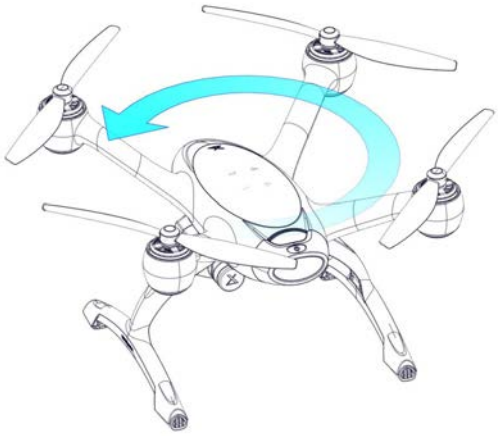


Yaw Counter Clockwise (Drone rotates CCW)

Move left thumbstick left

Keep right thumbstick centred

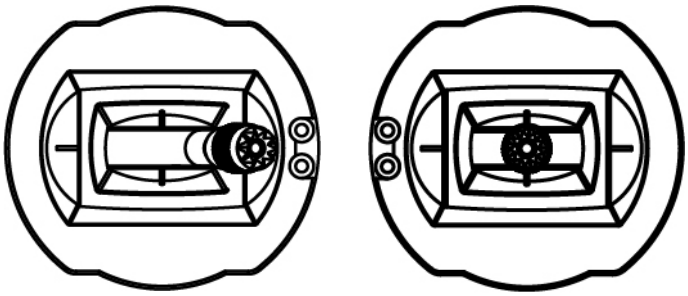


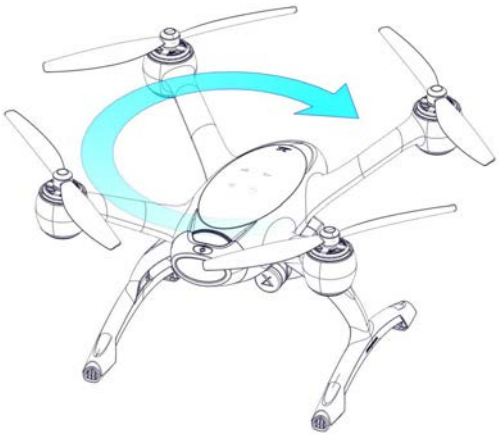


Yaw Clockwise (Drone rotates CW)

Move left thumbstick right

Keep right thumbstick centred

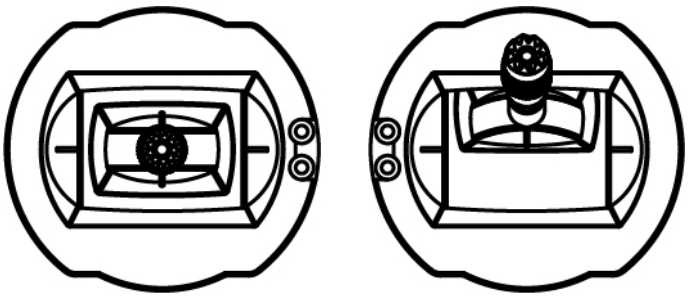


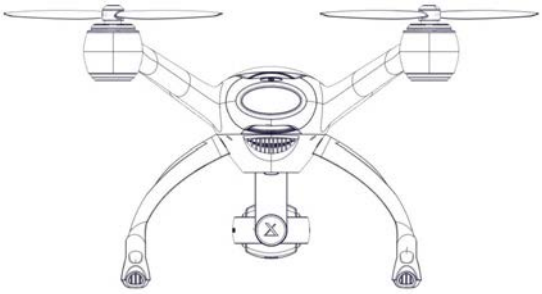


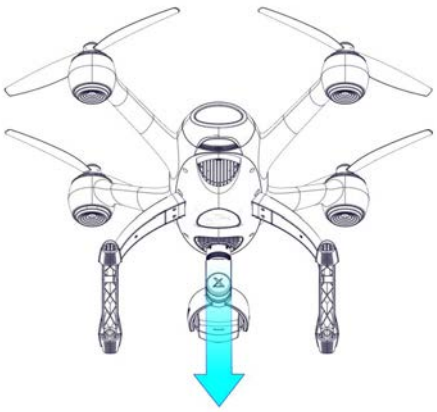
Forward Movement – (Drone tilts forward)

Keep left thumbstick centred

Move right thumbstick up



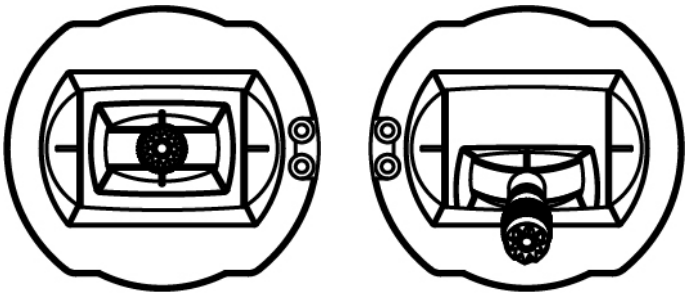


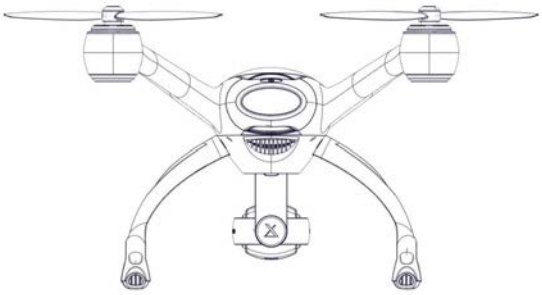


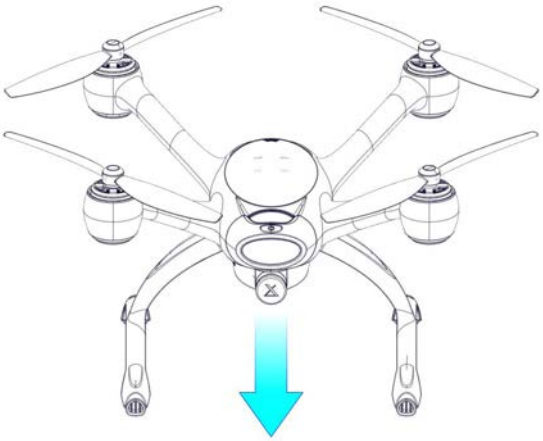
Backwards Movement – (Drone tilts backwards)

Keep left thumbstick centred

Move right thumbstick down



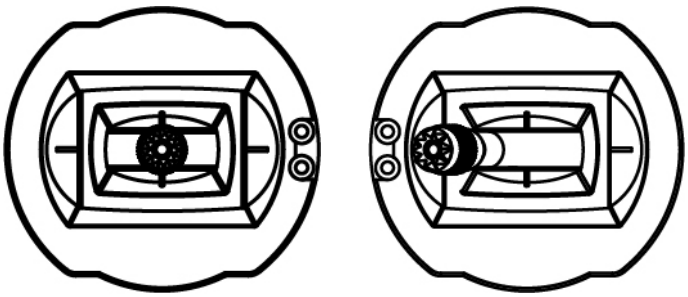


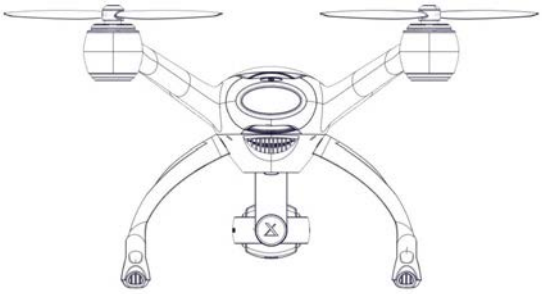


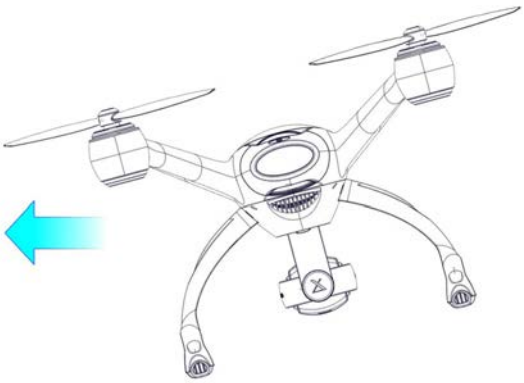
Roll Left – (Drone moves left)

Keep left thumbstick centred

Move right thumbstick left



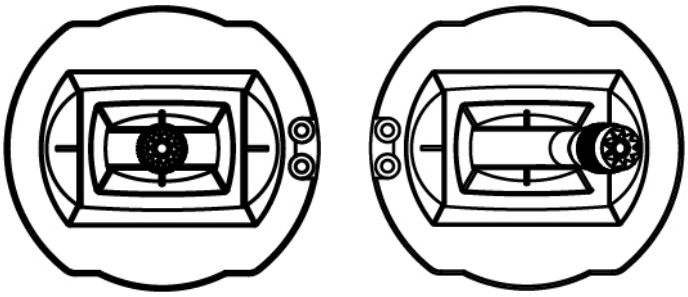


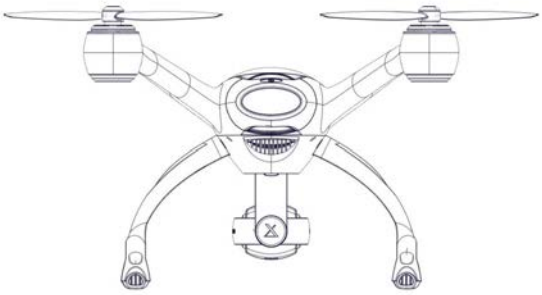


Roll Right – (Drone moves right)

Keep left thumbstick centred

Move right thumbstick right

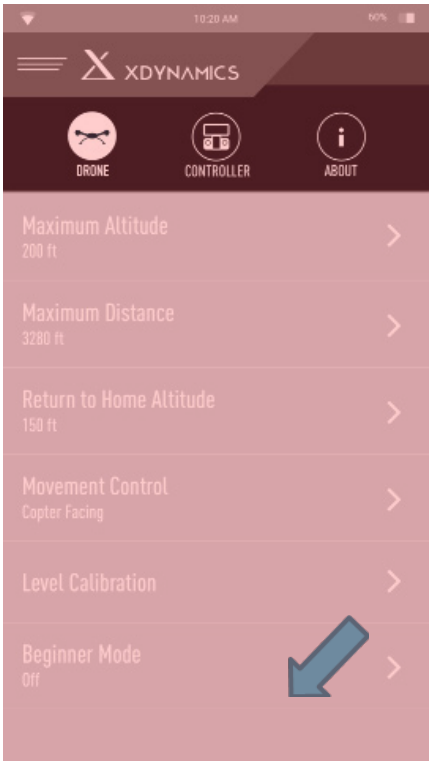


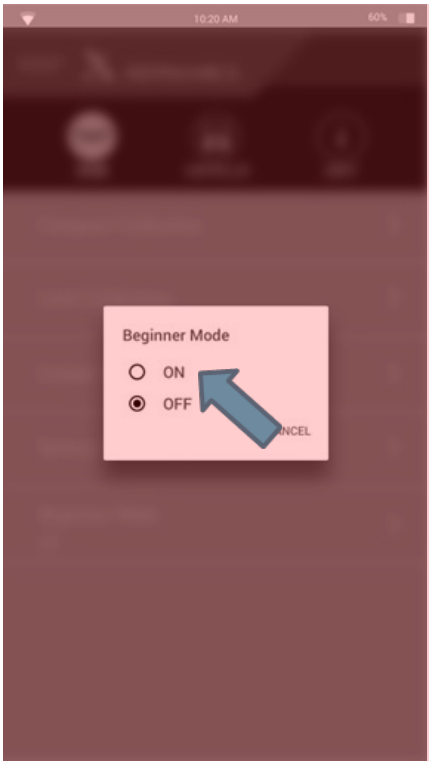


Flight Modes

Beginner Mode

User may enable beginner mode at Setting Page. After enabling the Beginner Mode, the drone can only be flown within a spherical radius of 30m from the take-off position.



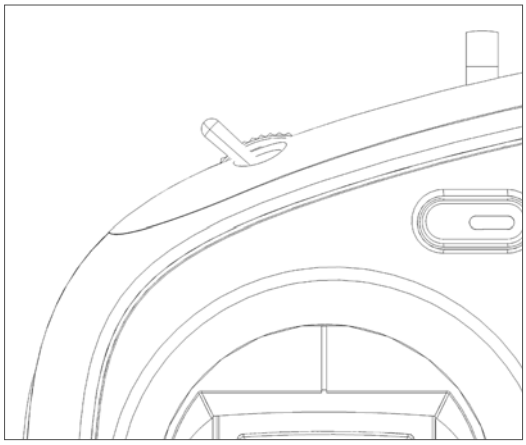


Flight Modes

The Evolve drone has 3 flight modes that the operator can choose from. The modes are selected by a 3 position switch located on the top left of the Remote Controller. Below is a description of each:

1. GPS Mode (Left position on the 3 position Switch)

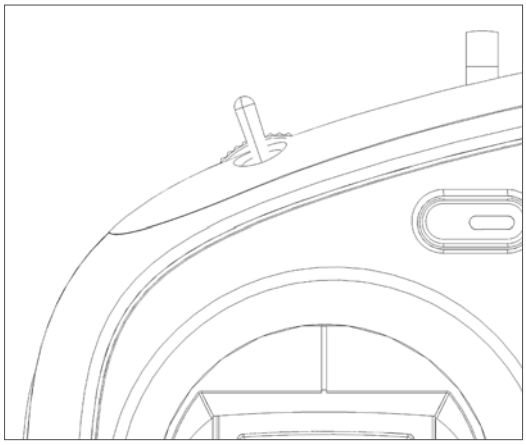
In this mode, with a strong GPS signal, the drone will hold position when the control sticks are released. This mode is suggested for beginner operators.



Position 1 – GPS Mode

2. GPS Custom Mode (Centre position on 3 position Switch)

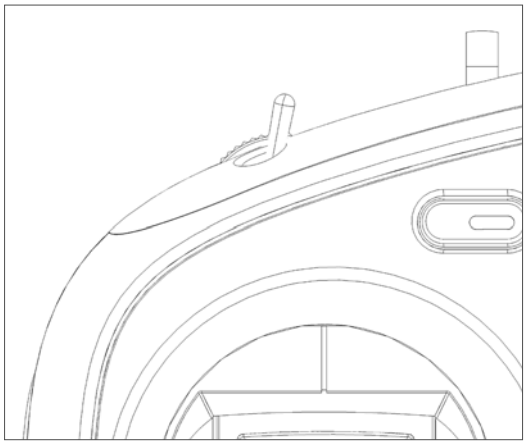
In this mode, with a strong GPS signal, the drone can perform the Smart Pilot functions such as Waypoint Operation, Easy Course and other modes. When the drone is not performing a smart function it will fly in GPS Mode.



Position 2 – GPS Custom Mode

3. Free Mode (Right position on 3 position Switch)

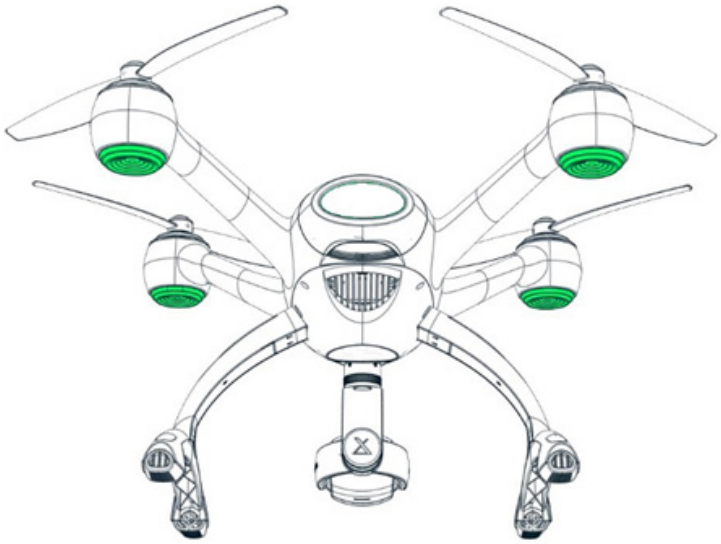
In this mode the drone will hold in level attitude orientation when the control sticks are released, but it will not hold position. This results in the drone drifting in the direction the wind is blowing and the operator must control position at all times. This mode is only recommended for experienced operators. This mode is meant for smoother breaking reactions and camera panning.



Position 3 – Free Mode

Return to Home

This feature brings the drone back to the location it first acquired a home lock position utilizing the GPS signal. Ensure GPS signal is fixed before takeoff (when all 4 LED lights located under the motors are solid green a GPS home lock is achieved) to bring it back to your home point position, when it reaches the home position the aircraft will hover for 5 seconds then land automatically. During the landing decent the operator can move the drone's position to clear and obstacles on the ground or land in a preferred spot. On any stage the RTL mode can be modified by pressing the RTL button again and confirming the RTL cancel, then the drone will state back into the mode which the 3 position switch mode is selected.



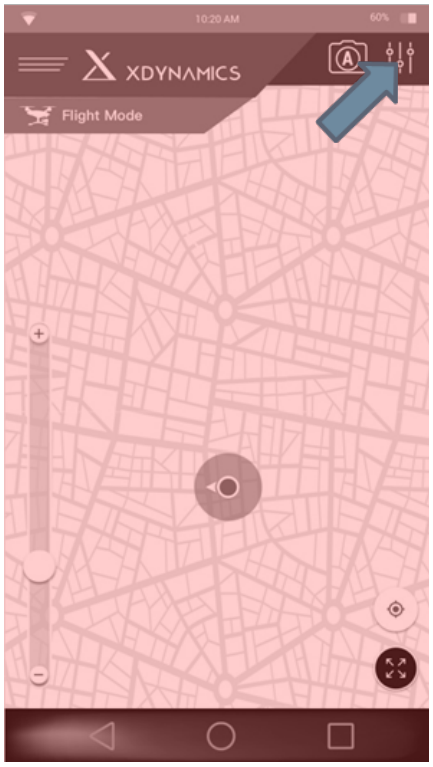
The number of GPS satellites acquired and the health of the GPS signal can also be checked on the top screen of the Remote Controller. 6 is the minimum number of satellites needed. The signal health will be confirmed by a (Excellent / Good / Fair / Poor) message on the APP.

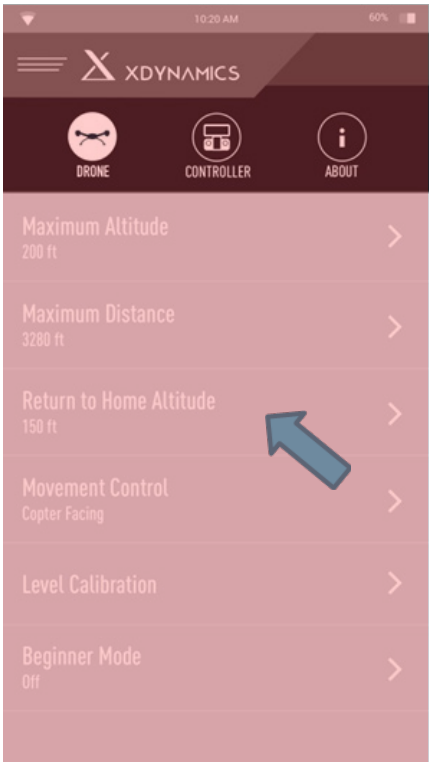
Determining the Return to Home Altitude

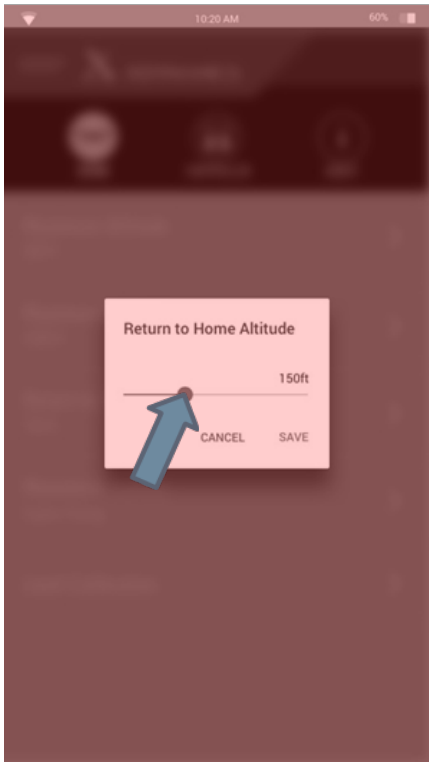
Depending on the flight conditions and obstacles in the return to home flight path, the operator can choose a safe return altitude for the Return to Home function. This altitude should be set up before flight under the APP configuration tab. A low altitude setting is not recommended for obstacle clearance (such as tress or buildings). Also notice the maximum legal flight altitude. This configuration allows the drone to reach a programed altitude before starting to flying back to the home position. If the drone is below the programed altitude it will climb to the programmed altitude then proceed to the home position. If the drone is above the programed altitude it will remain at that altitude and then proceed to home position.

Note: This altitude setting is also used for Return to Home function in a case of failsafe triggering do to loss of signal or power loss of controller.

To configure the Return to Home Altitude, user may enter the Setting Page. At the Drone section, there is the RTH Altitude Setting, tap and change the value.



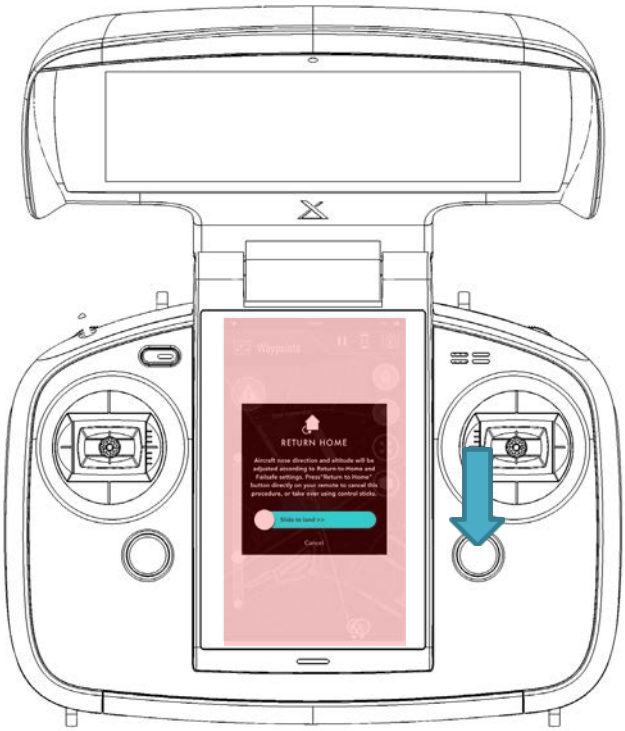




Using the Return to Home Button on the Controller

Follow the steps below:

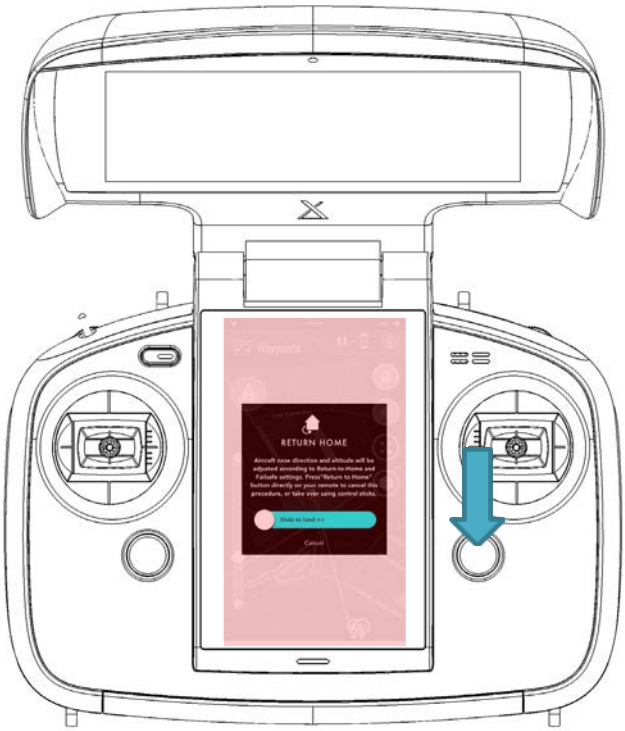
1. Make sure GPS Signal is showing at least 'Good' (if not, visually track the drone as it fly back to home position).
2. Press and hold the Return to Home button for 3 seconds.
3. The drone will climb to pre-set altitude, or if at a greater altitude than the programed altitude it will remain at that altitude, and then return to the Home Point in shortest path (straight line).
4. Smart Pilot System indicates the Drone is under Return to Home Mode.
5. When reaching the home point the drone will hover for 5 seconds then proceed to auto land (during the decent the operator can reposition the drone to clear obstacles or land in preferred spot).

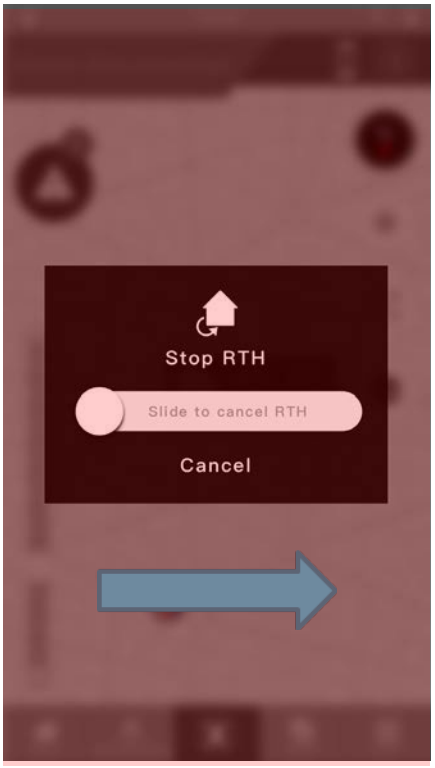


Return to Home Button Cancellation

During the return home flight the user may stop the RTH process by following the below steps:

1. Press and hold the Return to Home button for 3 seconds.
2. Smart Pilot System indicates the Drone Flight Mode.
3. The drone will continue in the mode at which the 3 position switch mode is selected.

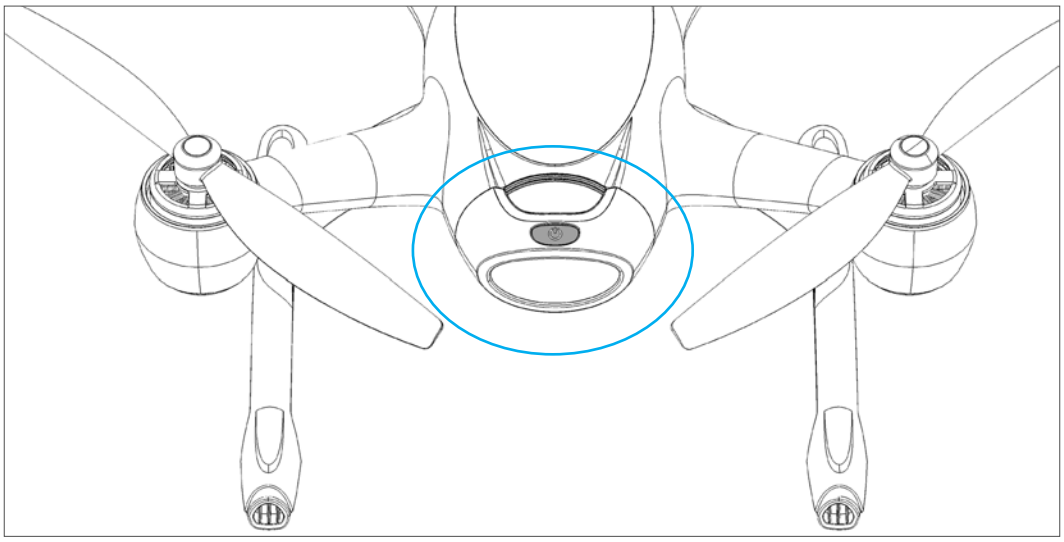


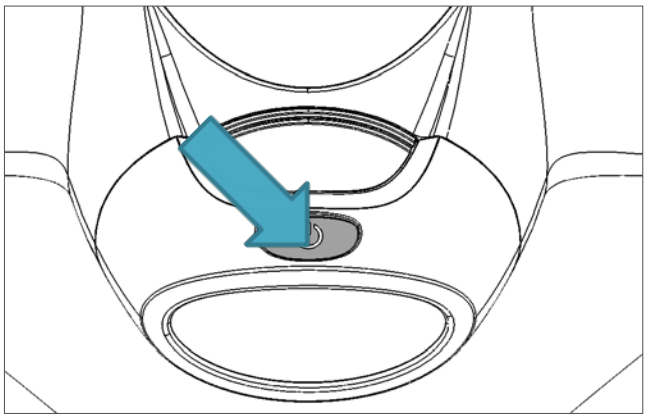


Turn On/Off Aircraft

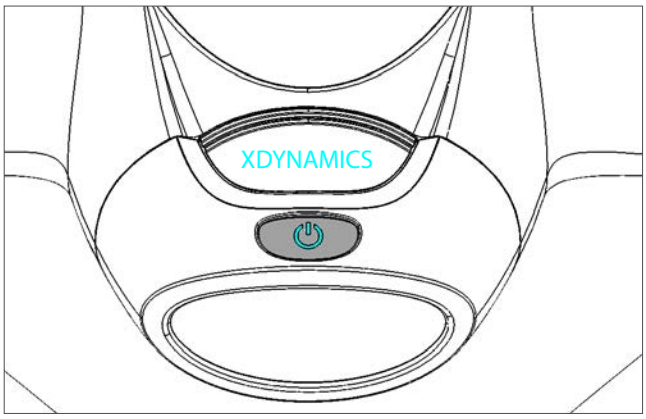
Turning On Drone

The battery has a dual press feature to avoid the user accidentally turning on the battery with a single button press.





Press and release the battery switch then press again and hold battery switch until the XDynamics logo runs across the screen.



The drone is powered on when the battery light is illuminated and the power percentage of charge is displayed.

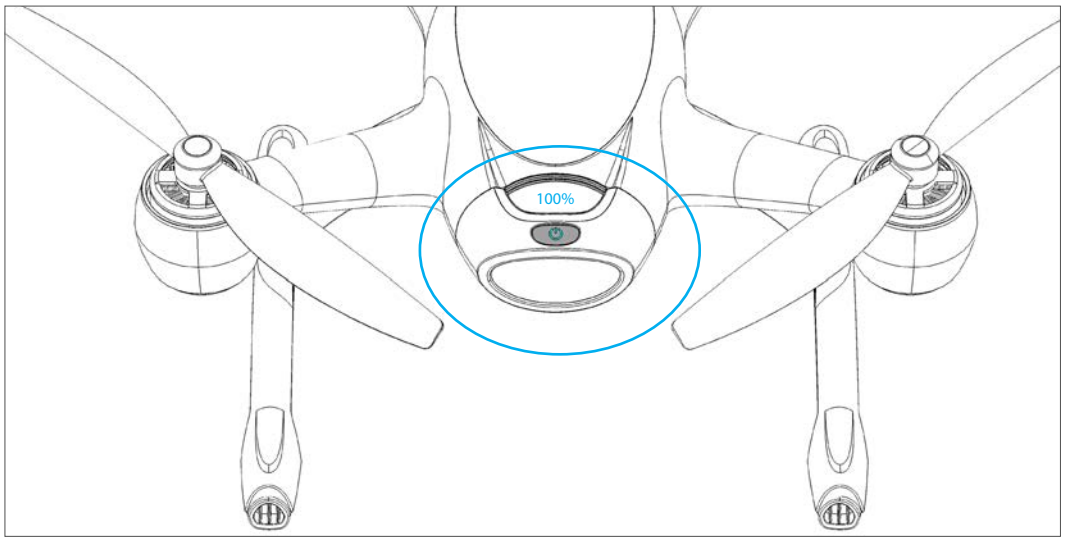
The battery will turn on if it is installed in the drone or not.

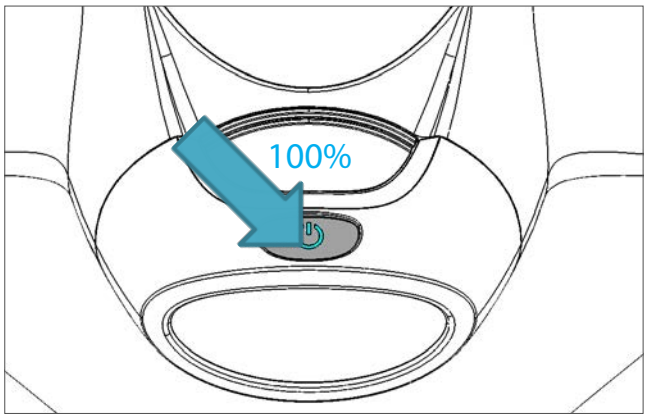
If the battery is still turn on when removed from the drone, ensure the battery connect terminals are left unobstructed to prevent short circuiting.

Turn On/Off Aircraft

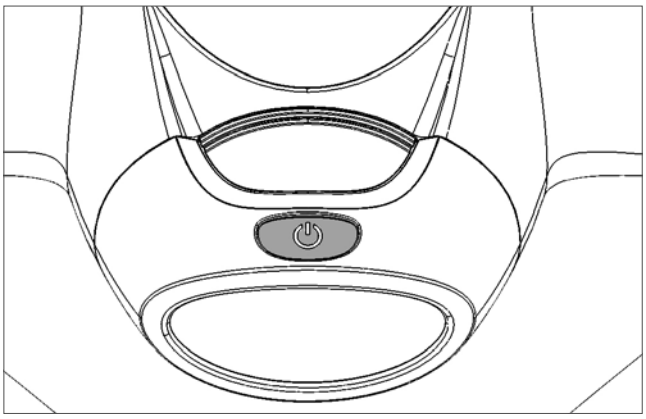
Turning OFF the Drone

Press and release the battery switch then press again and hold battery switch until the XDynamics logo runs across the screen.





Press and release the battery switch then press again and hold battery switch until the XDynamics logo turns off.



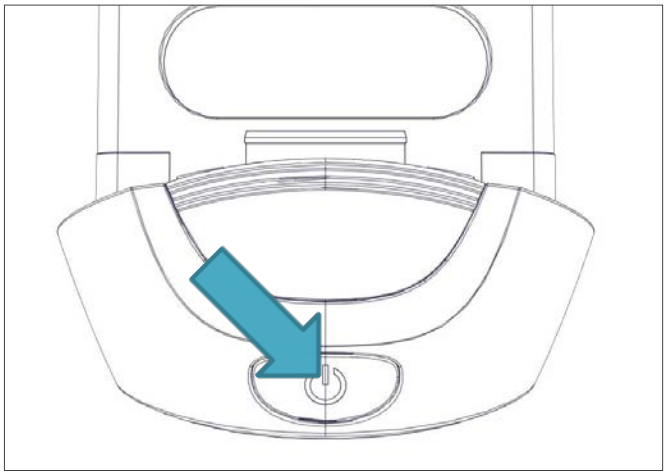
The drone is powered off when the OLED Logo and Power button LED are off.

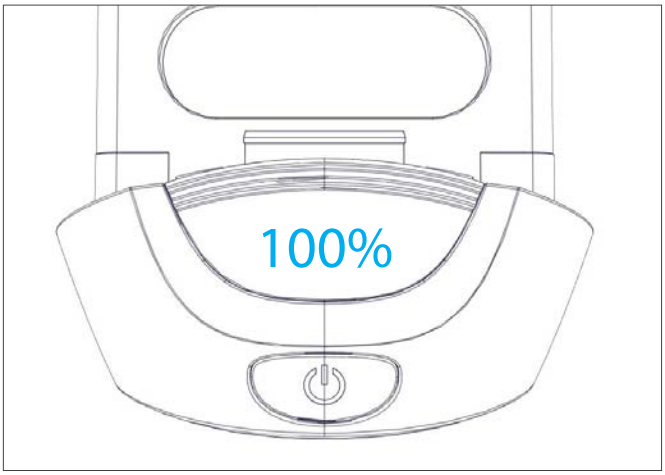
Turn On/Off Aircraft Battery

Turning the Battery On When not Plugged into the Drone

Press and release the battery switch then press again and hold battery switch until the XDynamics logo runs across the screen.

Note: Never short out any of the pins of the battery or try to connect to any other equipment other than the Evolve Drone and the supplied charger.

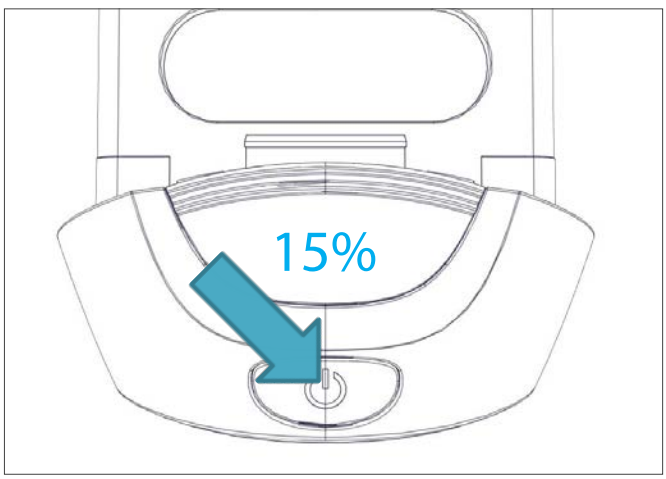


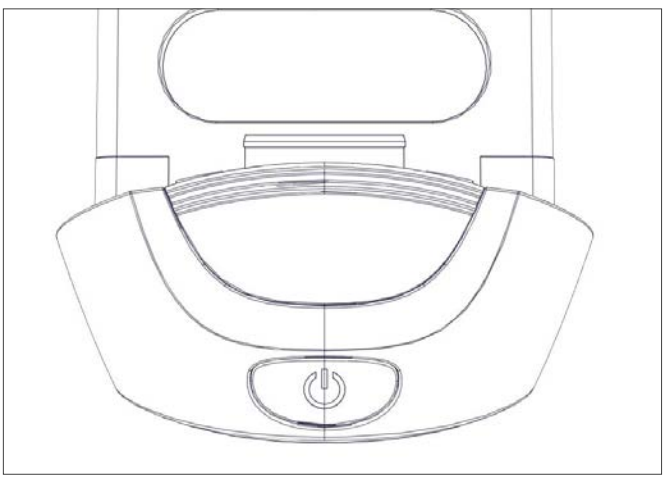


Turning the Battery Off When not Plugged into the Drone

Press and release the battery switch then press again and hold battery switch until the XDynamics logo runs across the screen.

Note: Never short out any of the pins of the battery or try to connect to any other equipment other than the Evolve Drone and the supplied charger.



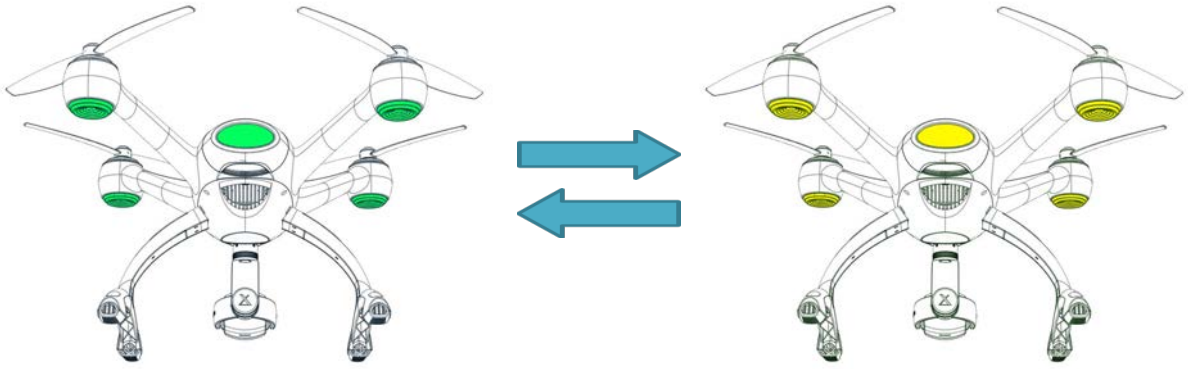


Aircraft LED Indicators

The aircraft LED indicators are located under each motor and at the rear of the drone. The LED indicated the current state of the drone. See diagrams below for indications:

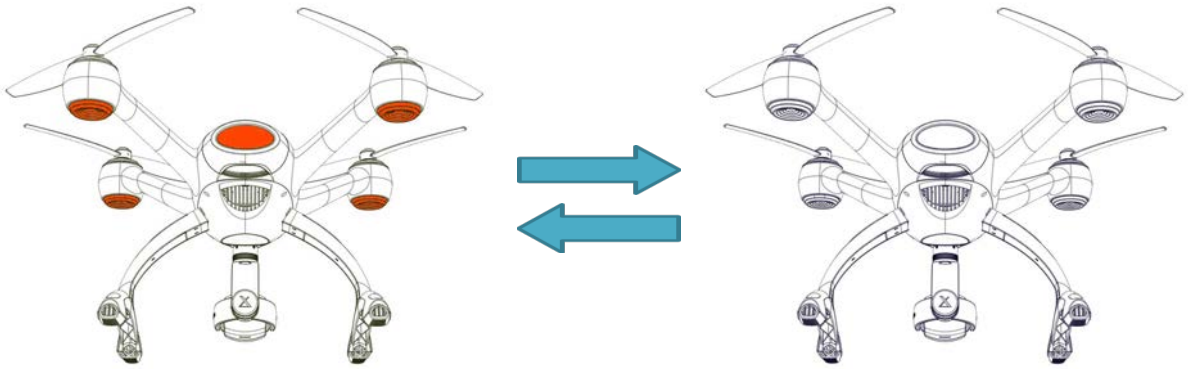
LED Powering Up / Arming Flight Control

(Green / Yellow Alternating Fast Blinking LED)



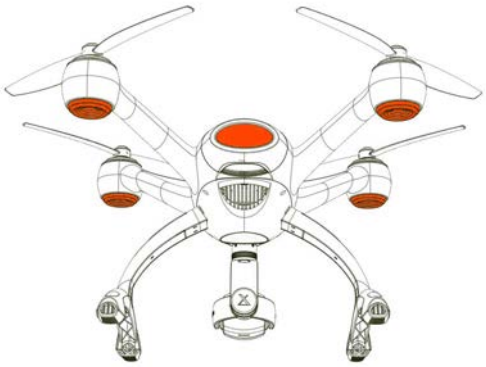
Initializing / Waiting for RC Signal

(Blinking Red LED)



Error State

(Solid Red LED) - Refer to Troubleshooting Section

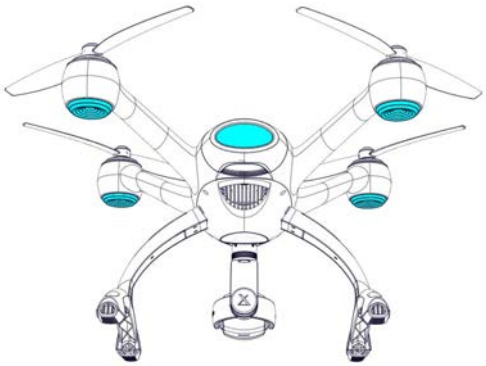


Aircraft LED Indicators

The aircraft LED indicators are located under each motor and at the rear of the drone. The LED indicated the current state of the drone. See diagrams below for indications:

Ready for Flight (Free Mode)

(Solid Blue LED) – Ready for Smart Pilot App Launch

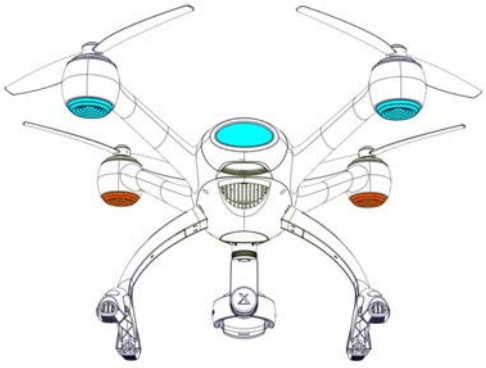


GPS Ready (Can be flown in GPS Mode)

(Solid Green LED) - Set's home position

Normal Flight Mode

(Red Front / Blue Rear Solid LED) - All systems functional

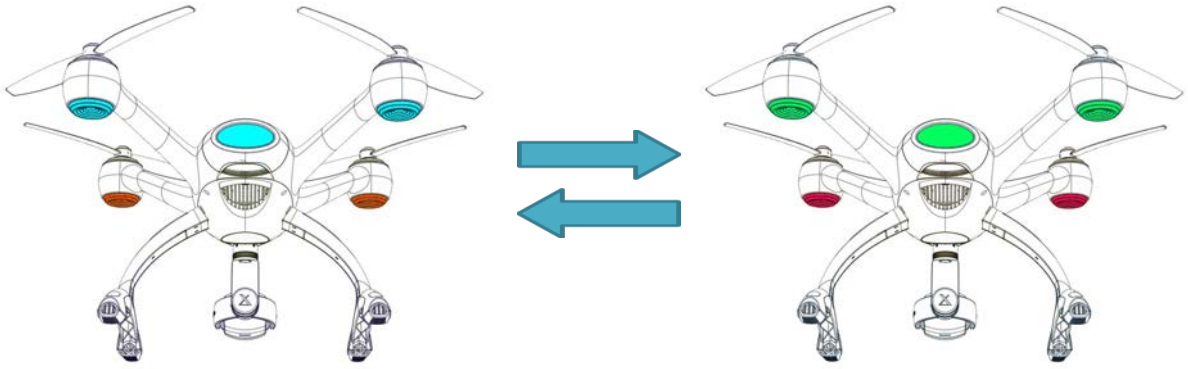


Aircraft LED Indicators

The aircraft LED indicators are located under each motor and at the rear of the drone. The LED indicated the current state of the drone. See diagrams below for indications:

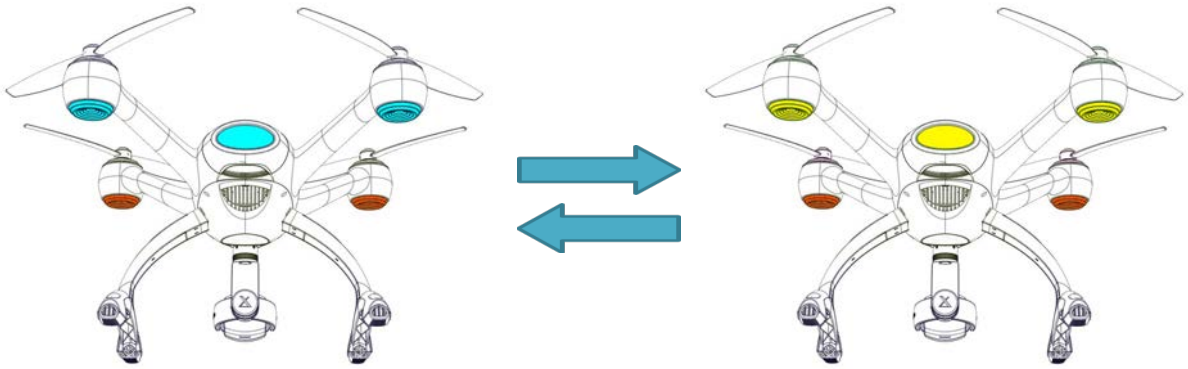
Landing Mode

(Red Front / Green Rear Solid LED) – Make sure landing zone is clear



Malfunction During Flight

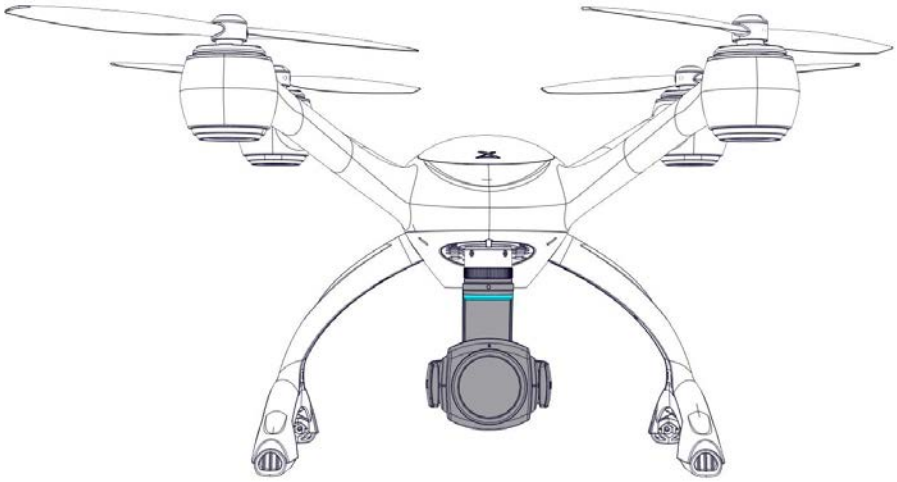
(Consult smart pilot / troubleshooting for more details)

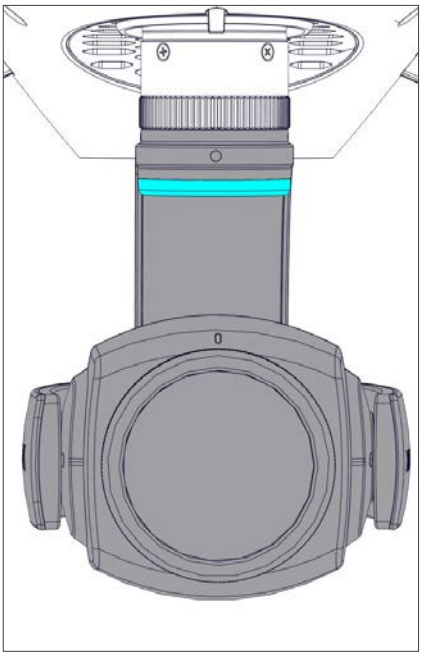


If the 'Malfunctioning During Flight' LED warning is showing land drone immediatley.

Aircraft LED Indicators

The camera gimbal has an LED indicator located below the base of the mount. This indicator states the status of the camera. This is a visual reference for the operator to confirm the state of the camera such as taking video or taking still photography.



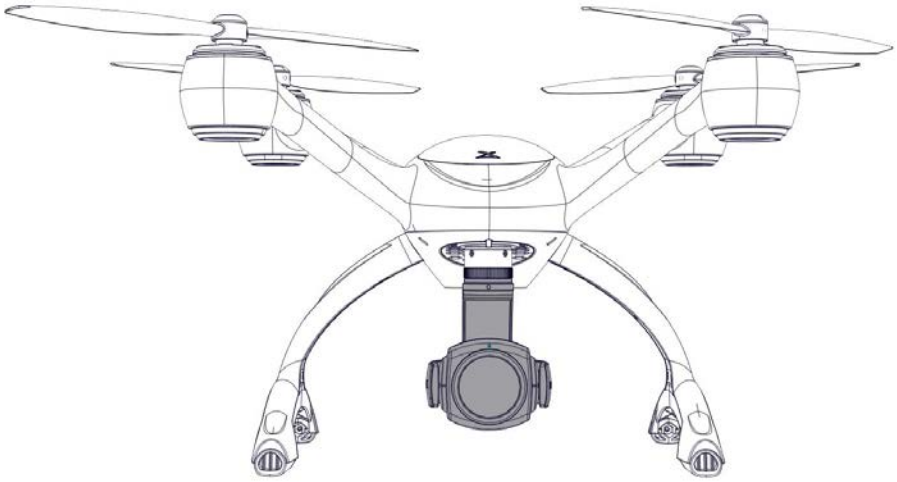


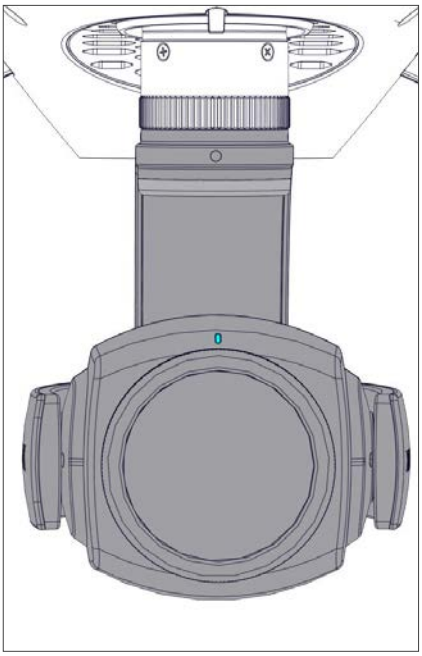
Blinking Blue LED = Gimbal Initializing

Solid Blue LED = Gimbal Ready (Please note LED turns off when recording video or still images)

4K Camera Indicators

The camera gimbal has an LED indicator located below the base of the mount. This indicator states the status of the camera. This is a visual reference for the operator to confirm the state of the camera such as taking video or taking still photography.



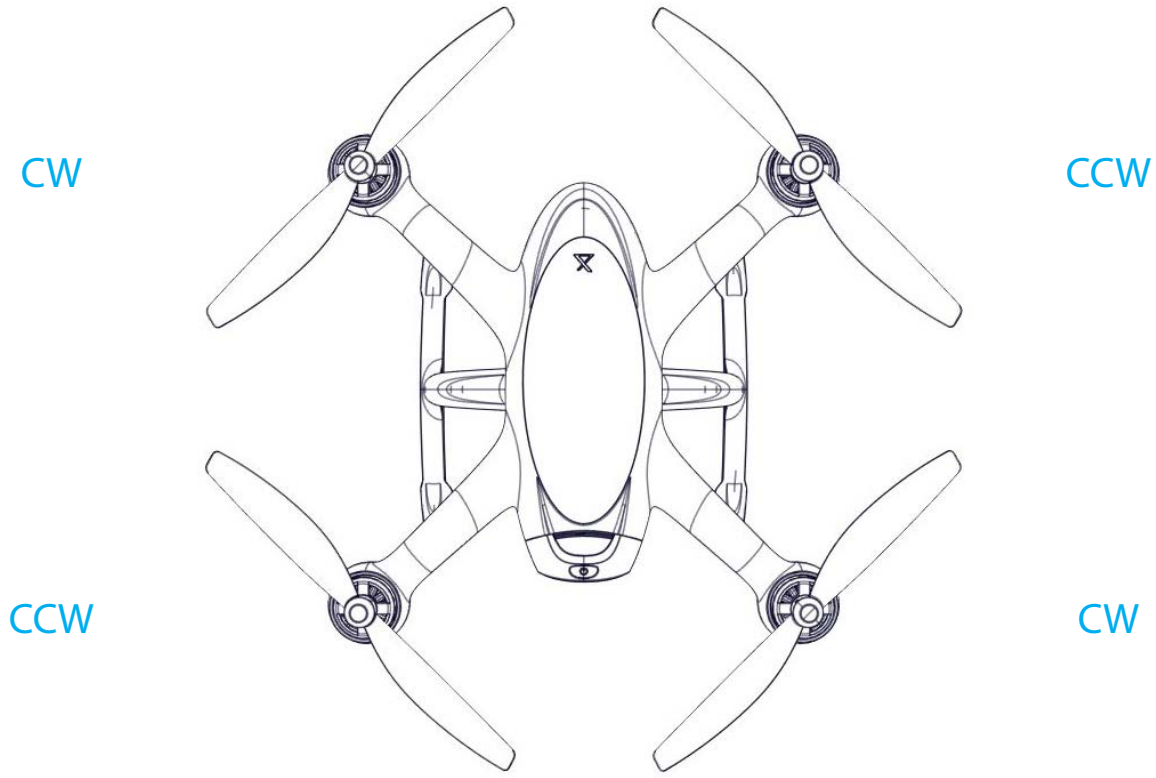


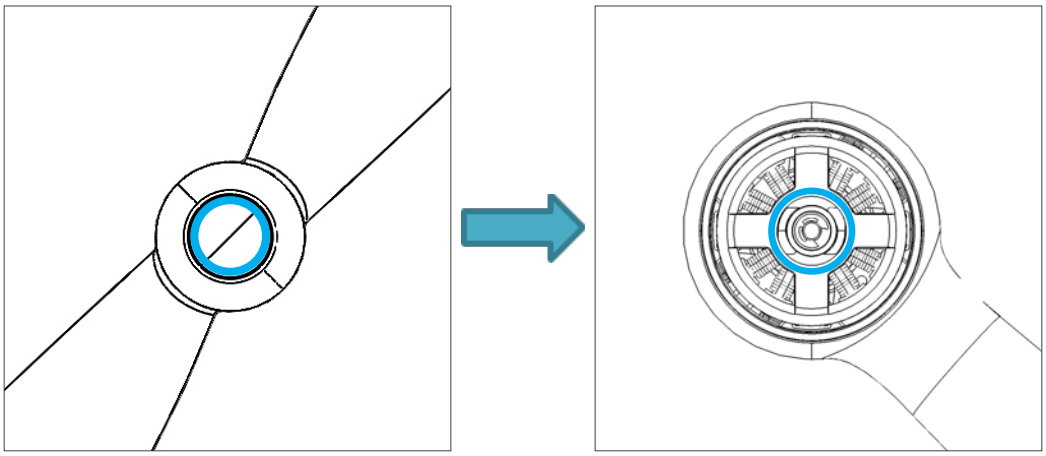
LED Status	Description
GREEN on	Normal, idle
GREEN toggles once	Single shot
GREEN toggles till shots complete (0.1″ on every 0.3″)	Burst
GREEN toggles gently (0.5″ on every 1″)	Video recording
RED toggles rapidly (0.2″ on every 0.4″)	System start up
RED toggles gently (0.5″ on every 1″)	SD card failure
RED on	High temp / SD Card Missing
RED & GREEN toggles alternately	Firmware upgrading

Ensure Correct Propeller Alignment

The propellers need to be mounted with the correct CW (Clock-Wise) and CCW (Counter-Clock-Wise) configuration. Two propellers are marked with a white ring and two propellers have no markings. Mount the propellers with the white ring to the motors with a white ring on top. Please follow the steps on the following page to ensure all propellers are securely in place.

See diagram for attaching and detaching the propellers:



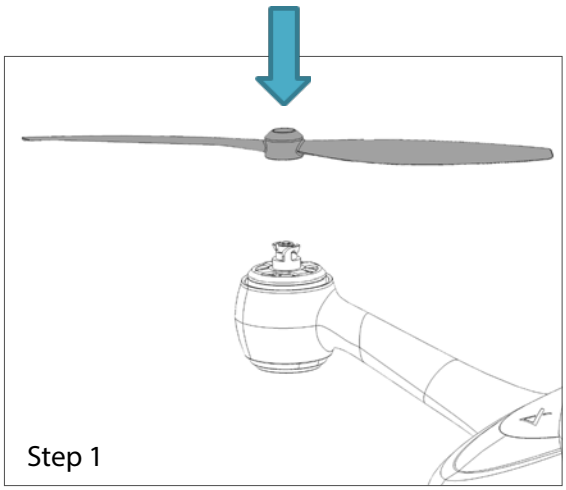


- Ensure to match both CW props with white circle marking to motors with white circle marking.
- Ensure to match both CCW props with no circle marking to motors with no circle marking.

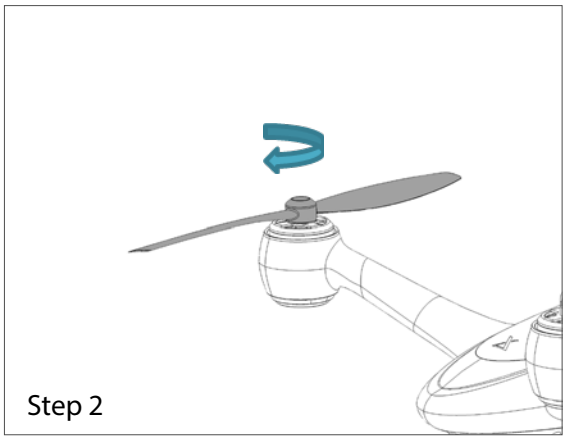
Attaching and Detaching the Propellers

The Evolve drone employs a sturdily constructed attach and detach propeller system. With a quick half turn installation the drone can be ready to fly within minutes of pulling it out of the pack. To detach the propellers follow the step below in reverse.

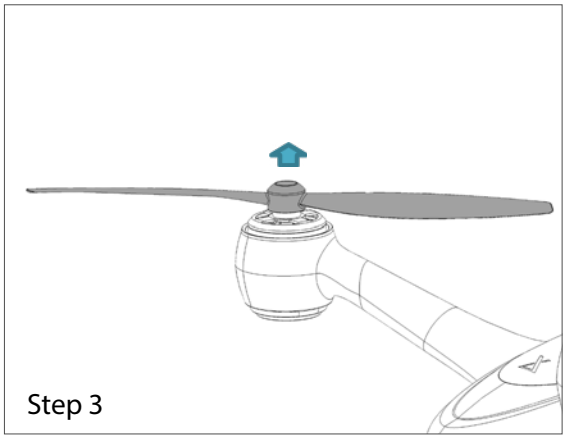
See diagram for attaching and detaching the propellers:



Step 1 - Ensure that the CW / CCW direction of the propeller is aligned with the direction of the motor.



Step 2 - Place the propeller on top of the motor and apply a downwards twisting force that matches the direction of the arrow shown on top of the propeller.



Step 3 - Keep twisting the propeller with downwards force until the red dot on the propeller and the do on the motor are aligned. Once you release the downward force the propeller should pop up and lock securely into place. Confirm this is secure by twisting the propeller left and right and checking that the propeller is securely fixed to the motor.

Pre Flight Checklist

The below checklist is recommended before every drone flight. Drone operators are encouraged to add more check list items that might be required for their particular operations.

1. Aircraft Pre-Flight Checklist

- Gimbal Clamp (Removed; Stowed)
- Micro SD Card (Installed; Available Space)
- Format SD Card (As Necessary)
- Battery (Installed; Status Check Fully Charged)
- Propeller (Check Condition; Installed Black on Black, Silver On Silver)
- CHECK COMPLETE

2. Remote Controller Pre-Flight Checklist

- Wi-Fi Internet Service (Connected)
- Maps (Loaded)
- Way Points (Loaded if necessary)
- Flight Mode Switch (GPS mode) VERY IMPORTANT for BEGINNERS
- Battery (Status Check Fully Charged)
- CHECK COMPLETE

3. Remote Controller Before Aircraft Initialization Checklist

- Power On (Controller)
- Drone initialization done. Blue or Green light states
- Pilot App (Launch)
- Camera Icon (Select)
- Camera Options (Checked, Set)
- Check for RF Interference (signal strength indicators on APP)
- CHECK COMPLETE

Arming the Drone

Whenever arming or disarming commands are given to the flight controller the drone's state may change suddenly requiring the operator to react immediately in order to keep positive control of the drone.

Arming Pre-Check

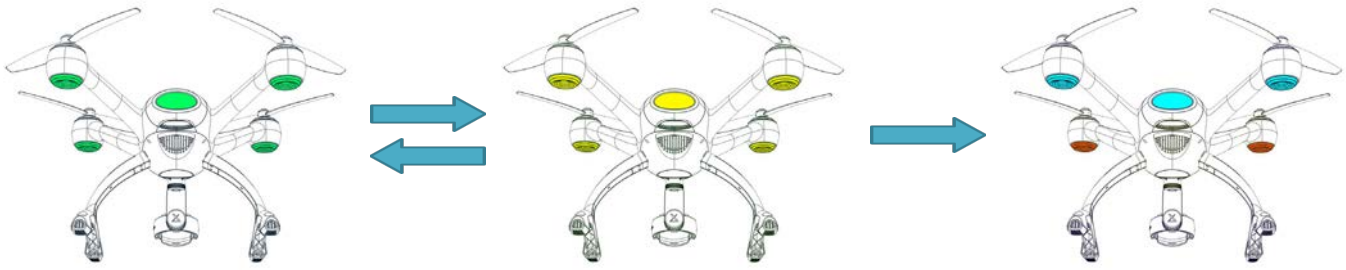
The Evolve makes several internal calibrations and adjustments before each flight. If for any reason, any of the vital sensors or internal equipment has a safety issue the drone will not ARM upon the ARM command given by the operator's stick and the LEDs under each motor will turn RED. Please refer to the Smart Pilot screen to check for the diagnoses in order to correct the problem.

The most common reason for not arming is the calibration of compass on a different or magnetically noisy environment. Please refer to Compass calibration and try again.

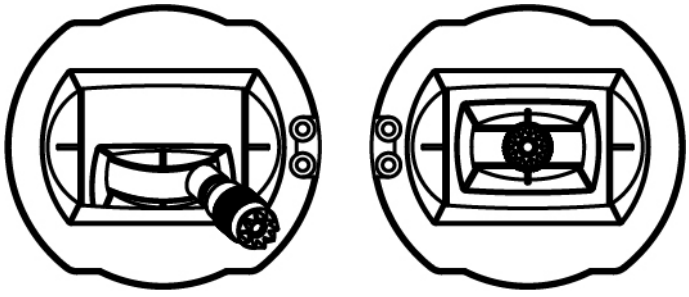
There is a 5 second delay on the arming and disarming of the stick commands to avoid accidental spinning of the motors or disarming the drone in mid-air causing the drone to crash.

Arming:

Before arming the drone make sure pre-flight check lists are complete and the drone is in an area clear of obstacles and loose debris, as loose debris can damage the propellers and possibly cause loose debris to act as projectiles doing damage to surrounding property and personnel.



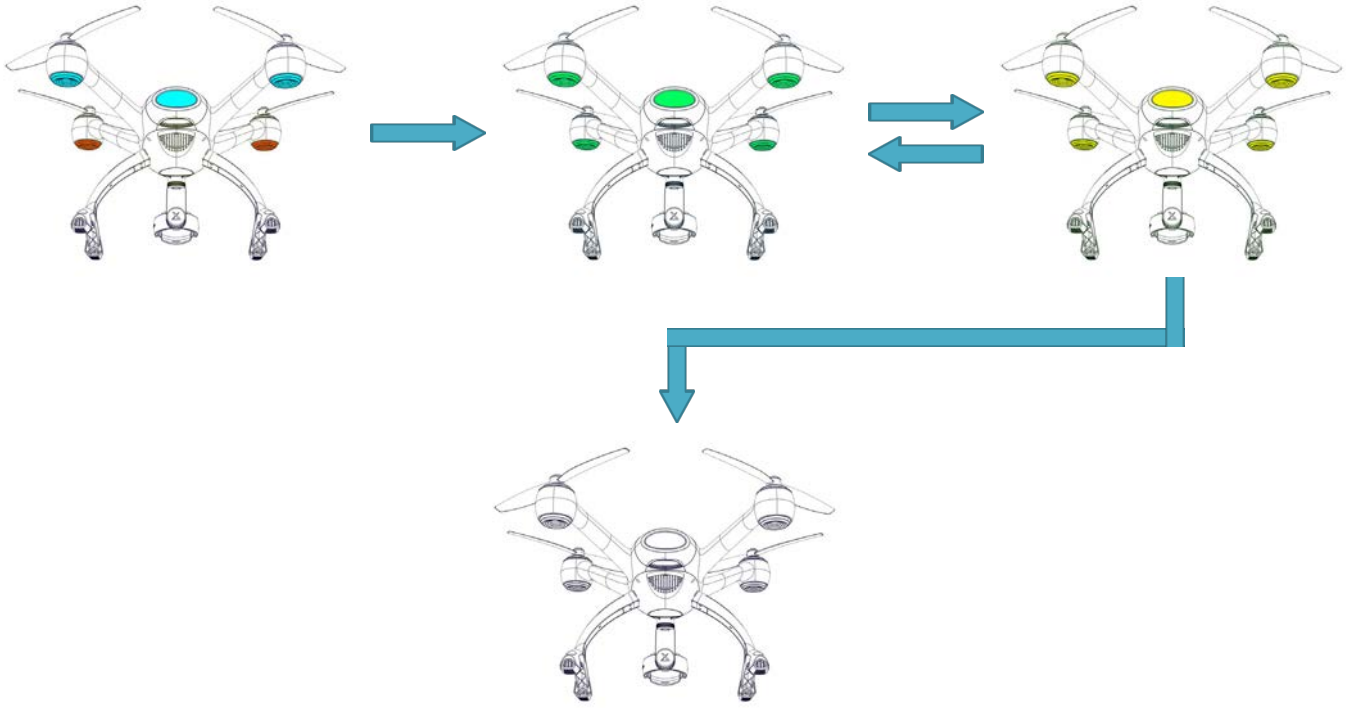
Push the throttle stick down and to the right and wait for the LED's light change. During arming the LEDs color will fast blink different colors followed by a long beep, the motors will then engage and the propellers will start spinning. Move the throttle stick to the middle position and the drone is ready to take off manually.



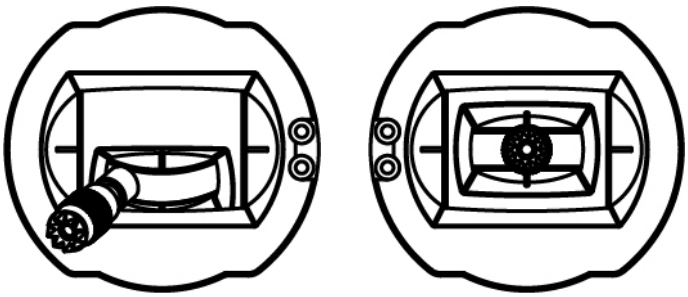
Disarming the Drone

Disarming:

After a landing the drone, hold the throttle stick down and to the left to disarm the motors. The LED indicators will change color followed by a long beep and propellers will stop spinning. Make sure the all the LED indicators are solidly lit by the same color (either Green or Blue) with no blinking before moving the sticks back to central position. If the LEDs are blinking the drone is still in arming mode, keep the sticks in the same position until all the LEDs are solid (either Green or Blue).



Push the throttle stick down and to the left and wait for the LED's light change. During disarming the LEDs color will fast blink different colors followed by a long beep, the motors will then engage and the propellers will start spinning. Move the throttle stick to the middle position and the drone is ready to take off manually.



Ensure the drone is fully disarmed (either solid Green or Blue LED) before returning the left thumb stick is returned to the middle position.

Auto Take Off / Auto Landing

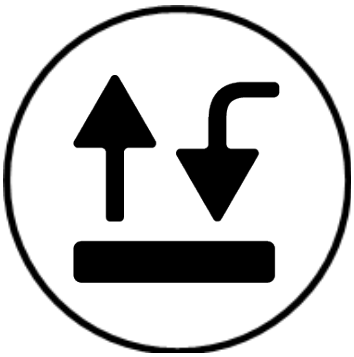
Auto Take Off

For ease of operation and to assist beginner operators, the evolve drone can take off and land automatically.

Follow the steps below:

1. Press the Auto Take Off button for 3 seconds
2. The drone will arm itself and take off
3. The drone will rise to 4 to 5 feet (If the drone is in GPS mode it will hold position until the operator takes over, but if it is in manual mode the operators needs to correct for wind drift immediately)

Follow previous pre-flight check as stated in arming the drone above



Auto Take Off / Auto Landing

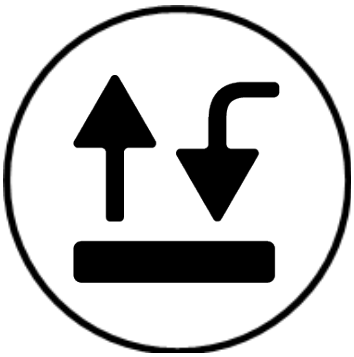
Auto Landing

For ease of operation and to assist beginner operators, the evolve drone can take off and land automatically.

Follow the steps below:

1. Press the Auto Take Off button for 3 seconds
2. The drone will blink green LEDs in the rear arms and will start descending immediately (during the decent the operator can reposition the drone to clear obstacles or land in preferred spot).
3. When landed the drone will disarm automatically

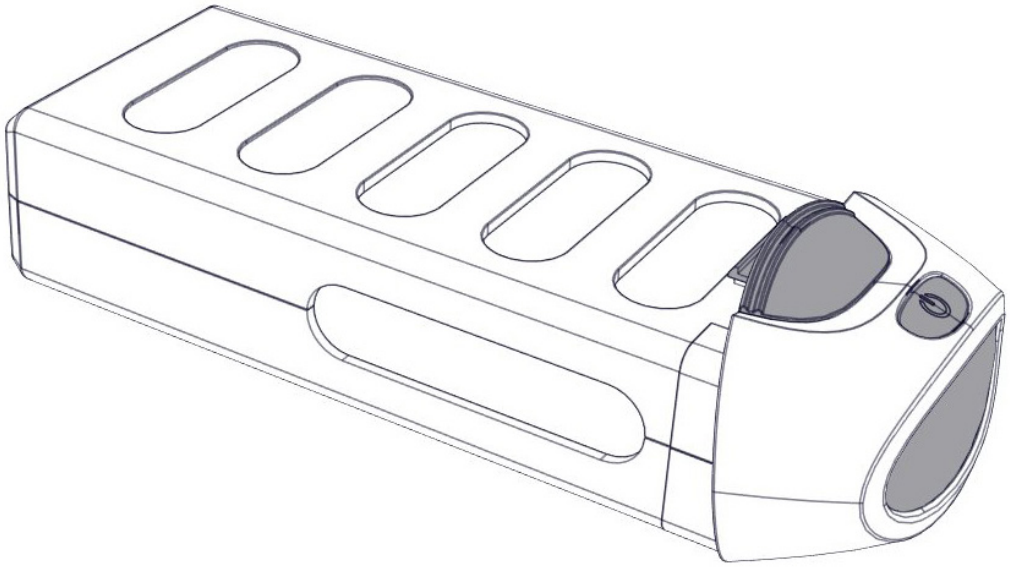
After confirming the land operation, the Remote Controller will update the status to indicate the Drone is landing.



Drone Battery

Battery Overview

Below is a diagram identifying the different components of the drone battery:



Components of the drone battery:

1. Heat ventilation holes
2. Drone rear light
3. Power button
4. Battery Power Status (OLED Display)
5. Battery Connector

Auto Landing

Important – Monitoring battery level during flight is crucial to safety and flight planning.

There are several ways to monitor battery level during flight. The battery level can be visually checked by the icon on top screen, also the user will find the battery's voltage on the clean top screen with the information provided at the right bottom corner. The Evolve battery is made to last around 15 minutes in low wind conditions and standard atmosphere pressure.

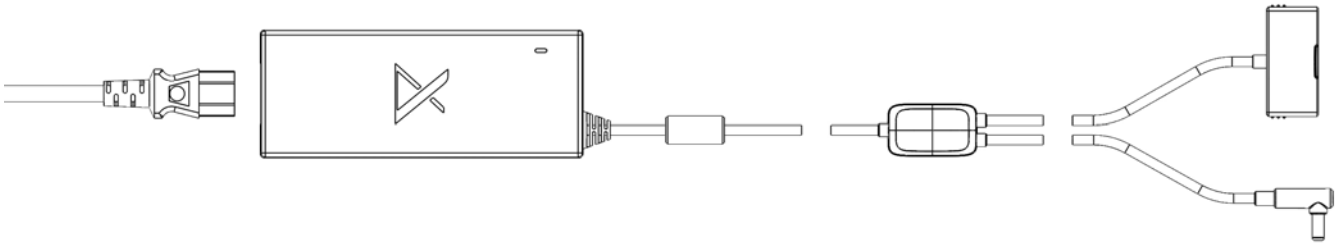
- The flight mode and environmental conditions should be considered while flying the drone and monitoring battery level.
- The Drone's battery level icon is found at the top right of the FPV screen on the Remote Controller.

When the drone battery reaches 15% charge, an automatic Return to Home function will be activated.

Charging the Drone Battery

Battery Charger Overview

Below is a diagram identifying the different components of the battery charger:

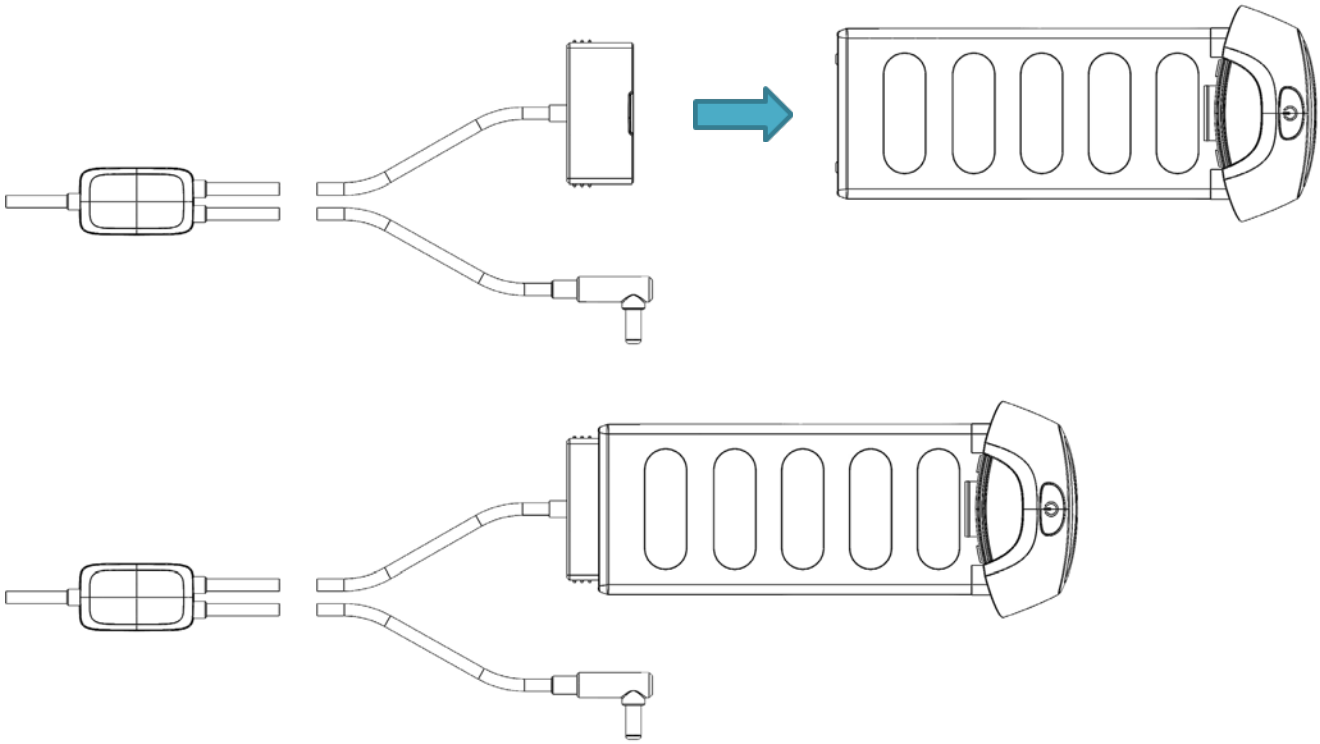


Components of the battery charger:

1. Heat ventilation holes
2. Drone rear light
3. Power button
4. Battery Power Status (OLED Display)
5. Battery Connector

Follow the below steps to charge the drone battery:

1. Plug in power supply to wall socket power supply
2. Plug square connector into the back of the battery
3. Battery display screen will show the percentage battery state during charge
4. When the percentage is at 100% the battery is fully charged



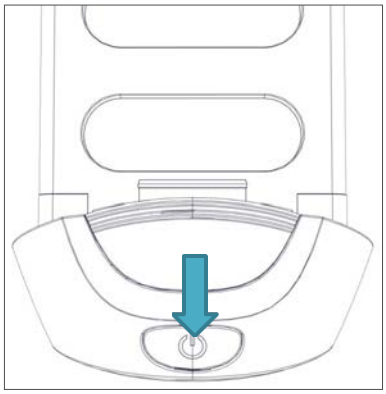
Charging the Drone Battery

Battery Charger Overview

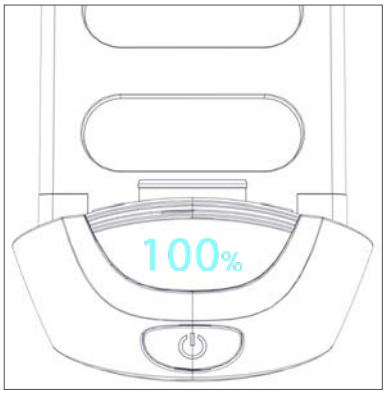
The battery charge level can be checked even if it is not installed in the drone by following these steps:

1. Press and release power switch
2. Battery level percentage will be displayed
3. Followed by a battery level icon
4. The display will go blank and the battery will power off

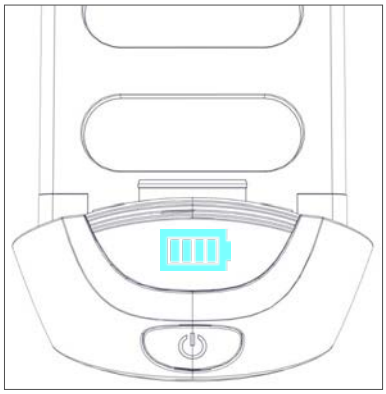
Fully Charged Battery



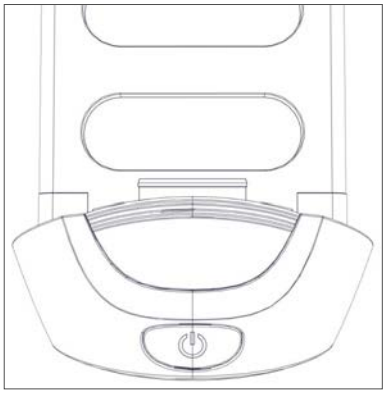
Press and release the battery switch



The battery level percentage will be displayed



Followed by a battery level icon



Turn off the OLED display after 10s

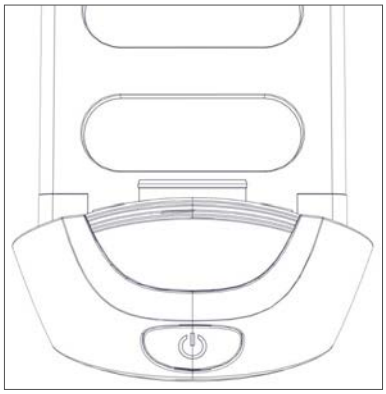
Charging the Drone Battery

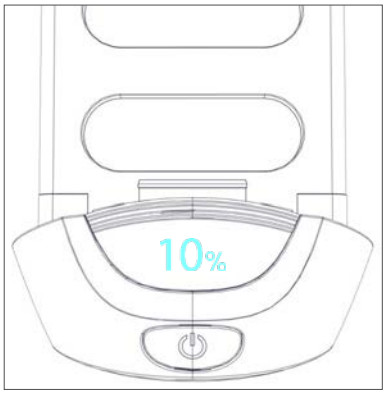
Battery Charger Overview

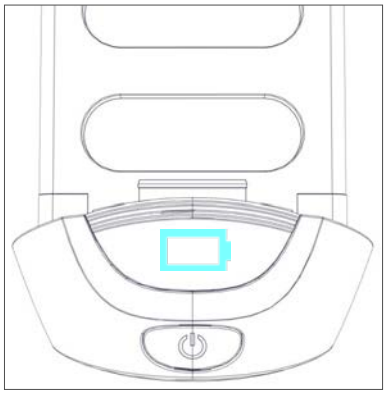
The battery charge level can be checked even if it is not installed in the drone by following these steps:

1. Press and release power switch
2. Battery level percentage will be displayed
3. Followed by a battery level icon
4. The display will go blank and the battery will power off

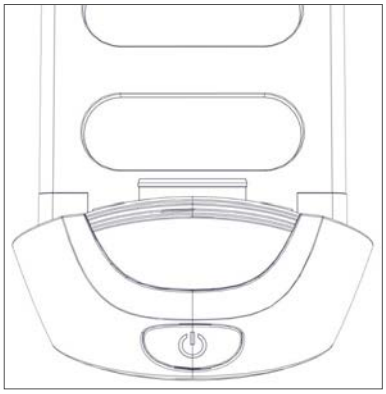
Low Power Battery







If the power status low (under 10%) the digits and icon will blink to draw users attention. Blink interval 0.5s

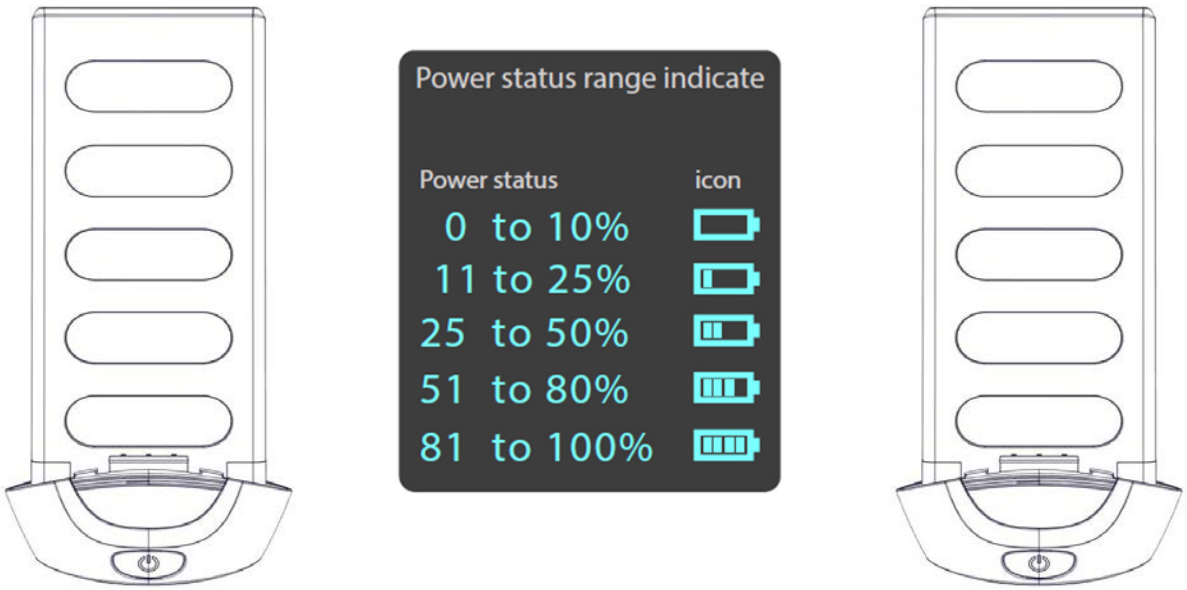


Turn off the OLED display after 10s

Charging the Drone Battery

Power Status Range Indications

When determining the estimated flight time and distance range of any drone flight the operator needs to have an idea of how much flight time is remaining according to the current power percentage left. Below describes the estimated flight times for battery percentages.



Battery Level Status

Consider the following battery levels for decision making:

100% - Fully Charged

Flight time around 25 minutes

75% - Minimum Level Amount for a New Flight

Flight time around 17 minutes

50% - Half Charged

At this level voltage and current draw has the most effect on flight time

Approximately 10 minutes remaining.

30% - Low Charge Level

Consider returning home and landing soon.

15% - Land Immediately.

The battery failsafe mode is triggered and RTL happens

Warning: Never drain the battery to 5% or less, this may damage battery or make the battery unreliable on next charge.

Drone Calibration

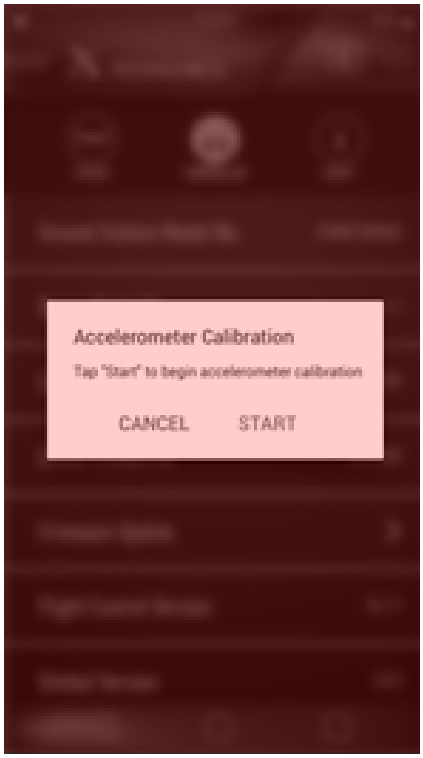
Accelerometer Calibration Procedures:

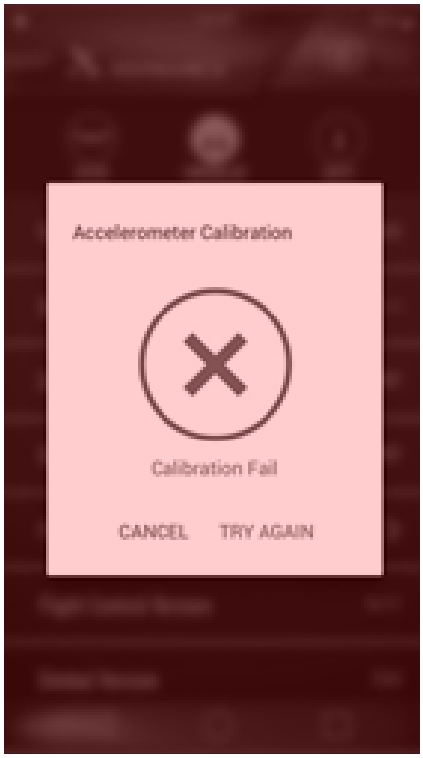
Please ensure all firmware is up to date and follow on screen instructions if any variance from the instructions outlined below.

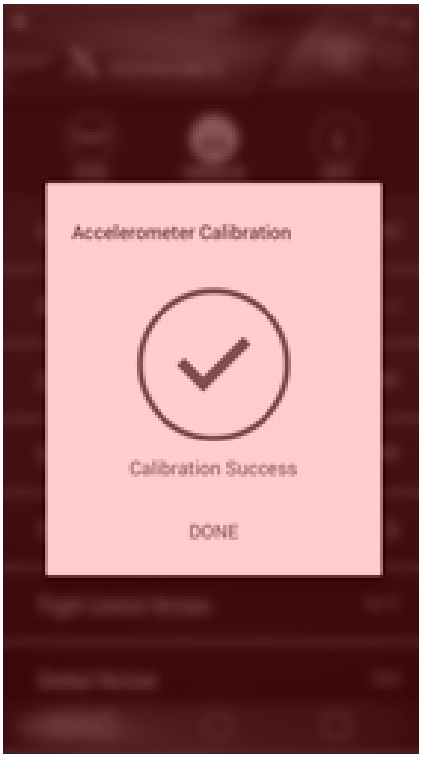
To calibrate the accelerometer follow these steps:

1. For safety remove the propellers from the drone
2. Make sure the GS and drone are powered on and connected
3. Navigate to the accelerometer calibration page on the smart pilot APP
4. Press “start” on the accelerometer calibration page
5. Ensure the drone is on a level surface and press “next”
6. Follow the on screen instructions for drone placement and push “next” when prompted
7. Once complete the APP will indicate a failed or successful calibration
8. If failed recycle the drone and controller power and restart at Step 1.

Accelerometer calibration is only required when requested by the Smart Pilot System.



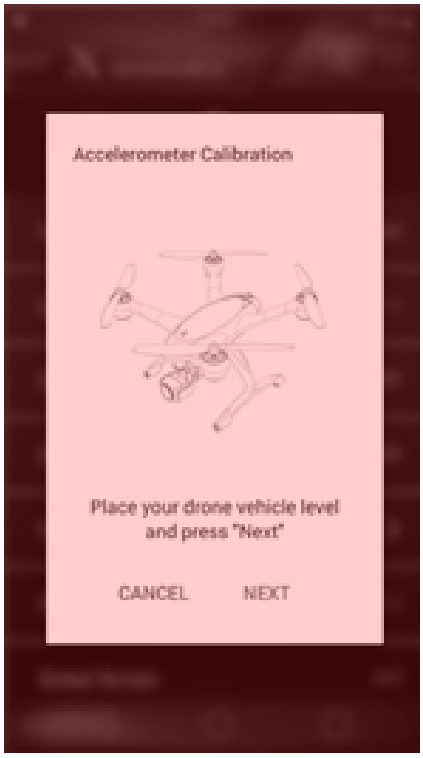


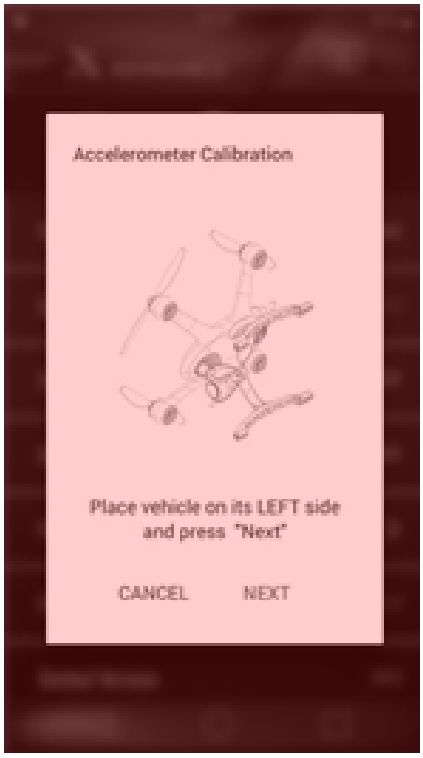


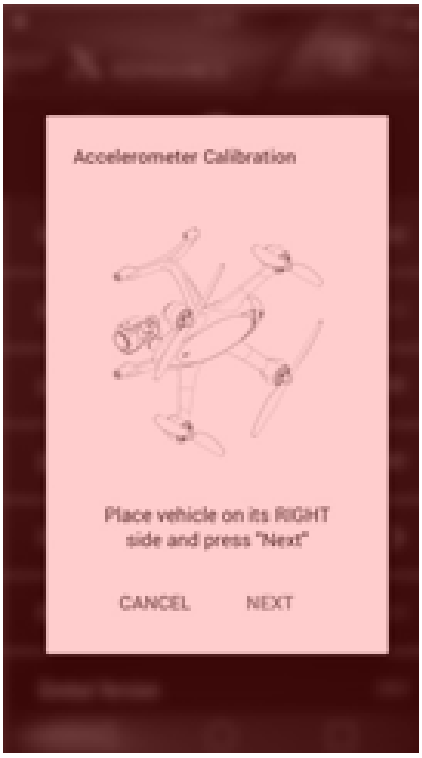
Drone Calibration

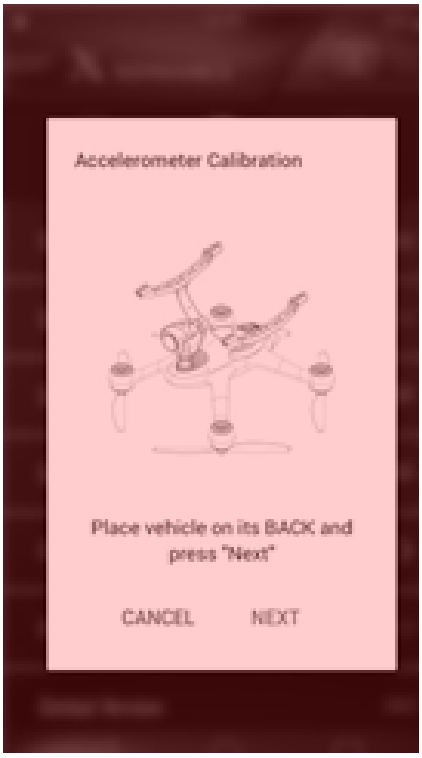
Accelerometer Calibration Procedures:

Please ensure all firmware is up to date and follow on screen instructions if any variance from the instructions outlined below.









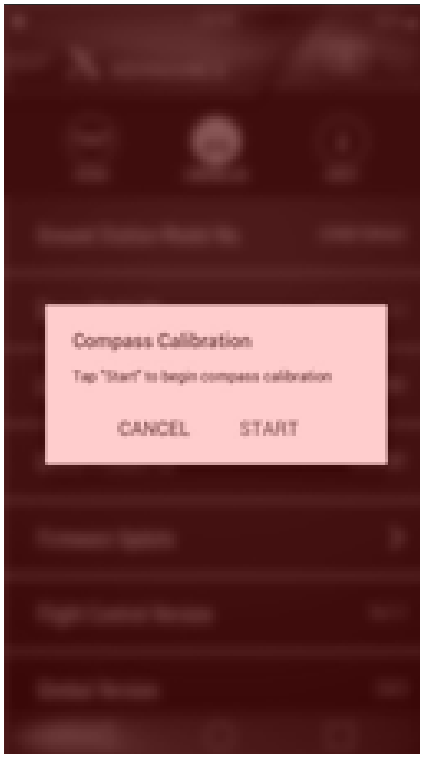
Drone Calibration

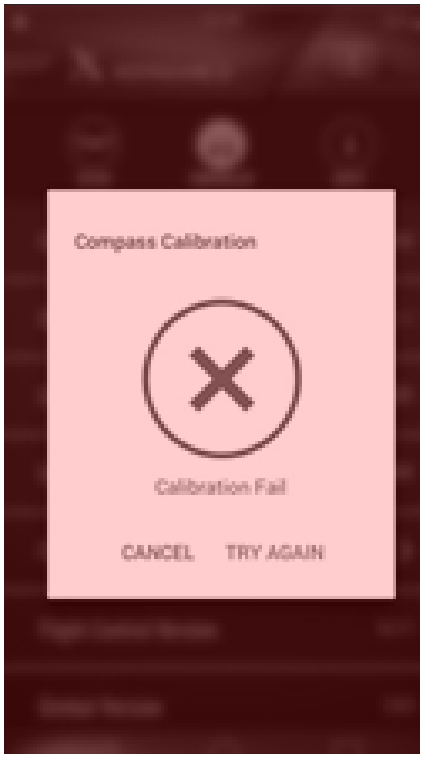
Compass Calibration Procedures:

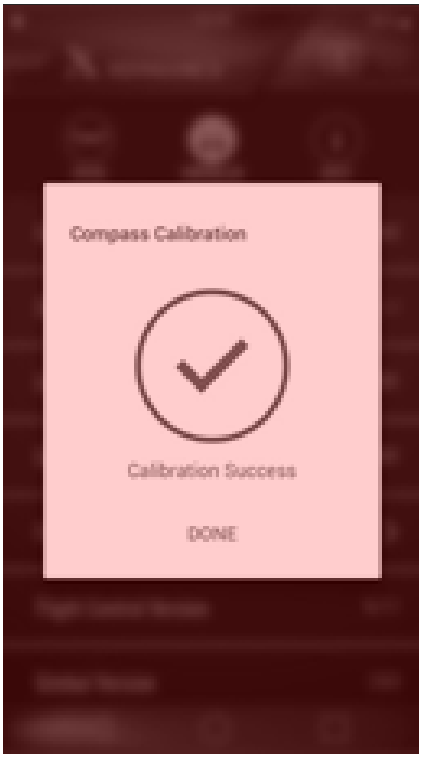
The electronic compass on the Evolve drone is used to determine the direction the drone is pointing in reference to true north. The compass is a sensitive sensor that is affected by electromagnetic interference from sources such as radio towers and high voltage power lines. The compass can give false readings if the drone is placed over a surface composed of metal or there is metal under the surface, such as rebar under concrete. If a compass error occurs simply relocate the drone in a different location until the metal interference is gone. If relocating the drone does not clear the compass error or if the smart pilot APP requires a compass calibration follow the steps below.

To calibrate the compass follow these steps:

1. For safety remove the propellers from the drone
2. Make sure the GS and drone are powered on and connected
3. Navigate to the compass calibration page on the smart pilot APP
4. Press "start" on the compass calibration page
5. Follow the on screen instructions to rotate the drone on the proper plane
6. Listen for a tone during rotation and after each tone stop and proceed with the next rotation until complete
7. When complete the APP will indicate calibration success or failed
8. If failed recycle the drone and controller power and restart at Step 1



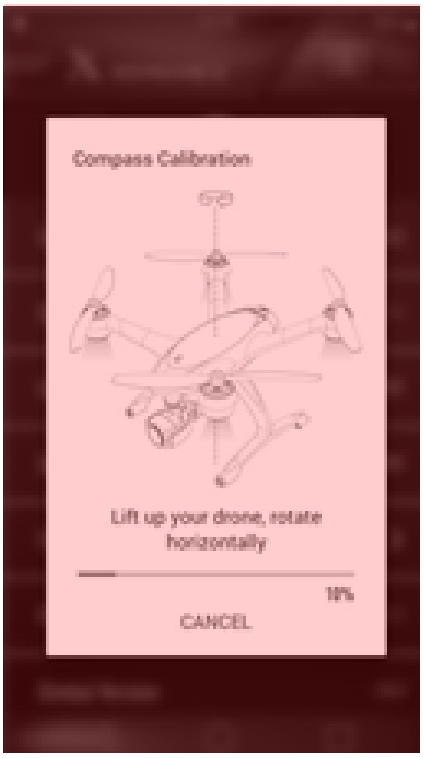


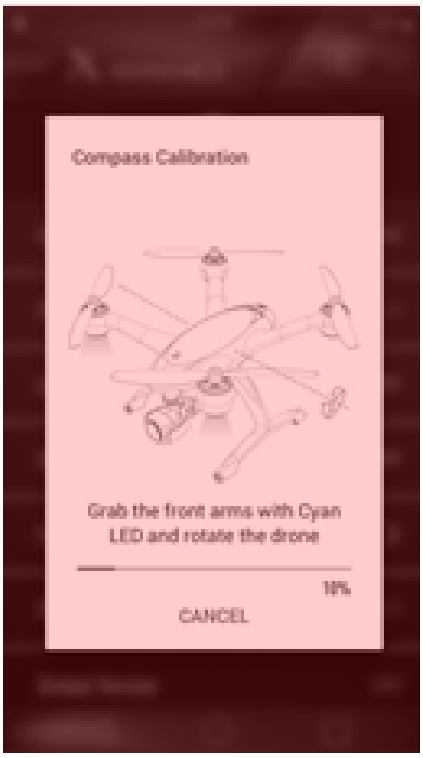


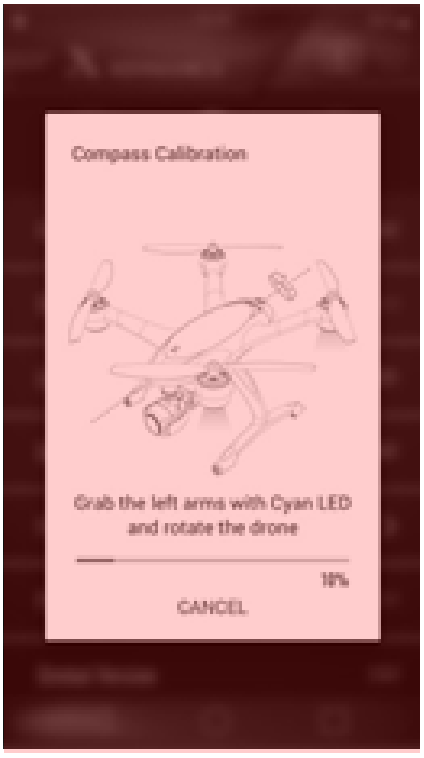
Drone Calibration

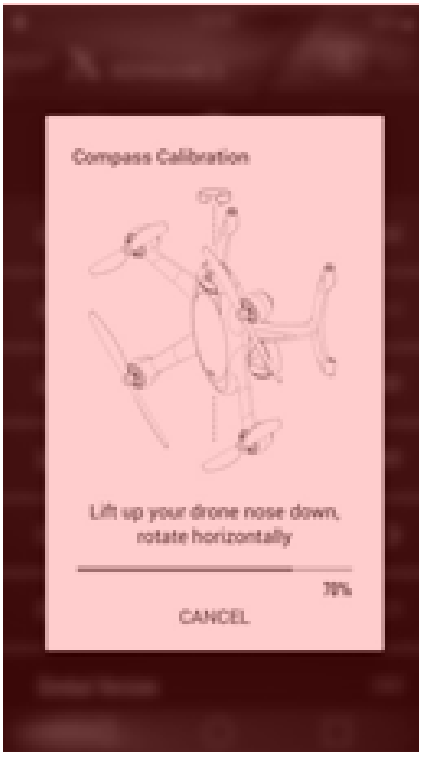
Compass Calibration Procedures:

Please ensure all firmware is up to date and follow on screen instructions if any variance from the instructions outlined below.









Remote Controller

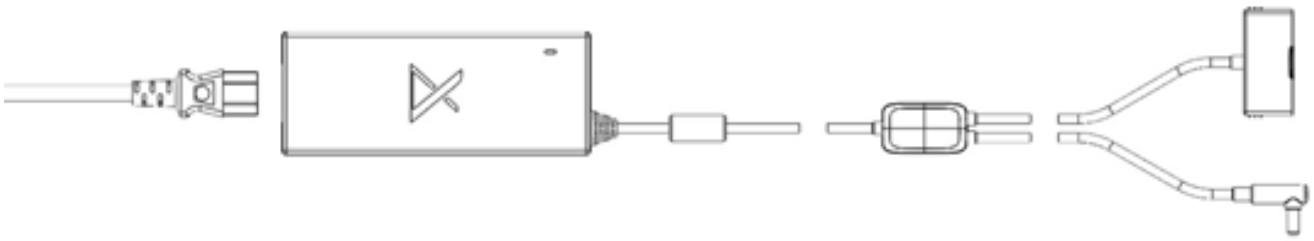
Charging the Remote Controller Battery

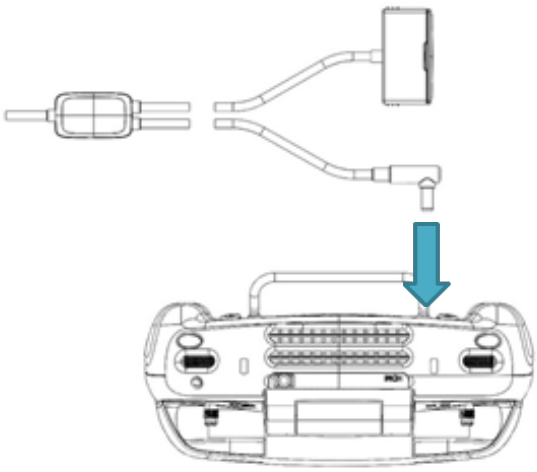
The remote controller battery can be charged with the supplied battery charger whilst inserted into the remote controller main housing.

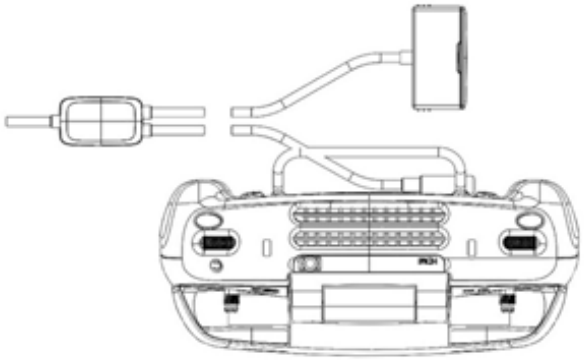
Follow the below steps to charge the Remote Controller battery :

1. Plug in power supply to wall socket power supply
2. Plug silver round connector into Remote Controller
3. When the LED indicator on the GS turns off battery is fully charged

Please note the remote controller battery can also be charged simultaneously with the Evolve drone battery.



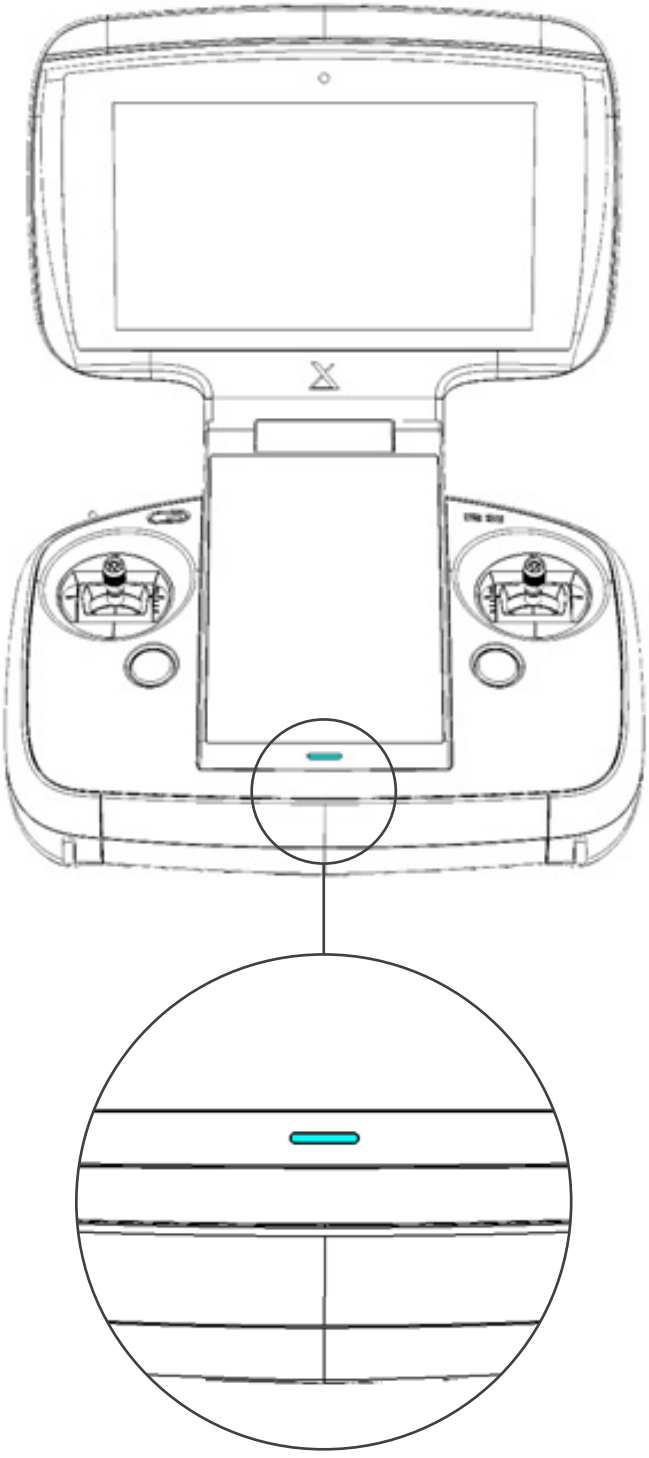




Remote Controller

Remote Controller LED Indicators

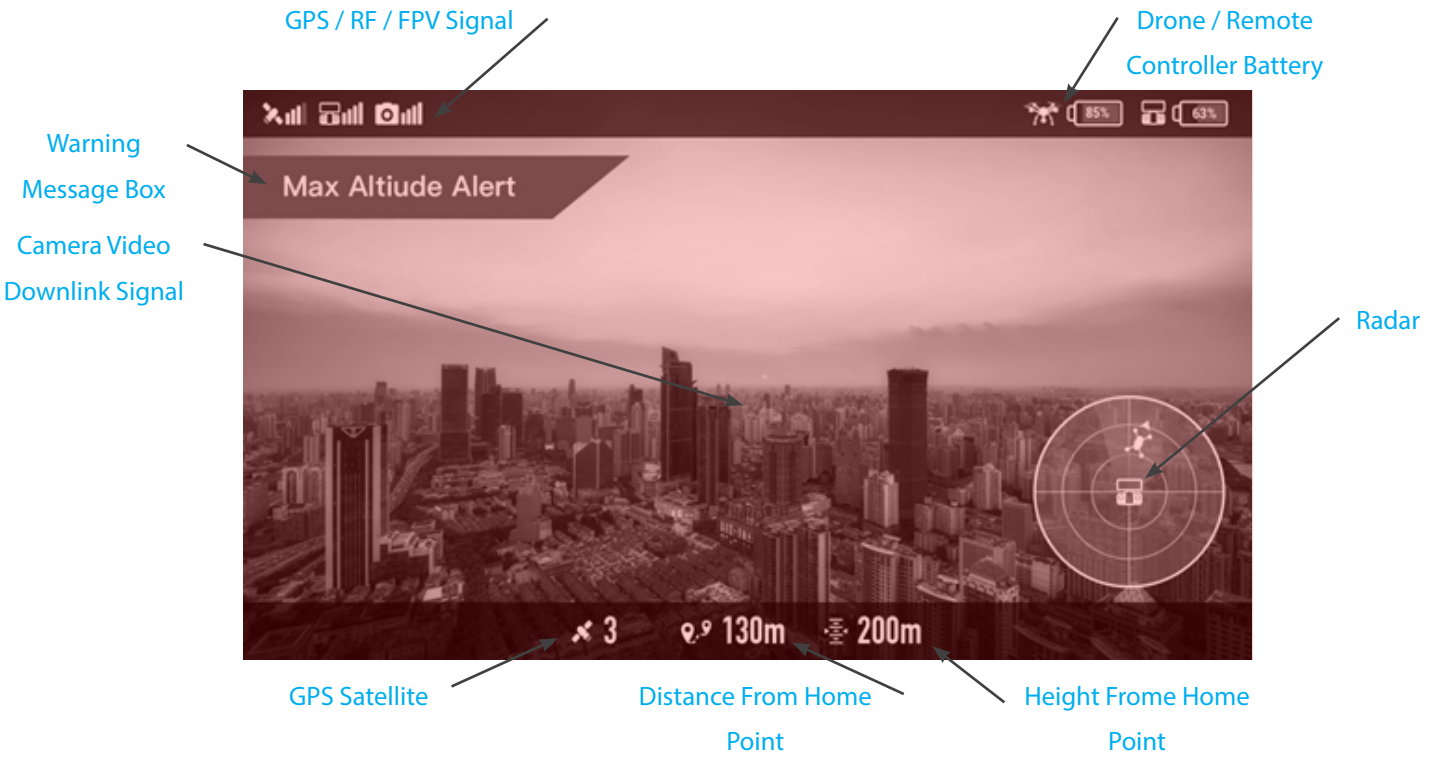
The Remote Controller LED indicator is located below the bottom screen. The LED indicated the current state of the Remote Controller battery charge. During normal operating battery operating level the LED will be blue. When the voltage has dropped to the point requiring immediate recharge, the LED will turn to Amber. It is not recommended to start a new flight with an amber indication on the LED.

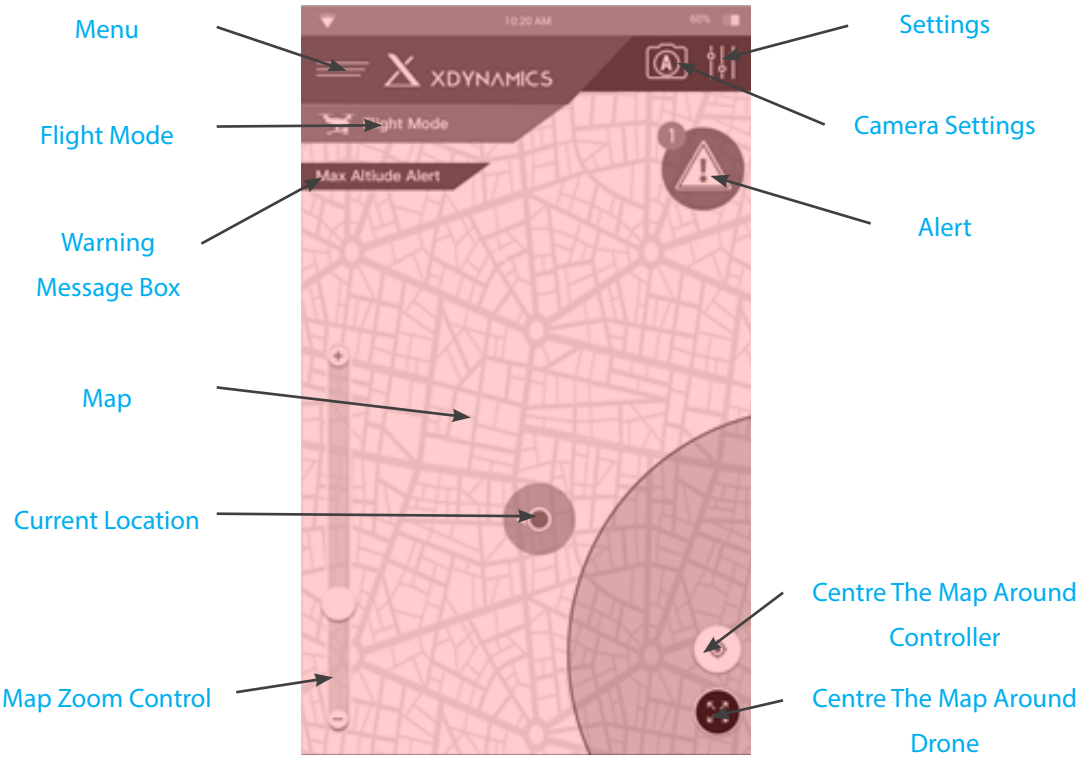


Remote Controller Application

Flight Data

Flight Data is displayed as below:





Remote Controller Application

Warnings and Alerts

Smart Pilot System provides notifications on warnings and alerts, and will provide suggested actions on solving the issues.

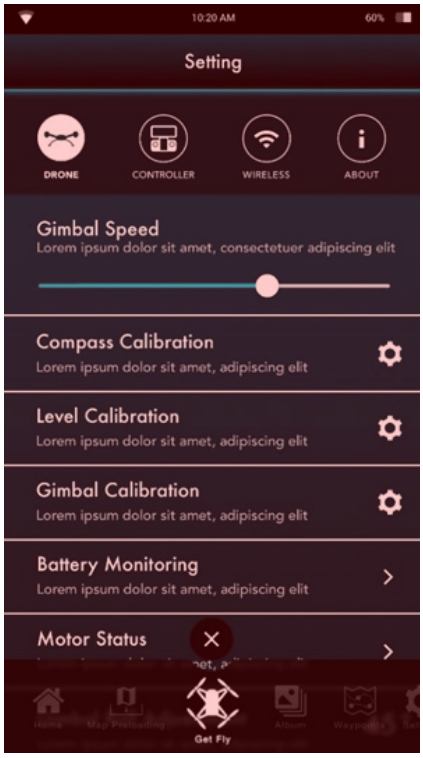
The top screen shows the warnings at the top left corner.

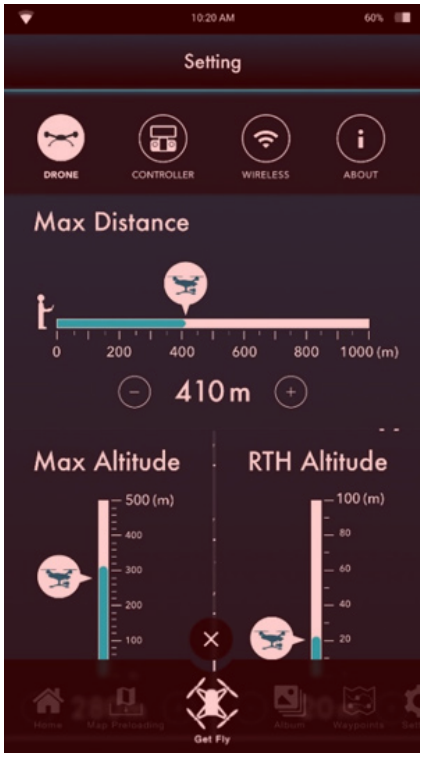
The bottom screen also shows the warnings at the top left corner. And, you may also notice the current number of warnings on the Alert button at the top left corner. Tapping the Alert button on the screen will bring you to the Warning List. You may check all the existing warnings and tap the suggested action to solve the issue.

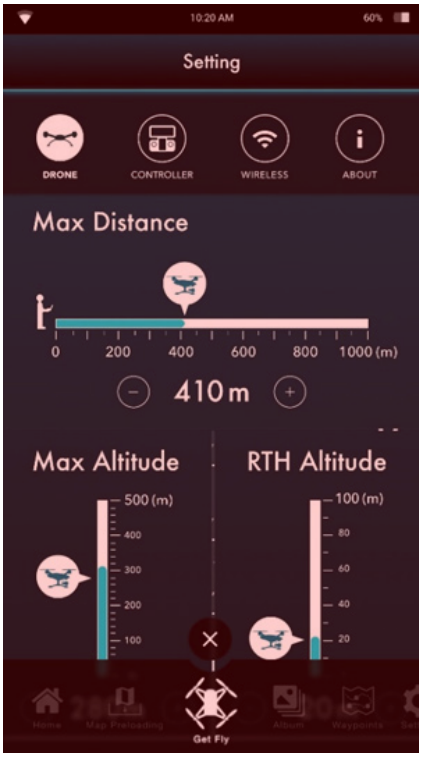
Remote Controller Application

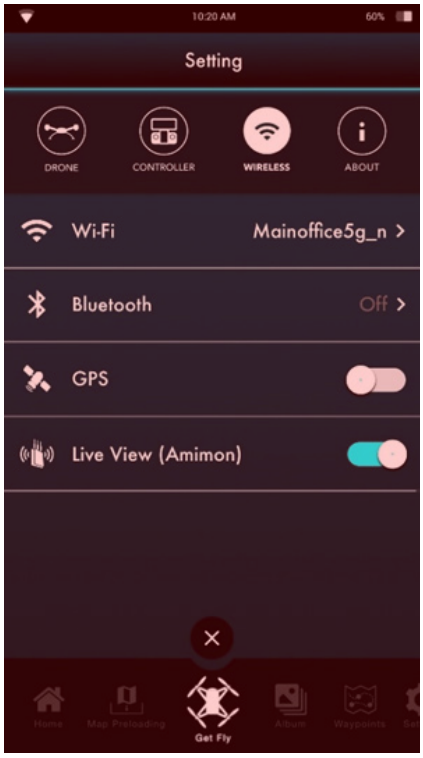
Settings Menu

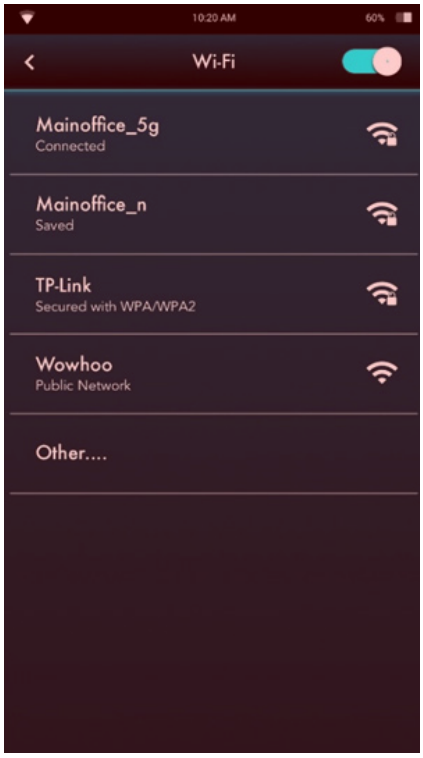
The settings menu allows the operator to configure the drone to suite their preferences. Settings include Done, Controller, Wireless, and About.

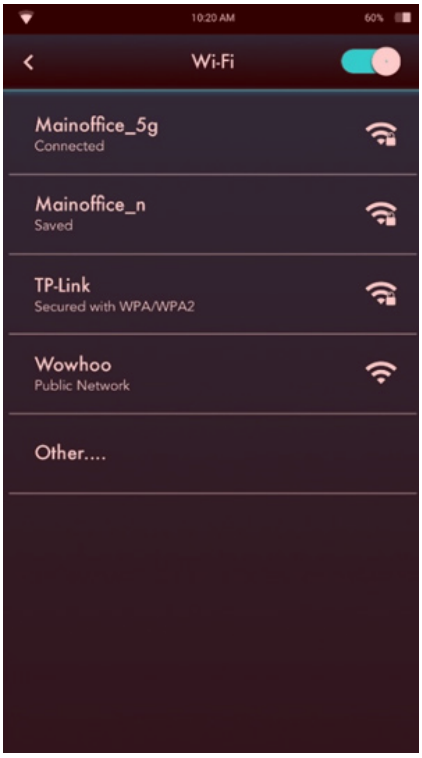












Remote Controller Application

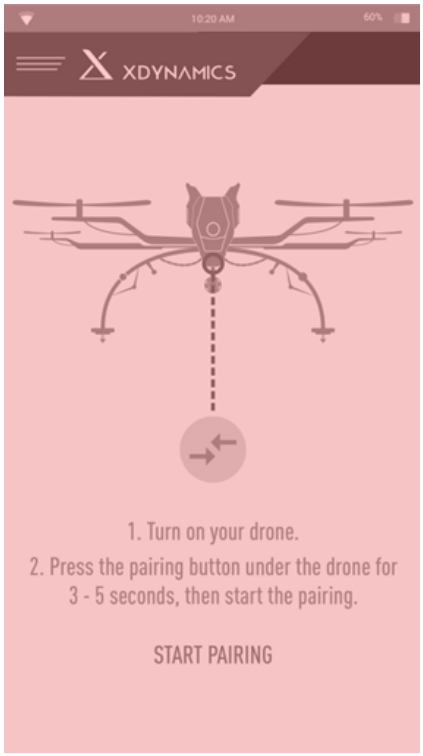
Linking the Remote Controller

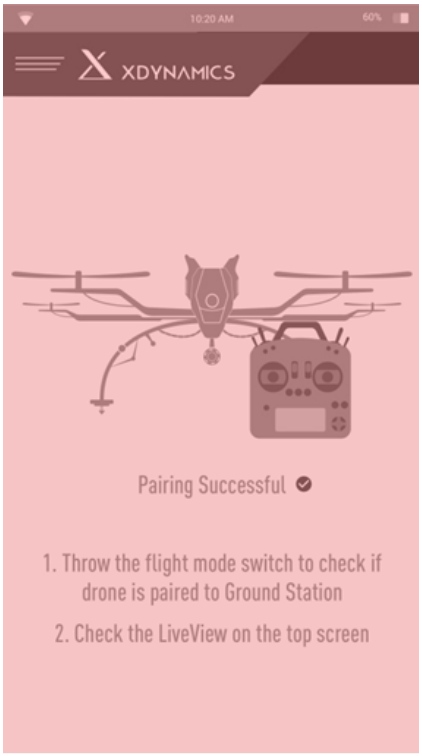
The Evolve drone system is pre linked from the factory. If there becomes a situation requiring the Remote Controller and the drone to be re-linked Follow the below steps:

To pair the remote controller to a new drone follow these steps:

1. Navigate to the Smart Pilot System Drone Pairing Page.
2. Turn on the Drone.
3. Keep the Drone at least 3ft away from the Remote Controller.
4. Tap "Start Pairing" on the Remote Controller screen.
5. Follow the instructions on screen to complete the pairing.
6. The screen shows the modules pairing status.
7. The whole pairing process may take up to 2 minutes.

Only required if trying to pair a new drone to the remote controller or a new controller to the drone.



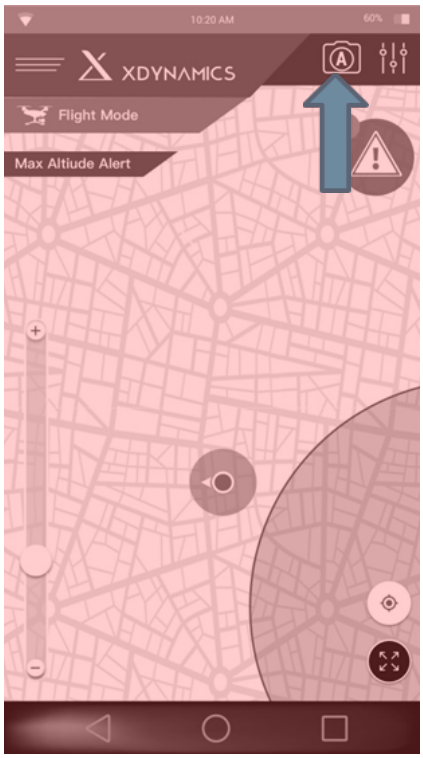


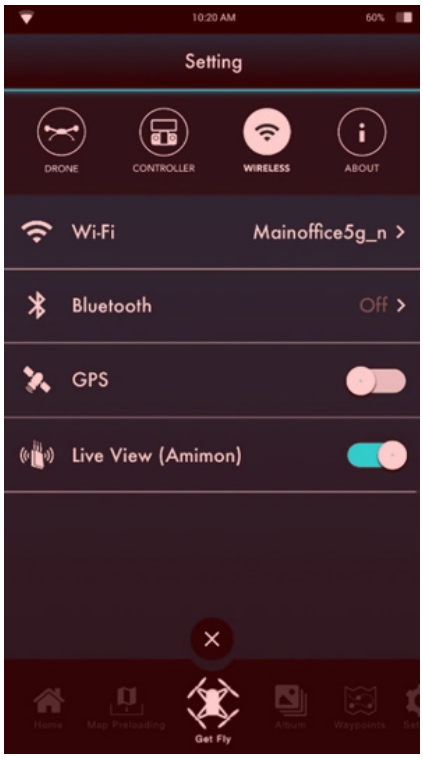
Camera and Gimbal Section

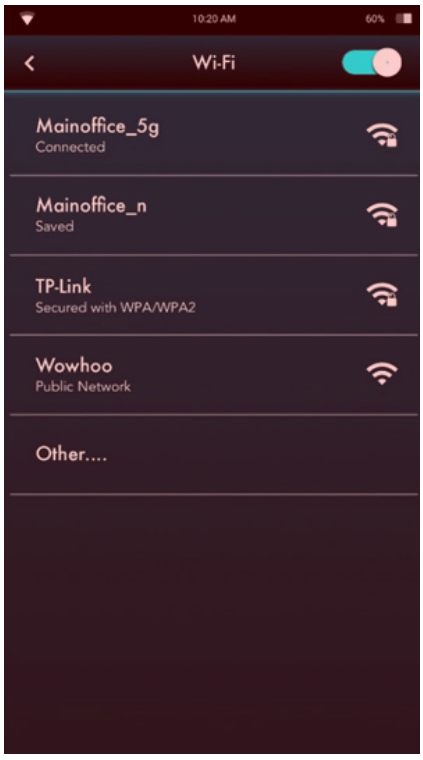
Camera Settings Page

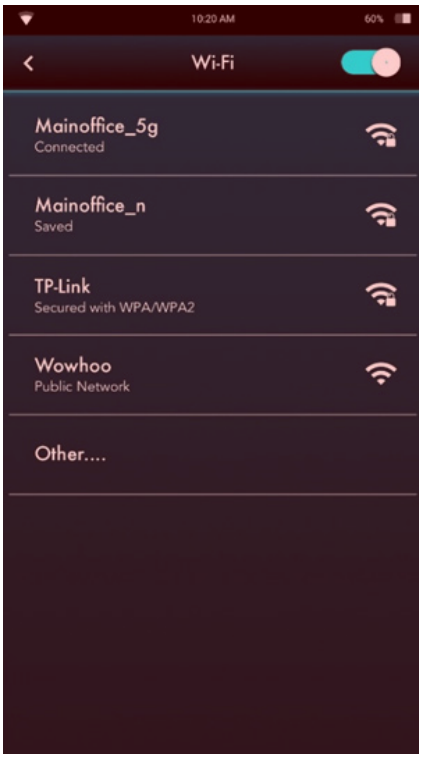
The drone camera has full control of key video shooting settings, all of these settings can be found at the camera setting page in the Smart Co-Pilot System.

Selecting the icon indicated in the below diagram will open the configure setting for the camera. The standard settings are similar to those found in most digital camera systems, including ISO, shutter speed, contrast, quality, format etc.





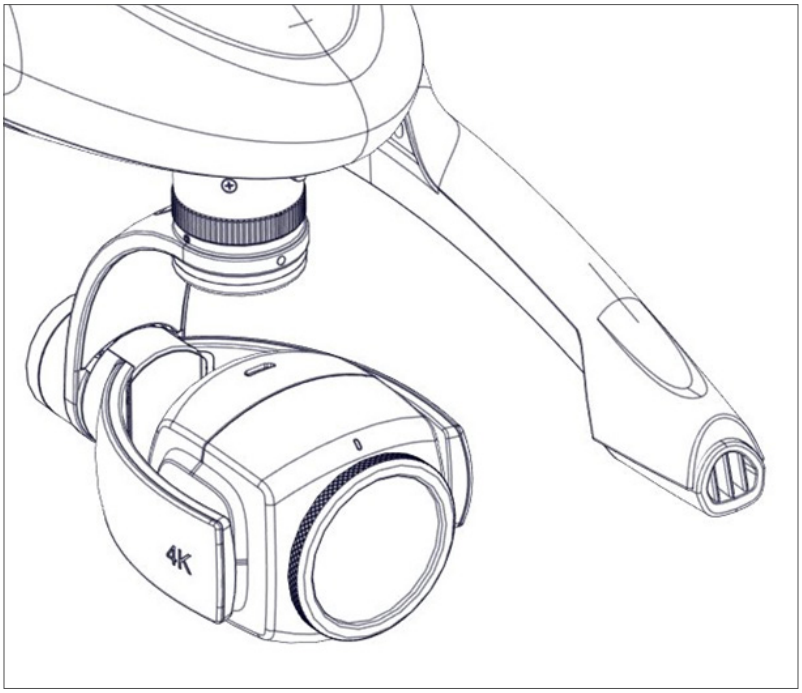


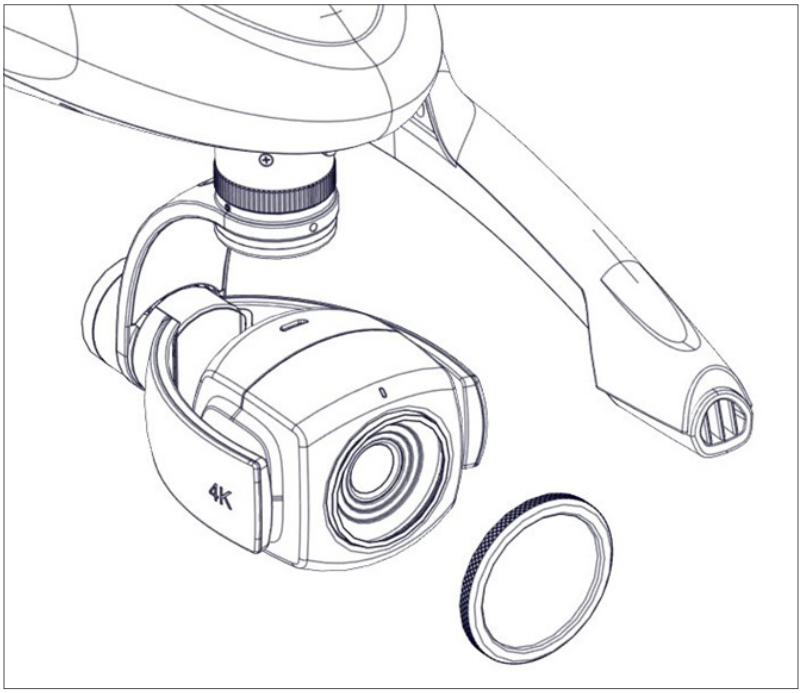


Camera and Gimbal Section

Removing Filter Cover (Allows for cleaning)

To remove the camera filter unscrew CCW as shown in the diagram below.





Flight Operations Section

Weather Limitations

Although the Evolve is a high performance drone, weather can be a crucial factor to flight performance and safe operations. Caution must be observed when it comes to weather planning. Effective weather planning breaks down to these criteria:

- Weather information gathering – This can be achieved be watching your local news weather station and by using the web and APP tools like The Weather Channel and NOAA
- Knowledge of weather patterns in your operational area – Search for local weather patterns with similar APP tools for forecasting weather
- Executing flight plan and go or no go situations based on the weather information – Be sure to make informed decisions based on accurate weather information and remember no flight is too important to ignore safely hazards created by inclement weather.

If these criteria are met the chances of a crash or close calls are substantially reduced.

Below is the weather limitation of the Evolve:

- Wind speed - 25 mph for maximum safe operations
- Outside temperature - 104°F hottest recommended / temperature 32°F for the coldest temperature
- Visibility – At least 5 statute miles of clear visibility and a minimum cloud cover ceiling of 400ft
- Fog – Not Recommended to Fly
- Rain – Do Not Fly

Flight Operations Section

Flight System Limitations

Below are the flight limitations of the Evolve:

Speed

- Accenting – 17.5 MPH
- Descending – 11MPH
- Horizontal – 45 mph (For higher top speeds contact customer support for signing of warranty wavier prior to activation)

Distance

- 600 ft

Height

- 5000 ft above sea level

Weight

- 2.5 kg

Max. Flight time –

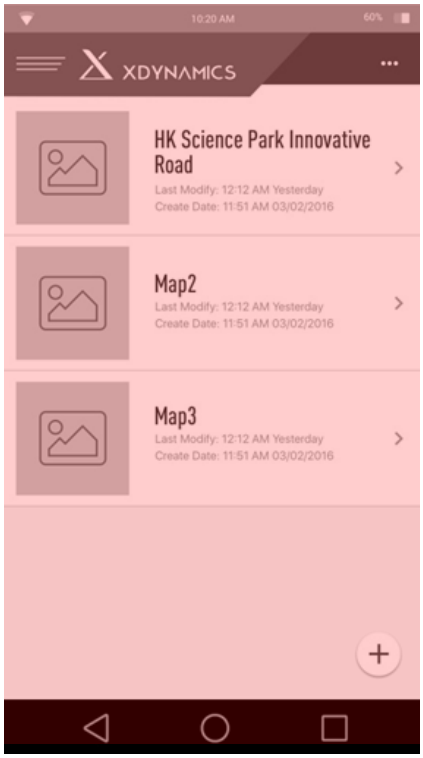
- 15 min

Flight Operations Section

Map Preloading (Offline Map)

In order to ensure the map can be displayed outdoor without network, Smart Pilot System offers the offline map download feature. Follow the below steps to download the map:

1. Connect Remote Controller to WiFi internet connection with download capabilities
2. Navigate to the Smart Pilot System Offline Map Page
3. Tap "+" to create a new offline map area
4. Enter the Area name
5. Drag and pinch the map to the designated area
6. Tap Download to start downloading
7. Smart Pilot System will indicate the download progress

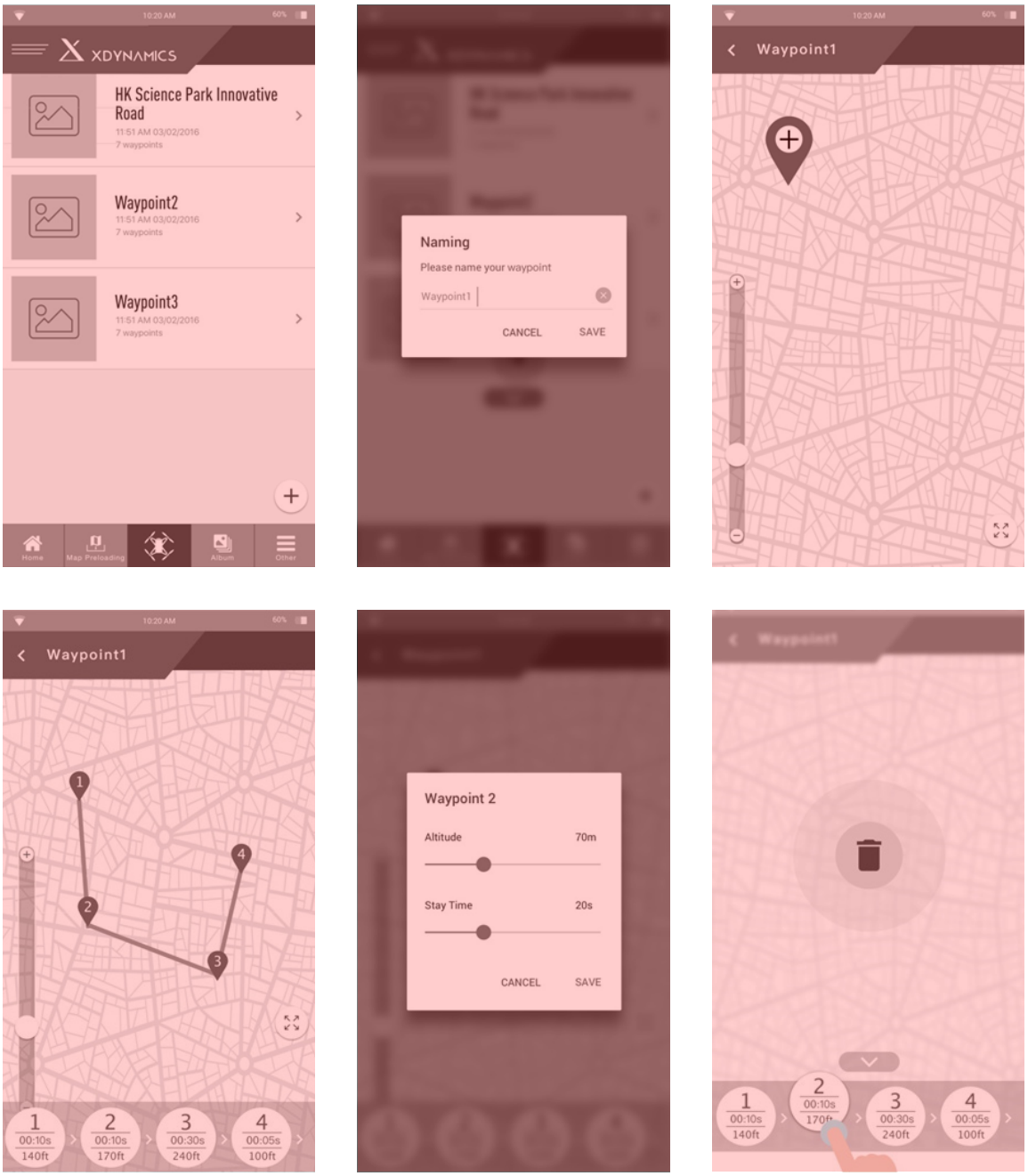


Flight Operations Section

Setting Waypoints

You may plan your automated flight path at the Smart Pilot System. Follow the below steps to Plan your automated flight.

1. Navigate to the Smart Pilot System Path Planner Page.
2. Tap "+" to create a new plan
3. Enter the Plan name
4. At the plan editing, long tap on the map and tap "+" to place a waypoint on the map
5. Tap of the waypoint to edit the stay time and altitude
6. Long tap the bottom waypoint bubbles, drag to re-arrange the order or remove
7. The plan is auto saved, tap back to return



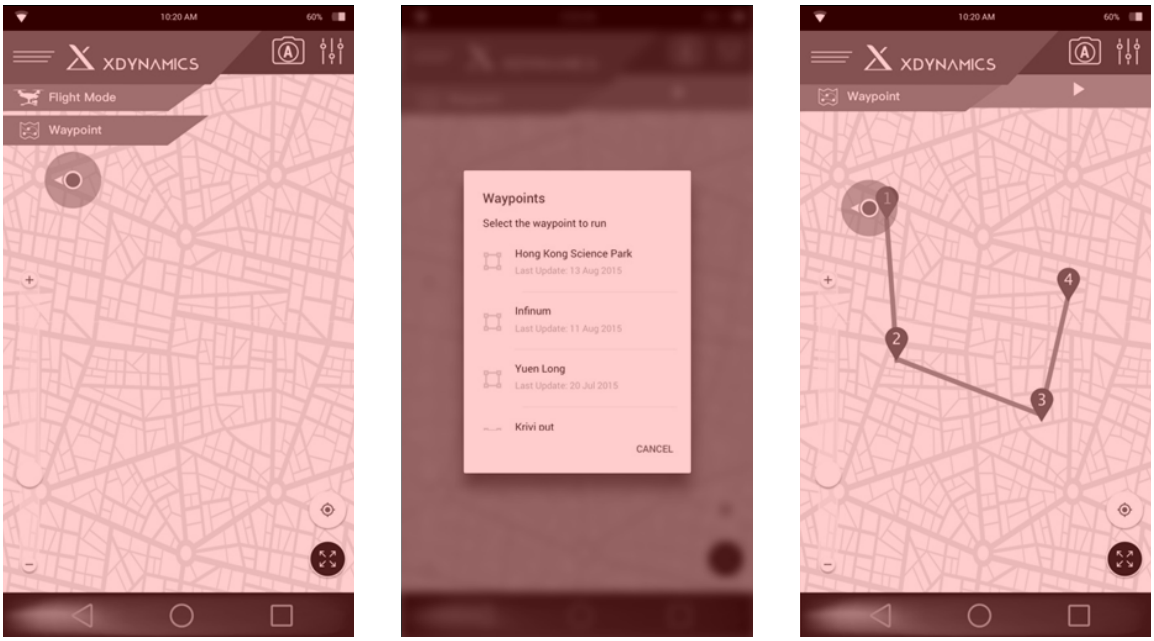
Run Waypoint Plan

Setting Waypoints

For executing the waypoint path, select Custom Mode by choosing the middle position on the flight mode switch and then choose waypoint mode and follow the steps outlined below. By the end of the execution of the whole plan the drone will hover in position at the last waypoint. Auto mode can be cancelled at any time by switching back the flight mode switch to the left for GPS mode. The pilot has full control of the position and yaw angle of the drone during auto flight.

To execute the plan, you may enter the Fly page by following these steps:

1. Navigate to the Smart Pilot System Fly Page.
2. Tap the Flight Mode and change to Waypoints
3. Select the desired plan
4. Smart Pilot System will upload the plan to the drone
5. Tap “Start” to execute



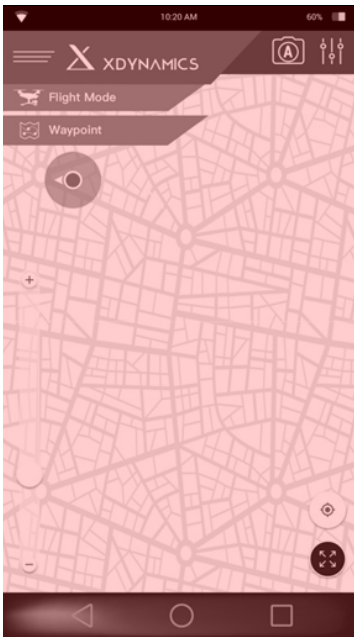
Flight Operations Section

No Fly Zones

Although the Evolve is a high performance drone, weather can be a crucial factor to flight performance and safe operations. Caution must be observed when it comes to weather planning. Effective weather planning breaks down to these criteria:

- Weather information gathering – This can be achieved be watching your local news weather station and by using the web and APP tools like The Weather Channel and NOAA
- Knowledge of weather patterns in your operational area – Search for local weather patterns with similar APP tools for forecasting weather
- Executing flight plan and go or no go situations based on the weather information – Be sure to make informed decisions based on accurate weather information and remember no flight is too important to ignore safely hazards created by inclement weather.

Flying in no-fly zones can be potentially illegal, please insure flights are always conducted in a safe to fly area.



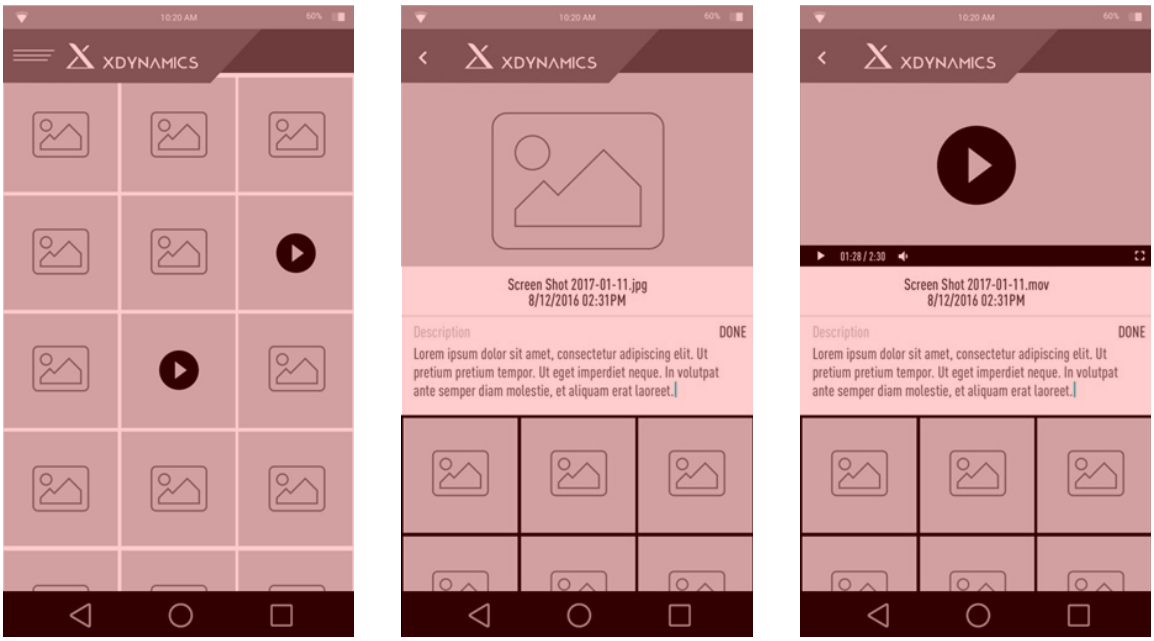
Content Options

Album and Image Editing

You may view your photos and videos on the Smart Pilot Systems page. The editing tool is also available for quick image editing.

1. Navigate to the Smart Pilot System Album Page.
2. The bottom screen shows the Images and Videos store at the Remote Controller.
3. Tap the media on the screen.
4. The top screen show the photo/video in full screen mode, while the bottom screen provide the detail information and control for the photo/video
5. Tap the Pen on the top right corner to enter the photo editing section
6. Crop the image and tap next
7. Apply filter and save your image

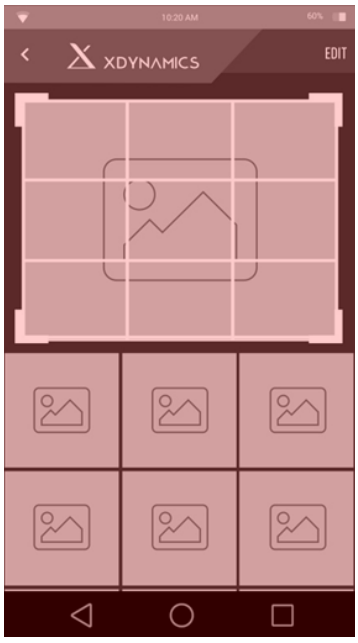
Media on the controller is a DVR recording from the FPV downlink. For full quality images, remove the SD card and upload to your computer.

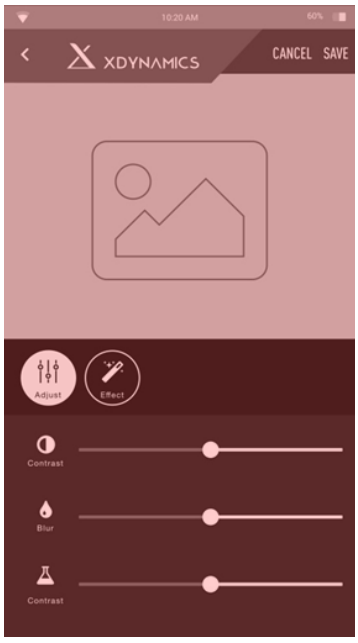


Content Options

Album and Image Editing (Continued)

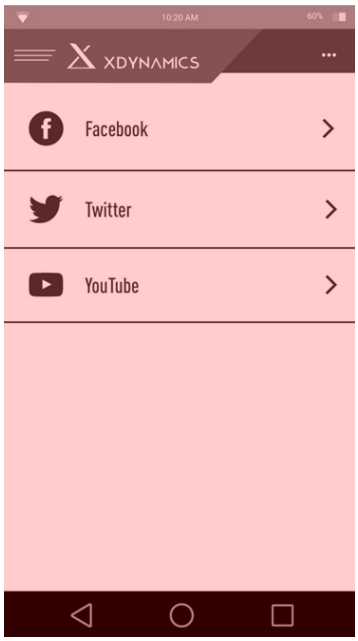
You may view your photos and videos on the Smart Pilot Systems page. The editing tool is also available for quick image editing.





No Fly Zones

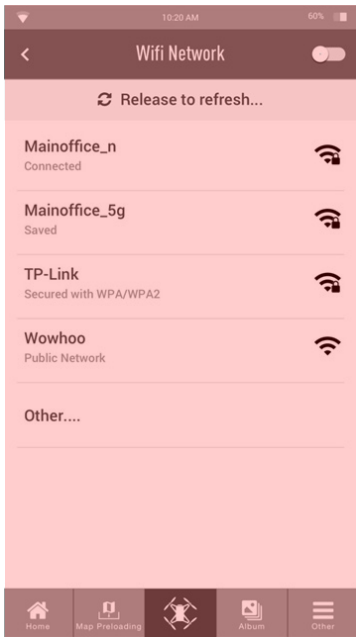
Although the Evolve is a high performance drone, weather can be a crucial factor to flight performance and safe operations. Caution must be observed when it comes to weather planning. Effective weather planning breaks down to these criteria:



Flight Operations Section

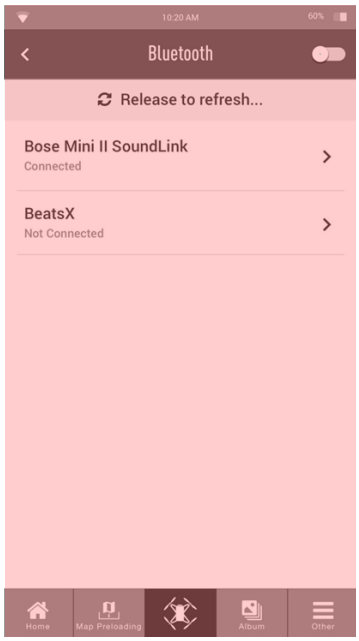
Wi-Fi Network

To download maps and connect to social media services the Remote Controller needs connect to a Wi-Fi network. Navigate to the Wi-Fi Network page on the Smart Pilot APP and connect to the desired Wi-Fi network.



Bluetooth

To listen to voice alerts form the Smart Piot APP the ground controller has the ability to connect to Bluetooth capable devices. Navigate to the Bluetooth page on the Smart Pilot APP and connect to the desired Bluetooth device. Be sure to make Bluetooth devices detectable to the Remote Controller.



Controller Trouble Shooting

Trouble Shooting Remote Controller

To trouble shoot issues for the ground controller press on the alert icon and refer to the alert list for corrective action.

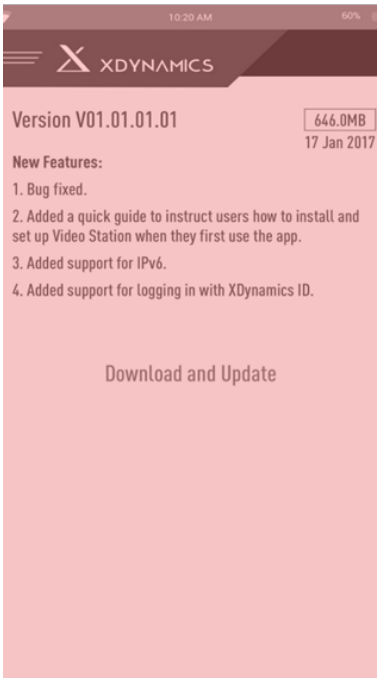
Updating the Controller

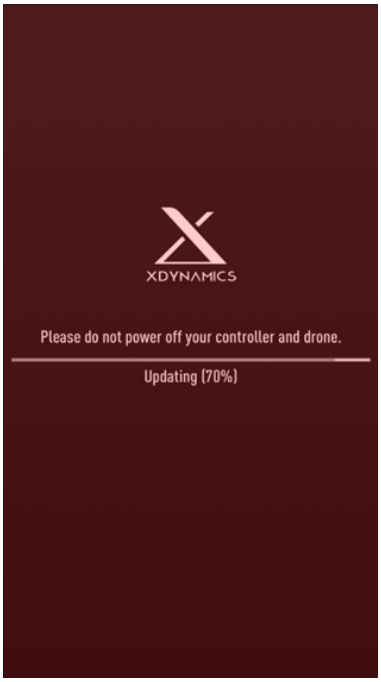
Firmware Updates

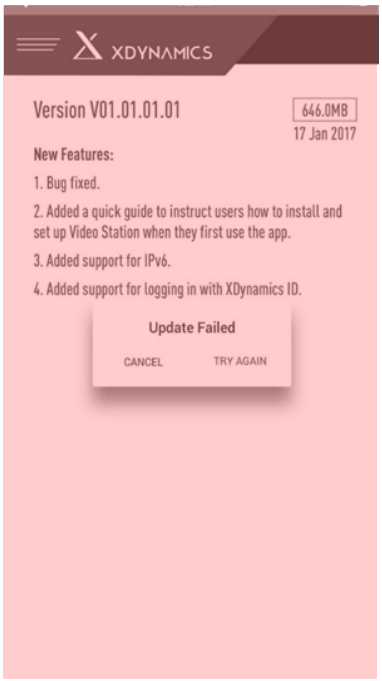
The Remote Controller App will guide the user through the Firmware Update process

Firmware Update requests are displayed on the Remote Controller screen.

Whenever an update is available, the Smart Co-Pilot system will request the operator perform the update when the Remote Controller is connected to a Wi-Fi source. This process can be simply accessed from the alert page by selecting update.







Product Specification

Gimbal

ITEM	SPECIFICATION
Controllable Range	Pitch -90° to +30°
Gimbal Accuracy	Static stability: ±0.01°, motion stability: ±0.4°
Stabilization	3-axis (pitch, roll, yaw)

Camera

ITEM	SPECIFICATION
CMOS Sensor	Sony 1/2.3" CMOS, Effective pixels:12.4M
Lens	FOV: 94 Degree 21mm, f/2.8, focus at infinite
ISO Range	ISO 100-3200
Shutter Speed	1/8000s – 0.5s
Max Photo Resolution	4000 x 3000 3000 x 3000 3840 x 2160 2592 x 1944
Video Resolution	4K: 3840 x 2160 @ 30 fps 2.7K: 2592 x 1520 @ 30 fps 12M: 4000x3000@28fps FHD: 1920 x 1080 @ 120 fps, HD: 1280 x 720 @ 240 fps
Max Video Bit Rate	60Mbit/s (60 is OK, but recommend 30)
Photo File Formats	JPEG
Video File Formats	MP4
Supported SD Card Types	Micro SD (SD/SDHC/SDXC) / Max. 64GB
Connectivity	Micro USB 2.0
Weight	71.5 g (including RTC battery)
Dimensions	58mm x 58.8mm x 53mm

Product Specification

Remote Controller

ITEM	SPECIFICATION
Processor	Quad Core 2.0GHz 64-bit CPU+ PowerVR GPU
Operating System	Android 6.0
Memory	4GB DDR3
Internal Storage	64GB eMMC
Supported SD Card Types	Micro SD (SD/SDHC/SDXC) / Max. 64GB
Upper Display (View Finder)	7” 720p Screen Anti-reflective Coating Luminance: 600 cd/m2
Lower Display (Console)	5” 1080p Multi-Touch Screen Anti-reflective Coating Luminance: cd/m2
Embedded Camera	5MP Front Camera
R/C & Telemetry Operating Frequency	2.404-2.467GHz
Max Transmission Distance	1 km, FCC Compliant, unobstructed and no
Live View Working Frequency	5.18-5.825GHz
Max Live View Distance	1000 m, FCC Compliant, unobstructed and no
Live View Quality	1080p @ 60 fps
Live View Transmission Latency	<10ms
Wireless Connectivity	Bluetooth 2.1 EDR 4.0 BLE Wi-Fi (802.11b/g/n/ac) Miracast & DLNA support
Peripheral Connectors	USB 3.0 OTG x 1 USB 3.0 Host x 1 Micro HDMI-out x 1 Microphone-in jack x 1 Headphone-out jack x 1 SD Card Slot x 1 DC-in x 1

Product Specification

Remote Controller

ITEM	SPECIFICATION
Sensors	Magnetometer Accelerometer Three-axis gyroscope Proximity Detector Microphone
Operating Temperature	0 - 40 degree C
Battery	6000 mAh Li-Po 3S
Operating Voltage	11.1V @ 4A (max)
Dimensions	199 mm* 176.4 mm* 106.9 mm
Weight	1622 g (including battery)

Gimbal

ITEM	SPECIFICATION
Power Output	120W
Voltage	18 V
Output Current	6.6A
Net Weight	663g
Dimensions	190mm*67.5mm*40mm
Operating Temperature	0 to 40 degree C
Input Voltage	110V – 240V a.c. 50Hz/60Hz

Product Specification

Drone Battery

ITEM	SPECIFICATION
Capacity	6700 mAh 4 Cell LiPo
Voltage	14.8V
Battery Type	Lithium-ion Polymer
Energy	99.16 Wh
Net Weight	<650g
Dimensions	190mm*67.5mm*40mm
Operating Temperature	0 to 40 degree C
Max Charging Voltage	17.4V

Remote Controller Battery

ITEM	SPECIFICATION
Capacity	6000 mAh Li-Po 3S
Voltage	11.1V @ 4A(max)
Battery Type	Lithium-ion Polymer
Energy	66 Wh
Net Weight	<440 g
Dimensions	156.7 mm*68.4 mm*40.7 mm
Operating Temperature	0 to 40 degree C
Max Charging Voltage	18V

Product Disposal

Ensure Safe Disposal

Ensure the product is disposed of in line with local laws and environmental guidelines.

Separately dispose of LiPo batteries used for the product, in line with local laws and environmental guidelines.

The RBRC® seal on the lithium-ion battery indicates that XDynamics. is voluntarily participating in an industry program to collect and recycle these batteries at the end of their useful lives, when taken out of service within the United States and Canada. The RBRC® program provides a convenient alternative to placing used lithium-ion batteries into the trash or municipal waste, which may be illegal in your area. XDynamic's participation in RBRC® makes it easy for you to drop off the spent battery at local retailers participating in the RBRC® program or at authorized XDynamics product service center. Please call 1 (800) 8 BATTERY® for information on Li-ion battery recycling and disposal bans/restrictions in your area. XDynamic's involvement in this program is part of its commitment to protecting our environment and conserving natural resources. RBRC® and 1 (800) 8 BATTERY® are registered trademarks of the Rechargeable Battery Recycling Corporation.

NEED TO VERIFY THIS SECTION / IF WE ARE GOING TO DO THIS.

Safety

Safety Precautions

When using your equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury, including the following:

- Follow all warnings and instructions marked on the product.
- Adult supervision is required.
- Do not use this product near water. For example, do not use it next to a bath tub, wash bowl, kitchen sink, laundry tub or swimming pool, or in a wet basement or shower.
- If flying the drone over water monitor battery flight time to avoid a water landing
- Use only the batteries indicated in this manual
- Do not dispose of batteries in a fire. They may explode.
- Dispose of used battery according to the information in The RBRC® seal.
- Use only the adapters included with this product. Incorrect adapter polarity or voltage can seriously damage the product.
- Do not leave the batteries in a car left under direct sunlight.

Safety

RF Radiation

RF radiation exposure statement The Product complies with FCC RF radiation exposure limits set for an uncontrolled environment. Use of other unapproved accessories may not ensure compliance with FCC RF exposure guidelines.

FCC Part 15 - This equipment has been tested and found to comply with the requirements for a Class B digital device under Part 15 of the Federal Communications Commission (FCC) rules. These requirements are intended 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.

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

(2) This device must accept any interference received, including interference that may cause undesired operation.

To ensure safety of users, the FCC has established criteria for the amount of radio frequency energy that can be safely absorbed by a user or bystander according to the intended usage of the product. This product has been tested and found to comply with the FCC criteria.

NEED TO VERIFY THIS SECTION WITH SPECIALIST

Safety

Drone

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

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.

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

NEED TO VERIFY THIS SECTION WITH SPECIALIST

Safety

Ground Station

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

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body with the minimum distance 0mm.

NEED TO VERIFY THIS SECTION WITH SPECIALIST

Safety

Warrenty

What does this limited warranty cover? The manufacturer of this XDynamics Product warrants to the holder of a valid proof of purchase (“Consumer” or “you”) that the Product and all accessories provided in the sales package (“Product”) are free from defects in material and workmanship, pursuant to the following terms and conditions, when installed and used normally and in accordance with the Product operating instructions. This limited warranty extends only to the Consumer for Products purchased and used in the United States of America and Canada. What will XDynamics do if the Product is not free from defects in materials and workmanship during the limited warranty period (“Materially Defective Product”)? During the limited warranty period, XDynamics’s authorized service representative will repair or replace at XDynamics’s option, without charge, a Materially Defective Product. If we repair the Product, we may use new or refurbished replacement parts. If we choose to replace the Product, we may replace it with a new or refurbished Product of the same or similar design. We will retain defective parts, modules, or equipment. Repair or replacement of the Product, at XDynamics’s option, is your exclusive remedy. XDynamics will return the repaired or replacement Products to you in working condition. You should expect the repair or replacement to take approximately 30 days. How long is the limited warranty period? The limited warranty period for the Product extends for ONE (1) YEAR from the date of purchase. If XDynamics repairs or replaces a Materially Defective Product under the terms of this limited warranty, this limited warranty also applies to the repaired or replacement Product for a period of either (a) 90 days from the date the repaired or replacement Product is shipped to you or (b) the time remaining on the original one-year warranty; whichever is longer. What is not covered by this limited warranty? This limited warranty does not cover: 1. Product that has been subjected to misuse, accident, shipping or other physical damage, improper installation, abnormal operation or handling, neglect, inundation, fire, water or other liquid intrusion; or 2. Product that has been.

LIMITED WARRANTY NEEDS TO BE VALIDATED BY COMPANY POLICY