# **Operation Manual/Quick Start Guide Addendum**

Reference:

Item 2, Pg. 3 in Operation Manual: "In the Box"

Additional items included in the box:

FPV cable, FPV Package (goggles or monitor. Add-on only), GoPro mounting case (FPV package. Add-on only), Gimbal board programmer.

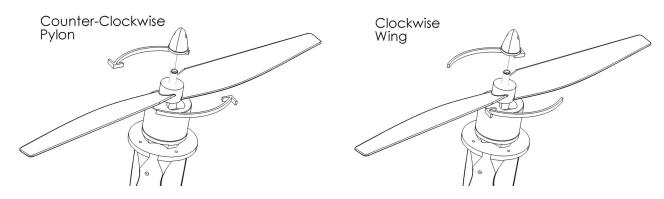
Reference:

Item 2 in Quick Start Guide: "Install Propellers"

Item 5, Pg. 8 in Operation Manual: "Installing Propellers":

Corrected procedures below:

Each motor comes with a spinner. The pylon motors and spinners spin counterclockwise, and wing motors and spinners spin clockwise. The black spinners go to the pylons, and the silver to the main wing. Unscrew the spinner, place the props with "R" engraved on them onto the pylons, and the ones without an "R" onto the main wing motor shafts. Tighten the spinner back on top by holding the motor still and spinning the spinner into place. All spinners are self tightening so just tighten firmly with fingers. Included black, plastic washers can be used to fill any space between prop and motor shaft, but are not necessary.



### Reference:

Item 3 in Quick Start Guide: "Install Payload"

Item 5, Pg. 9 in Operation Manual: "Install Payload"

Additional material below:

Gimbal Assembly:

1. Remove the nosecone from your X PlusOne and place the gimbal in its place. If you are facing the battery compartment on the craft, the vertical gimbal motor should be on your left (see image). Plug the gimbal board into the power cord before mounting gimbal. That way the connection will be held between the gimbal and the battery, as shown.



- Insert the long screws included in hardware kit, through the holes in the battery compartment and the gimbal. Secure with included nut on the backside. The direction of the screws is irrelevant.
- 3. Attach GoPro to gimbal base using included bolt, spacer and wing nut. Position the GoPro so that it balances freely level; facing forward.





Fixed Mount: Mount the fixed mount and GoPro same as above. See below for final set up:





Gimbal Board Programmer: All gimbals include a cable to connect your gimbal board to a computer. If your gimbal ever gets off centered, contact xCraft support at <a href="mailto:support@xcraft.io">support@xcraft.io</a> to receive the software needed to recalibrate your gimbal.

### Reference:

Item 9, Pg. 16 in Operation Manual: "Maintenance" Additional material below:

Telemetry Module (Ai Only): Use the telemetry to connect your X PlusOne to a computer or smartphone for "follow-me". Necessary USB to mini USB connector cable is included. Connect the craft to a computer and use Mission Planner or QGroundControl software to calibrate, update, or set way points for your X PlusOne. Follow the calibrating instructions to connect craft to computer. Visit the "How To" videos on the xCraft Youtube page for help on calibrating or setting up "follow-me".

### Reference:

Item 6 in Quick Start Guide: "Flight Modes"

Item 7, Pg. 11 in Operation Manual: "Operation-How to operate your X PlusOne"

Corrected	flight	modes	below:
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Home	Return to Home. Craft will return to original take off location.
Fly	Normal switch position for flight.
Hover	Hover in place. Craft will hold position and can be controlled with hover controls. Craft uses GPS to auto-stabilize itself. Ensure GPs has clear signal, free of buildings and trees etc.
	Same as Hover except, craft will react to direction inputs regardless of orientation. i.e. even if the craft is turned sideways, pulling back on the right stick will bring the craft back.
Acro	Use for forward flight. Craft is stabilized but does not use GPS to hold a hover position. In forward flight, craft will pitch forward up to 75°.

FPV: First-Person-View accessories allow the pilot to stream live footage from the craft to the ground.

• FPV Power: Due to hardware upgrades, your X PlusOne may have wire connectors or a switch to power on the FPV in your craft. You will have to power on the FPV in order to transmit a live feed. Note: Check local regulations for use of 5.8 GHz FPV transmitter.

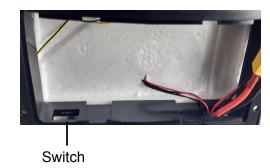
See below for examples of each:

The wire connectors are labeled; simply connect both red ends.

The switch is set in the "Off" position and is labeled. Simply switch to "On" before using.

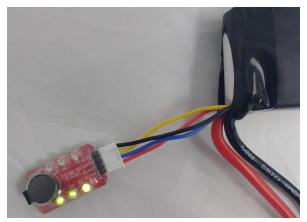






- FPV Cable is included in your package and allows you to connect your GoPro to your craft to transmit a live feed. Connect the Micro USB end to the GoPro and the other connector to the matching wire labeled "FPV" in your craft.
- FPV Goggles: To connect the goggles to your GoPro, power on FPV from your craft and connect the GoPro. Power on the GoPro and goggles. Scan through the channels on the goggles until the camera footage comes through clear.
- FPV Monitor: To connect the monitor to your GoPro, power on FPV from your craft and connect the GoPro. Power on the GoPro and monitor. Scan through the "group" button until you find the camera image. Scan through the "channels" to get a clearer image.
- GoPro Mount Case (FPV Package): Use this case to mount the GoPro to the gimbal/fixed mount and plug the FPV cable into the Micro USB connection.

Battery Monitor (RC Only): Plug the battery monitor into the balance cable of the craft battery and leave plugged in during flight. Monitor will beep loudly when the battery reaches its set cut off limit.



## **Suggested Pre-Flight Calibration**

It is highly recommended that you calibrate your X PlusOne every time you fly in a new location. As the GPS is highly reliant on satellite connection to perform any autonomous functions, it needs a strong signal for loiter, Return to Home, Follow-me, and other various programing functions.

Use Mission Planner software (Windows), or QGroundControl (iOS/Windows) to calibrate, set modes, or set way points for your X PlusOne.

For more information visit:

xCraft Youtube channel for calibration How-to's.

Mission Planner: <a href="http://ardupilot.org/planner/docs/mission-planner-overview.html">http://ardupilot.org/planner/docs/mission-planner-overview.html</a>

QGroundControl:http://ggroundcontrol.io

For questions or more information, email <a href="mailto:support@xcraft.io">support@xcraft.io</a>, or call 1-208-665-1353