

STEP BY STEP INSTRUCTIONS FOR DJI GROUNDSTATION AUTOMISSION

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Auto Takeoff, Waypoint following, and Auto landing

1. Open the DJI Groundstation 4.0 on your PC
2. Connect the DJI DataLink to the computer via the USB.
 - a. The RED light should go on (the red light has a label on the right of it that says DATA / POWER)
3. Turn on the power to the helicopter
 - a. Plug in both batteries to the via the YELLOW connectors, on the octocopter
 - b. DO NOT MOVE the octocopter after plugging it in
4. Turn on the Transmitter (JR-XG8 Remote Control)
 - a. Flip all the switches AWAY from you (towards the ground, if you are holding it parallel to the ground)
 - b. Put the throttle (the LEFT gimble stick) downwards, towards you
 - c. Flip the silver ON/OFF switch in the center of the transmitter UPWARDS (away from you)
 - d. Put the transmitter in AUTOPILOT (GPS) MODE by flipping the switch in the TOP RIGHT of the transmitter, labeled (GPS / ATT / MANUAL), up towards you, to GPS MODE
5. CONNECT the groundstation to the octocopter
 - a. Click **CONNECT** on the TOP RIGHT.
 - b. This should successfully handshake the DJI software with the octocopter, after a successful GPS lock is established.
 - c. On the bottom left corner is the GPS status bar, that looks like this



when it is ready: . At this point, you can proceed.

6. If it is not ready, or if there is an error handshaking, it will look like this



instead: . Check the connections between the Data Link from the computer and the Data Link on the helicopter.

7. Set the **Altitude Offset**
 - a. At the top, click the tab Sys_set, click Altitude Offset
 - b. Make sure "HEIGHT" is selected, then click OK
8. Put the flight controller in **Click and Go mode**:
 - a. At the topClick Toolbox, click and go
9. Select **JOYSTICK**
 - a. In the top left of the groundstation, click **JOYSTICK** then **SELECT JOYSTICK (?)**
10. Set the **HOME POSITION**
 - a. At the top right of the screen, click **SET HOME POSITION**

11. Set the **WAYPOINTS**

- a. To set the waypoints, open the **EDITOR** (click EDITOR, a square button at the top center)
- b. Click **NEW** to set a new flight path
- c. Click on the “+” button in the editor, then click to add points to the flight path
- d. Set the altitude of each waypoint
 - i. If the line between waypoints is **RED**, there is a problem with the flight, most likely the altitude. Set the altitude to a higher number and click enter.
 - ii. Make sure the flight path (line between waypoints) is **BLUE**
- e. Set the flight parameters by clicking on the “Editing Mission” Folder
 - i. Set the flight time limit in Seconds to 600: See “MissionTimeLmt”
 - ii. Set the **ROUTE: StartToEnd**
- f. Click **SAVE** to save your flight path
- g. Click **UPLOAD**, then click **OK** when the flight chart is displayed as a text chart

NOW YOU ARE READY TO FLY

12. **Auto Takeoff:** (to take off and hover above the home point)

- a. At the top center of the screen, click **One Key Takeoff**
- b. Put the throttle on the transmitter in **CENTER** position
- c. The octocopter will takeoff and hover at about 12 feet

13. **Once hovering, set the waypoint flight:**

- a. Click **GO** in the **EDITOR**
- b. The octocopter will begin the waypoint flight
- c. At the top of the editor screen, you can see the progress of the octocopter (ie. Waypoint 1 completed...)
- d. Once finished, the octocopter will hover around the last waypoint.

14. Click “**GO HOME**” in the top right

- a. The octocopter will fly to above home point

15. **AutoLanding:**

- a. Click **AutoLanding** in the **EDITOR**
- b. It will prompt you to click “**PAUSE** then **KEYBOARD** mode”
- c. At the top right of the screen, click **PAUSE**
- d. Click the **KEYBOARD**
- e. Click **AutoLanding** at the bottom of the editor
- f. The octocopter will land.

ANYTIME DURING FLIGHT, TO START USING THE TRANSMITTER AND STOP USING THE GROUNDSTATION SOFTWARE

16. On the transmitter, see the GPS switch on the top right (it has a piece of tape that says “**MAN / ATT / GPS**”

17. Flip the switch down one notch to ATT then back up to GPS
18. NOW YOU CAN CONTROL THE OCTOCOPTER WITH THE TRANSMITTER, and the DJI SOFTWARE will NO LONGER control the octocopter.