

Precautions Before First Flight

When you got Joyance drones, please read carefully the operation manual & operation videos and strictly obey the following steps to operate the drone(s). Operation manual in Mode 2 for example (Left throttle).

PS:

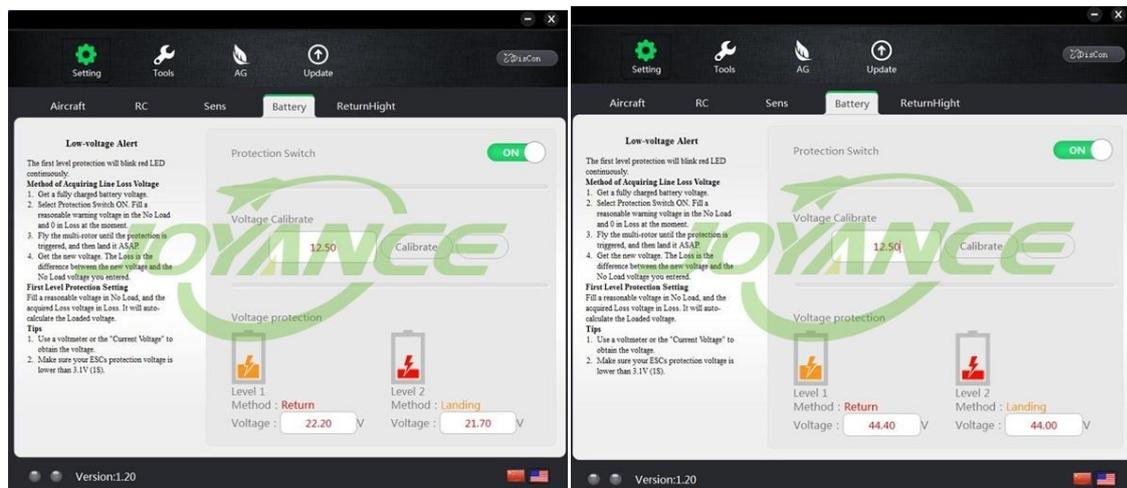
Operation Manual is together with the drone in the case.

Operation Videos: <http://www.joyancetech.com/html/sprayer/how-to-use/>

Steps:

1. Batteries voltage

Two batteries drone low voltage alert: Level 1 is 44.4V, Level 2 is 44V.



b) A-key return set height 10M by default, you can change it if necessary.

c) The spray width and work speed can be changed according to different crops and situation.

2. Calibrate IMU and GPS before first flight.

When you got the drone(s), please calibrate IMU at first;

IMU Calibration English <https://youtu.be/-ibEjFuUKyc>

IMU Calibration Spanish <https://youtu.be/hZpRLJ1NH4Y>

And then calibrate GPS;

When move to another field 500km away, please calibrate GPS again.

GPS Calibration English <https://youtu.be/ek3NeV924il>

GPS Calibration Spanish <https://youtu.be/s-Dpwq0oKsc>

3. Full charge all the batteries before first flight.

We keep them in 3.85V per cell during delivery.

Charge drone battery by advanced four-way charger,

Practice drone battery and screen battery by B3 charger,

Futaba T8FG remote controller battery by relative charger(Manual Page 19-22).

If you won't use the batteries for more than 2 weeks, please stock them in 3.85V per cell (at total 23.1V).

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-charge-batteries-of-drones.html>

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-discharge-battery-of-drones.html>

4. Unfold drone, fasten all the screws and confirm them to be tight, and check them every 3 flight.

Unfold GPS stand and fasten it,

Check the screws on the drone.

<http://www.joyance.tech/html/sprayer/how-to-use/Unfold-the-sprayer-drone.html>

5. Install the **propellers** correctly.

6. Turn on **Remote controller**

7. **BB buzzer** alarm voltage is 3.7 V as default, if not, please set it to 3.6-3.7V (Please refer to the manual on page 17).

Connect BB buzzer to battery/batteries and check the batteries are full charged before fly.

<http://www.joyance.tech/html/sprayer/how-to-use/how-to-use-battery-buzzer.html>

When low battery voltage(about 3.7V per cell, total 22.2V) the buzzer will keep alarm, then you need to fly the drone back (or land the drone)and change the batteries.

8. Connect BB buzzer to aircraft battery/batteries and plug in the batteries on the aircraft in sequence(manual page 27&28), if the sequence is wrong, it may burn the drone.

<http://www.joyance.tech/html/sprayer/how-to-use/sequence-of-power-on-and-power-off.html>

9. Wait the aircraft self-inspect and search **satellite signal** automatically, ensure GPS signal is more than 7 stars.

10. Take off in GPS **mode**, then fly in spray mode. Take off in GPS mode.

Fly and spray operation:

A. For first flight, we advice you to test with no-load/empty tank, and it will be better if can take a video of the first flight and feedback to us.

<http://www.joyance.tech/html/sprayer/how-to-use/no-load-trial-flight.html>

B. Fly with payload/full tank: follow 3-5 steps, fill water & pesticide, then follow 6-10 steps.

Other precautions:

1. Advise beginners fly in Spray Mode or practice flight technology with practice drone at first;

2. In RTH process (one key return), the aircraft position can be adjusted by sticks on remote controller. (DO NOT touch the throttle stick in this process)

3. DO NOT upgrade the "ASSISTANT" software and change default settings of the software without Joyance's permission, it may affect the safety of your drone.

4. If you change new motor or new ESC, please do ESC calibration.

ESC Calibration(one battery) https://youtu.be/Q8sf_nP6jg

ESC Calibration(two batteries) <https://youtu.be/ISH1NQfsc30>

5. If you change new remote controller, please do RC calibration.

RC calibration(english language) https://youtu.be/QW_85QIEJu8

RC calibration(spanish language) <https://youtu.be/n50Cdi7To9Y>

Operation Video:

<http://www.joyance.tech/html/support/videos/How-to-use-Sprayer-Drone.html>

How to use: <http://www.joyance.tech/html/sprayer/how-to-use/>

How to charge drone battery:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-charge-batteries-of-drones.html>

How to discharge drone battery:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-discharge-battery-of-drones.html>

How to do GPS calibration:

<http://www.joyance.tech/html/sprayer/how-to-use/how-to-do-GPS-calibration.html>

How to land the drone:

<http://www.joyance.tech/html/sprayer/how-to-use/how-to-land-sprayer-drone.html>

How to use radio telemetry:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-use-radio-telemetry.html>

Full automatic flight:

<http://www.joyance.tech/html/sprayer/how-to-use/autonomous-flight-agriculture-drone.html>

GPS mode spraying method:

<http://www.joyance.tech/html/sprayer/how-to-use/GPS-mode-spraying-method.html>

Semi-automatic spraying method:

<http://www.joyance.tech/html/sprayer/how-to-use/semi-automatic-spraying-method.html>

How to fold sprayer drone:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-fold-the-sprayer-drone.html>

How to unfold sprayer drone:

<http://www.joyance.tech/html/sprayer/how-to-use/Unfold-the-sprayer-drone.html>

How to install Futaba battery:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-install-battery-of-Futaba-T8FG-re.html>

How to assemble FPV screen:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-assemble-FPV-screen.html>

How to scan image on FPV screen:

<http://www.joyance.tech/html/sprayer/how-to-use/How-to-scan-image-on-FPV-screen.html>

What display on FPV screen:

<http://www.joyance.tech/html/sprayer/how-to-use/What-display-on-FPV-screen.html>

Remote controller function:

<http://www.joyance.tech/html/sprayer/how-to-use/Remote-controller-functions.html>