
Propeller PPK

Best Practices, Tips & Troubleshooting



Best Practices

By following these steps you can ensure that the vast majority of PPK flights collect high-quality data without issue:

- Ensure that your drone, batteries and controller have been updated to the most recent Firmware using DJI Assistant 2 on your computer
- Charge all batteries to full the day before your flight, and your AeroPoint(s)
- Review the suggested settings for the GSR flight app and check if there are any flight restrictions in the proposed area.
- Ensure your AeroPoint is on, within the capture area and in a good location
 - Where possible always place the AeroPoint on a known point or record its position to provide greater flexibility
- Check the flight location against the Propeller Corrections Network. If outside;
 - Ensure you are using the known point method for your AeroPoint, and
 - Ensure that your flight time exceeds 10 minutes by adjusting settings

Tips for Propeller PPK

These are some handy things to keep in mind about the workflow to make the process even easier.

- **No red light, no flight!:** Don't make the mistake of placing the AeroPoint without turning it on. Without AeroPoint data your PPK flight is worthless.
 - Equally, remember to turn the AeroPoint off before you pick it up!
- **One and done:** If a flight plan requires just over a single battery, try bumping up the flight height (max of 400ft) to decrease the flight time.
- **Clearly alright, clearly in-flight:** Your AeroPoint(s) need to be in a good clear location for data gathering, but their location also has to be within the flight area!
- **Laptop is your friend:** Using DJI Assistant 2 on your computer is the recommended way to update firmware on all equipment, whether in the office or out in the field.

Troubleshooting

Our Customer Success experts have shared the most common issues and the underlying reasons and fixes for each one.

The drone won't take off!

Possible explanations:

-RTK Function still enabled: Propeller PPK uses an AeroPoint instead of a base station.

- *How to recognize:* a warning message won't display, but it will voice prompt 'RTK on'
- *How to fix:* Inside GSR, navigate to the '... Menu' > RTK > and disable RTK Function

-Compass requires calibrating: This is usually required when a flight is not in a similar area as the preceding flight, or is being flown for the first time.

- *How to recognize:* a warning message will display.
- *How to fix:* Inside GSR, navigate to the '... Menu' > Drone > Advanced Settings > Sensors > Calibrate Compass [Move away from large metallic and electronic devices, then follow the prompts on the screen to complete the calibration]

-Firmware update required: This may happen without warning, particularly if you haven't flown your drone in a few weeks.

- *How to recognize:* no warning message will display, but you can check the current version against the most recent available in DJI Assistant 2
- *How to fix:* Use DJI Assistant 2 on your computer to check for and update firmware on the drone, batteries and controller.

-Controlled airspace: In certain locations, particularly those in close proximity to airports, the drone will not take off without proper authorization from DJI?

- *How to recognise:* a warning message will display.
- *How to fix:* Follow the DJI Self-Unlock procedure ([link](#))

-Camera in video mode: Explanation required?

- *How to recognise:* a warning message will display.
- *How to fix:* Inside GSR, press the on-screen button to cycle from Video Mode to Camera Mode?

The base map on the controller looks strange!

Possible explanations:

-Base map is set to Amaps instead of Mapbox: This is a Chinese base map server, and will display Mandarin characters and smiley faces.

- *How to recognize:* the screen will display Mandarin characters and smiley faces.
- *How to fix:* On controller, tap the icon with three white horizontal lines on the top left of the main screen > 'cog icon' > Select map type > Mapbox

-Your drone isn't connected to the internet: This may prevent the base map from loading, or cause it to appear fuzzy or distorted.

- *How to recognize:* the base map doesn't load or appears fuzzy or distorted.
- *How to fix:* On controller, swipe down from the top of the screen and then hold down on the WiFi icon to reach that menu.

The KML boundary import isn't working!

Possible explanations:

-Not familiar with the workflow:

- *How to recognise:* When you insert the SD card to the controller nothing happens
- *How to fix:* On controller, select the 'hamburger' menu on the top left of the main screen > 'sd card icon'

-The KML used is a polyline, not a polygon: The KML import only works for polygons (except for linear missions, which accept a polyline).

- *How to recognize:* The Micro SD card with KML is inserted into the controller but no files appear under the KML menu (include screenshot showing KML menu)
- *How to fix:* Return to the software you used to create the KML file and ensure it is a polygon.

-Folder structure is incorrect: The KML import requires a particular folder structure or it will not work.

- *How to recognize:* The Micro SD card with KML is inserted into the controller but no files appear under the KML menu (include screenshot showing KML menu)
- *How to fix:* Ensure that the folder path structure on the SD card is in the *D:\DJI\KML\[file name].kml*.

I can't resume my flight!

Possible explanations:

-Difficult finding the flight: This can be difficult to find if you haven't done it before.

- *How to recognize:* You can't work out how to resume a flight after a pause or previous section is complete.
- *How to fix:* On controller, select the 'hamburger' menu on the top left of the main screen > 'file' icon > Pick flight plan > Resume. The same 'file' icon can also be found on the flight planning screen