



Flyability SA
+41 21 311 55 00
info@flyability.com
Route du Lac 3 | 1094 Paudex
Switzerland

FAQ Inspector 3.0/mapping feature

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FAQ/Troubleshoot

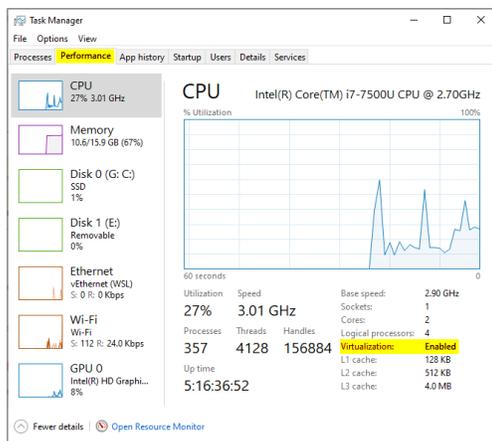
1) What are the minimum requirements to run the mapping feature of Inspector 3.0?

You must have:

1. Windows 10 updated with version 1903 or higher. (version 1903 was released in May 2019). It is not compatible with Mac.
2. A **CPU that supports virtualization** which is the case for almost all Intel or AMD CPUs nowadays.
3. A minimum of 8 GB of RAM.
4. **Latest drone firmware and software version, respectively Avionics V1.4 and Cockpit V2.5.** Download and installation instructions [here](#). Note that you can try with flights done with previous firmware/software but we can not guarantee that you will be able to successfully map them.

2) How to know if the Virtualization is enabled on my PC?

Open the Task manager (in the Windows search bar, type "task Manager"), navigate to the Performance panel and check the Virtualization status. If the Virtualization entry is displayed your computer supports Virtualization. If next to it displays Enabled you are done else see below.



Sockets:	1
Cores:	2
Logical processors:	4
Virtualization:	Enabled
L1 cache:	128 KB
L2 cache:	512 KB

3) How to enable Virtualization on my PC ?

Refer to the computer manufacturer user manual on how to enter the BIOS. Then search for the option V-TX, AMD-V or Virtualization, make sure the option is set to "Enabled.. You can also refer to this relevant [webpage](#) about virtualization and how to access the BIOS of your computer

4) How to know which Windows version I'm running?

win+R then type "winver" without quotes



5) Are all the inspector 2.2 features available on Inspector V3.0?

Today we are missing some features such as POI move, preview flight functionality and the ability to export portions of a video. Those features may be implemented in future versions.

6) How does the licensing system work?

The licensing system works per drone. It means that each drone needs to get a subscription to be able to use the mapping functionality for it. For example if you own 3 drones, you will need to get 3 subscriptions (one for each drone). Note that when the drone subscription is activated, any user can access the mapping functionality of Inspector 3.0 to post-process the flight from the drone.

7) Is an internet connection needed with Inspector 3.0

An internet connection is required in the following cases

1. The first time Inspector is started
2. The next start after buying a datamap license.
3. The first time a mapping is started, to download the engine. At this stage it is recommended to have a good connection as the engine is about 2GB.
4. If you have a license, at least once every 30 days.
5. To update the mapping engine.
6. To update the Inspector software.

8) How long will it take to process a standard 10 minutes flight?

The processing time will depend on your PC configuration and will take 30 minutes on average for a 10 minutes flight. The processing time may also vary according to the complexity of the environment you are flying in.

9) What outputs can be generated with Inspector 3.0 and can they be used in third-party software?

On top of the pdf/Docx reports that were already existing on Inspector V2.2, a *.PCD point cloud file and a *.TRAJ trajectory text files are generated with the mapping feature., They are all common formats that can be used in any third-party software that supports them.

10) How to access the outputs folder?

The output files are automatically created in the flight folder under the "vio" subfolder. It can be accessed from Inspector 3.0 → HOME. Move your mouse over a flight, right click on it and open explorer.

11) Can I make 3D measurements with the mapping feature?

You can still do 2D measurements on images as in Inspector 2.2. However, 3D measurement is not available on Inspector V3.0. Files can be opened with another software such as CloudCompare with such features.

12) How do I make sure my flight will be mapped successfully?

You can refer to the "Flying tips for mapping" chapter in the [user manual](#). Note that if you do not respect those tips, the mapping can still be effective but several unrealistic points cloud / trajectories files can be generated with decreased quality/accuracy.

13) Why did the mapping fail?

The mapping can fail for several reasons. Here are the main reasons:

- The antivirus/firewall/Live protection prevents the software to install the mapping engine and triggers a timeout → deactivate antivirus and firewall plus the Windows Live protection. To access the real time protection, type "Windows security" in the Windows search bar.
- Flight that did not respect the flying recommendations → refer to question n°12.
- The drone Firmware/Software are not the latest (respectively V1.4 and V2.5)
- Hardware failure like the camera IMU.

14) What is the expected accuracy of the mapping functionality?

Currently we cannot guarantee any accuracy of the mapping algorithm and data localization feature of Inspector 3.0. Accuracy depends on several environmental factors like the asset shape and size, the reflectivity and the amount of visual features of the surfaces in it, the presence of dust. It will also depend on the flight itself and best practises should be respected all time. (sharp image, avoid collisions) From our internal testing and depending on the conditions, we observed an accuracy from 10cm to half a meter.. In general, this accuracy is sufficient for most of the use cases.

15) Is Inspector 3.0 compatible with ELIOS 1

Unfortunately not. The mapping algorithm of Inspector 3.0 does not successfully work with Elios 1 video stream due to the cage obstruction. Therefore, Elios 1 is not supported by Inspector 3.0. Users of the Elios 1 can rely on Inspector 2.2 for their data post-processing.