



GPS RECEIVER SETUP

Faction Four Systems Inc.

Applies to Smart Squad 2.8 and 2.9 · Windows 10 and Windows 11 · Revised October 2026

Adding an external u-blox GNSS receiver to a Windows device, so Smart Squad can put an accurate position on a ticket or a note. Windows positions a device from nearby Wi-Fi networks when it has no other source, which is often wrong by a street or more — a dedicated receiver is what makes the coordinates worth recording.

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BEFORE YOU START

- A **u-blox GNSS receiver**. Other makes may work, but the driver steps below are u-blox specific.
- **Administrator rights** on the Windows device — installing a device driver and editing Device Manager both require them.
- A position where the receiver can actually see sky. First fix from cold can take several minutes indoors or beside a building, and will sometimes not happen at all.

SETTING IT UP

1 Install the u-blox driver

Go to the u-blox u-center product page and open its documentation and resources. Download **u-blox GNSS Sensor Device Driver for Windows** and install it.

Install the driver *before* plugging the receiver in. Windows will otherwise bind its own generic driver first, which is what produces the COM-port case in step 3.

2 Plug the receiver in

Connect it by USB and give Windows a moment to finish installing it.

3 Check how Windows recognises it

Open **Device Manager**. The receiver appears in one of two places, and this is the step that decides whether Smart Squad can use it:

WHERE IT APPEARS	WHAT IT MEANS
Sensors → u-blox GPS/GNSS Sensor	Correct. Windows is presenting it as a location sensor, which is what Smart Squad reads. Go to step 4.
Ports (COM & LPT) → u-blox Virtual COM Port	Not usable yet. Windows is treating it as a serial device, and no application will see a location. Fix it below.

If it came up as a COM port: right-click it, choose **Update driver**, then **Browse my computer for driver software**, then **Let me pick from a list of available drivers on my computer**, and select **u-blox GNSS Location Sensor**. It should move under Sensors.

4

Confirm Windows has a position

Open the **Maps** app and press the locate button. Check the position it shows is within about 30 metres (100 feet) of where you actually are.

Test this before going near Smart Squad. If Windows itself cannot place the device, nothing in the app will either, and you will spend the time in the wrong place.

5

Confirm Smart Squad is using it

Sign in to Smart Squad, start a note or a ticket, and capture the location. The coordinates should populate from the receiver.

If you get **No current GPS location available**, Windows is not offering a location to applications — the receiver is almost certainly still bound as a COM port. Go back to step 3.

IF IT STOPS WORKING

Location privacy settings will silently block it. Windows has a per-machine and a per-app location switch, and an agency device image sometimes ships with them off. Check **Settings > Privacy & security > Location** and confirm both location services and desktop app access are allowed. No error names this as the cause.

A receiver moved to a different USB port can come back as a COM port. Windows binds drivers per port on some configurations. If location stops after someone re-cabled a dock, step 3 is the first thing to check.

Set the device up once, then label it. Where a vehicle has a dock and a swappable receiver, note which receiver was configured against which device — it saves repeating step 3 on every shift change.

RELATED

Printer setup for the same devices is under printers and devices. If the receiver is configured and Smart Squad still records no position, raise it with Faction Four support and include which of the two Device Manager locations the receiver appears in — that answer resolves most of these.