

WARDRAGON - FIRST-TIME SETUP & COMMISSIONING

1 IDENTIFY YOUR CONFIGURATION

Two choices define your kit. Confirm both before you start.

Variant	What it means for setup
Pro (ARM)	No dedicated FPV SDR. The 5 GHz and 900 MHz ports are not used.
Elite (x86)	Dedicated FPV SDR fitted. Install the FPV 5.8 and FPV 900 antennas as well.
Mobile	Hardened carry case with a built-in maintenance screen and a locking power connector.
Drop-In	DIN-rail enclosure. Install it first — see the Drop-In Installation Guide.

Have ready: A monitor and cable, a USB keyboard and mouse, an internet connection for the unit during setup, and the default credentials supplied with your kit. Drop-In units must be physically installed first — see the Drop-In Installation Guide.

2 CONNECT EVERY ANTENNA

Connect all antennas before applying power. Each antenna is etched with the name of the port it belongs to.

Port	Detects
DragonSDR RX	DJI DroneID — primary detection port
WiFi RX	WiFi Remote ID
BT5	Bluetooth 5 LR Remote ID
GPS	Unit position. Supplied and required on Drop-In; optional on Mobile.
5 GHz (FPV 5.8)	FPV video activity. Elite only.
900 MHz (FPV 900)	Control and telemetry links. Elite only.
TX	Not used. Leave unconnected.

Important: Torque SMA connectors to 3–5 in-lb. Without a torque wrench, hand-tighten firmly by the connector nut only — never by the antenna body, never with pliers. Loose connectors are the most common cause of missing detections.

3 CONNECT DISPLAY AND INPUT

Mobile — use the built-in maintenance screen, or remove the HDMI dummy plug from the right-angle adapter and connect a monitor. **Keep the plug.** Connect the keyboard and mouse through the supplied USB-C to dual USB-A cable.

Drop-In — monitor to the front-panel HDMI port. Elite: USB is behind the removable dust cover. Pro: use the external USB port below HDMI.

4 CONNECT THE NETWORK

Connect Ethernet to the external port. DHCP is enabled by default.

Required: The unit needs internet access during initial setup.

5 APPLY POWER

Configuration	Power input
Mobile	12 V / 24 V DC via the supplied vehicle adapter, or 120 V AC
Drop-In	12 V / 24 V DC to the front-panel terminal block

Mobile — connect the adapter to the locking power connector, energize it, then press and latch the external power button.

Drop-In — confirm polarity and voltage at the terminal block, then energize the DC supply.

The system boots in 60–90 seconds. Allow up to 5 minutes on first boot or after an update.

Note: The exhaust fan switch inside a Mobile case is not the main power switch.

6 LOG IN AND SECURE THE UNIT

Log in at the desktop with the default credentials supplied with your kit, then **change the password immediately.**

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7 INSTALL REMOTE ACCESS

Kits ship with remote access disabled. Being reachable on the network is not the same as being remotely manageable. Do this now, while the monitor is still attached.

```
sudo apt update
sudo apt install openssh-server
```

```
sudo systemctl enable ssh
sudo systemctl start ssh
```

For remote desktop, install RustDesk, set a permanent password under Settings → Security, and enable LAN discovery. Test it before disconnecting anything.

Critical: Mobile — reinstall the HDMI dummy plug once remote access is confirmed working. Without it, remote desktop shows a blank screen or fails to connect.

8 VERIFY THE SYSTEM IS DETECTING

All three services should report active (running):

```
sudo systemctl status zmq-decoder
dji-receiver dragonsync
```

```
curl http://localhost:8088/status
```

Important: DJI drones broadcast DroneID only while the motors are spinning. A powered-on aircraft sitting still will not appear.

9 CONNECT TAK

Multicast is enabled by default. On the ATAK device open Settings → Network Preferences → SA Multicast and set both Input and Output to:

239.2.3.1:6969

The device must be on the same network segment as the unit. iTAK and WinTAK use the same address.

For TAK Server delivery, certificates, and the ATAK plugin, see the User Guide.

10 SHUT DOWN CLEANLY

Always shut the operating system down before removing power. Cutting power without a clean shutdown can corrupt the filesystem.

```
sudo shutdown -h now
```

If your kit has the WarDragon Console installed, you can instead use **System → Shutdown**. Not every kit ships with the Console, so confirm first.

Once the unit has powered off: **Mobile** — detach the external power button. **Drop-In** — remove DC power at the source.

11 COMMISSIONING RECORD

☐ Acceptance check — complete before handover

- ☐ All antennas fitted to matching ports, torqued to 3–5 in-lb
- ☐ Unit boots to the desktop and default password changed
- ☐ Remote access installed and tested with the monitor attached
- ☐ All three detection services report active
- ☐ GPS lock confirmed if unit position is required
- ☐ Detections confirmed in TAK; clean shutdown verified

Serial number /
configuration

Installed location

Commissioned by / date

12 WHERE TO GO NEXT

If you need to	See
Networking, TAK Server, certificates	User Guide
Troubleshooting	User Guide, §10
Install a Drop-In unit	Drop-In Install Guide
Open a support request	cemaxecuter.com/support/



Support