

WARDRAGON - USER GUIDE

1 PREPARE FOR SETUP

This guide provides quick steps to get your WarDragon system up and running. For complete documentation, updated instructions, and additional resources, visit the official repository:

<https://github.com/alphafox02/WarDragon/tree/main>

2 WARDRAGON AT A GLANCE

WarDragon is a compact, headless RF sensing appliance that combines dedicated detection radios, software-defined radio (SDR), GPS, and purpose-built software to detect drones across multiple protocols and stream real-time detections to your existing operational systems

Once configured, it operates unattended, continuously publishing system health, alerts, locations, and track information to your operational picture

Capability	Band	What you get
DJI DronelD	2.4 / 5.8 GHz	Detection and decode of drone, pilot, and home-point telemetry
WiFi Remote ID (ASTM F3411)	2.4 / 5 GHz	Standards-based Remote ID broadcasts
Bluetooth 5 LR Remote ID	2.4 GHz	Long-range Bluetooth Remote ID broadcasts
Analog FPV video (Elite)	5 GHz race bands	Detection of analog first-person-view video links
RFD900 / MAVLink (Elite)	900 MHz	Detection and decode of long-range control links

Analog FPV and RFD900/MAVLink coverage is included on Elite kits. ELRS detection is on the Elite roadmap.

3 IN THE BOX

Your kit arrives ready to run, with the WarDragon software pre-loaded. A typical kit includes:

- The WarDragon unit in its case or enclosure
- Power supply
- The matched antenna set specified for your variant -including the dedicated 5 GHz FPV and 900 MHz antennas on Elite kits
- Display and input adapters appropriate to your variant
- Quickstart card

Note: Some processor variants require an HDMI adapter to connect an external display

Each kit includes matched antennas selected and tuned for your specific configuration to ensure optimal detection performance

4 GETTING STARTED

FIRST BOOT

1. Connect every antenna before applying power
2. Connect a display
 - Mobile Kits have a built-in maintenance screen.
 - For a Drop-In Kit, connect a monitor, keyboard, and mouse to the unit using the supplied adapters
3. Apply power
 - The system is ready in roughly 60-90 seconds.
4. Log in at the desktop with the default credentials, then change the password

Username: dragon Password: dragon

THE WARDRAGON DASHBOARD

WarDragon includes a built-in local dashboard for setup and quick checks. With the unit running, open a web browser on the unit and go to:

<http://localhost:4280/>

- System health & status
- Core settings
- Live drone detections

5 CONNECTING TO YOUR NETWORK

Capability	What you get
Wired (DHCP)	Default. Plug into a DHCP network and WarDragon is reachable immediately.
Wired (Static IP)	Fixed installations that require a known address.
Field Hotspot	Deployments with no existing network- WarDragon creates its own WiFi network for nearby devices.
Hybrid	Run the hotspot for field devices while using the wired link for backhaul, simultaneously.

The wired port is DHCP-enabled by default. Connect it to your network and locate it by hostname in your router's device list. A static IP can be configured for fixed installations.

NOTE: The internal connection between the compute board and DJI detection radio is factory configured and should not be modified.

This guide applies to all current WarDragon kits. Pro kits provide the core detection stack, Elite kits add analog FPV (5 GHz) and RFD900/MAVLink (900 MHz) detection. Mobile kits ship in a ruggedized transport case with a built-in maintenance screen. Drop-in kits ship in a DIN-rail integrator enclosure. Setup and operation are the same across all variants except where noted.

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6 INTEGRATING WITH YOUR OPERATIONAL PICTURE

Detections and system health stream directly into your team's existing operational picture

WARDRAGON SUPPORTS:

Capability

Cursor-on-Target (CoT) over the network

Detections and unit health publish as CoT and appear on TAK-based common operating pictures, including ATAK, WinTAK, and ITAK

Secure Server Delivery

WarDragon can deliver its feed securely to a TAK server for centralized, multi-user operations

MQTT

Publishes to MQTT for integration with dashboards and automation platforms

Command-and-control platforms

Exports to leading command-and-control and common-operating-picture systems for integration into a broader operational picture

NOTE: When connected to the same network, WarDragon automatically publishes system health and drone detections to your operational picture

7 DRAGONSCOPE (ELITE KITS)

DragonScope is an optional add-on for Elite kits that extracts and reports DJI drone serial numbers using OcuSync 2, 3, and 4

With DragonScope

- Adds serial number extraction via OcuSync 2/3/4
- Enhances identification and attribution
- Ideal for investigative and advanced operations

Without DragonScope

- Detects DJI drones (ID, location, track)
- Does not report serial numbers
- Perfect for general awareness and monitoring

DragonScope is an annual subscription service. Contact your sales representative for details

8 REMOTE OPERATION & BEST PRACTICES

- After setup, WarDragon is intended to run headless - no monitor or keyboard required
- Manage and monitor remotely via your network or integrated systems (TAK, MQTT, server, etc.)
- Ensure the unit has proper ventilation and a stable power source
- Use quality antennas and keep them secure and unobstructed for best performance

BEST PRACTICES

- ✓ Keep firmware up to date
- ✓ Monitor system health in your operational picture
- ✓ Regularly review logs and detections

9 POWER DOWN

Always shut down WarDragon cleanly before removing power

1. In the dashboard, open the **System** menu
2. Select **Shutdown**
3. Wait for the system to power off
4. Once off, it is safe to disconnect power



Support Line

(888)901-7430 M-F, 8AM – 5 PM EST

