NINE HILL

USER GUIDE · 1 OF 7

Edge Scout TAK plugin

Everything the plugin does, in the order you will meet it: install it, link a sensor, work a detection, and configure the alerts. Written for the operator holding the tablet.

OVERVIEW

WHAT THE PLUGIN DOES

The plugin listens for drone Remote ID broadcasts and draws them on your TAK map in real time, on the screen your team already works from.

- Individual airframe tracking — one drone, one track
- Track freshness, with visible aging and fade-out
- Pilot location plotted and tethered to the drone
- Nearby crewed aircraft via ADS-B, where your sensor supports it

REQUIREMENTS

WHAT YOU NEED

- An Android EUD running ATAK-CIV 5.5 or later
- The Edge Scout plugin, version-matched to that ATAK release
- An Edge Scout sensor — mini, mini-c, Charlie, Link, Pro or Tower
- A connection: Bluetooth, USB-C tether, or your TAK Server via the Edge Scout TAK Bridge

> The EUD's own on-board Wi-Fi and Bluetooth radios can be used as a source, but Android restricts them heavily and performance is poor. Use a sensor.

SETUP

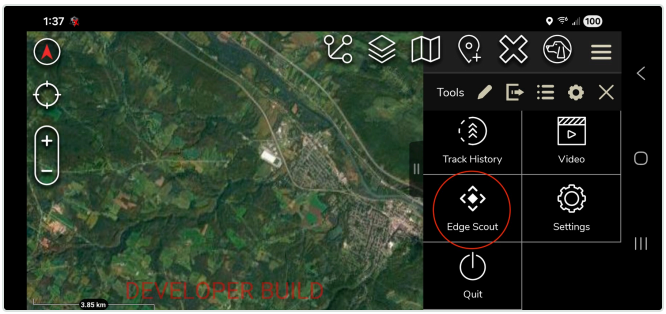
INSTALL AND ENABLE

01 **Install ATAK**
Install ATAK-CIV from the Google Play Store if it is not already on the device.

02 **Install the plugin**
From the Play Store, or directly from Nine Hill as an APK for locked-down devices.

03 **Load it in ATAK**
Settings → Tool Preferences → Plugins (Plugins manager) and enable Edge Scout.

04 **Open it**
Tap the Edge Scout icon in the ATAK toolbar. The plugin opens as a side pane and the map stays live behind it.



The toolbar. One tap from ATAK — no second app to remember.

> Plugins are discovered when ATAK starts. If Edge Scout does not appear, fully close and reopen ATAK before troubleshooting anything else.

Edge Scout TAK plugin — continued

Connecting a sensor

CORE TASK

CONNECTING A SENSOR

Open **SENSORS** from the **MANAGE ›** link in the track-list footer.

Over USB-C

Connect the sensor to the EUD with a USB-C cable and approve the one-time Android USB permission prompt. The sensor links automatically, shows as **LINKED**, and begins feeding tracks.

Over Bluetooth

01 **Scan**

Tap **+ PAIR NEW SENSOR**. Nearby Edge Scouts are listed strongest signal first.

02 **Link**

Tap **LINK** on the sensor you want, and confirm pairing if prompted.

03 **Done**

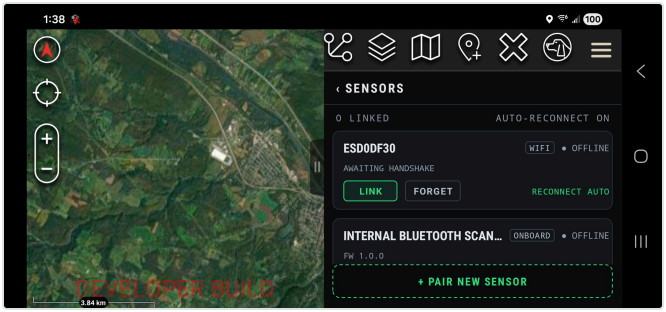
Once linked it reconnects by itself on the next session.

From your TAK Server

Link and Tower never pair to a tablet. Their detections reach you through the Edge Scout TAK Bridge, which feeds your TAK Server from Edge View — the plugin then displays them like any other track, with no sensor attached to the device.

Sensor controls

CONTROL	WHAT IT DOES
LINK / UNLINK	Connect or disconnect. Unlinking keeps the card so you can relink quickly.
FORGET	Remove a remembered sensor entirely.
RECONNECT AUTO / MANUAL	Whether the sensor reconnects itself each session.
Transport badge	Shows BT, USB or ONBOARD.
Health line	Battery %, signal (RSSI), firmware version, and the feeds available.



Sensor manager. Every connected Edge Scout, its link state, and what it can currently hear.

> A battery at or below 20% turns red and raises an alert. Note that unlinked is not disabled — a sensor you have not linked yet still shows at full brightness.

Edge Scout TAK plugin — continued

The thirty-second workflow

QUICK START

THE THIRTY-SECOND WORKFLOW

01 **Detect**

A new drone appears in the list and on the map. If alerts are on you get a tone and a buzz. New tracks start as **UNKNOWN** (yellow).

02 **Triage**

The list sorts by threat. Tap a filter chip to focus on one classification.

03 **Assess**

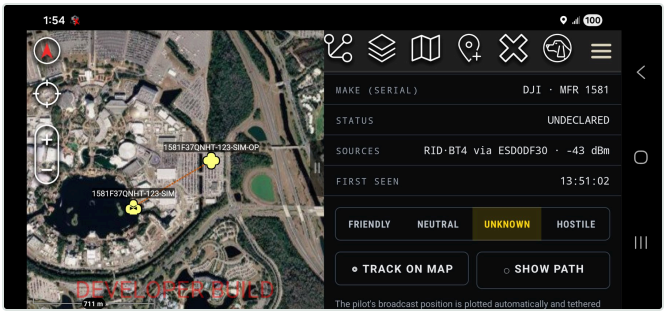
Tap the track for its detail view: full ID, pilot location, distance and closing rate.

04 **Classify**

One tap marks it **FRIENDLY**, **NEUTRAL**, **UNKNOWN** or **HOSTILE**. It recolors everywhere and broadcasts to your team.

05 **Act**

The pilot marker is already on the map, tethered to the drone. Navigate to it, hand it off, or keep watching.



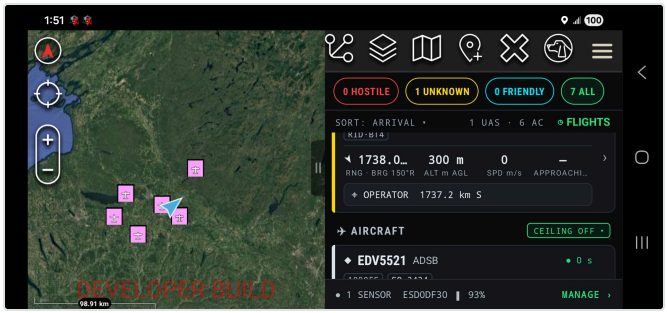
A worked detection. The aircraft, its track, and the operator position tethered to it.

Edge Scout TAK plugin — continued

The track list

REFERENCE

THE TRACK LIST



The track list. Everything in the air, ranked and updating, without leaving the map.

Filter chips

HOSTILE, **UNKNOWN**, **FRIENDLY**, **ALL** — each carries a live count and filters the list. Counts include stale and altitude-hidden tracks.

Sort row

SORT: THREAT ▾ cycles THREAT, RANGE and AGE. The right side shows drone and aircraft counts. ◷ **FLIGHTS** opens flight history.

What a track card tells you

CELL	DRONE	AIRCRAFT
Where is it?	Arrow, range and bearing	Same
How high?	Metres AGL	Feet MSL
How fast?	m/s	Knots (GS)
Where is it going?	APPROACHING (red) / RECEDING, m/s	Climb or descent, fpm

A colored edge bar and diamond show affiliation. The header carries a stable name, the decoded model and a badge per RF source; a freshness dot and age in seconds sit on the right. The operator row reads like ✵ **OPERATOR 320 m NE**, or **NO FIX** when the aircraft is not broadcasting one.

Staleness and the altitude ceiling

A track that stops broadcasting fades, freezes its last numbers and shows a **STALE** tag. If it stays silent past your Stale-Out Time it drops off the list. Crewed aircraft appear under ✈ **AIRCRAFT**; tap the green chip to cycle 3,000 / 5,000 / 10,000 ft / OFF. Traffic above the ceiling collapses into an **N hidden — SHOW** line. Emergency squawks always punch through.

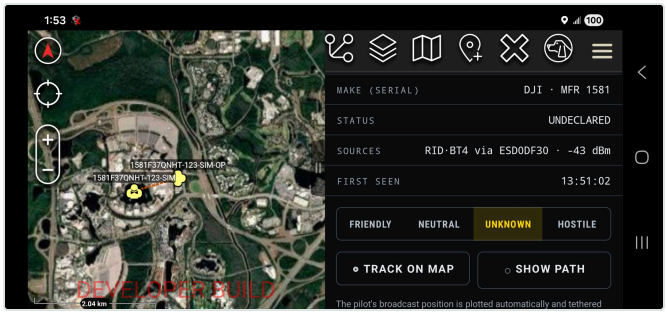
Edge Scout TAK plugin — continued

Track details and the map

REFERENCE

TRACK DETAILS AND THE MAP

Track details



Track detail and the classifier. One tap recolors the track everywhere and rebroadcasts it to the team.

Tap any card. You get an affiliation banner with live evidence (sources and age), three hero numbers — range and bearing, height, closing rate with a time-to-closest-approach countdown when converging — and the full payload: MAC/ID, serial, operator ID, operator position and accuracy, inferred make, RSSI and status.

- Classifier — four-way; one tap recolors the card and map icon and rebroadcasts to the team
- ✎ Rename — a friendly name that persists everywhere
- ◎ TRACK ON MAP — pan and zoom to the target
- ◌ SHOW PATH — draw the flight path as a real TAK route, selectable and exportable; tap again to hide

On the map

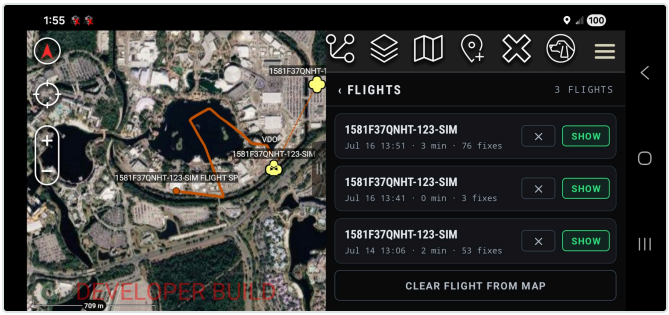
Markers match the card color. A leader line scaled to speed shows heading. A dashed burnt-orange tether links the drone to its pilot marker. Markers dim as tracks go stale. Tapping a drone icon and choosing details from the radial menu jumps back into the plugin.

Edge Scout TAK plugin — continued

Flight history

REFERENCE

FLIGHT HISTORY



Flight history. Replay what happened — the part that matters at the after-action.

Open ◷ **FLIGHTS** from the sort row — flights are saved automatically when a drone drops off. **SHOW** replays the path with the pilot position for that flight, one at a time; **CLEAR FLIGHT FROM MAP** removes the replay; ✕ deletes it, with a confirmation. Tap **‹ FLIGHTS** to go back.

CONFIGURE

ALERTS AND SETTINGS

Settings → Tool Preferences → Edge Scout.

SETTING	WHAT IT DOES
Audible Alert on New Track	Plays a tone on first detection.
Vibrate on New Track	Buzzes on first detection — readable through a pocket.
Suppress Alerts for Known Traffic	Stays quiet for civil ADS-B and friendly or whitelisted drones. Hostile and unknown always alert.
Aircraft Altitude Ceiling (ft MSL)	Default ceiling for the aircraft section; changeable live from the green chip.
Stale Out Time	Seconds after the last broadcast before a track goes stale and is retired. Also defines flight boundaries.
Auto Broadcast Found UAS	Shares detections to your TAK servers and multicast automatically.
Stolen Drone API Key	Optional. Looks up lost and stolen airframes and auto-flags matches as hostile.

Sharing over TAK

With Auto Broadcast on, every track you detect and every classification you make goes out over your connected TAK server and multicast. Drones detected by other Edge Scout operators on your network appear in your list and on your map, merged by airframe, so you never see the same drone twice.

Edge Scout TAK plugin — continued

The color language

REFERENCE

THE COLOR LANGUAGE

COLOR	MEANING
Red	Hostile — a declared threat
Yellow	Unknown — the default for a new track
Cyan	Friendly — yours, or whitelisted
White	Neutral — ordinary civil air traffic
Green	Controls — buttons, links, selection, the fresh dot
Burnt orange	Paths and tethers — flight-path routes and the pilot tether

HELP

WHEN IT DOESN'T WORK

The plugin doesn't appear in ATAK. Fully close and reopen ATAK after installing — plugins are only discovered at startup. Then confirm Edge Scout is enabled in the Plugins manager. If it still will not load, the plugin build has to match your ATAK version; this one is built against ATAK-CIV 5.5.

The sensor won't connect over USB. Check you approved the Android USB permission prompt when the cable went in. If nothing happened, unplug and replug, or open the SENSORS screen. A different USB-C cable — a data cable, not a charge-only one — fixes most of the rest.

The sensor is linked but no drones show up. The footer should show the sensor as LINKED and the list should read "LISTENING — TRACKS APPEAR AS THEY ARE HEARD." If so, there may simply be nothing broadcasting nearby. Only aircraft actively broadcasting Remote ID can be detected.

A drone shows but there's no pilot location. The operator row reads NO FIX until the aircraft broadcasts an operator position. Many send it shortly after take-off once they have GPS lock, so give it a moment and it usually fills in.

I'm not hearing or feeling alerts. Check Audible Alert and Vibrate are enabled, and that Suppress Alerts for Known Traffic is not hiding cues for friendly or known contacts. The tone plays on the media channel, so raise media volume. Alerts fire on a track's first detection only, not on every update.

TEACH THIS TOO

WHAT IT CANNOT SEE

> Edge Scout detects aircraft broadcasting FAA-mandated Remote ID. It will not detect a drone deliberately configured not to broadcast, a hand-built or FPV aircraft, or a sub-250 g recreational aircraft not required to broadcast. Teach this on day one — an operator who believes an empty screen means empty sky has been trained badly.