

AV_Halo COMMAND delivers unmatched situational awareness—fusing real-time, Al-enhanced sensor feeds, telemetry, and environmental data into a secure, mission-tailored operating picture that drives faster, smarter decision-making. It enables seamless coordination of assets across the battlespace—whether fixed, mobile, or distributed. AV_Halo COMMAND fuses AV's Kinesis™ universal tactical control architecture with the VigilantHalo™ mission control user interface and a robust sensor fusion engine to deliver layered command and control (C2) for both offensive and defensive missions. COMMAND integrates with other services within the AV_Halo software platform, as well as third-party mission systems.

_Scalable Capabilities

- > Threat Detection & Classification: Full-spectrum threat detection across air, ground, maritime, and subsurface domains using advanced Al capabilities for automated classification, in a single pane of glass.
- > 360° Domain Awareness: Fused sensor data from EO/ IR, radar, RF, and acoustic sources deliver a complete operational picture.
- > Smart Alerts & Timelines: Receive geo-tagged threat alerts with real-time timelines for informed decisionmaking all within the same user interface.
- Autonomous Zone Monitoring: Monitor zones autonomously, with Al-generated countermeasure recommendations.
- > Real-time Target Tracking: Manage hundreds or thousands of simultaneous targets in real time, leveraging both AV tools or third-party hosted AiTR tools.
- Advanced Al Mission Planning: Generate mission plans for large-scale operations of edge assets using Al capabilities.

_Benefits

- > Empower operators to manage and control over 20 uncrewed systems from various manufacturers through a single, user-friendly interface that now includes all-domain awareness.
- > A fully-featured mission planner for both pre-flight planning and real-time mission adjustments.
- > Control multiple UxSs as a single entity for streamlined operations.
- Easy, user-friendly pairing manager for connecting vehicles via radio communication.
- Seamless integration with Cursor on Target (CoT and Tactical Assault Kit (TAK).
- Customizable, Scalable configurations to fit specific mission requirements.
- Designed for easy integration of third-party capabilities, third-party UxS, payloads and mission systems.



FIGURE 1: UNIFIED COMMAND INTERFACE IN THE FIELD



FIGURE 2: SCALABLE, MISSION-OPTIMIZED INTERFACE

