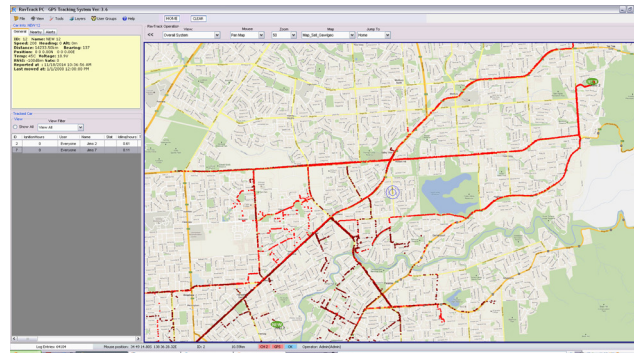


# RavTrack PC AVL/Tracking Software Application

RavTrack™ PC by Raveon is a PC application for displaying, tracking, alarming, and logging the activity of GPS Transponders such as Raveon's RV-M7-GX series of vehicle trackers and ATLAS series of personnel locators.

This easy-to use PC application graphically shows the location and status of cars, trucks, people, or anything equipped with RavTrack Transponders. The displayed map may be any graphic image, bitmap, or .jpg.



## The features below are what make RavTrack PC the right choice for tracking your vehicles and personnel

Real-time	See where your vehicles are NOW, not a few minutes ago. Position and status updates are available as quickly as every second. No other radio tracking system has as fast an update rate as RavTrack
In the Office or In the Field	Track your vehicles and assets at field offices, temporary work sites, remote locations, or in the office. RavTrack PC is a complete stand-alone tracking system. No server required. No Internet required. No satellite required. A single PC and a Raveon GPS transponder is all that is required. The map on the display may be any graphics image, scanned map, or photo you choose
Visualize your Operation	The displayed map can be your city, your airport, your construction site, or park, golf course, or city. See where vehicles and personnel are, or should be - see where they aren't but should. RavTrack PC can show you your business in a way no voice system can. Zoom and switch between different maps with a click of the mouse.
Geo-Fence monitoring	RavTrack PC users may create geo-fences on the map around areas like keep-out zones, off-limit areas, must-patrol areas, and environmentally sensitive areas, and then have the system alert when geo-fence rules are violated
One-Click status	Tracking is one thing it does well, but do you want to know status also? One-click on an icon on the map or click an entry in the tracked-object table, and the user can see complete vehicle status including location, distance, heading, velocity, I/O status, temperature, voltage, altitude, and radio signal strength
Custom Alerts	Knowledge is power, and RavTrack PC gives you the power over your moving assets. Know where they are, when they move, how-long they are idle, or if they are miss-used. The RavTrack PC operator can be alerted to various transponder-specific events such as speeding, proximity to Points of Interest, Geo-fence violations, and digital input status.
Database Driven	The information on all units being tracked is stored in a Microsoft Access SQL database. All movements and events are logged in a separate MS Access SQL database. Users may use Access and other SQL tools to create custom reports or interface with the data in real-time
Single or Multi-User	The software may be run in a single-user stand alone configuration on one PC, or operated in a multi-user configuration where multiple RavTrack PC users can monitor the system and create their won alarms
Log Replay.	Log Replay. The user may select log entries to replay on the map, to show the past location and status information.
Up to 6 radio Channels	Expand the coverage with multiple radio channels. RavTrack PC will allow up to 6 radios to be connected to one PC, so up to 6 different RF channels may be utilized in the same area, or linked in via remote sites
Low Cost Transponders	The highly integrated RV-M7 series GPS Transponder has a radio, modem, and GPS in one assembly. The per-unit cost is lower than any other radio AVL product on the market. And there are no service fees for a wireless carrier or satellite provider

## Features cont'd

Secure	All position transmissions are encrypted, so that only radios with the same pass-key code can communicate. The pass-key itself cannot be read out of the radio, so even a stolen radios will not make the system less secure. The RavTrack PC program is also administrator-rights protected, allowing a view-only user mode, and total-control for the administrator
Filtered View	RavTrack PC's powerful display filtering allows the operator to filter the tracked vehicle list and the displayed icons on the map by over a dozen different parameters such as displaying only moving vehicles, or alarming vehicles, or stationary vehicles, low-battery conditions, or emergency personnel, or ignition on.
Advanced Features	Advanced features are configured when the Transponder is installed. The RavTrack Transponders have alarm inputs, status output pins for specialized applications. All Raveon GPS Transponders report position, velocity, time, temperature, voltage, altitude, I/O status, alarms, GPS signal quality, and radio signal quality in each transmission, so the system operator has enormous visibility to the status and location of his tracked objects.
ESRI Shape Files	ESRI shape files may be imported and overlaid on the map.

## RavTrack PC Specifications:

### Map Files

- Any .jpg, .tiff, geo-tiff, or .gif graphics file
- Photos, scanned maps, or screen captures may be used
- User may easily switch between available maps stored on local hard drive
- Comes with standard database of icons to display tracked objects
- Supplied utility to calibrate user maps
- Raveon map calibration service available
- User may add custom icons to map file.

### Databases

- Tracked Objects: Microsoft Access. One record for each tracked M7 Transponder.
- Fields: ID, Name, Status, Time, Date of last report, Lat, Lon, Altitude, Alerts, Speed, Direction, Inputs, GPS status, Icon used, Voltage, Temperature, Radio Signal Strength
- System Log File: Microsoft Access. One record for each position report received over the air.
- Fields: Entry Number, ID, Status, Time, Date, Lat, Lon, Alerts, Speed, Altitude, Inputs, UTC time, Voltage, Temperature, RSSI, Operator Text
- System Log Filter: Log all activity or log only moving objects.

### Map Home Location

- Center map on current position as reported by local GPS
- Center map on a fixed lat-lon
- Optionally draw circles around home location
- On-click to re-center map on home location

### Alerts Triggers (rule based):

- Zone alert. entering or leaving a geo-fence
- Low battery
- Speeding
- Idling too long
- Stopped
- Proximity to points of Interest on the map
- Distance from home location

### Alert Actions

- Message box pop-up showing ID and rule that caused the alert
- Play a .wav file
- Send an email
- Execute a shell program

### Communications:

- Radio Interface RS-232 COM port
- Maximum number of channels (open Com Ports): 6
- Com port numbers supported 1-16
- Protocols \$PRAVE, NMEA 0182

# RavTrack PC AVL/Tracking Software Application

Select what you would like to view. Turn on or off layers

Pan, click to centre or measure distance

Zoom map and centre it "Home" with one click

Name, location & status of selected object

Database view of all tracked objects.  
One click on any to display detailed status

Location of the mouse on the map

Status of GPS connected to PC

Status of the radio channels

