Geotab® GO9™ — Expandable Plug-&-Play Telematics Device

For the most up-to-date version, please visit: goo.gl/f7huRc

GO9 Device

Geotab's GO9 telematics device is the most powerful yet. The GO9 offers a 32-bit processor, 4x more memory and 5x more RAM than the GO8. Similar to the GO8®, the GO9 offers state-of-the-art GPS technology, g-force monitoring, GEOTAB IOX® expandability, engine and battery health assessments, and communication on the LTE network.

Vehicle Tracking

Using Geotab's patented tracking algorithm, the GO9 accurately recreates vehicle trips and analyzes incidents. The GO9 also offers in-vehicle alerts to instantly notify drivers of infractions and — with hardware Add-Ons — provides live coaching for driver's on-road performance. The GO9, a true Plug-&-Play technology, does not require a dash-mounted antenna or any wire splicing.

Top Features

- Easy Plug-&-Play installation
- LTE Connectivity
- Small form factor device
- Intelligent in-vehicle driver coaching
- Breakthrough accident detection and notification
- External device expandability via IOX Technology

Security

Geotab platform security is designed for end-to-end protection of your data.

Key implementations include:

- GO device and network interfaces use authentication, encryption, and message integrity verification.
- GO devices are individualized. Each device uses a unique ID and non-static security key — making it difficult to fake a device's identity.
- Over-the-air updates use digitally-signed firmware to verify that updates come from a trusted source.
- Geotab uses independent third-party experts to validate the platform from end to end.

- Built-in auto-calibrating accelerometer and gyrometer
- Near-real-time vehicle data
- Fast GPS acquisition time using Almanac OTA support - Support for GPS+GLONASS connectivity
- Additional native support for more vehicle protocols
- End-to-end cybersecurity

Technical Specifications and Features

Interfaces	**Engine Management**
	Legacy OBD (SAE J1850 PWM/VPW, ISO 9141-2, and ISO 14230 (KWP2000))
	Single Wire CAN (GM 33.3 kbps, Fiat/Dodge 50 kbps)
	ISO 15765 CAN (including WWH-OBD, GMLAN, VW TP2.0) @ 125/250/500 kbps
	Medium Speed CAN @ 125/250/500 kbps
	     J1939-13 Type 2
	     TTL CAN
	2- or 3-wire install support (for older vehicles/asset tracking)
	
	Input/Output
	Buzzer
	LEDs — Ignition, GPS, Cellular
	IOX (more details below)
	Internal GPS/Cellular antennas

Cellular	**GO9 LTE ATT (BETA)** LTE (CAT-1): Bands 2/4/5/12, 3G: Bands 2/5 **GO9 LTE TMO (BETA)** Single Mode LTE (CAT-1): Bands 2/4/12 **GO9 LTE VZW (BETA)** Single Mode LTE (CAT-1): Bands 4/13 3GPP Compliant
GPS Receiver	72-channel engine (GPS/GLONASS) Under 1 second Time-To-First Fix for hot and aided starts Concurrent GPS & GLONASS system A-GNSS Accuracy: ~2.5 m FW upgrade in the field possible
I/O Expandability Support (IOX)	**Currently supports a combination of up to 5 of the following**: Driver ID Hours of Service (HOS) Garmin Iridium Satellite AUX — 4 per IOX (Digital or Analog) Serial Port and Additional CAN for third-party device integration Driver Feedback via external Buzzer and GOTALK Substance Spreader Relay control Alert
Environmental and EMC	**Operating Temperature** −40 to +85 °C **SAE J1455 (More to come)** Thermal Shock (Section 4.1.3.2) Mechanical Vibration (Section 4.10) Operational Shock Load Dump, Inductive Switching, Burst Transients, Starter Motor Engagement (Section 4.13.2.2.1) Coupled Transients (Section 4.13.2.2.2) Electrostatic Discharge Handling, operational and non-operational (Section 4.13.2.2.3)

	Radiated Immunity Radiated and Conducted Emissions, Performance class
Accelerometer & Gyroscope	3D accelerometer and 3D gyroscope. Full-scale acceleration range of ±8g and an angular rate range of ±250 dps Acceleration and angular rate output data rate of 1.66 kHz
Mechanical	**Weight**: 70 g (0.15 lb) **Dimensions**: 75 mm L × 50 mm W × 23 mm H **Housing**: Flame retardant black ABS

Electrical	**Voltage**
	  12 V and 24 V systems supported
	
	Current (at 12 V)
	  Operating Mode: 60–300 mA
	  Operating mode + IOX: Up to 2 A
	  Sleep mode: 1.5 mA
	
	Resettable overcurrent protection to IOX

Compliance	**Standards**: FCC, IC, PTCRB **Carriers**: T-Mobile, AT&T, VZW
Over The Air (OTA) Support	**Firmware Updates**: For maintenance, new features, and custom applications **Parameters**: For turning additional features on/off **Almanac/Ephemeris Data**: For quicker GPS latch
In-cab Buzzer	**Decibel Output**: >85 dBA at 10 cm **Driver Feedback**: Harsh braking, harsh acceleration, harsh corners, over-revving, excessive idling and speeding, engine based seatbelt violations (when available), and custom **Test Mode**: Diagnostic beeps for validating GPS and wireless connection
Voltage Recording	Curve-based voltage logging to detect weak batteries, failing alternators, and failing starters.
64-Mb Non-volatile Flash Memory	**Main Data Memory**: Up to 80,000 logs in offline mode (out of coverage) **Accident Data Memory**: Buffer records over 100 minutes of second-by-second data (6,000 logs). Last 72 records (1.2 minutes) are sent instantly on accelerometer-triggered accident-level events.
Recording Parameters	Patented curve-based GPS/voltage/accelerometer/engine data logging algorithm for fewer, more accurate data points.
Intelligent Ignition	Non-engine-based ignition detect on voltage and movement, allowing for 3-wire installation. Ideal for older vehicles with no engine information and covert installation for asset recovery.

Preparing For Installation

Before installing the GO device, please record the device serial number. The serial number is used to verify the communication status of the GO device.

Carefully read the device release notes (goo.gl/fZURff) or the vehicle specific installation notes (goo.gl/MCIXt0) to verify that we support your vehicle. If you have any questions or concerns, please consult your Authorized Reseller.

Ensure no dash warning lights are on in the vehicle while it is running, and all other functions, such as headlamps and flashers etc. work prior to installing the device.

Before Installation, add the device to your MyGeotab database using the device serial number . This will ensure all data logged from point of install onward is sent to your database.

Installation Instructions

⚠️ Read important related safety information and limitations of use following these installation instructions. Read and follow all instructions and warnings to prevent serious injury and/or vehicle damage.

WARNING! Prior to GO installation, read and follow important safety information including limitations of use located following these installation instructions. Always read and follow all safety information to prevent loss of vehicle control and serious injury.

WARNING! Some installations are not straightforward and must be completed by an Authorized Geotab Installer to ensure a secure installation. An unsecure device installation can cause poor electric and/or data connection that can lead to short circuits and fires or cause malfunctions of vehicle controls that can result in serious personal injury or significant damage to your vehicle. Some examples requiring professional installation from an Authorized Geotab Installer are:

- The OBD port location is such that the device protrudes and interferes with entering or exiting the vehicle, or located where it could be inadvertently kicked or bumped during vehicle operation
- The device isn't fully secured and so may come loose with vibrations or accidental contact
- An electrical harness or additional wiring is required
- Vehicle mounting modifications are required to secure the device, i.e. removing of panels; deformed/damaged OBD connector; or physical damage to the electrical wiring
- The device does not beep six times and power on when first installed
- The installer questions their ability to complete a secure installation according to these instructions

WARNING! Do not attempt to install, reconfigure, or remove any product from a vehicle while the vehicle is in motion or otherwise in operation. All installation, configuration, or removal must be done only in stationary vehicles which are securely parked. Attempting to service devices while the vehicle is in motion could result in malfunctions or accidents, leading to death or serious personal injury.

How to Install the GO Device

1	Locate the vehicle's engine diagnostic port, typically found in the driver's area at or below knee level.	
	Note: Heavy-duty vehicles use a different connector system. Contact your Authorized Geotab Reseller for heavy-duty connector applications or for extension harnesses should it be necessary to place your device away from the engine diagnostic port.	
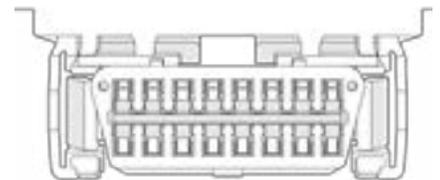
| 2 | Align the receiver end of the device with the engine diagnostic port and push in place. Please ensure the device is well connected to the diagnostic port. Once connected, the device emits 6 quick beeps. |

| 3 | Once the device is connected and receives power, the LEDs on the front of the device start blinking then turn solid once completing the actions below.

Red LED — Device configuration

Green LED — Cellular network connectivity

Blue LED — GPS network connectivity

The device emits two quick beeps every 10 seconds during set-up. Initial startup may take several minutes to complete. |

| 4 | Once all three LEDs turn solid, secure the device using the provided cable tie.

Note: The device is considered installed when the Green and Blue LEDs turn solid. |

| 5 | When performing under-dash installations with an extension harness, make sure the antenna side points upwards — towards the sky for faster GPS latch times. The GPS antenna in the **GO9** is located on the bottom of the device. |

| 6 | Navigate to installmygps.com to verify that the device is communicating. In the space provided, enter your name, the company name, and the GO device serial number — found at the bottom of the device. Click **Log Install**. |

| 7 | After you click **Log Install**, the web page displays the current communication status of the device in GREEN or RED text. If the device is communicating, the status is displayed in GREEN text. If the device is not communicating, the status is displayed in RED text.

Note: If the device is not communicating, please ensure the GO device is installed correctly and try again. |
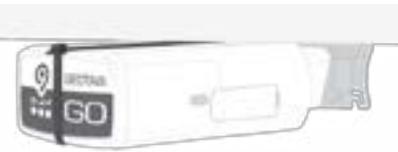
WARNING! All in-vehicle devices and related cabling must be securely fastened and kept clear of all vehicle controls, including gas, brake and clutch pedals. This requires the use of a cable tie when securing the device or any extension harness to the OBD connector, securing both sides of the harness. If you do not use a cable tie, vibration in the vehicle can lead to a loose connection which could indirectly cause the vehicle's engine computer to fail, loss of vehicle control and cause serious injury. Inspect devices and

cabling regularly to ensure all devices and cables remain securely attached.

WARNING! If at any point after an in-vehicle device is installed a warning lights up on the vehicle dash or the vehicle stalls or has a marked drop in performance, shut off the engine, remove the device, and contact your reseller. Continuing to operate a vehicle with these symptoms can cause loss of vehicle control, and serious injury.

Important Safety Information and Limitations of Use

For the latest version of the Limitations of Use, please visit: [goo.gl/k6Fp0w](goo.gl/k6Fp0w).

WARNING! Your in-vehicle devices must be kept clear of debris, water and other environmental contaminants. Failure to do so may result in units malfunctioning or short-circuiting, that can lead to a fire hazard and cause loss or serious injury.

WARNING! Do not attempt to remove the devices from the vehicle in which they are originally installed for installation in another vehicle. Not all vehicles share compatibility, and doing so may result in unexpected interactions with your vehicle, including sudden loss of power or shutdown of the vehicle's engine while in operation or cause your vehicle to operate poorly or erratically and cause serious injury and/or vehicle damage.

NOTICE: This product does not contain any user-serviceable parts. Configuration, servicing, and repairs must only be made by an authorized reseller or installer. Unauthorized servicing of these products will void your product warranty.