GEOTAB
management by measurement

Geotab™ GO7™ – Expandable Plug-&-Play Telematics Device

For the most up to date version, please visit: goo.gl/5zcEWm

GO7 Device

GO7 is a small yet extremely powerful telematics measurement tool. Similar to GO6™ before it, the GO7 offers state of the art GPS technology, g-force monitoring, GEOTAB IOX™ expandability, and engine and battery health assessment. Using Geotab's patented tracking algorithm, it accurately recreates the vehicle's trips and analyzes incidents. The GO7 offers in-vehicle alerts to notify drivers instantly of infractions and is truly a plug and play technology – it does not require a dash mounted antenna or any splicing of wires. Major enhancements over the GO6 include:

● Enhanced auto-protocol detect and select
● Programmable or soft pins - allows firmware to change pin utilization based on protocol and vehicle type
● Secondary protocol support for Ford, GM, Chrysler, Volvo, Mazda and more
● Four CAN BUS interfaces enabling more options for engine protocol support and device expandability
● Higher sensitivity accelerometer

Top Features
● Easy plug-and-play installation
● External device expandability via IOX™ Technology
● Intelligent in-vehicle driver coaching
● Small form factor device
● Breakthrough accident detection & notification
● Accurate engine diagnostics, DTC, and proprietary engine data
● Real-time vehicle data
● Fast GPS acquisition time using Almanac OTA support
● Built-in auto-calibrating accelerometer

Technical Specifications and Features

Interfaces	**Engine Management** • CAN: ISO 15765 • Diesel Engines: SAE J1939 & J1708 • Legacy OBD: SAE J1850 PWM/VPW, ISO 9141-2, and ISO • 14230 KWP2000. • On-Board Single Wire CAN (GM J2411) • Medium Speed CAN (Ford, Volvo) • Variable Input Output Module (coming soon) • 2 or 3-wire install support (for older vehicle/asset tracking) **Input/Output** • Buzzer • LEDs: Ignition, GPS, Cellular • IOX (more details below) • Internal GPS/Cellular antennas
Cellular	**GO7 CDMA:** • CDMA 1XRTT: 800/1900 MHz **GO7 3G**: • HSPA/UMTS : Bands I/II/V • GSM/GPRS: 850/900/1800/1900 MHz **GO7 2G** (coming soon): • GSM/GPRS: 850/900/1800/1900 MHz
GPS Receiver	• 50-channel engine • Under 1 second Time-To-First Fix for hot and aided starts • Hybrid GPS/SBAS engine (WAAS, EGNOS, MSAS) • 3GPP compliant • A-GPS: Differential Almanac • Accuracy: ~3m
I/O Expandability Support (IOX™)	Currently supports up to a combination of 4 of the following: • Driver ID • Hours of Service (HOS) • Garmin • Iridium • Auxiliary (4 per IOX) • Serial Port for 3rd party device integration
Accelerometer	3-axis auto-calibrating accelerometer. Full scale (±2g, ±4g, ±8g & ±16g), capable of measuring accelerations with an output data rate of 100 Hz or 400 Hz.
Environmental and EMC	Operating Temperature: -20 to +70 °C Extended Operating Temperature: -40 to +85 °C SAE J1455: • 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 1

Mechanical	Weight: 70 g (0.15 lb) Dimensions: 75 mm L x 50 mm W x 23 mm H Housing: Flame retardant black ABS

Electrical	• Voltage: 12V and 24 V systems supported
	• Current:
	   ○ Operating Mode: 60-300 mA
	   ○ Operating mode + IOX: Up to 2 A
	   ○ Sleep mode: 5 mA
	• Internal current draw measurement
	• Resettable over-current protection to IOX

Other Compliance	• FCC, IC, PTCRB, CE, E-mark, WEEE, REACH, RoHS • Carriers: Verizon, Telus, Telefónica, Rogers. Other carriers pending.
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	• 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.
32-Mb Non-volatile Flash Memory Store	• Main Data Memory: Up to 40,000 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 Detect	Non-engine based ignition detect based on voltage and movement allowing for 2-wire installation. Ideal for older vehicles with no engine information and covert installation for asset recovery.

Preparing For Installation

Before installing your device, please document your device serial number. You will need this information at a later time to verify your installation.

1. Verify that we support your vehicle by carefully reading the device release notes at goo.gl/fZURff or from the vehicle specific installation notes at goo.gl/MCIXt0. If you have any questions or concerns please consult your Authorized Reseller.
2. Ensure no dash warning lights are on in the vehicle while it is running, and all other functions such as headlamps and flashers etc. are working prior to installing the device.
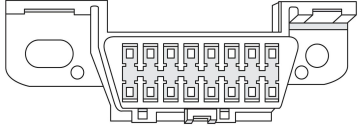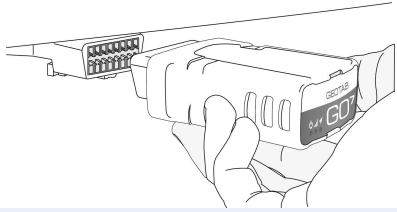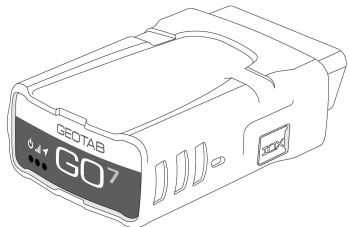
Installation Instructions

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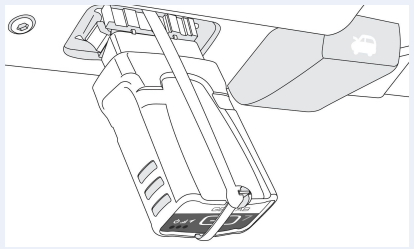
WARNING! Prior to GO installation, read and follow important safety information including limitations of use located following these installation instructions. Always read and follow all safety information to prevent loss of vehicle control and serious injury.

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 could protrude or interfere when entering or exiting the vehicle or located so could be inadvertently kicked or bumped during vehicle operation.
- The device isn't fully secured and so may be able to vibrate loose or get kicked or knocked.
- An electrical harness or additional wiring is required.
- Vehicle mounting modifications are required to secure the device i.e. removing of panels, or the OBD connector has been deformed/damaged or there is any physical damage visible to the electrical wiring.
- The installer questions their ability to complete a secure installation according to these instructions.

WARNING! Do not attempt to install, re-configure 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.

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 location.	
2.	Align the receiver end of the device with the engine diagnostic port and simply push in place, ensuring that the device is well connected to the diagnostic port. You will hear 6 quick beeps and all three lights on the device will flash briefly.	
3.	With the vehicle parked outdoors to locate satellites and vent exhaust fumes, start the vehicle and allow it to run for approximately 3 minutes. During this time period you will notice the Red LED will power on and illuminate on the face of the device. Shortly afterwards the Green and Blue LEDs will illuminate when the device connects with the cellular and GPS networks. This initial startup may take several minutes to complete.	

4.	Once all three LED lights have come on, secure your device using the supplied cable tie.
5.	**GO7 vs. GO6 GPS Antenna** When performing under dash installations with an extension harness, it is important to be aware of the type of device you are installing (GO6 vs. GO7). Make sure the antenna side is always pointing upwards towards the sky for faster GPS latch times. The GPS antenna in a **GO6** is located on the top side of the device. The GPS antenna in a **GO7** is located on the bottom side of the device.
6.	Please verify that the device is communicating correctly. Using a PC or smart phone, navigate to installmygps.com Fill in your Name, Company, and the Geotab GO device serial number (found at the bottom of the device) and click on "Log Install".
7.	You will now see a screen showing you the current status of the device. If the device is communicating correctly, you will see GREEN lettering with the last valid GPS record. If the text appear in RED the device is unable to communicate and you must verify the installation.

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 cabling continue to be securely attached.

WARNING! If at any point after an in-vehicle device is installed a warning light illuminates 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

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 compatability, 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.

Limitations of Use: Mapping and tracking features available through the software is dependent on third party mapping data and services and the availability and accuracy of the Global Positioning System ("GPS") operated by the United States government. Both third party data and services as well as GPS are subject to changes which may affect the accuracy or performance of mapping and tracking information or graphics presented through the use of the software. This product, software and services are not intended for use for primary navigation, route planning or similar purposes, as information presented may be inaccurate, delayed or misinterpreted.

The device communication features may be interrupted or inoperable if a vehicle travels outside of a network coverage area or where there is a fault or service interruption with the carrier. Device communication also requires transmission of data through the internet. Failure in internet access will result in the interruption of communications. As a result, the product and related software and services are not designed or intended as the primary means used in emergency or failsafe situations including, without limitation, situations: (A) where failure of same may result in a risk of property damage, death or personal injury; (B) where the product, software or services are used to alert others upon the occurrence of certain vehicular events recorded by the device; or (C) requiring fail-safe controls or fail-proof delivery of information, including without limitation any operations involving radioactive or hazardous materials, life support systems or munitions or weapons.

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.