

## IOX-AUXM

For the most up to date version, please visit: [goo.gl/srUWJY](http://goo.gl/srUWJY)

The IOX-AUXM monitors up to eight signals from your vehicle in real-time – providing additional insight into the condition of your fleet.

### Top Features

- Monitor up to 8 inputs at any time with two IOX-AUXMs
- Self-learning input triggers
- Supports GND–Float, GND–Driven, and Float–Driven circuits



## IOX Hardware Technical Specifications

<b>Weight</b>	50 g
<b>Size</b>	<b>Overall length:</b> 1100 mm L <b>Widest point:</b> 36 mm W × 16 mm H
<b>Housing</b>	Black, moisture-resistant thermoplastic overmold
<b>Interfaces</b>	<b>CAN:</b> 500 kbps (for daisy chaining)
<b>Inputs Available</b>	AUX1, AUX2, AUX3, AUX4 or AUX5, AUX6, AUX7, AUX8
<b>Input Absolutes</b>	-40 V to +40 V
<b>Resistance</b>	<b>Input Impedance of each AUX:</b> 30.3 kΩ to 37 kΩ Driving Circuit Resistance must be less than 100 Ω
<b>Input Logic Levels</b>	<b>GND</b> – Float, Low: Floating, High: <100 mV <b>Float</b> – Driven, Low: Floating, High: >3.3 V <b>GND</b> – Driven, Low: <100 mV, High: >3.3 V
<b>Input Type Detection</b>	Automatically identifies GND-Float, Float-Driven and GND-Driven driving circuits with capacitive loading of <200pF
<b>Power Output</b>	<b>Daisy Chaining:</b> 2500 mA @ 12 V/24 V
<b>Current Rating</b>	<b>Operating Mode:</b> 30 mA <b>Sleep Mode:</b> 0.4 mA
<b>Temperature Rating</b>	-40 °C to +85 °C

<b>Connectors</b>	8-pin Molex 43020-0800 <b>Keyed 5-pin mini-USB type-B plug:</b> Daisy chain power and CAN in <b>Keyed 5-pin mini-USB type-B socket:</b> Daisy chain power and CAN out
<b>Installation</b>	Keyed mini-USB plug connects to the GO device or another IOX Input wires connect to the intended circuit Wires covered by heat shrink must be cut for IOX to operate as AUX 5 to 8
<b>Compatible Devices</b>	GO6®, GO7®, GO7 Rugged, GO8®, GO8 Rugged, GO9®

## IOX Installation Instructions

**NOTE: Professional Installation Required** – Installation of the IOX-AUXM requires the installer to have sufficient technical knowledge and expertise for mobile device installation and integration into modern vehicles, i.e. Certified Geotab® Installer certification or equivalent.

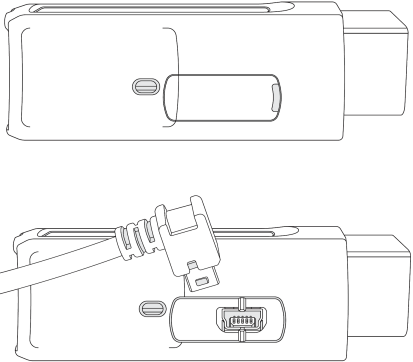
**WARNING!** Prior to IOX-AUXM installation, read and follow GO device installation instructions ([goo.gl/rkLRiA](http://goo.gl/rkLRiA)) to verify any existing GO device installation is correct in preparation for IOX-AUXM installation. Incorrect installation of either the GO device, and/or IOX-AUXM can result in loss of vehicle control and serious injury.

**WARNING!** Prior to IOX-AUXM installation, read and follow [Important Safety Information and Limitations of Use](#), located at the end of the document. Always read and follow all safety information to prevent loss of vehicle control and serious injury.

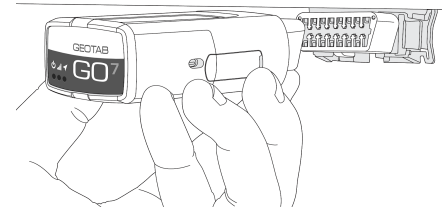
Identify and test the connection points for the auxiliaries you wish to monitor. Please note, the IOX wire has a reach of approximately 3.5 feet from the GO Device mounting location. Extending the wiring to reach some connection points may be necessary. Make the auxiliary connections and secure them using an approved method, such as T-tapping. Ensure none of the components or wiring interferes with the safe operation of the vehicle.

### How to Install IOX-AUXM

- 1 Unplug the GO device from the vehicle and remove the IOX expansion port cover on your GO device.
- 2 Plug the 90° USB connector from the IOX in to the GO device. Secure the USB connector using a zip tie. Please note that over tightening the zip tie may damage the USB connector.  
**Note:** Insert the USB connector in the orientation displayed in the image.
- 3 The IOX-AUXM has four inputs – configured and labelled **Aux 1–4**. Connect the desired auxiliaries in the vehicle to the IOX-AUXM wires, as needed. If more than four auxiliaries are required please refer to [Expanding your IOX-AUXM](#).  
Aux 1 = Blue   Aux 2 = Orange   Aux 3 = Green   Aux 4 = White



4 Once you connect the IOX-AUXM to the GO device, plug in the GO device and immediately start the vehicle. The GO device will enter debug mode.



5 While the GO device is in debug mode, trigger each auxiliary one at a time so the IOX-AUXM learns the inputs. Once the IOX-AUXM learns an input, the GO device emits a number of beeps corresponding to the auxiliary number. For proper configuration, you must hear the beeps when the auxiliaries are triggered both ON **AND** OFF (e.g. Aux 2 sounds two beeps when triggered ON and then two beeps when triggered OFF). Repeat this step until the corresponding beeps are heard on BOTH trigger ON and trigger OFF.

6 Navigate to [installmygps.com](http://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**.

**Installer Name:**

**Installer Company:**

**Device Serial No:**

**Odometer:**

**Asset Number:**

7 After you click **Log Install**, the web page displays the current communication status – 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 device is installed correctly and try again.

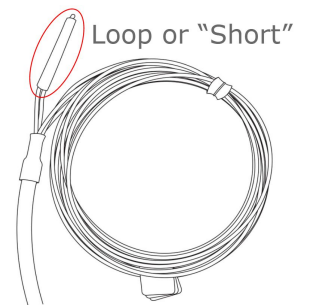
## Expanding your IOX-AUXM

The IOX-AUXM can expand from four to eight auxiliaries by plugging in a second IOX-AUXM to the expansion port of the first and following the steps below.

**Note:** You must remove the zip tie from the original IOX-AUXM.

In order for the second IOX-AUXM to report as 5-8, follow the steps below:

- 1 Locate the red and black loop, also known as Short.
- 2 Cut the wires to configure the IOX-AUXM to act as Aux 5-8.
- 3 Secure both IOX-AUXMs with a zip tie.



## Colour Guide

Aux 5 = Blue

Aux 6 = Orange

Aux 7 = Green

Aux 8 = White

**Note:** By cutting the loop, the second IOX-AUXM always report as AUX 5-8, regardless of whether or not an Aux 1-4 is installed. The loop must be cut before connecting the IOX to the chain.

## Termination Shunt

The IOX comes with a termination shunt installed in the expansion port. If you plan to install more than one IOX in a daisy chain, you must remove the shunt from each device in the line, with the exception of the last IOX connected. The shunt must remain in the last IOX and secured with a zip tie.

The shunt in the last IOX ensures the GO device detects and configures the IOX, as effectively as possible.

**Note:** Failure to install the shunt in the last IOX may affect IOX communication. To ensure the IOX communicates, please secure the shunt with a zip tie.

## Important Safety Information and Limitations of Use

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

**WARNING!** Do not attempt to install, configure or remove any product from any 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 units while being operated could result in malfunctions or accidents, leading to death or serious personal injury.

**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. You must inspect devices and cabling on a regular basis to ensure all devices and cabling continue to be securely attached. Loose cabling or devices may impede the use of vehicle controls, resulting in unanticipated acceleration, braking or other loss of vehicle control, which could lead to death or serious personal injury. Improperly fastened in-vehicle devices may detach and impact operators upon sudden acceleration or deceleration, which may cause injury.

**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.

**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 or vehicle damage 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 death or 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.

 **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).