# GEOTAB<sub>8</sub> IOX-USB

For the most up-to-date version, visit: goo.gl/35JWdW.

The IOX-USB includes an auxiliary USB power adapter for charging and powering USB devices. Constant power to the mobile device allows the driver to use battery intensive applications while in the vehicle. The driver can use applications, such as Geotab® Drive, without concern for battery life and power with the IOX-USB cable. Also, with the IOX-USB, the display of the tablet/phone powers on and off with the ignition.

**★ NOTE**: The IOX-USBM is discontinued. Use the IOX-USB with the USB cable (recommended length of 1 meter) — supplied with your smartphone/tablet — to connect the IOX-USB to the Geotab  $GO^{\mathsf{TM}}$  device.

#### **Features**

- Easy-to-install IOX™ for the Geotab GO device
- Charges and provides constant power to USB devices
- Compatible with Geotab's standard third-party device protocol (mv.geotab.com/sdk)



# **IOX hardware technical specifications**

Weight	64 g
Size	Overall Length — 1190 mm L Widest Point: 31 mm W × 16 mm H
Housing	PC+ABS clamshell casing
Interfaces	CAN: 500 kbps (for daisy chaining) USB: Data transfer or charging
Frequency Range	13.56 MHz
Nominal Input Voltage	12 V / 24 V
Power Output	5 V/1.5 A USB Charger

Current Draw IOX-USB on GOx daisy chain	40 mA at 12 V / 24 V Operating mode (typical/nominal current draw) 100 mA at 12 V / 24 V Operating mode (max. current draw) 0.4 mA at 12 V / 24 V Sleep mode (min. current draw)  Without USB Load: 40 mA With USB Load 1000 mA: 540 mA With USB Load 500 mA: 290 mA With USB Load 1500 mA: 800 mA
Temperature Rating	−40 °C to +85 °C
Connectors	Male Mini-USB Type-B connector: Daisy chain power and CAN in Female Mini-USB Type-B connector: Daisy chain power and CAN out Female USB Type-A connector: USB charger  Front View of P1  1. Red - Power 2. White - USB negative 3. Green - USB positive 4. Black - Ground
Compatible Devices	All GO7® and newer devices and variants
GO9 can source a maximum total current to the IOX in Daisy Chain	2500 mA at 12 V/24 V  * NOTE: For each IOX in the Daisy Chain, add the Max Current draw, and do not exceed the Max.Total IOX Current draw.

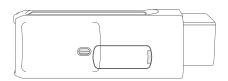
## **IOX installation instructions**

! IMPORTANT: Professional installation (Certified Geotab® Installer or equivalent) is required for the safe and proper installation of this product (harness and/or IOX). The installer must have sufficient technical knowledge and expertise for the respective installation.

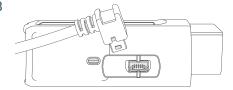
▲ □ WARNING! Always read and follow all safety information, including Important <u>Safety Information and Limitations of Use</u>, before harness and/or IOX installation. Disconnect the GO device from the vehicle before installation and connect it post-installation (see <u>goo.gl/rkLRiA</u>). Failure to follow these instructions and warnings can result in loss of vehicle control and serious injury or vehicle damage.

## **Installing the IOX-USB**

Unplug the Geotab GO device from the vehicle and remove the IOX expansion port cover on the GO device.



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.

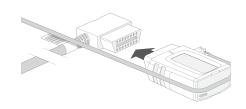


**\* NOTE**: Insert the USB connector in the orientation displayed in the image.

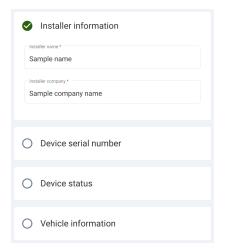
- Choose an appropriate location to mount or conceal the standard USB receiver, depending on the application. If you plan to use various devices with the IOX-USB, mount the USB receiver in an accessible location.
  - **\* NOTE**: Choose an area where the IOX-USB does not interfere with the safe operation of the vehicle. Keep the routing of the IOX wire in mind when choosing a location for the USB receiver.

If the device installation is permanent, secure the USB receptacle and USB connector together using electrical tape or another suitable method, and conceal.

- In some cases the standard USB receptacle is taped in place, provided both surfaces are properly prepared. Once you connect the IOX-USB to the GO device, secure the two USB ends together.
  - **\* NOTE**: The USB cable, supplied with your mobile device, is required to connect to the IOX-USB. The IOX-USB does not replace the device's USB cable.
- Once you connect the IOX-USB to the GO device, plug in the GO device and immediately start the vehicle. The GO device enters debug mode.



- 6 Navigate to <u>myinstallpub.geotab.com</u> to verify that the device is communicating.
  - In the **Installer information** section, enter the installer's name and company name. Select the next section.
  - In the Device serial number section, enter the 12-digit alphanumeric serial number, located on the bottom of the device, then click Validate.
     Select the next section.
  - In the Device status section, review the status of the device. The PASS status indicates the device communicated with the network in the last 24 hours. The FAIL status indicates the device has not communicated with the network in the last 24 hours. Select the next section.
  - In the **Vehicle** section, enter the vehicle-related information.
  - **\* NOTE:** If the device is not communicating, please ensure the device is installed correctly and try again.

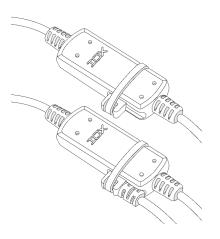


#### **Termination shunt**

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 device 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.



## Incompatibility

The IOX-USBPWRF/M, IOX-USBF/M, and IOX-USB cannot be used together on the same GO device.

## Third-party data communication

To enable third-party data communication on the IOX-USB, apply the following custom parameter to the GO device through MyGeotab™:

<GoParameters>

<Parameter Description="Enable USB Data" Offset="164" Bytes="02"/>

</GoParameters>

Third-party USB data transfer is only available on the ProPlus plan. If your GO device is on the Pro plan, it automatically upgrades to the ProPlus plan — with all associated charges — when third-party data transfer begins. If the GO device is on the Base plan, please request an upgrade to the Pro or ProPlus plan.

The IOX-USB operates as a USB 2.0 full-speed host. The maximum data transfer rate is 12 Mbit/s. The IOX-USB uses the

Android Open Accessory protocol to enumerate a USB device.

For details on how to integrate with the GO device via IOX-USB, refer to the Hardware SDK documentation on MyGeotab (mv.geotab.com/sdk).

## **After initial setup**

#### How to Toggle IOX-USB Functionality in MyGeotab

By default, the IOX-USB functionality is enabled. After the initial setup, you have the option to enable or disable IOX-USB functionality in MyGeotab.

- 1 In MyGeotab, navigate to the **Vehicles & Assets** page.
- 2 On the **Vehicles & Assets** page, use the search field to select the desired vehicle.
- On the **Asset Edit** page, select the **Settings** tab.
- 4 Make any required change to the **Enable USB data transfer** toggle.

#### **Automated Vehicle Selection**

After the IOX-USB is installed and connected in the Drive App, the Drive App skips the vehicle selection process and automatically assigns the connected vehicle to the user.

If you are assigned to a vehicle but choose to connect an IOX-USB with a different telematics device, you are assigned to the vehicle connected via IOX-USB. Upon successful assignment, the App displays a green popup notification message. If you are already assigned to a vehicle that is also connected to an IOX-USB, no message is displayed.

# **Important Safety Information and Limitations of Use**

For the latest version of Limitations of Use, visit: 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.

# **Regulatory statements**

#### **USA**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- \* NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Geotab could void the user's authority to operate the equipment.

#### Canada

CAN ICES-003 (B) / NMB-003 (B)

## **Germany**

Wir besitzen keine Versand- und Lagerfläche in Deutschland und sind nicht von der Rücknahmepflicht nach § 17 ElektroG betroffen.