

# Geoforce AX11 Installation Guide

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## Step 1: Prepare for the Installation

Be sure you have all the required components and tools needed.

This must include:

1. The Geoforce AX11 Device.  
(AX-HW-LTE-BLE)
2. Optional components:
  - Cable tie(s)
  - OBD-II Y-Harness (AX-Cable-1)
  - Type 2 9-pin Y-Harness(AX-Cable-2)



## Step 2: Record the Asset and VT1 Serial Numbers

1. Record the device Serial Number (IMEI) printed on device label.
2. Record the asset information (in which the device was installed).
  - a. Record the Year/Make/Model
  - b. Record the Vehicle VIN
  - c. Record the License Plate
  - d. Record the Odometer & Hour meter
3. Send this information to Geoforce support or enter the information on the asset in your account.

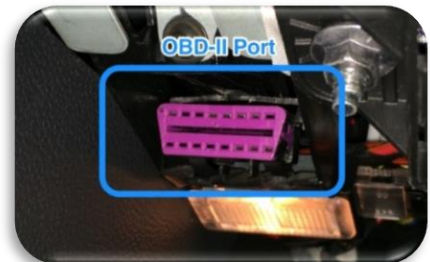


## Step 3: Plan the Installation

### Unit Placement

The device uses a compact enclosure with an integrated OBD-II plug with both GPS and cellular antennas mounted internally. It is more important to consider GPS performance, GPS signal strengths are much lower than those seen by cellular networks supported by the device.

To ensure optimal GPS location quality, the device should have the clearest possible view of the sky. However, since most diagnostics ports are located under the dashboard, achieving this can be challenging. For heavy-duty vehicles or covert installations, using an optional harness may be necessary to ensure compatibility or to position the device higher within the dashboard.



### Mounting

#### Conventional Mounting:

The device includes a sensitive three-axis accelerometer used to provide safety event data to the Geoforce Platform. Typically, the factory OBD-II port offers sufficient rigidity for proper accelerometer functionality. However, if the device is positioned where it might be kicked or dislodged, secure it by looping a cable tie around the device and the OBD-II port shell or consider using an optional Harness.

#### Y-Harness Mounting:

When using an optional OBD-II harness (9-pin, OBDII Y), the device **must** be securely affixed to the solid body of the vehicle. Avoid mounting the device under metal or attaching it to wire bundles. Use multiple cable ties or 3M VHB adhesive tape, ensuring the non-label side of the device faces outward towards the windshield.



- ✓ Good mounting locations.
- ✗ Areas to avoid.

### Installation Steps:

1. Unsnap or remove the screws on the dashboard to access the back of the diagnostic port.
2. Remove the screws or detach the diagnostic port. Connect one end of the Y-harness to the vehicle diagnostic port.
3. Connect the AX11 device to the selected harness. The device's red, green, and blue lights will turn on.
4. Neatly secure the Y-harness and AX11 modem using zip ties. Ensure the device is not placed directly under metal, as it has internal antennas. Properly securing the device with zip ties is critical, as the accelerometer requires a stable mount for accurate messaging.
5. Reconnect the vehicle diagnostic port and reassemble the dashboard.

### Step 4: Verification

1. Ensure the vehicle is parked outside with a clear, unobstructed view of the sky.
2. After connecting the device, allow up to 10 minutes for it to establish its initial connection to the cellular network.
3. Start the vehicle's engine and let it idle for 30 seconds before turning off the ignition.



The following table describes the operations of the LEDs on the AX Device

## Device Should have a Solid RED and BLUE Light

The following table describes the LED states:

LED Indicators	Color	LED Status	Description
OBD/J1939/J1708	Green	Solid OFF Fast blinking Blinking every 10 seconds	OBD/J1939/1708 Protocol not found OBD/J1939/1708 data transmission. Deep sleep mode
GPS	Blue	Solid OFF Blinking every 1 second Solid ON	GPS power OFF GPS not fix GPS Location Fix
WWAN	Red	Solid OFF Blinking every 1 second Blinking every 2 second Blinking twice every 2 second Solid On	GSM Power OFF GSM no signal GSM registered GPRS connected Assigned server connected

Once completed, please contact Geoforce Canada at 1-888-574-3878 option 2 to validate the install.