# IntelliShift VG-6 Installation Guide with Driver ID



Installation of your new device should be performed by a 12V certified technician or mechanic familiar with automotive 12V systems.



### Fob Reader (Short):

- Green (Data, connect to Pin 6)
- Black (LED, connect to Pin 19)
- Red/White (Ground, connect to Pin 1)

## Fob Reader (Long):

- Grey (Data, connect to Pin 6)
- Blue (LED, connect to Pin 19)
- Black/Black (Ground, connect to Pin 1)

#### **Buzzer:**

- Red (connect to 12V source)
- Black (Output, connect to Pin 2)

#### Fob/Buzzer Info

 For a successful installation, you will need to provide a roll of 18-gauge wire, heat shrink butt connectors/heat shrink tubing and hardware if

- need be.
- To be installed where the customer deems it necessary. In most cases, we like to install them near the Ignition on the dash.
- Hole size to be drilled is approximately 5/8" for the Short Fob, and 11/16" for the Long Fob. Once drilled, please run wire through and use the lock nut included securing Fob reader to dash.
- Run the wires either along with the VG-6 harness if you can, if not, run the Fob reader harness directly to the device.
- Secure Buzzer to VG-6 harness once wired.

## **Mounting Guidelines**

- The device should be installed under the dashboard with a clear line of sight to the sky, and as close to the windshield as possible. Place the device with barcode decal "THIS SIDE TOWARDS SKY" facing up. (Reference diagram A)
- DO NOT install the unit underneath metal as the signal will not penetrate and reach the satellite.
- During the initial installation, the vehicle should ideally be outside to ensure the best GPS signal.
   The devices may not report a location to the satellite if it is inside a garage or other structure.
- Secure the device with Velcro, and/or zip ties to ensure it is solidly mounted to the vehicle.

#### **Installation Guidelines:**

- After securing the harness within the vehicle it is now time to power up the device.
- With the Ignition Off, Plug in the device to the Molex Connector.
- During the boot up process the device will show a Solid Green light for 30 Seconds
  - This represents the device powering up
- After the device has powered up the Green LED will start to Flash at the following Rates
  - 25 times on-off every 10 seconds when the ignition is on
  - Eight times on-off every 10 seconds when the ignition is off
- During the installation if you see a Red LED flashing please be sure to review the section on Troubleshooting
- Before finalizing installation, contact our Support
  Department at (631) 670-1623 to verify the device
  is properly reporting to IntelliShift.



### **Troubleshooting:**

The Green and Red LEDs are intended to aid in troubleshooting installations. Below is a summary of their behavior.

#### **Green LED**

See Installation Guidelines.

#### **Red LED**

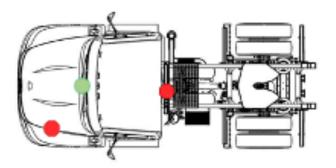
 The red LED flashes two-digit codes. The first digit indicates which general area is having a problem (hardware, modem, GPS, end-end service). The second digit gives specific error information. Since there can be more than one error condition, the device rotates through the error codes (e.g. if the GPS is tracking no satellites and the modem is not registered).

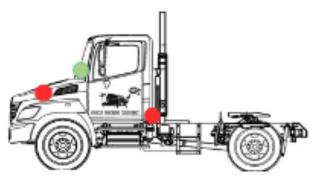
## 1-X Error Codes: IntelliShift-Specific Errors

- 1-1: The device has an expired license key due to a failure to resync with the IntelliShift configuration server. Contact IntelliShift with the serial number of the device.
- 1-2: Low supply voltage. This could be caused by a true low voltage condition (<8V) or a high impedance supply that dips in voltage when the current draw spikes due to modem transmit.
- 1-3: Allocated data usage exhausted.
   Contact IntelliShift Technical Support for further instructions.

## 2-X Error Codes: Modem Related Error Codes

• **2-1:** Modem module fault. Contact IntelliShift for failure analysis and repair.





- 2-2: No SIM inserted. Make sure the SIM drawer contains a SIM and that it is correctly seated in the socket. If it is, then contact IntelliShift for failure analysis and repair.
- 2-3: No signal. Check that the cellular antenna is correctly attached. Try to substitute a known-good cellular antenna to see if the antenna may bebroken. If this fixes the problem, then reinstall a new antenna. If not, then RMA the unit to IntelliShift for failure analysis and repair.
- 2-4: Network not found. Contact IntelliShift.
- 2-5: Last data session failed. This means that an attempt to establish a data session failed. This failure will occasionally happen in a working unit, but if the problem is persistent Contact IntelliShift.
- **2-6**: Network is not available.

## 3-X Error Codes: GPS Related Error Codes

• **3-1:** GPS module fault: Contact IntelliShift for failure analysis.

- **3-2:** GPS antenna fault: try replacing the GPS antenna with a known good antenna. If the condition is not corrected after 2 minutes, contact IntelliShift for failure analysis.
- 3-3: GPS not tracking any satellites. Check that
  the GPS antenna has a clear, unobstructed
  view of the sky and has been operating for at
  least five minutes. Check that the GPS antenna
  is facing the correct way up. If the condition
  persists contact IntelliShift for failure analysis.
- 3-4: GPS no fix (less than three satellites). If the antenna only has a partial view of the sky due to the position of the vehicle (e.g. under a cover, close proximity to a building, etc.) then try to move the vehicle to ensure that it will be able to make fixes when standing in the open. If the vehicle has a full view of the sky and the error condition persists then try to reposition the GPS antenna to reduce any obstructions from its view of the sky.
- 3-5: GPS has no time. The GPS receiver sets
  its internal clock from the satellite signals. If
  the GPS receiver has no time, then it has never
  seen a single satellite since the device was last
  power cycled.

# 4-X Error Codes: End-to-End Application Error Codes

 4-2: Data transfer failed. If the condition persists then contact IntelliShift Technical Support.

### **Driver ID Troubleshooting:**

- If you're done with the install and the Fob reader isn't reading the Key Fob, please check your wiring to Pin 6.
- If you're done with the install and the LED light isn't illuminated, please check your wiring to Pin 19.
- If you're done with the install and Fob reader isn't working and the LED is off, please check your wiring to Pin 1.
- If you're done with the install and the Buzzer isn't sounding off, please check your wiring to Pin 2 and your 12V connection for the Red wire.
- If you confirmed all the above is in correct order and are still have issues with the functionality of the Fob Reader, we will diagnose further on our end to pinpoint any problem.
- We pride ourselves on making our installations look as factory as possible. Please use Wire Loom to conceal the wires you run throughout the customer's vehicle if in plain sight and when it's exposed outside. Additionally, if a hole is made to run our wirings inside/outside, please use Silicone to cover up the additional space.

Before finalizing installation, please contact our technical support department at 631-670-1623 to have them verify the vehicle is visible in IntelliShift and is registering properly.