

# Trimble Gateway T511 Installation Guide

# Install Overview

- **Mount the T511.**
  - Mount the device in or on the dash with a clear view of the sky unobstructed by metals, with the top pointing to the sky.
    - The GPS receiver is directly under the “GPS” symbol on the case.
  - Be sure the module is clear of driver activities and potential environmental hazards.
- **Connect to the vehicle.**
  - The main cable includes an RP1226 connector for most late-model vehicles.
  - Adapters are available to connect at the diagnostic port if needed, as well as a 2-pin cable for in-dash installations.
- **Mount and connect the display**
  - Note the TG Blue Barrel is no longer needed for display. Connect the 2-pin Power/Ground to the mating connector on the T511 Main Cable.
  - If you are switching from a PMG or PCG, a new display cable is needed.

# Additional Install Notes

- The optional white Ignition lead is available if needed, but most vehicles will boot normally using the J1939 Engine Data signal.
- TG supports power inputs from 12 or 24 volt vehicles (6-36 volt functional range).
- TG will automatically adjust to the baud rate of the vehicle J1939, whether 250k or 500k.
- The display will power from the 2-pin Power/Ground connector, while all Display communications take place over Wi-Fi.
- Vehicle-specific install guides and videos are available at: <https://transportation.trimble.com/installations/>

# Standard Kit M-010-0728

- Trimble Gateway T511 – E-006-0638
- RP1226 Main Cable – L-016-0728
  - 44-Pin head
  - RP1226 for Power/Engine Data connection to newer trucks. Adapters are available for older vehicles
  - Power/Ground Connector for displays
  - Two discrete inputs (not currently used)
- H-048-0526 – #8 x  $\frac{3}{4}$ " Mounting Screws

# Trimble Gateway T511 Overview



Mount  
Flanges

Main Cable

# L-016-0728 RP1226 Main Cable



# Adapters

- M-010-0741 – 9-Pin Kit
  - L-016-0737 – RP1226 to 9-Pin Adapter
  - Connection to any approved 9-Pin Diagnostic Port
- M-010-0744 – 2-Pin Kit
  - L016-0740 – RP1226 to 2-Pin Adapter
  - L-016-730 – Power/Fuse Harness
  - Connection to any approved 2-Pin Diagnostic Port
- M-010-0742 – Volvo/Mack Kit
  - L016-0738 – RP1226 to Volvo/Mack OBD-style Adapter
  - Connection to Volvo/Mack diagnostic port on pre-2018 Volvo/Mack trucks with Volvo/Mack engine



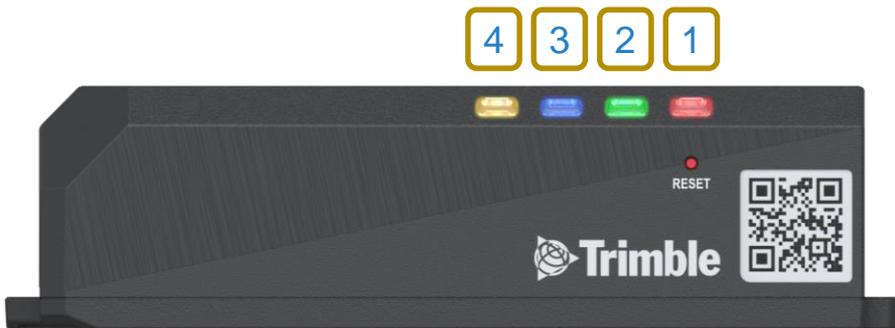
# Display Cables

- L-016-0743 – 2-Pin connection to PCT Cradle
- L-016-0744 – 2-Pin connection to PD.5

*\*Displays will need to be manually powered on, they will not wake automatically*

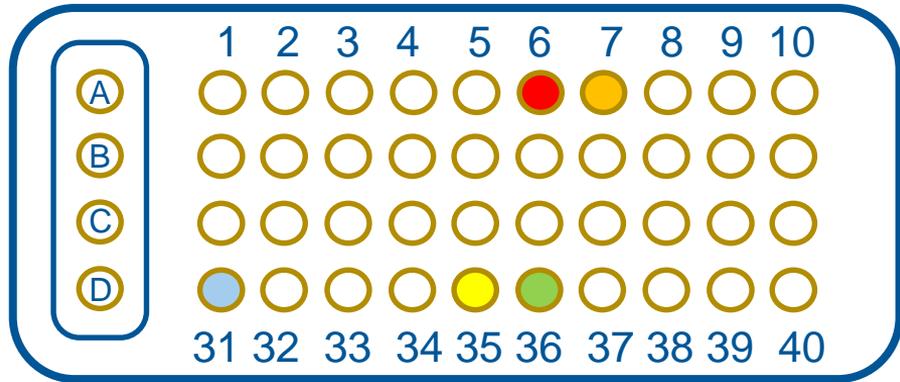


# T511 LED Indicators



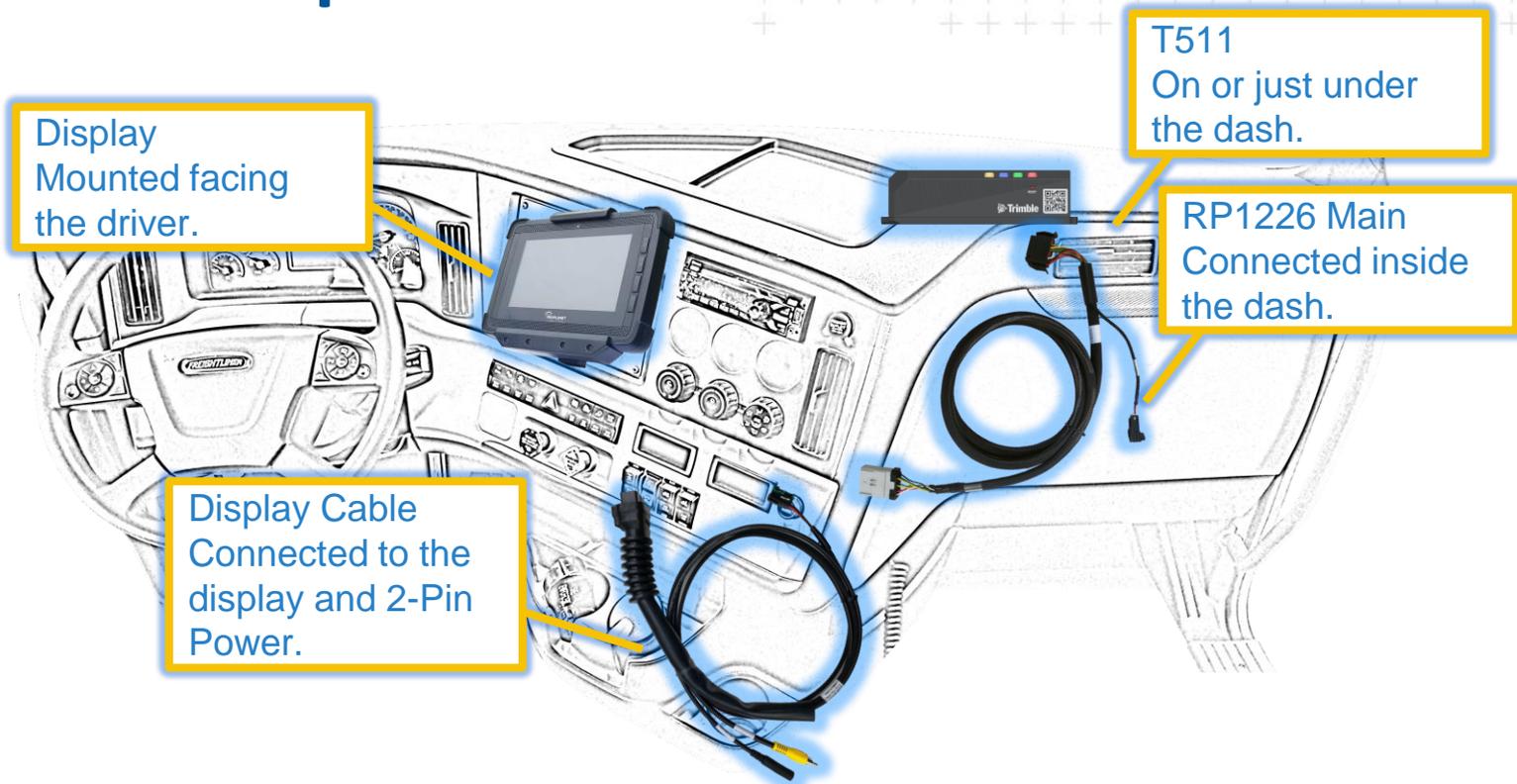
- LED 1
  - Solid Red = ON and Charging
  - Off = Powered Off
- LED 2
  - Solid or Flashing Green = Cell Connected
  - Off = No Cell Connection
- LED 3
  - Rapid Blue Flash = Engine Data Connected
  - Off or Solid Blue = No Engine Data
- LED 4
  - Solid Amber = GPS Fixed
  - Blinking Amber = No GPS Fix

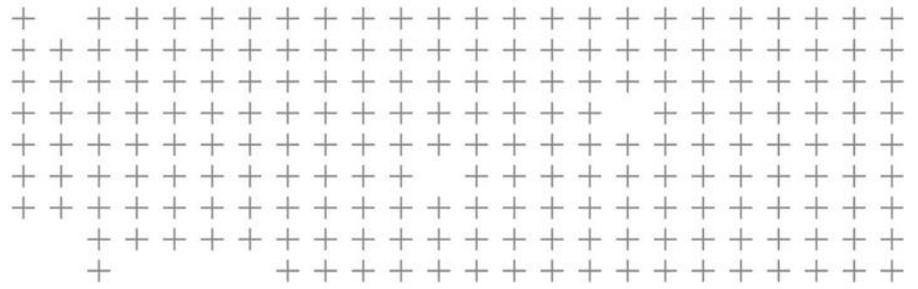
# Main Cable Pin-out



Pin	
A and B	Input Power 12-24 Volts
C and D	Ground <5 ohms to known ground
31	Ignition Sense 12-24 Volts
6	J1708 High
7	J1708 Low
36	J1939 High 60 ohms +/-5 to Low with vehicle ignition off
35	J1939 Low 60 ohms +/-5 to High with vehicle ignition off

# Install Example

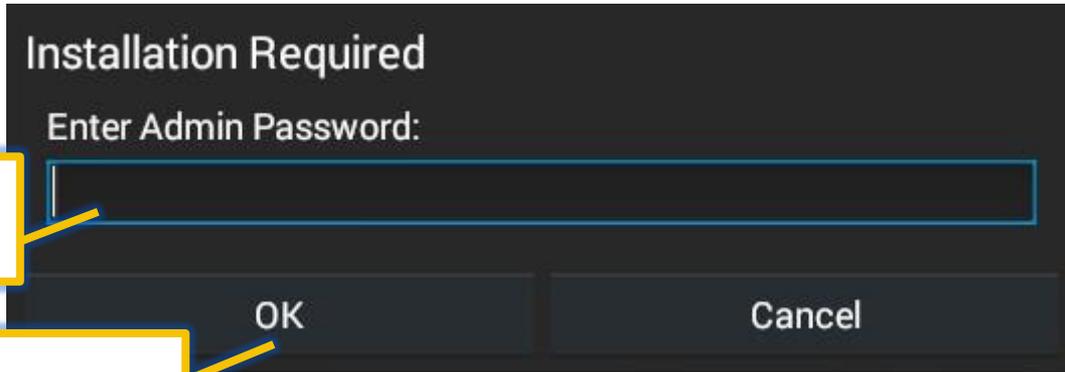




# Activation and Testing

# Activation

- Start the vehicle and confirm the TG LEDs come on.
- On first boot, the device will recognize it is not paired and begin the activation process.

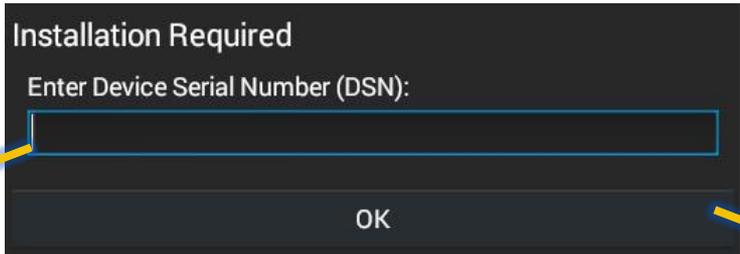


The image shows a dark-themed dialog box titled "Installation Required". Below the title is the text "Enter Admin Password:". A text input field is present, with a yellow callout box pointing to it containing the text "Enter 9238". At the bottom of the dialog box are two buttons: "OK" and "Cancel". A second yellow callout box points to the "OK" button with the text "Press OK".

# Activation



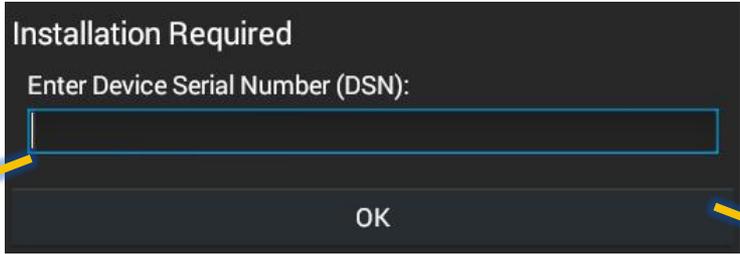
Enter the TG serial (DSN)



Press OK

The display will then reboot and prompt again

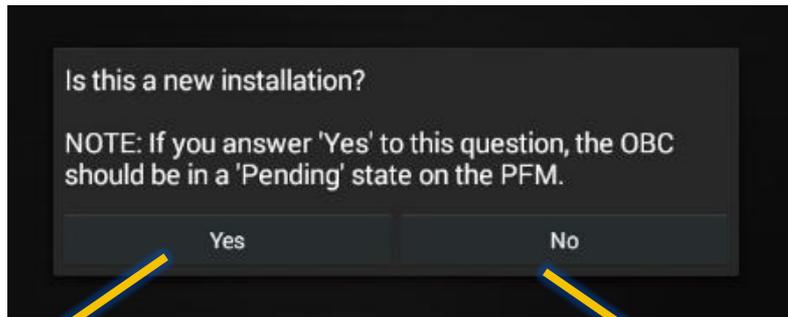
Enter the TG serial (DSN)



Press OK

# New Install vs. Not New

THE DISPLAY WILL ASK IF THIS IS A NEW INSTALL

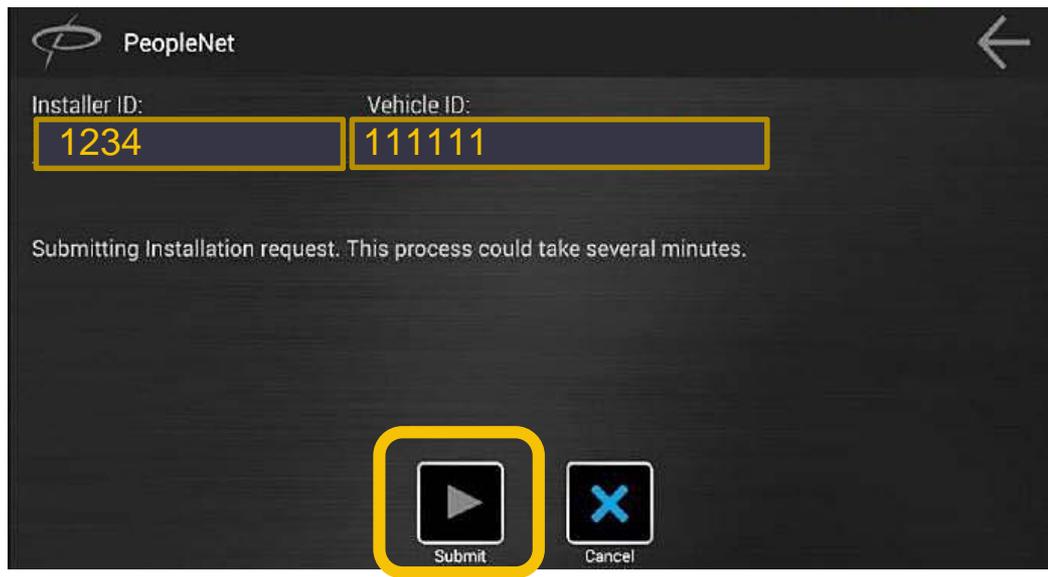


Select YES if this is a new TG and the first device in this truck.

Select NO if this is a used TG or if truck is already active under another DSN.

# New Install

## FOLLOW THESE STEPS FOR NEW INSTALL



The screenshot shows the PeopleNet installation interface. At the top left is the PeopleNet logo and a back arrow. Below are two input fields: 'Installer ID' containing '1234' and 'Vehicle ID' containing '111111'. Below the fields is the text 'Submitting Installation request. This process could take several minutes.' At the bottom are two buttons: 'Submit' (a play button icon) and 'Cancel' (an 'X' icon). The 'Submit' button is highlighted with a yellow border.

- If this is a new install, enter your installer ID and truck number, then press Submit.

# DSN Swap

FOLLOW THESE STEPS IF YOU ARE SWAPPING DEVICES IN A PREVIOUSLY INSTALLED UNIT

PeopleNet

Installer ID: 1234

Vehicle ID: 111111

Old DSN: 6031234

Connected OBC DSN=6035629

Done

- If you are swapping the TG in a previously installed unit, the activation will toggle the assigned device while keeping the vehicle history.
- Enter your Installer ID
- Enter the Vehicle Number as it currently appears in the network.
- Enter the serial number of the previous device (leave blank if unknown) then press Done.

# Testing

## NAVIGATE TO SYSTEM>OBC DIAGNOSTIC>STATUS

PCG Status

Cruise  
Unknown

Current State  
MINNESOTA

DSN  
11000701

Driver Log Regula  
24

GPS Quality  
Good

Heading  
North

Verify correct DSN.

Verify display charging.

Verify GPS is Good.

Status

PCG Status

Heading  
North

Ignition Mode  
Wired

Ignition Status  
On

Latitude  
44.881137

Longitude  
-93.405245

Odometer  
0

“Ignition Mode” shows the boot trigger. “Wake on CAN” indicates J1939 Data.

“Ignition Status” shows whether the engine is running with RPM>450.

Status

# Vehicle Data

NAVIGATE TO SYSTEM>OBC DIAGNOSTIC>VEHICLE

PCG Status
Brakes Applied Disabled
Current Gear Unknown
DSN 11000672
Diesel Exhaust 81.6
Engine Diesel Fuel 21012.25
Engine Fuel 21012.25
Engine Hours 3870.45
Engine Load 15
Engine NG Fuel Unknown
Fuel Economy 0.0

Verify Engine Fuel  
is greater than 0.

PCG Status
Fuel Economy 0.0
Fuel Tank 1 64.0
Fuel Tank 2 Unknown
Odometer 154341.1
RPM 917.25
Retarder Torque 0
Soft Fuel 21012.313
Soft Odometer 154341.07007
Speed 0.0
Throttle 0.0

Verify Odometer.

Verify RPM.