# PD5 Installation Guide

## BETA

# PD5 Components

These parts are required for a standard PD5 install

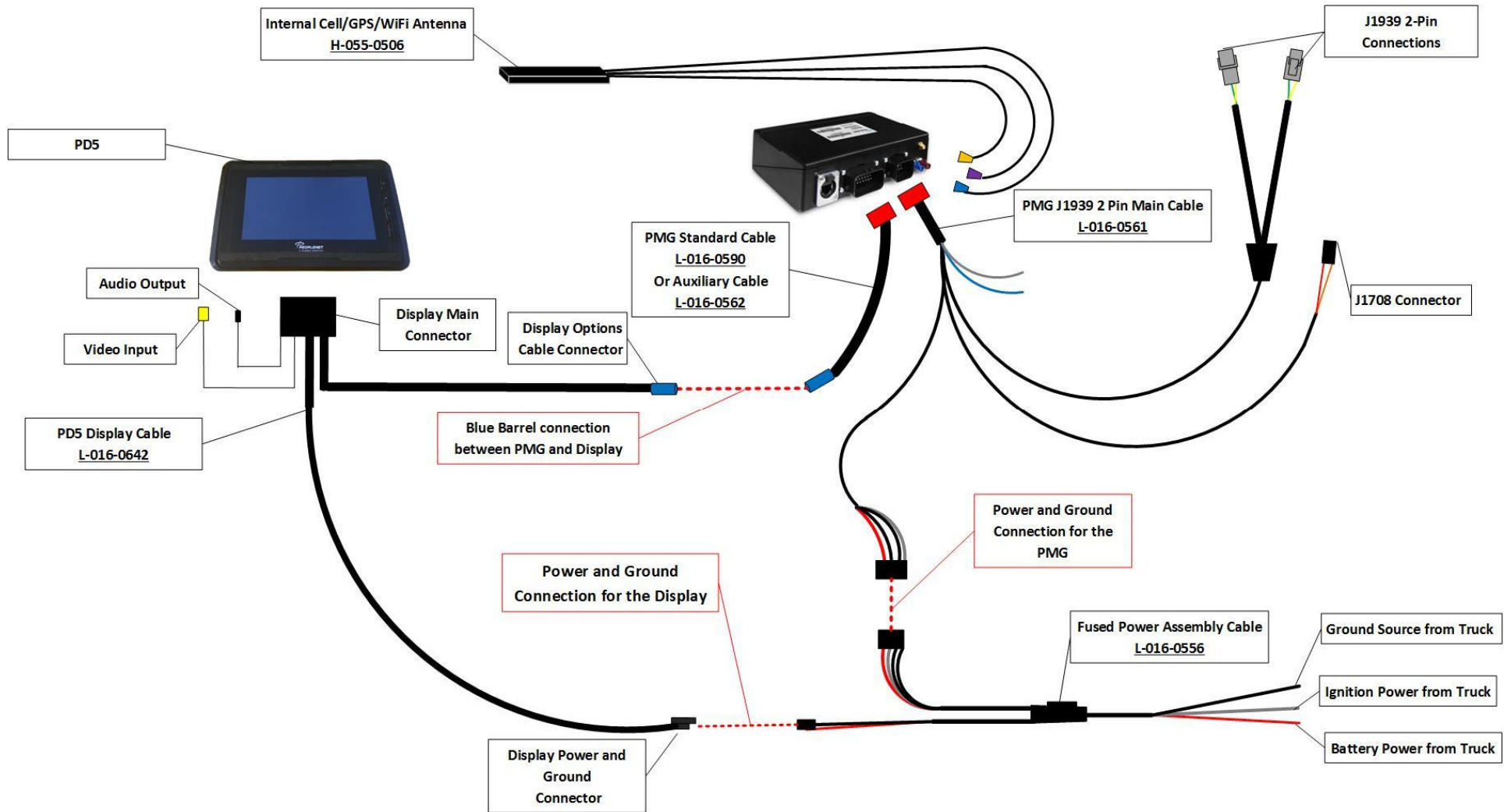| PD5 Fixed Mount Kit M-010-0634 | | | |
|---|---|---|---|
| **PD5 Display L-019-0516** | **PD5 Cable L-016-0642** | **RAM Mount H-050-0013** | **Screw Packs** |
| | | | **H-048-0509 RAM to PD5** **H-048-0510 RAM to Vehicle** |

## *Intended Use*

The PeopleNet PD5 is designed to operate within the typical truck-in-cab and be installed on the dash by the end user. It is designed to be used while mounted and should not be used while unmounted.

The host installed by professional person and please don't use it when Tablet non-fixed on RAM Mount.

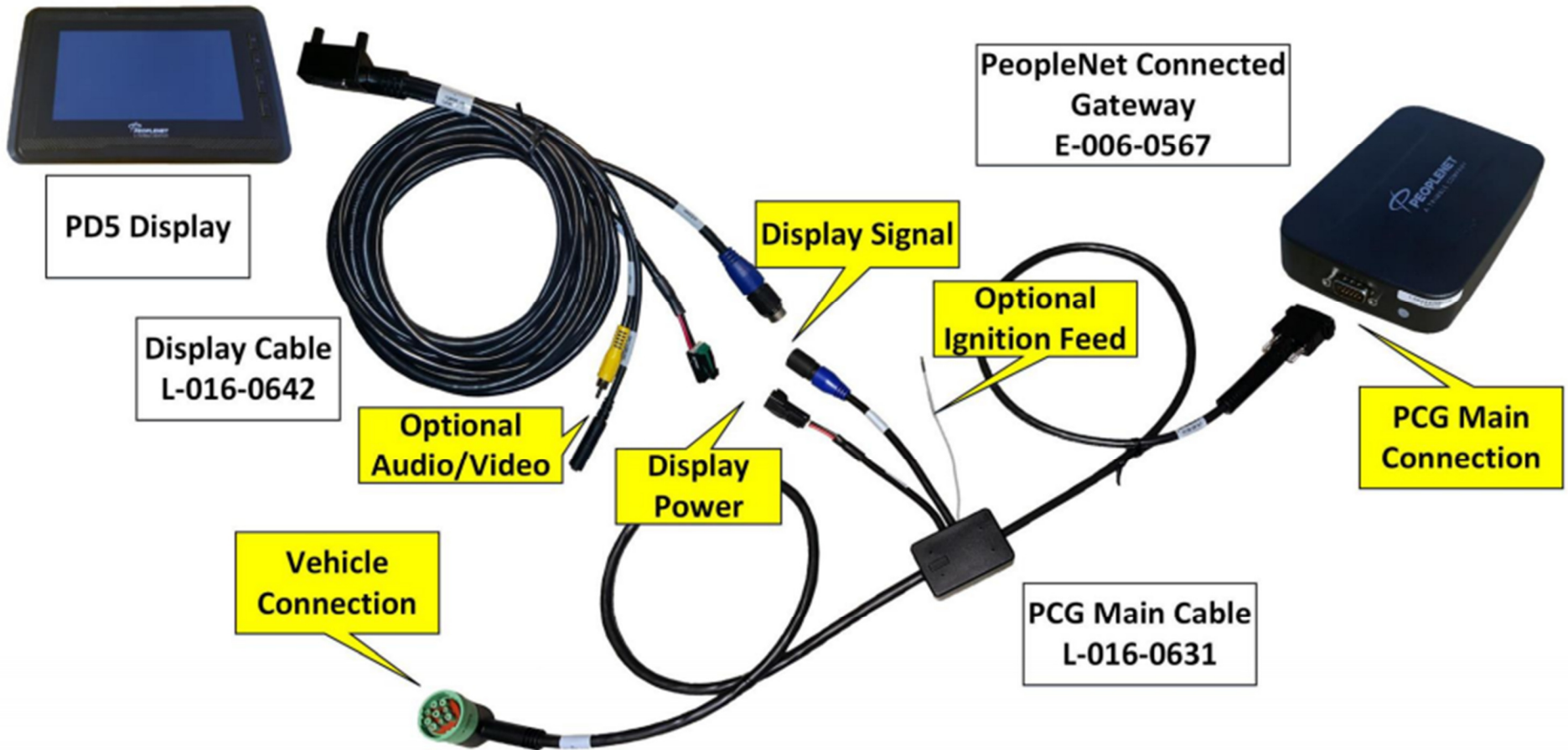The tablet is used special screws to fix on RAM Mount

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# System Overview

## PD5 connected to a PMG



Internal Cell/GPS/WiFi Antenna
H-055-0506

J1939 2-Pin Connections

PD5

PMG J1939 2 Pin Main Cable
L-016-0561

Audio Output

Video Input

Display Main Connector

PMG Standard Cable
L-016-0590
Or Auxiliary Cable
L-016-0562

Display Options Cable Connector

J1708 Connector

PD5 Display Cable
L-016-0642

Blue Barrel connection between PMG and Display

Power and Ground Connection for the PMG

Power and Ground Connection for the Display

Fused Power Assembly Cable
L-016-0556

Ground Source from Truck

Ignition Power from Truck

Battery Power from Truck

Display Power and Ground Connector

# System Overview
## PD5 connected to a PCG



**PD5 Display**

**Display Cable
L-016-0642**

**Optional
Audio/Video**

**Display
Power**

**Vehicle
Connection**

**Display Signal**

**Optional
Ignition Feed**

**PeopleNet Connected
Gateway
E-006-0567**
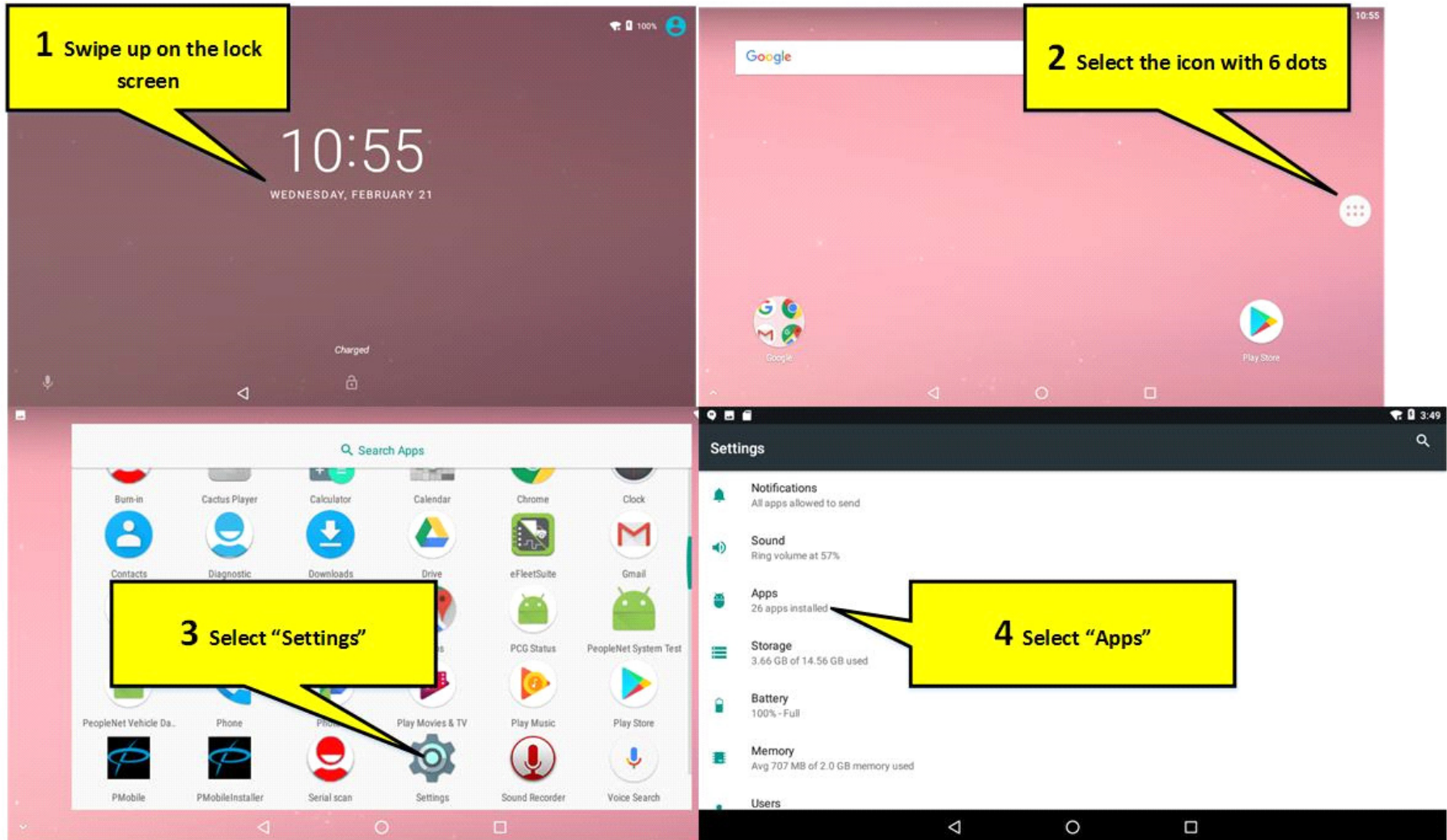
**PCG Main
Connection**

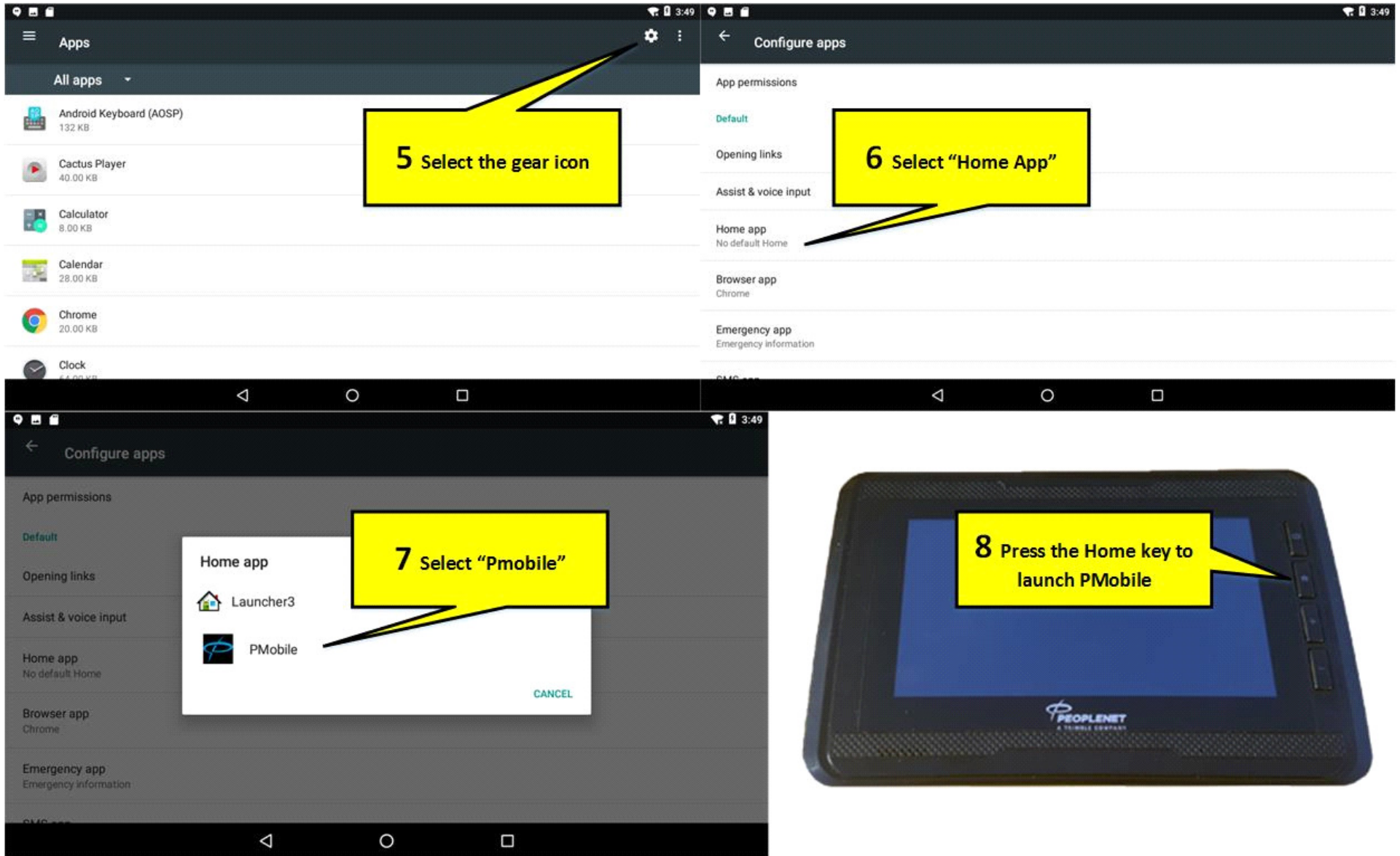**PCG Main Cable
L-016-0631**

# Standard Installation Steps

1. Identify a location on the dash where the display can mount.
    1.1.	The location should be sturdy enough to support the PD5 over time.  Metal is preferable.  If mounting to plastic, always use bolts with a backing plate or large washers
    1.2.	The location should be within easy reach of the driver
    1.3.	The location should be within the driver's sightlines but must not infringe on the view over the dash
    1.4.	The location must not interfere with access to, or safe operation of, any cab controls
2. Mount one RAM mount base to the vehicle and attach the other base to the display using the provided screws
3. Attach the RAM swivel arm, angle the display so it faces the driver, then tighten the arm
4. Connect the PD5 cable to the back of the display, making sure the pins seat squarely and the thumb screws are evenly tightened
5. Route the cable into the dash, making sure to avoid pinch or wear points
    5.1.	NOTE: The Video and Audio connectors will not be used on most installs. Secure them in the dash
6. Connect the blue barrel connector to the blue barrel on the PMG Auxiliary Cable or G3 OBC Main Cable
    6.1.	This connection will provide communications between the modules, as well as the Sleep/Wake triggers
7. Connect the 2-Pin Power connector to the mate on the PeopleNet Power Assembly
    7.1.	This connection will provide vehicle-direct Power and Ground to the display
    7.2.	Connect the PeopleNet Power Assembly following the vehicle-specific instructions on the PeopleNet Support Center
8. Turn the vehicle ignition ON and verify the device boots
    8.1.	If it does not boot automatically, press the power button on the top/right of the face
    8.2.	The Power button is also a battery charge indicator, with Solid Green indicating Charging, Solid Blue indicating the device is booted but not charging (as when it is unplugged), and Blinking Green indicating an issue with the battery or imminent loss of battery power
    8.3.	Follow the Pairing/Initialization Procedure below

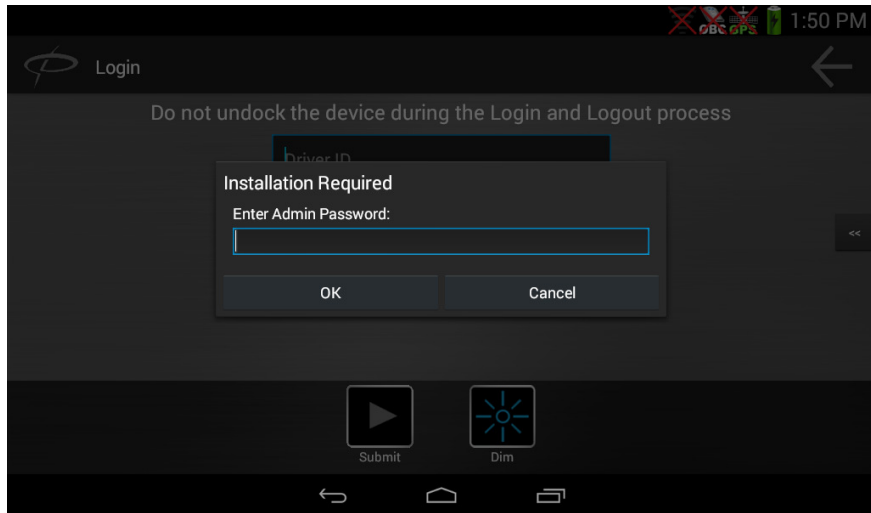# Setting PeopleNet "PMobile" to Default

**The PD5 will arrive without PeopleNet as the default boot mode. Follow these steps to set it so PMobile boots automatically on future starts.**

# Setting PeopleNet "PMobile" to Default



**5** Select the gear icon

**6** Select "Home App"

**7** Select "Pmobile"

**8** Press the Home key to launch PMobile

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# Pairing/Initialization Procedure



- When PMobile boots for the first time, it will indicate that it needs an installation.
  - If your PD5 (PeopleNet Connected Tablet) is already paired to a PMG (PeopleNet Mobile Gateway) or PCG (PeopleNet Mobile Gateway) which we will refer to as an OBC (On Board Computer)
  - You can manually start the installation process by going to default home -> settings -> information -> admin -> password 9238 -> installation.
- Enter "9238" for the admin password, and click "OK".
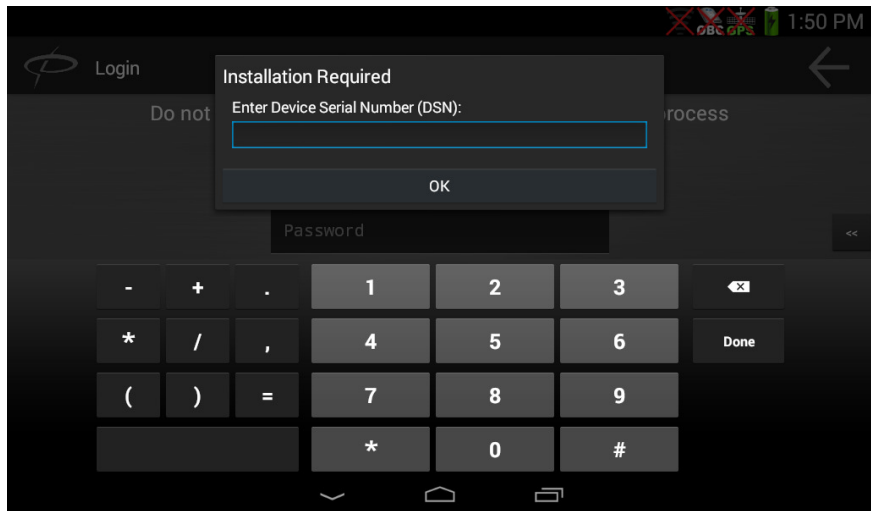


- You will be prompted to enter the DSN (Device Serial Number) of the OBC. The serial number is on a white sticker above the power LED.
  - The serial number starts with a 1 and is 8 digits long. Example: 11000682
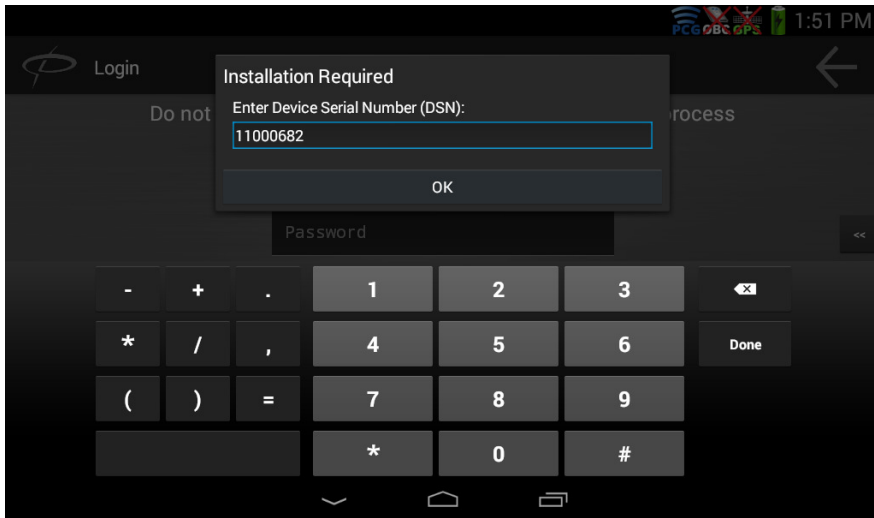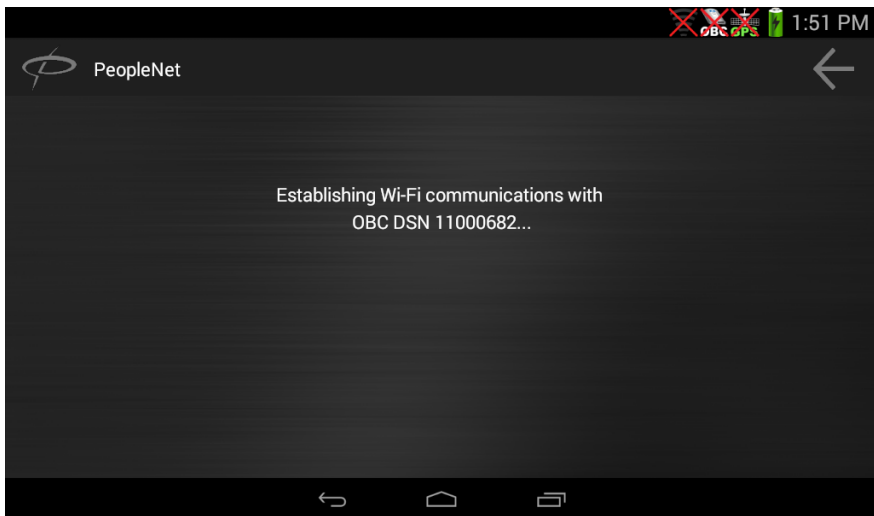- Enter the serial number of your OBC and click "OK".
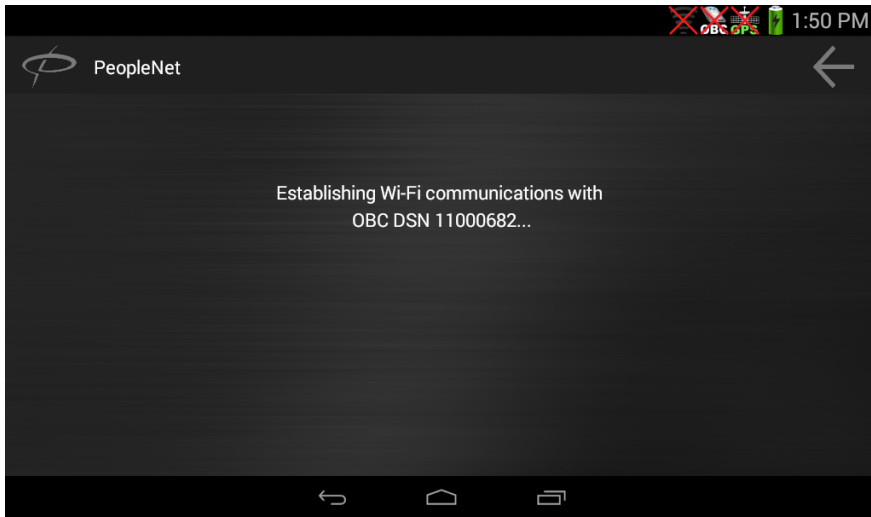
- The PD5 will attempt to connect to the Wi-Fi network of the DSN you entered.
  - If establishing the connection fails, verify the OBC is on and that the correct DSN was entered.
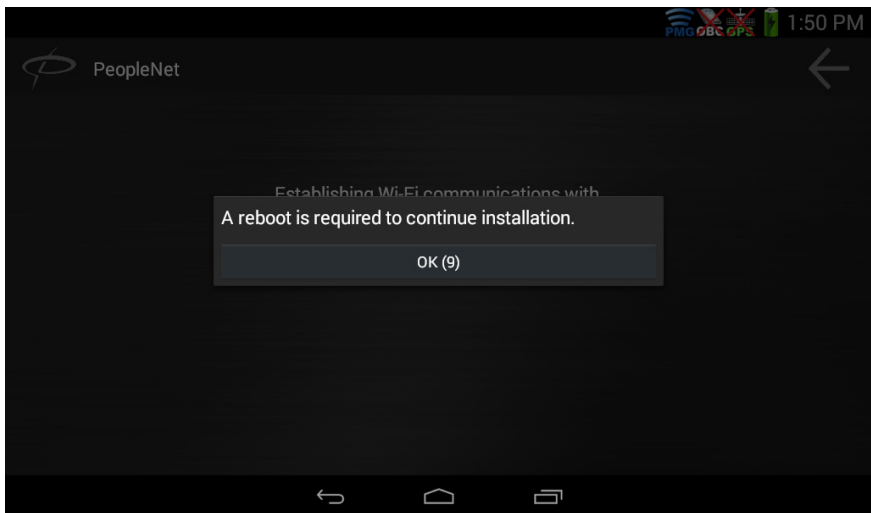


- If this is the first time your PD5 has connected to a OBC, it will need to modify a setting.
  - This setting allows the the PD5 to communicate with the OBC properly
- Click "OK" or let the timer expire.
- This will cause your PMobile software to reboot and use the new setting.

- Due to the reboot and the install not being complete yet, you will be prompted to complete an installation again.
- Re-enter your OBC's DSN and click "OK"



- The PD5 will attempt to do the same process as before; and attempt to connect to the Wi-Fi network of the DSN you entered.
  - If it fails, verify the OBC is on and that the correct DSN was entered.
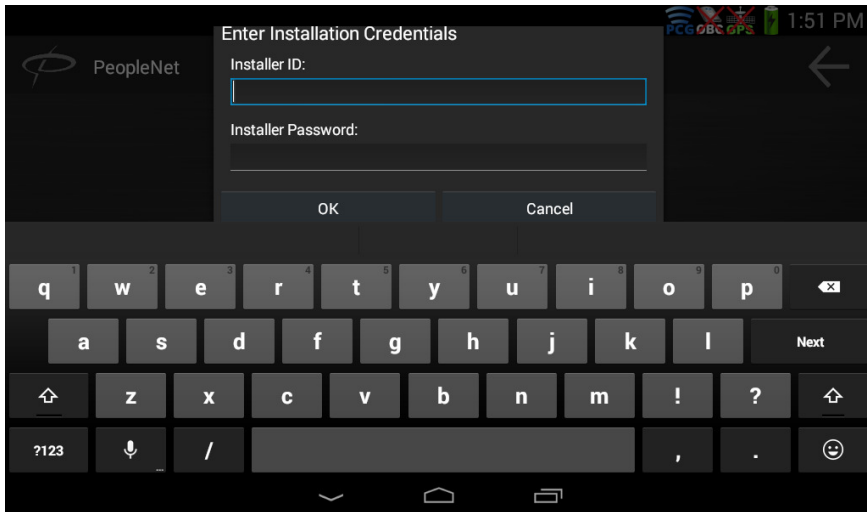
**PCG Installation Only**
- Once the wifi network is established, you will be prompted to enter your "Installation Credentials".
  - This is a new prompt unique to the PCG/PD5 pairing process.
  - The installation credentials are on the next screen.
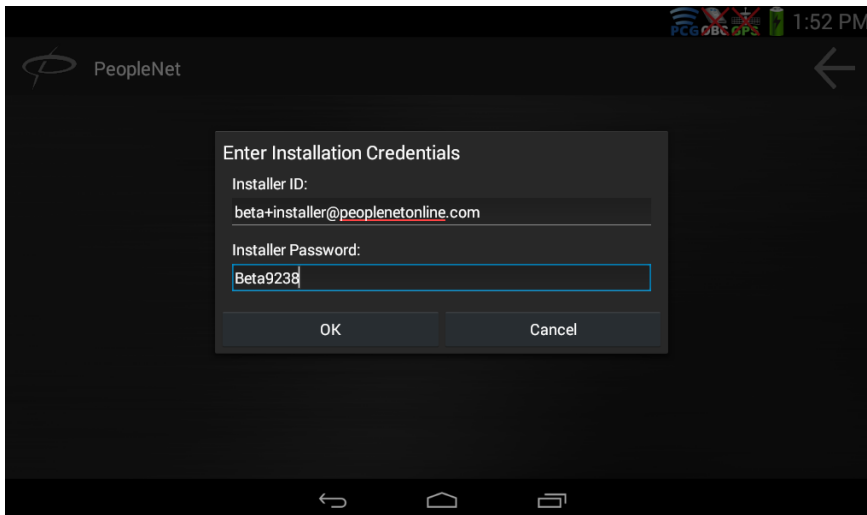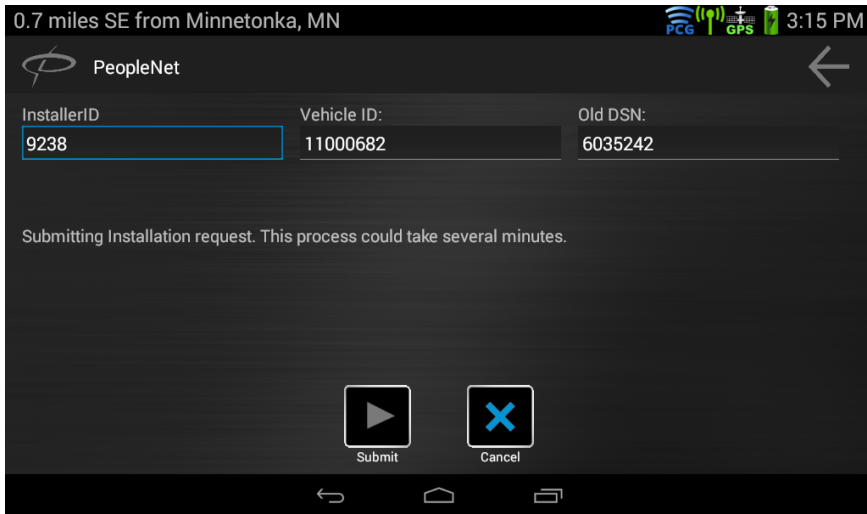


**PCG Installation Only**
- In the Installer ID field enter: Your Installer ID
- In the Installer Password enter: Your Installer Password
- **If you do not have an installer ID/Password please reach out to your system administrator**
- Click "OK"
- The step is very important, as it allows the PD5 to talk to the PCG and Enterprise (back-end). It creates a trust relationship and a certificate held by the PD5.
- There are a number of potential error messages depending on how far the PD5 gets into the process
  - If you encounter an error message, verify that the installation credentials were typed correctly
  - If the installation credentials are correct, try rebooting the PD5 and the PCG. The most common issue is the PD5 or PCG is unable to talk to the back-end, and rebooting will cause the PCG to reinitialize its modem and re-register with the cellular network.
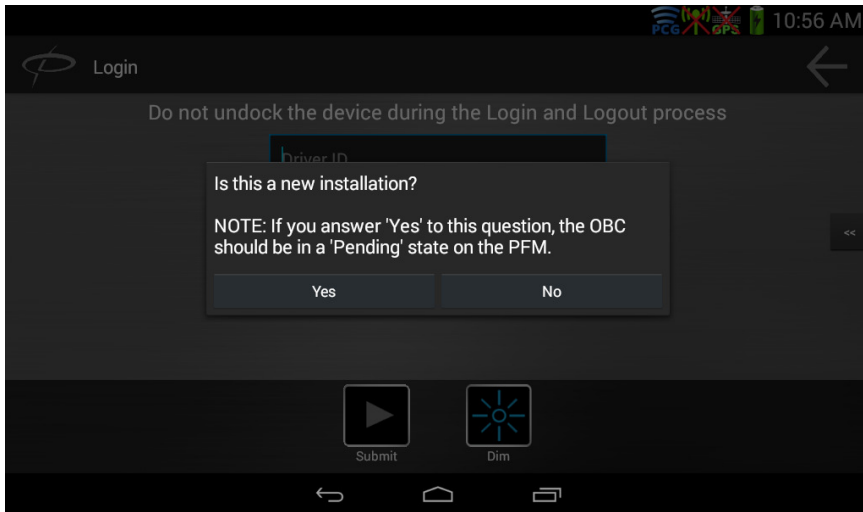
- After getting past the installer credentials, the installation process is identical to how it used to be
- You will be asked if this is a "new installation"
  - If the OBC is in a pending state (the OBCs will be shipped in this state) in the PFM (PeopleNet Fleet Manager) and you are going to give it a new truck number, then click "yes" this is a new installation
  - If the OBC is already in an activated state or you want to give a pending OBC an already existing truck number, then click "no" this is not a new installation



- If you selected "yes" this is a new installation, you will be prompted with InstallerID and Vehicle ID fields (you will not see the Old DSN field like you see in the screenshot).
  - Enter your Installer ID. This installer ID will not be the same as the installation credentials, and only digits are allowed in this field. If you do not have an installer ID, enter a number that will differentiate you from other installers in your fleet (the Installer ID used at this screen is recorded in the PFM, it has no impact on your ability to complete an install).
  - Enter the Vehicle Number you would like assigned to this device (it will be the vehicle number you use in the PFM to lookup this device)
  - Click "Submit"
- If you selected, "no", this is not a new installation, you will be prompted with InstallerID, Vehicle ID, and Old DSN fields (same as the screenshot).
  - Enter the Installer ID and Vehicle ID as noted above
  - Enter "Old DSN" only if you are swapping the PMG/PCG module in this vehicle

- After clicking "Submit" you will see "Submitting Installation request. This process could take several minutes" and the Submit button will be grayed out.
  - If you get an error code at this part and you clicked "yes, this is a new installation", verify that the truck number you're trying to use is not already in use, and you should have selected "no, this is not a new installation".
  - If you get an error code at this part and you clicked "no, this is not a new installation", verify that the truck number used does already exist, and the correct DSN was entered into the Old DSN field.



- Once you see "Installing Data Store, Activation nearly complete," your installation request was accepted by the PFM and has gone through.
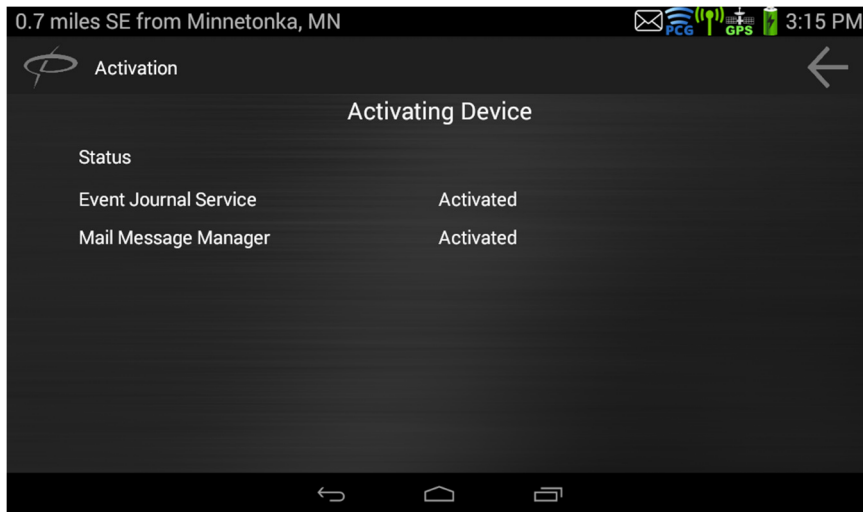
- You will then be prompted with "Activating Device". This means that the PD5 is loading settings from the PFM.
  - Event Journal Service and Mail Message Manager will start off as "Activating"
  - Once all the settings have been received, they will go from "Activating" to "Activated".
- PMobile software will then reboot and load to the Driver Login screen. At this point, your installation is complete.

# Testing

Once the PMG/PCG and Display are paired, a full test is recommended.  Follow the steps below to confirm function.

First, login to the device. If you do not have a Driver ID/Password, contact your system administrator for a test ID.

Once logged in, verify the following:

Go to System✧OBC Diagnostic✧Diagnostic Basic and verify:
- o GPS=**3D**    Indicates the GPS is currently reading.  This may not show if the vehicle is indoors.
- o Cell Strength is **>2**            Indicates relative cell signal strength on a scale of 0-7.

Go to System✧OBC Diagnostic✧Diagnostic Device and verify:
- o Ignition reads **ON** when the vehicle key is on and **OFF** when the key is off and **OFF** in accessory.

With the key ON, go to System✧OBC Diagnostic✧Diagnostic PerformX and verify:
- o **RPM** matches engine
- o **Odometer Type: ECM** and **Odo:** matches dash
- o **FUEL TYPE = ECM** and **FUEL: >0 gallons**

Confirm the Display Power button LED is green, indicating charging
- o Disconnect the PD5 from the cable and verify the LED turns to Blue and the display remains powered up
  NOTE: A fully charged battery will supply power for roughly 15 minutes, though a new unit may not have a full charge

Any accessories (Satellite, OBDii, GPIO, PTO) activated and confirmed.  See accessory guide for details.

# Hard Reboot Button

A hard reboot button is available under the top access panel on the display's right side. Press the button to reboot the device if needed.



Reset Button
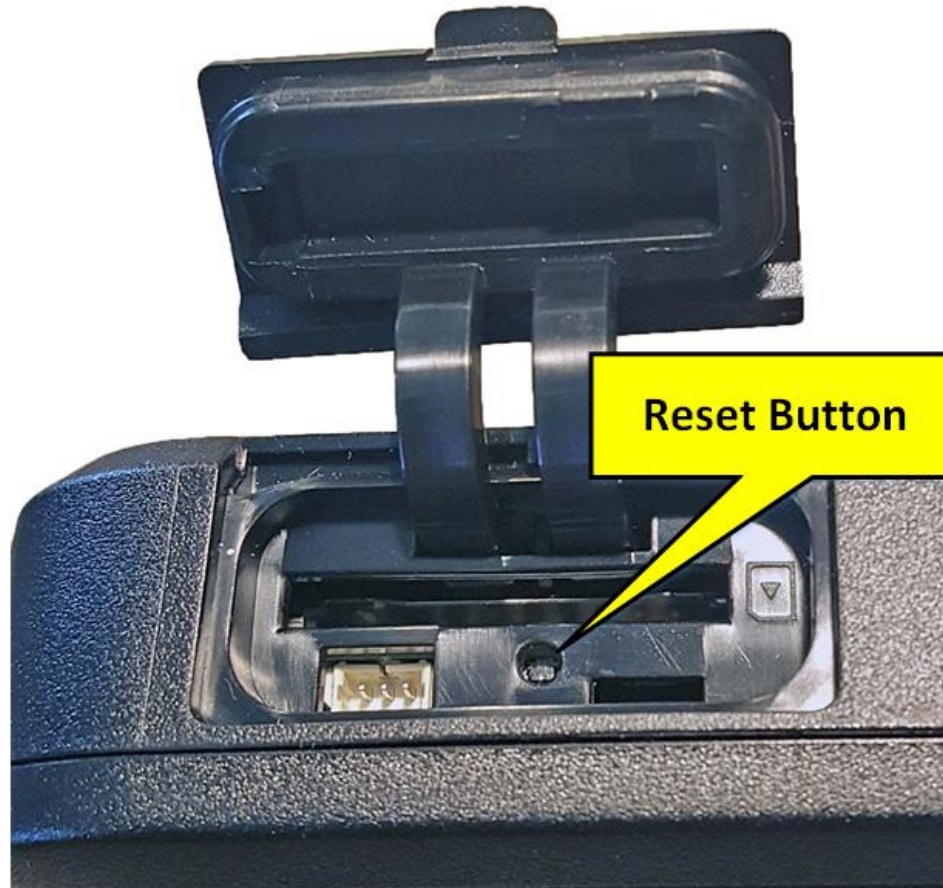
# Cable Pin-Out

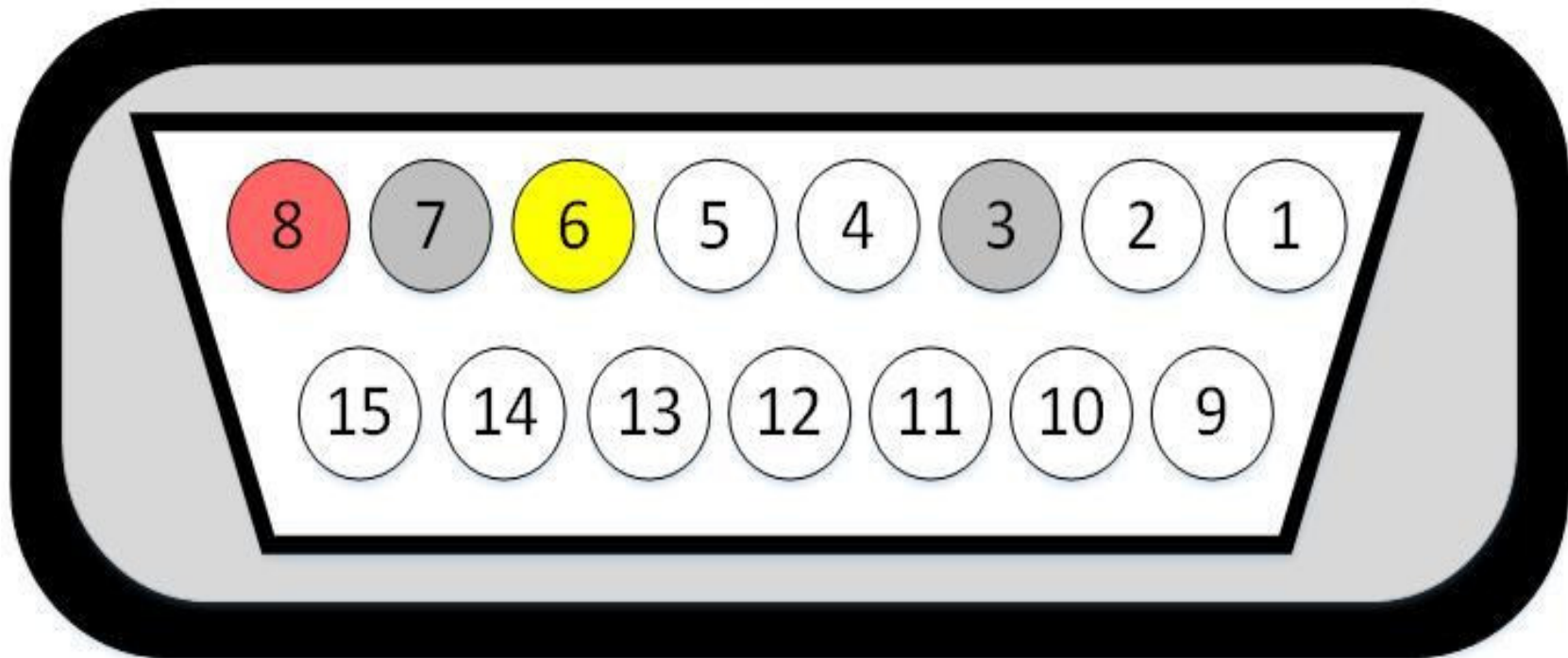This pin-out can aid in troubleshooting if the display fails to boot

PD5 Cable L-016-0642 Mating Connector View
Vehicle 11-24 Volt Constant Power – Pin 8
Vehicle Ground – Pin 7
OnBoard Computer 12 Volt Ignition Power – Pin 6
OnBoard Computer Ground – Pin 3

**Federal Communication Commission Interference Statement**

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.

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 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.

**FCC Caution:**
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Radiation Exposure Statement:**
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.