

Prerequisites

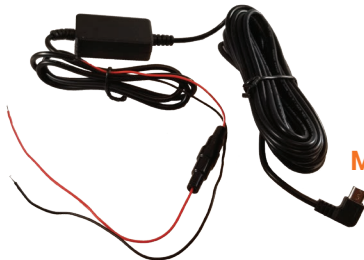
Required Information

- Name of asset (ex: Propane Truck #20)
- SN of each device to be installed (Serial number is found on the top of the unit with a QR code)

Standard Equipment



Camera



Direct Wire Harness



Micro SD Card



Tamper
Tape

Alternative Equipment

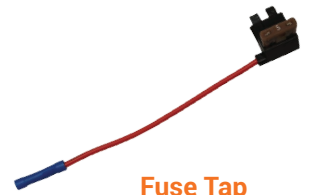


Power Module



USB Adapter

Optional



Fuse Tap

Required Tools

Rubbing Alcohol or Window Cleaner (to clean window surface for best adhesion)
 Level (to level camera during mounting)
 Drill with Phillips & Torx bits
 Small Socket Set
 Tablet with POV (Optional: to see live view of camera when setting mounting location)

Before You Begin

TIPS FOR PROPER CAMERA MOUNTING

- Ideal Location: Center (or as close to center as possible) of the windshield.
- Ideal Height: Highest point behind a rearview mirror - in the area swept by the wipers.
- Field of View: Should be clear of any occlusions (EZPass, rear view mirror, etc.)
- Angle: Camera should have a negative pitch angle (it should look "down" a few degrees.)
- The field of view should not have too much "sky".
- Split windows may have to adjust mounting location other than what is recommended in this document. Consult with your implementation manager at Pedigree Technologies.

Dry Fit

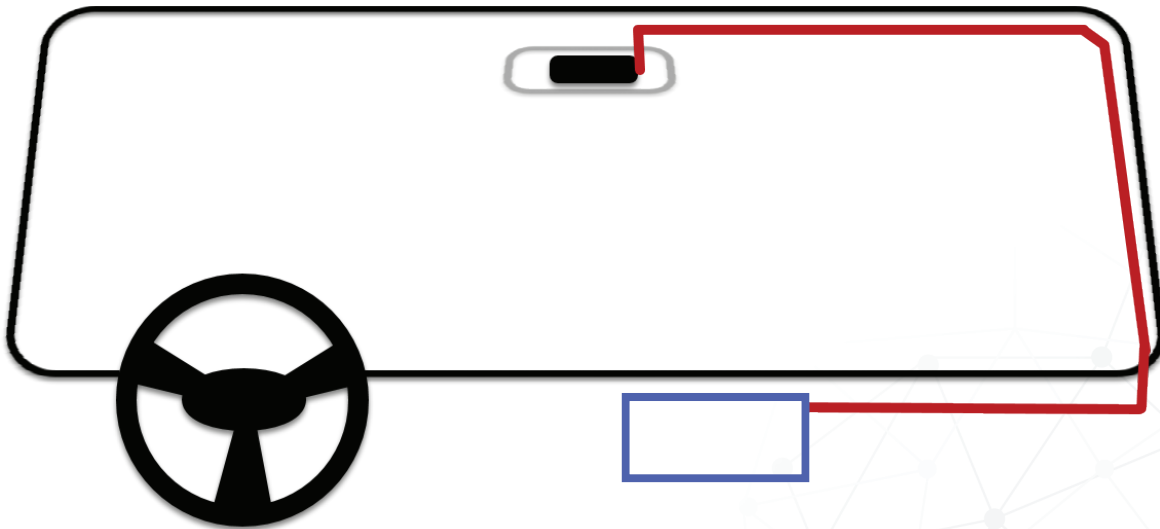
Determine proper placement of camera on the front windshield. (Dry fit only. It's important to run cabling to power source and determine where it will fit properly.)

- High on the windshield behind the rearview mirror area or right of center divider (slightly to the passenger side)
- Highest possible placement within the wiper blade path
- Avoid any overhanging exterior sun visor or other materials on glass including rock chips or cracks.



Power Cable

Route the cable inside the headliner and A pillar to the power box. (Avoid airbags and other hardware inside the A pillar.) Cables and wiring should not be visible after installation is complete.

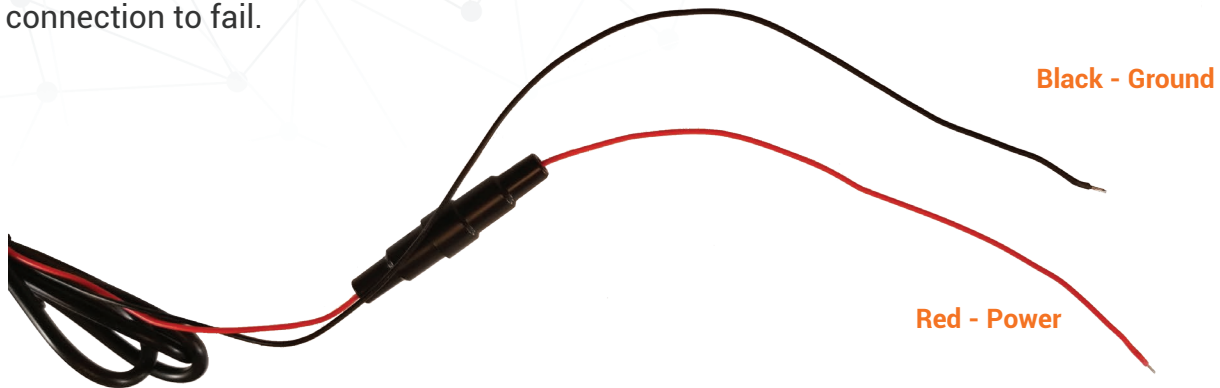


Standard Direct Wire Installation

STEP ONE

Connect the ground (black) wire of the direct wire harness to DC chassis ground.

- It may be necessary to crimp a ring terminal to the ground wire.
- Always connect the ground wire to an already established ground stud when possible.
- The frame of the vehicle is an acceptable ground point if ground studs are not available.
- The surface area must be clean and free of paint, rust, or anything that will cause the connection to fail.



STEP TWO

Connect the power (red) wire to ignition (or other 12V power source that is powered on when the ignition is on).

(Optional) Power to Fuse Tap

It may be necessary to connect the power wire to a blade fuse adapter.

- Crimp the power wire in the open end of the adapter
- Remove the ACC fuse and insert it into the fuse adapter (*maximum 10 Amps*)
- Plug the adapter into the open ACC fuse slot



STEP THREE

Connect the micro USB cable to the camera.



Alternative Option - APM Power Module Installation for Cab-Mate One

STEP ONE

Identify and record the ESN of the Cab-Mate One before proceeding. The following steps will cover the serial number and you will need it for activating the device later, or servicing the device in the future.

STEP TWO

For new intalls of the Cab-Mate One, install the diagnostic data cable as per the Cab-Mate One installation document. **DO NOT CONNECT DIAGNOSTIC CABLE TO CRADLE YET**



STEP THREE (for new Cab-Mate One installs)

Remove the ball mount from the Panavise mount. With the other side (the long piece) locate the desired position on the dash of vehicle and secure with hardware.



STEP THREE (for previously installed Cab-Mate One)

Remove the ball mount from the Panavise mount and remove from the back of the tablet by removing the 4 fastening screws.

STEP FOUR

Dry fit CameraView module as per the installation instructions (page 3 of this document), routing the USB cable to the Cab-Mate One, but do not plug it into the APM module yet.

Alternative - APMM Power Module Installation for Cab-Mate One continued

STEP FIVE

Secure the APMM bracket to the Cab-Mate One by sandwiching it between the Cab-Mate One and the ball mount using the supplied screw and washer pack. (Use the longer machine screws provided, paired with star washers.)



Ball Mount



APMM Bracket



Cab-Mate One

STEP SIX

Secure the APMM module to bracket using the supplied double-sided tape with the text side facing up as pictured below.



STEP SEVEN

Connect the 16pin and 6 pin plugs of the APMM harness to the ports on the bottom of the Cab-Mate One. (For previously installed Cab-Mate One, remove 16 pin connector from bottom of Cab-Mate One and replace with the APMM harness.)



APMM Harness



Bottom view

Alternative - APMM Power Module Installation for Cab-Mate One continued

STEP EIGHT

Connect the APMM harness to the AUX1 and LMU DIAG ports on the top of the APMM module.



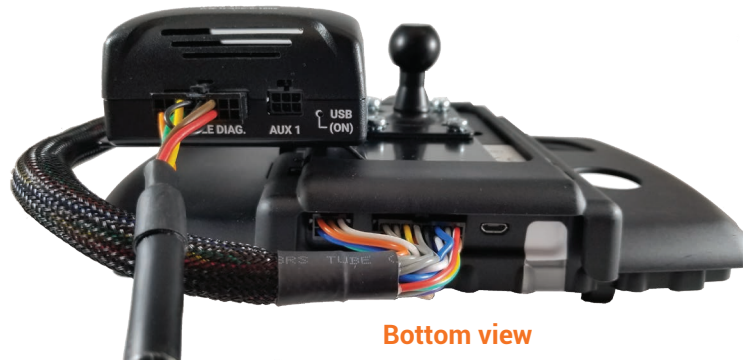
Top view

STEP NINE

Mount the Cab-Mate One/APMM assembly to the dash using the Panavise ball mount (not pictured).

STEP TEN

Connect the diagnostic cable to the port on the APMM labeled "VEHICLE DIAG" on the bottom of the APMM module.



Bottom view

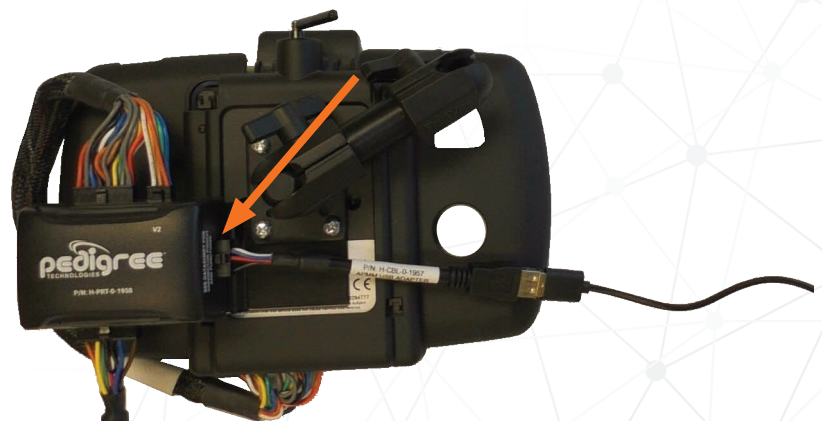
STEP ELEVEN

Connect the CameraView USB cable to the USB adapter cable.



STEP TWELVE

Connect the 10 pin plug from the USB adapter cable into the port on the side of the APMM power module.



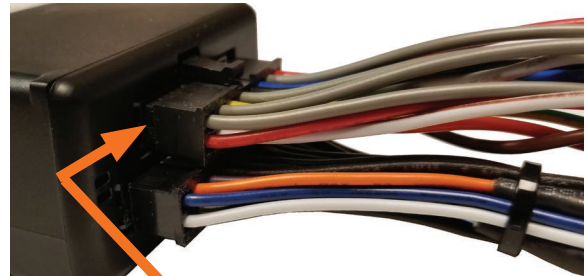
Alternative Option - APMM Power Module Installation for CalAmp LMU 3640



Remove Existing Diagnostic Cable

STEP ONE

For a previously installed LMU 3640, unplug the diagnostic cable from the LMU.



STEP TWO

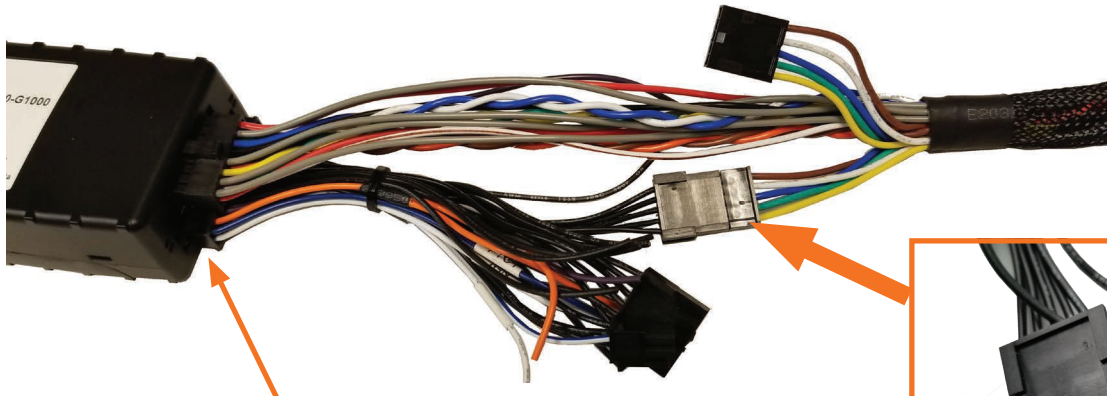
Plug the longer 16-pin plug from the APMM harness into the 16 pin port on the LMU, replacing the diagnostic cable you just removed if working on previously installed LMU.



APMM Harness

STEP THREE

Plug the male 5 pin plug from the APMM harness into the female 5 pin plug of the accessory harness.



OPTIONAL STEP

If this is a new installation of the LMU 3640, plug the 20 pin plug of the accessory harness into the 20 pin port of LMU.



Female 5 pin from Accessory Harness

Male 5 pin from APMM Harness

Alternative APMM Power Module Installation - CalAmp LMU 3640 continued...

STEP FOUR

Plug the 16 pin plug from the short end of the APMM harness into the LMU DIAG port on the power module.

STEP FIVE

Plug the 6 pin plug from the APMM harness into the AUX 1 port on the power module.



STEP SIX

Plug the diagnostic cable (from STEP ONE) into the VEHICLE DIAG. port on the power module.

Power Module



Diagnostic Cable

STEP SEVEN

Plug the usb adapter cable into the 10 pin port on the side of the power module.



STEP EIGHT

Connect the usb adapter cable to the USB end of the camera USB power cable. Connect the power end to the camera (pictured on p11.)



Camera USB
Power Cable

Test Camera Functionality

STEP ONE

Start the truck's engine.

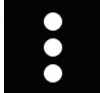
STEP TWO

Make sure that the camera has power (indicated by the blue LED next to the camera lens, may take 30-45 seconds to receive power).

STEP THREE

On the tablet, open POV, but **stay logged out**.

STEP FOUR

Tap the 3-dots menu  in the upper right corner of POV, and then select "Camera Setup".

STEP FIVE

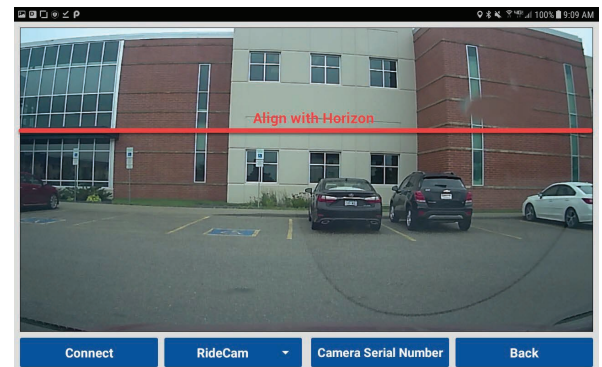
Connect: use this button to search for powered cameras in your immediate area. Choose the matching IMEI/ESN number from any results returned.

Standard Camera: change this field as "RideCam"

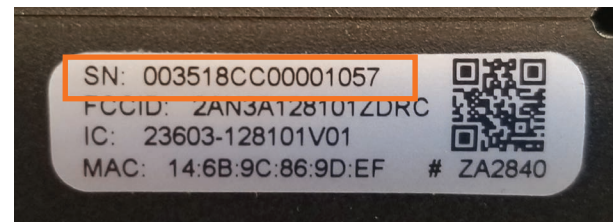
Camera Serial Number: use this field to add the camera's serial number to directly connect to this camera instead of using the Connect to search.



Blue LED next to camera lens



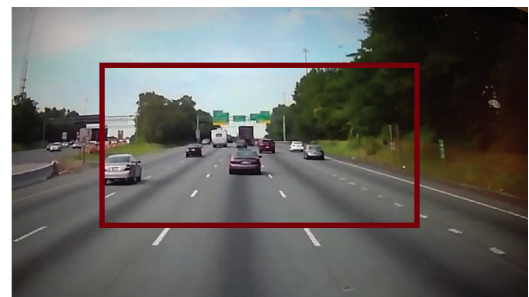
View from camera



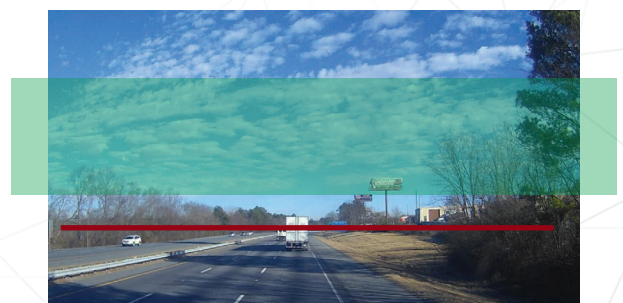
Once connected, use the horizon guide line to align your camera.

GOOD MOUNTING TIPS

- Metrics visual detection happens within red square area (image on right)
- Horizon line (in red below) must be level with more road than sky
- Field of view in green area
- No occultations in field of vision.



Good = level horizon, road in range



Bad = too much sky

Mount Camera

STEP ONE

Determine proper placement of camera on the front windshield.

- Center of the windshield behind the rearview mirror area
- Highest possible placement within the wiper blade path
- Avoid any overhanging exterior sun visor or other materials on glass including rock chips or cracks.



STEP TWO

Clean the mounting area on the windshield with alcohol (not provided). Remove all dirt, oil, and grime.

STEP THREE

Remove protective plastic on the camera lens.

STEP FOUR

Clean the lens with a soft, lint-free cloth (not provided). The lens should be free of scratches, dirt, and dust.



Camera Lens

STEP FIVE

Orient the camera to the windshield.

- Camera should be level to the horizon line.
- Point the lens forward with a slight downward angle so the camera picks up the front hood at the bottom of the frame.
- Rotate the camera on the mount to adjust the position.



STEP SIX

Remove the paper from the camera mount adhesive tape.

STEP SEVEN

Press the mount firmly to the windshield glass.



Secure the Camera

STEP ONE

Place the tamper tape across the camera and the mount (where the camera rotates) to secure the camera position. (Avoid covering the camera vents or serial number tag.)

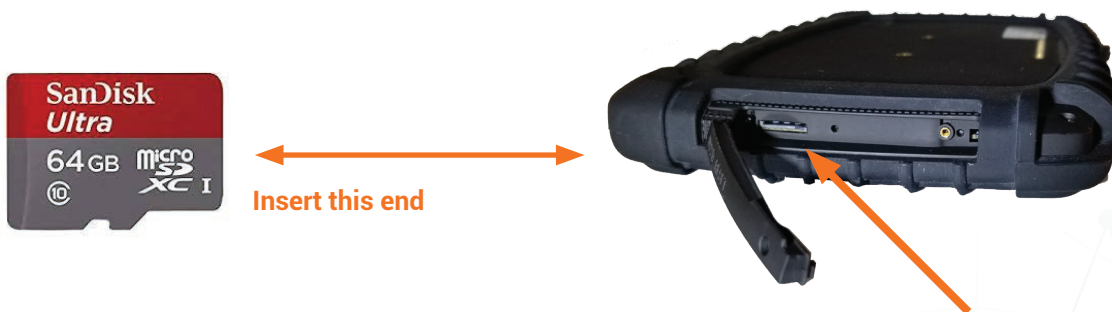
Tape the inline cable to the camera mount to prevent removal of the cable.



Install SD Card

INSERT MICRO SD CARD

Insert the micro SD card into the SD port on the side of the tablet. *On the Cab-Mate One and Cab-Mate Connect tablets, partially pull out the side rubber cover until it hinges out, revealing the SD port.* Insert the micro SD card carefully. Do not force. If it seems not to go in smoothly, you may be inserting the wrong end or the card is facing upside down.



Install Confirmation: 701-499-0022

You will need to call Pedigree Install Support to finalize and confirm the installation.