

## Prerequisites

### Required Information

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

### Required Equipment

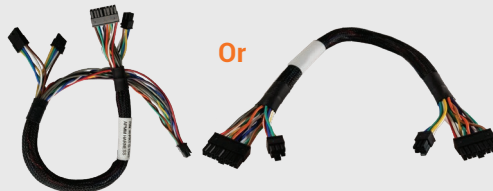
#### CAMERA



#### APMM POWER OPTIONS



V2 Power Module



APMM Harness

Or

#### 3 WIRE POWER OPTIONS



Hard Wire Adapter



Circuit Taps  
(optional)

### 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: Right of the rear view mirror on the windshield.
- Ideal Height: Highest point without rearview mirror obstruction - 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".
- Rear facing camera must also have a view of the driver in normal sitting position.

## Dry Fit

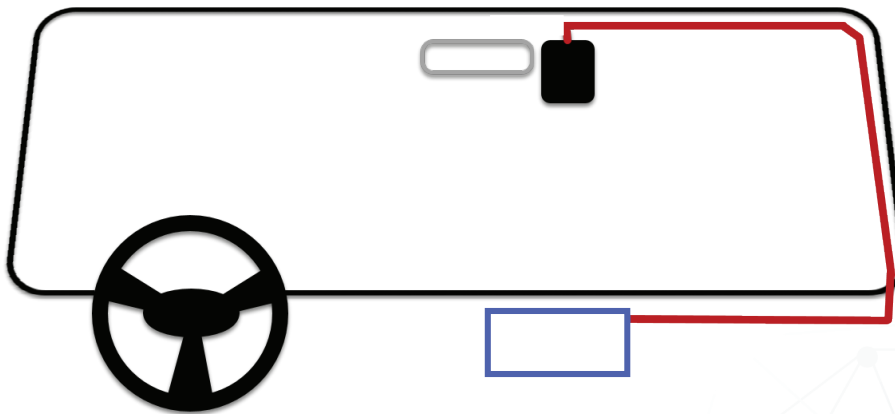
Determine proper placement of camera on the front windshield. (Dry fit only. It's important to run cabling to power source and determine where it will fit properly.)

- High on the windshield to the right of the rearview mirror area or 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.



## 3 Wire Power Installation Option

**STEP ONE** The Black wire (*ground*) should be securely fastened to a grounded screw or chassis ground.

**STEP TWO** The Red wire (*power*) should be connected to a constant 12-24VDC power source found at the key source or the fuse panel.

*(Circuit taps are provided in the hardware kit if needed, however soldering is the recommended connection.)*

**STEP THREE** The White wire (*ignition*) is the ignition event wire that is best installed directly to 12v switched ignition wire.

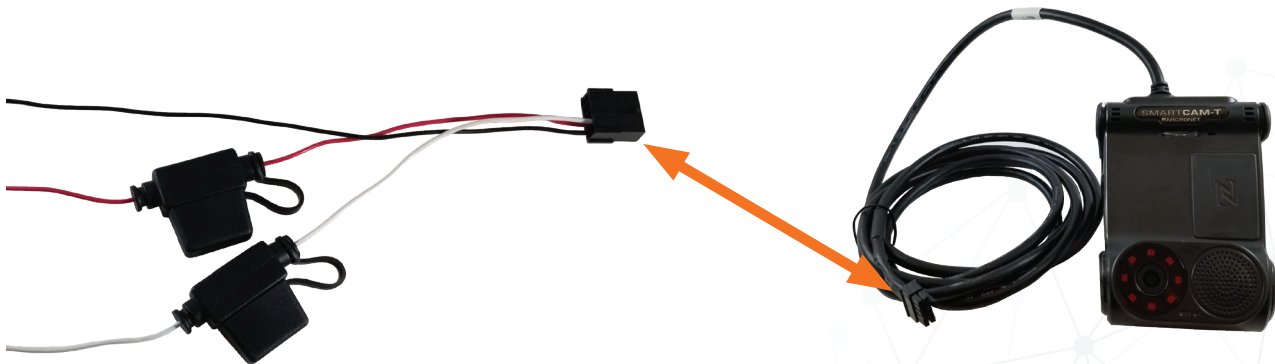
*Ensure that power to the ignition wire is available ONLY when the vehicle ignition is turned on. All makes and models of vehicles are different - we recommend knowledge of the particular vehicle's constant and ignition wiring prior to installation.*



*Ring terminals can be cut off for direct connection methods such as soldering and splicing.*

### STEP FOUR

Connect the 10-pin connector from the camera into the 10-pin port on the power cable.



Skip to page 10 of these instructions.

## APMM Power Module Installation Option (*Cab-Mate One only*)

### 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 camera power cable to the Cab-Mate One, but do not plug it into the APMM module yet.



## APMM Power Module Installation (*Cab-Mate One only*) 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

## APMM Power Module Installation (*Cab-Mate One only*) 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 10 pin connector from the camera power cable to the side port on the APMM module. (Skip to Page 10 of these instructions)



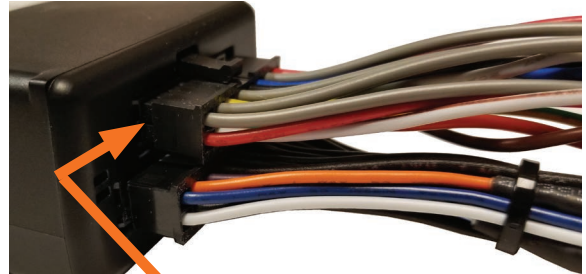
## APMM Power Module Installation CalAmp LMU 3640 Option



**Remove Existing Diagnostic Cable**

### STEP ONE

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



### STEP TWO

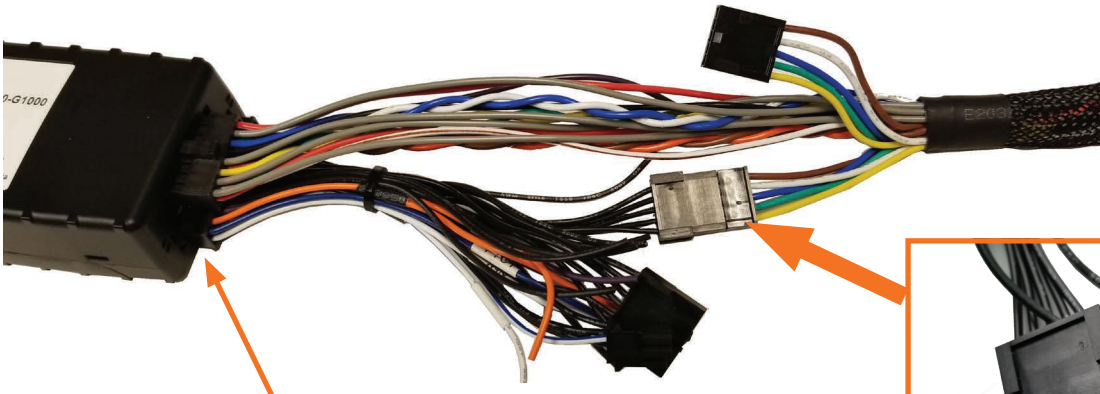
Plug the longer 16-pin plug from the APMM harness into the 16 pin port on the LMU, replacing the diagnostic cable you just removed if working on previously installed LMU.



**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**



## APMM Power Module Installation CalAmp LMU 3640 Option (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 camera power cable into the 10 pin port on the side of the power module.



Dual Camera



## Test Camera Functionality

### STEP ONE

Start the truck's engine.


### STEP TWO

Make sure that the camera has power and runs through its boot cycle (see chart).

### 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".

### LED LIGHT CHART

RED - Power

PURPLE - Boot cycle complete

GREEN - Connected



LED next to camera lens

### STEP FIVE

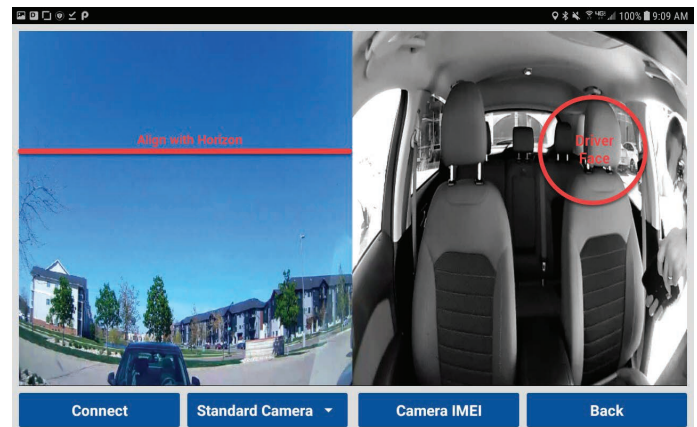
**Connect:** use this button to search for powered cameras in your immediate area. Choose the matching IMEI number from any results returned.

**Standard Camera:** keep this field as "Standard Camera"

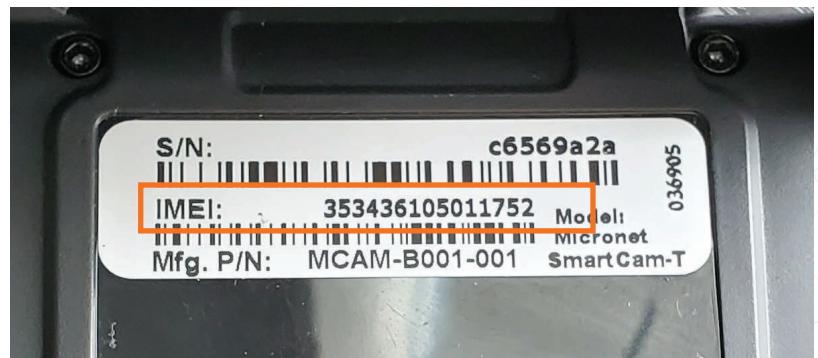
**Camera IMEI:** use this field to add the camera's IMEI to directly connect to this camera instead of using the Connect to search.

Find the IMEI number on the lable located underneath where the camera folds.

Once connected, use the horizon guide line to align your front camera and the Driver Face circle to align your rear facing camera.



View from camera



## Alignment

### STEP ONE

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

### STEP TWO

Remove protective plastic on the camera lenses.

### STEP THREE

Remove the film from the camera mount adhesive tape and firmly press to the windshield.



### GOOD MOUNTING TIPS

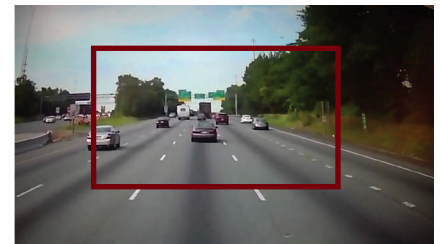
- Metrics visual detection happens within red square area (image right)
- Horizon line must be level with more road than sky
- Field of view in green area
- No occultations in field of vision.



Good = level horizon, road in range



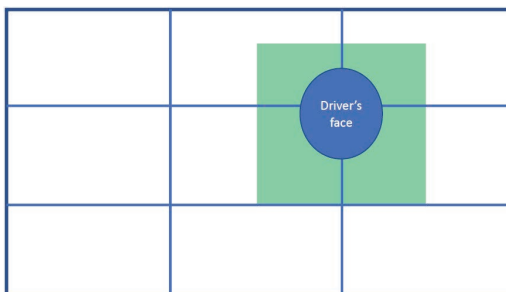
Bad = too much sky



Visual Detection Area

### CABIN VIEW

- In cab camera should show driver's face.
- No obstructions between camera and driver
- Camera should be mounted closer to driver
- Face should be within the example green band
- Must NOT affect driver's line of sight and per local regulations



## Finish

### TIE LOOSE CABLES

Cable tie all loose cables together as best as possible to prevent snags or cable movement during operation. Replace any panels that were removed. (Not pictured.)

### LED LIGHT CHART

RED - Power

PURPLE - Boot cycle complete

GREEN - Connected

## Micro SD Card

### MICRO SD CARD

Micro SD Cards are pre-installed before shipping to you. If you ever need to change out the card, you'll find the card inside the removable panel on the road facing camera side.

- Carefully remove the two screws (T6 Torx bit).
- Remove the old micro SD card by sliding it out
- Insert the new micro SD card by laying it on top of the secured SIM card- be sure to use at least 64 GB or higher, class 10 card
- Carefully slide the new micro SD in until it clicks



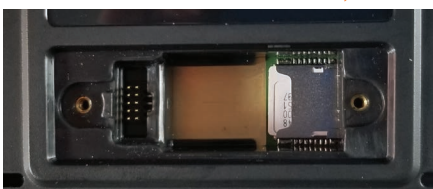
microSD card in top slot



slide out to remove



microSD card removed (leave SIM card secure in metal slot)



insert new microSD card



slide in to secure

