

Truck Installation Guide with MCA III

This document will explain the Ideal Placement of Viavi Leakage antennas and wiring in this equipment

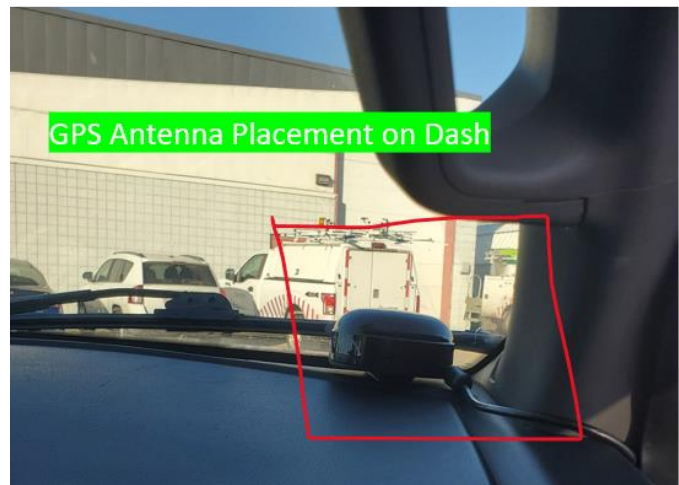
Step 1

Where to mount the equipment

- Mount the Ram Mount to a hard surface in a location where the tech can easily reach the meter from the driver's seat



GPS antenna – can be inside w/clear view of sky but outside on the roof top is recommended
Wi-Fi antenna – can be inside, use phone hot spot to upload, outside if building access point



Running the wires – whatever is recommended by the installation service. Typically run through a hole in the back of the cab behind the back seat

Antenna Placement – Where possible, make sure that the leakage antennas are a minimum of 18 inches away from each other in any orientation.

Ideal Antenna Placement

- Where possible, make sure that the leakage antennas are a minimum of 18 inches away from each other in any orientation.
- Where possible, place leakage antennas along the center line of the vehicle. This will provide equal coverage to both sides of the vehicle provided there are no obstruction blocking the antennas 360-degree view.
 - When you cannot align the antennas along the centerline of the vehicle, it is preferred but not required to offset the antennas in a position to provide best plant coverage nearest to the cable plant as you drive. Typically, the passenger side of the vehicle.



- It is preferred but not required to offset the antennas to the same side of the vehicle. This will provide for greatest accuracy
- when performing quadrangulation to determine magnitude and location of leaks.
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- When vehicle-based noise is identified and causes meter saturation issue, we suggest moving the affected antennas further away from the noise source. Typically, towards the rear of the vehicle.

NOTE: Get the latest Firmware for Seeker for noise improvement

- In practice, most of the vehicle-based noise emanates from the engine compartment so moving the antennas to the rear of the vehicle away from the noise source is ideal



- If extension BNC cables are needed to move the antennas towards the rear of the vehicle, the losses associated with the cable will be negligible. Often, using a 15 ft common lead from the MCA III to the diplexer in place of the 5 ft cable provided will suffice. This will move the diplexer out of the cab and into the side box of the vehicle in many cases.

Step 2

Seeker X with MCA III Installation Guide

Wire the DC Power cable to the vehicle power source and then connect to the back of the Seeker x Mobile Mount

- Use the provided in-line fuse holders to wire the **white** and **black** DC power cables to the vehicle battery as shown in figure 1
- Wire the **green** DC power cable to the vehicle key switch to allow the MCA III to determine when the vehicle is turned off.
- Note: This time is set in Stratasync *MCA III and X-Link General Configuration*

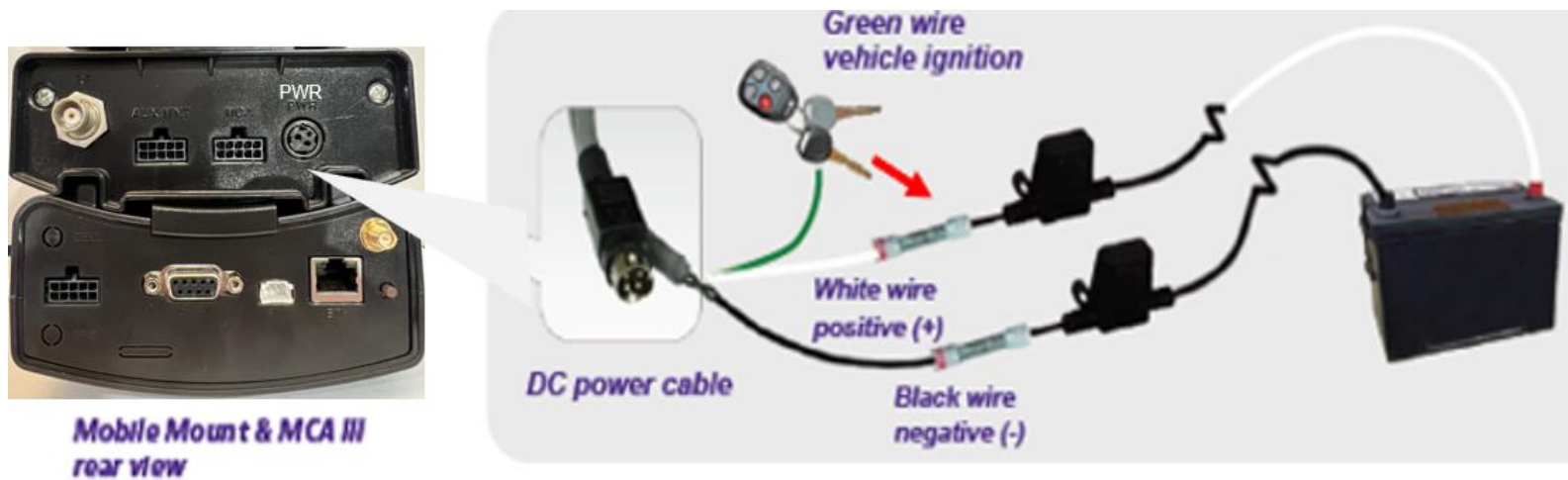


Figure 1: Powering the Mobile Mount

Step 3

Connect 10 Pin Serial cable to the MCA III from the Mobile mount as shown Figure 2

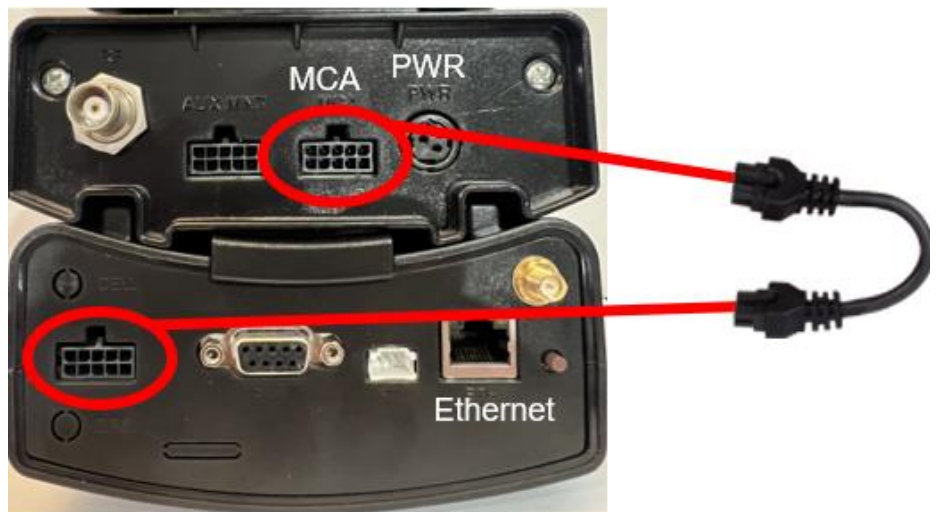


Figure 2: Serial cable placement

Step 4

Connecting Leakage Antennas

- Connect Mobile Mount BNC to Common point on Diplex Filter
- Connect Low and High band antennas to Diplex Filter

Note: Low Frequency and High Frequency side of Diplexer

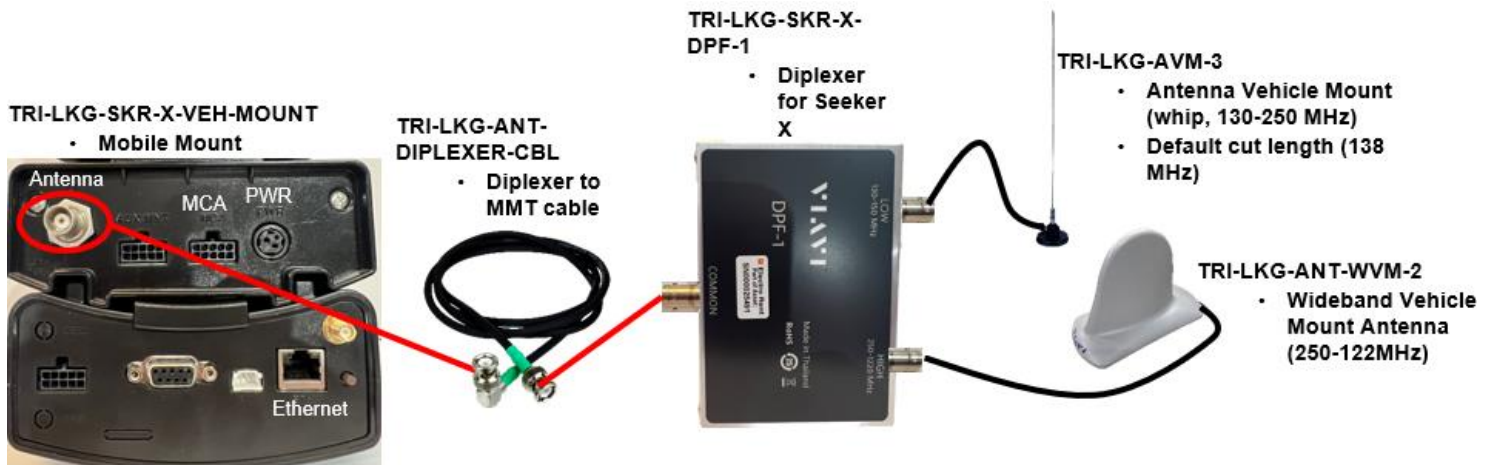


Figure 3: Leakage Antenna connection diagram

Step 5

Connecting WIFI Antenna

- Connect WIFI ci-fi antenna to the MCA III as shown in Figure 4



Figure 4: Wi-Fi connection

Step 6

Connecting GPS Antenna

- Connect GPS antenna to the MCA III as shown in Figure 5



Figure 5: GPS connection