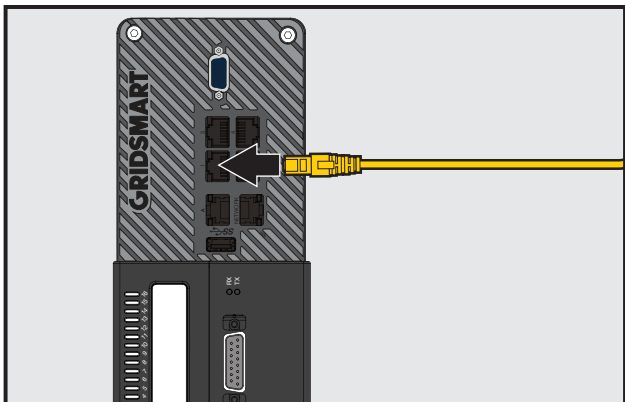


## GROUNDING AND FINAL INSTALLATION



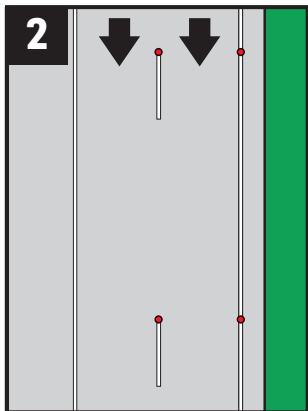
Install the EPM according to the supplied instructions before continuing to the next step.



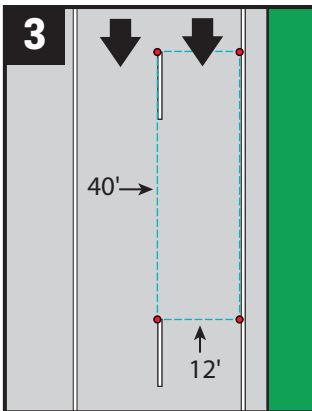
After completing your EPM instructions, connect the supplied CAT5e cable to a Camera Port (1-4) or your ETA.

## AC3/SC3 CALIBRATION IN THE GRIDSMART APP

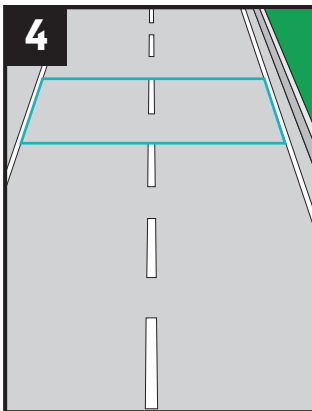
1. Align the AC3/SC3 so that the area of detection is laterally centered and provides adequate tracking prior to vehicles entering the detection zone. The view should be similar to figures 4 and 5.



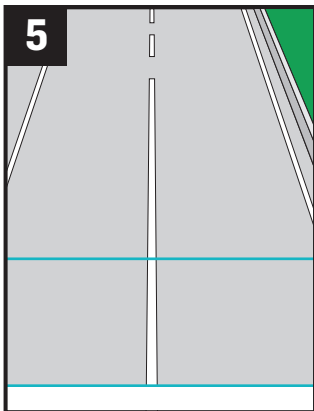
2. Calibrate the AC3/SC3 by creating a four-point calibration region in the Add Camera process or Camera Settings panel. Create a rectangle region on the road surface where the dimensions can be accurately estimated.



3. For example, you might draw the calibration rectangle from the back of a dash lane line to the back of the next dash line. Dash lines are traditionally 10' long with 30' spacing between them and the lanes are traditionally 12' wide. Alternatively, you can measure the area and set up traffic cones for reference.



Advance detection between 300' and 600'.



Stopline detection between 80' and 250'.

4. After calibration, draw one or more vehicle detection zones. A typical detection zone for the AC3 is depicted in figure 4 where a typical detection zone for the SC3 is depicted in figure 5.

**NOTE:** the calibration region from steps 2 and 3 is not a detection zone.

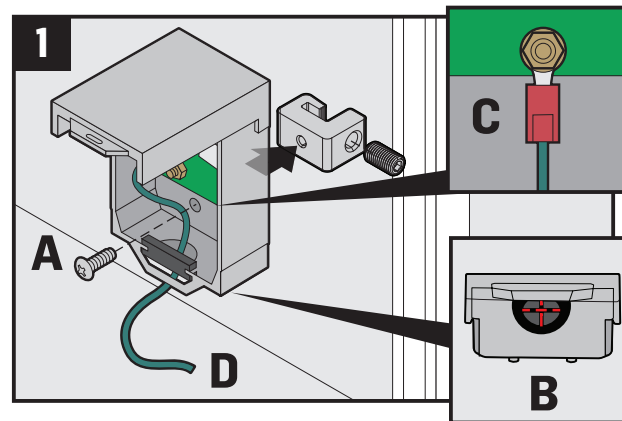
## TOOLS AND ITEMS NEEDED

- 7/16" Wrench
- 1/2" Wrench
- 3/4" Wrench
- 1/4" Wrench
- 13mm Wrench
- 16mm Wrench
- 3/32" Wrench
- Utility knife
- Phillips screwdriver
- Flat-head screwdriver
- 5/32" Allen wrench (included)
- Mounting bracket
- CAT5e test cable
- Diagonal Cutters
- 24AWG Shielded CAT5e cable
- RJ-45 Crimper
- Laptop (with Gridsmart App installed)
- Ground wire clamp (included)
- Cable tester
- Hand level
- DLG Di-120b Tester
- Measuring Tape
- Cable Jacket Stripper

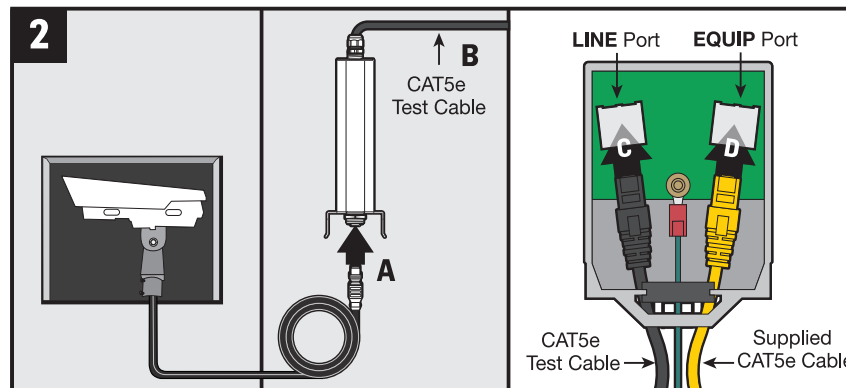


## BEFORE INSTALLATION

**HELPFUL TIP:** On your laptop, verify the Gridsmart App is updated to the latest software version and the Processor is updated to the latest firmware version. Both may be downloaded from [gridsmartcloud.com](https://gridsmartcloud.com).



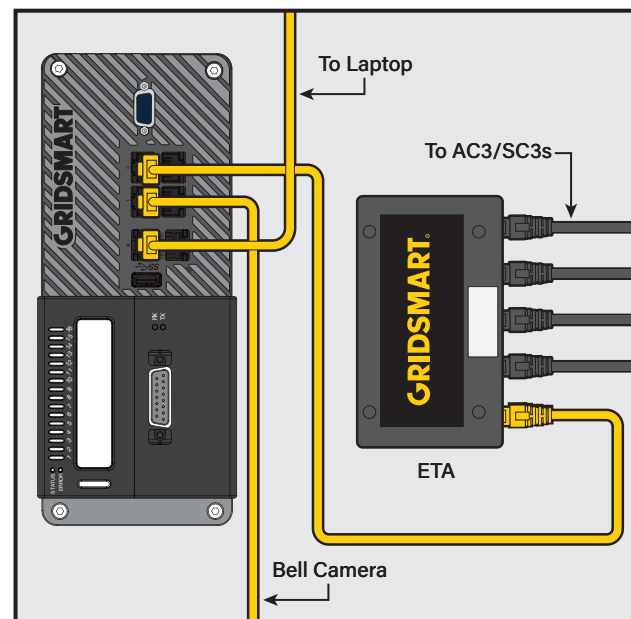
Install Ethernet Protection Module (EPM) on the cabinet DIN rail, opposite side from the Power Distribution (A). Cut an "X" pattern (B) along the rubber grommet. Connect 10AWG ground wire ring terminal to EPM board (C). Connect opposite end of 10AWG ground wire to cabinet ground rod with a wire clamp (D).



With AC3/SC3 in foam packaging, connect Camera cable to Junction Box (A). Connect M12 CAT5e test cable (B) to other end of Junction Box and remaining end to EPM LINE port (C). Connect one end of supplied yellow CAT5e cable to EPM EQUIP port (D) and other end to Processor Camera Port (1-4) or ETA. Verify Camera image via Gridsmart App.

After successfully equipment test, disconnect cables A, B, C, and D. **DO NOT** disconnect preinstalled camera cable.

## EXTERNAL SWITCH ASSEMBLY (ETA) INSTALLATION

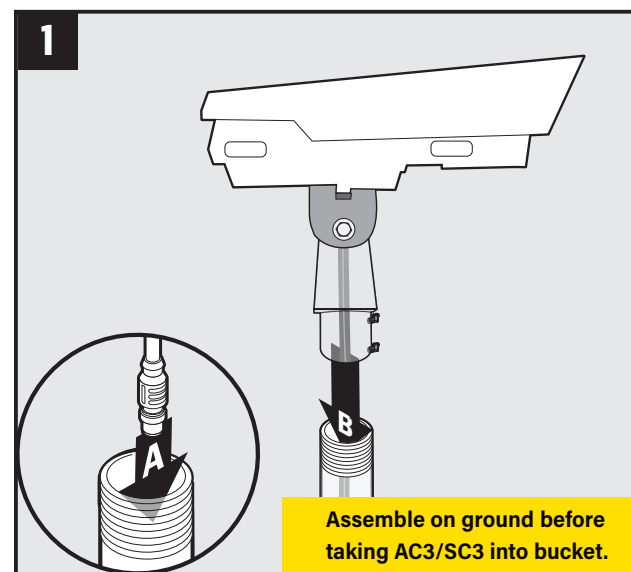


If using ETA, connect one CAMERA Port from the Processor to ETA CPU Port. Plug up to four AC3/SC3s in to ETA Camera Ports. **DO NOT plug Bell Cameras into ETA Camera Ports.**

**NOTE:** A separate EPM is required between ETA and each connected camera.

**! IMPORTANT: DO NOT** plug laptop into ETA ports. The 48VDC supply could damage your laptop.

## INSTALLATION



**HELPFUL TIP:** Before proceeding with Camera mounting, route CAT5e cable from traffic cabinet to AC3/SC3 mounting location.

Feed AC3/SC3 cable through 5' Camera pole (A). Apply anti-seize to pole threads. Screw AC3/SC3 bracket as far down on to pole as possible (B).

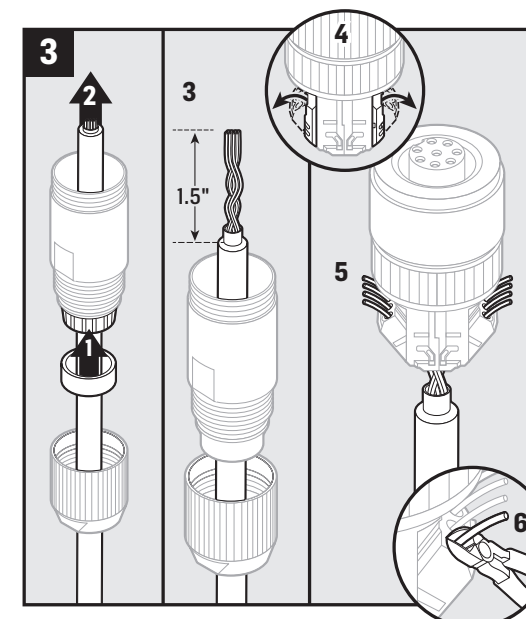
Turn set screws until they touch pole threads, then tighten three (3) full turns using a crescent wrench.

2

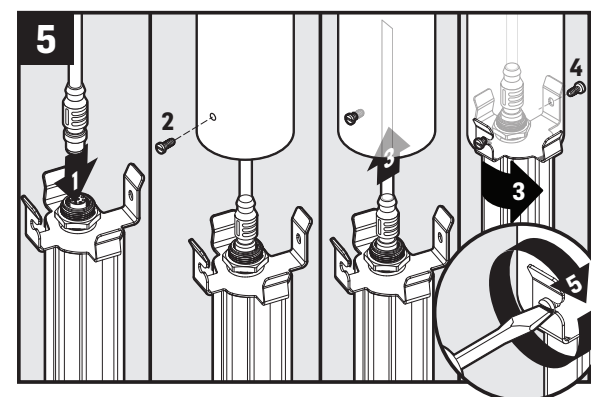
Install Mounting Bracket and AC3/SC3 assembly (with attached 5' pole) on Mast or Luminaire Arm.

**! IMPORTANT:** AC3/SC3 must be at mounted at least 25' above road way and aligned head-on within 5 degrees of the approach.

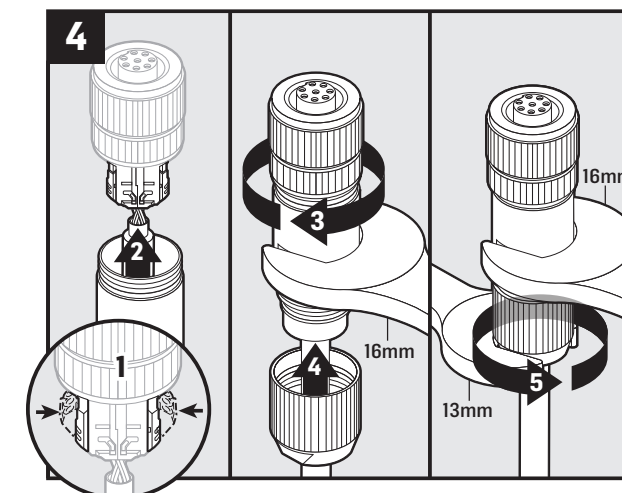
## INSTALLATION (continued)



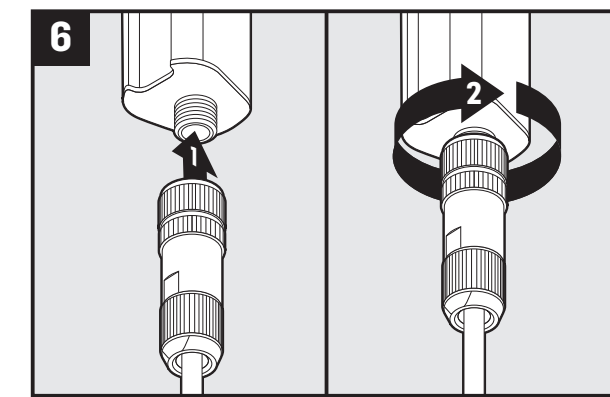
(1) Install the rubber cable gland into the black plastic fingers on the sleeve. (2) Install cable through pressure nut and sleeve. (3) Strip 1.5" off of cable. (4) Open both terminal blocks on connector. (5) Using the color code "B" above each terminal block, guide the individual wires from the back through the inlet openings. (6) Cut off protruding wire until it is flush.



(1) Install camera cable from pole assembly to junction box upper connection. (2) Install one of the mounting screws. (3) Slide tabs onto upper pole assembly and rotate junction box to engage screw. (4) Install second mounting screw. (5) Tighten mounting screws with flathead screwdriver.



(1) Press terminal blocks IN to close and connect the wires. (2) Push the sleeve up to the front of the connector. (3) While holding the sleeve housing in place with a 16mm wrench, (4) screw on the connector until tight. (5) Continue holding the sleeve housing with a 16mm wrench and screw the pressure nut onto the sleeve housing using a 13mm wrench.



(1) Install M12 connector to bottom connection of junction box. (2) Hand tighten connection.