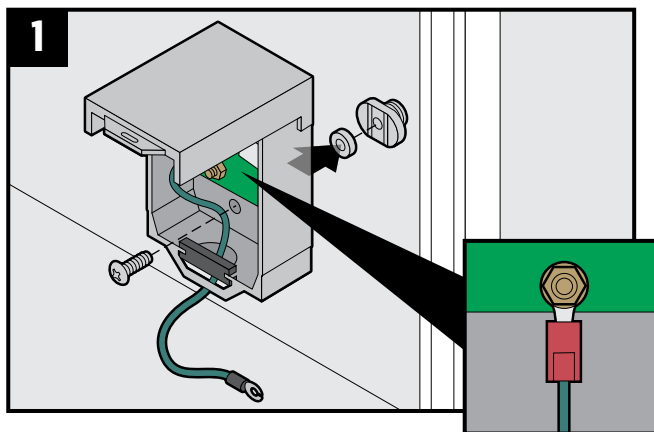## TOOLS AND ITEMS NEEDED

- 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

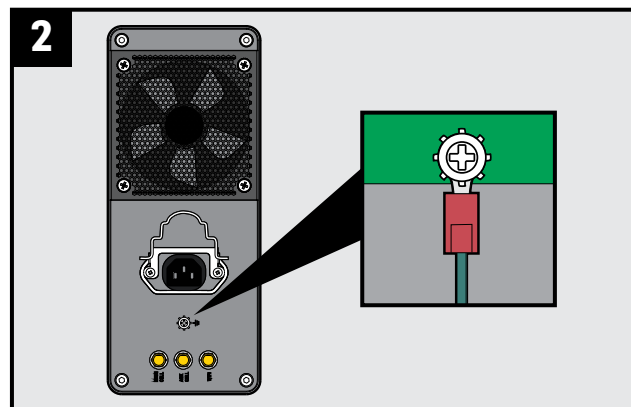- Measuring Tape
- Cable Jacket Stripper
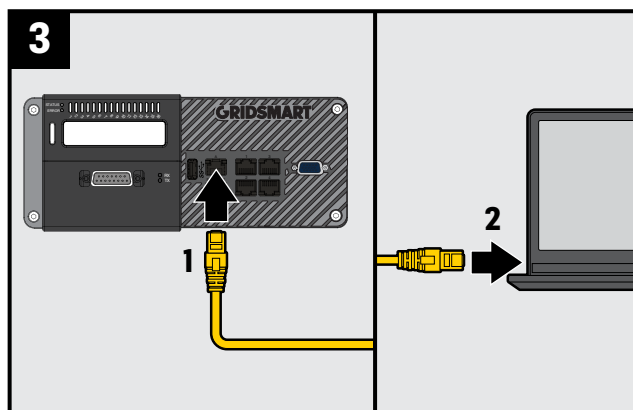
BEFORE INSTALLATION

Helpful tip: On your laptop, verify that the Gridsmart App is updated to the latest software version. Download the latest update from GridsmartCloud.com.
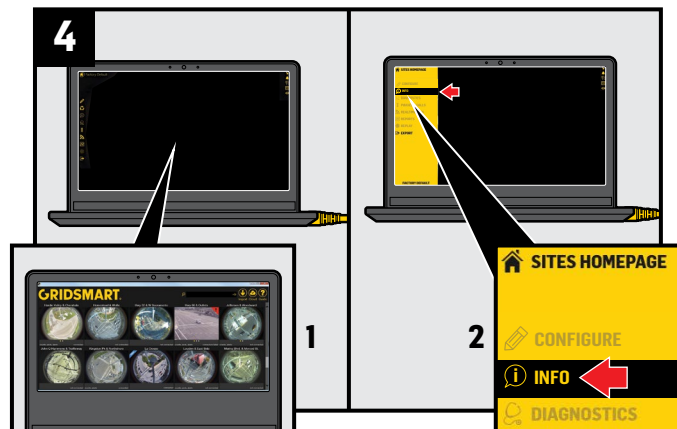

Install EPM onto cabinet DIN rail on opposite side from power distribution. Cut along rubber grommet "X". Connect 10AWG ground wire as close to ground rod as possible using ground wire clamp.

Connect 10AWG ground wire as close to ground rod as possible using ground wire clamp.

(1) Connect Processor to power source and power on (status light turns green in 2-3 minutes). **DO NOT USE A GFCI TYPE OUTLET**. Confirm your laptop is set to DHCP. **(2)** Connect your laptop to port "A" on the GS3 and open a browser (Google Chrome is recommended). Type https://192.168.150.10:8900 into the address bar. You will be redirected to the login page where you can enter your new admin account information.
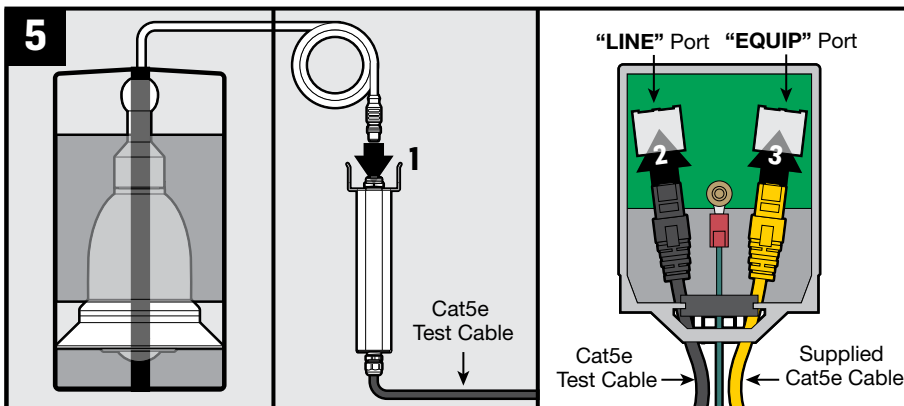

(1) Launch Gridsmart App on laptop. Select factory default site card. **(2)** Select "Info", verify "Site Info" version.
NOTE: The Bell Camera has not yet been connected, so there will be no camera image.

CUBIC™

Luminaire (LU): Follow instructions in the "Before You Start Guide" provided with your kit before proceeding to Step 5.

BEFORE INSTALLATION (continued)

5

"**LINE**" Port   "**EQUIP**" Port

Cat5e Test Cable
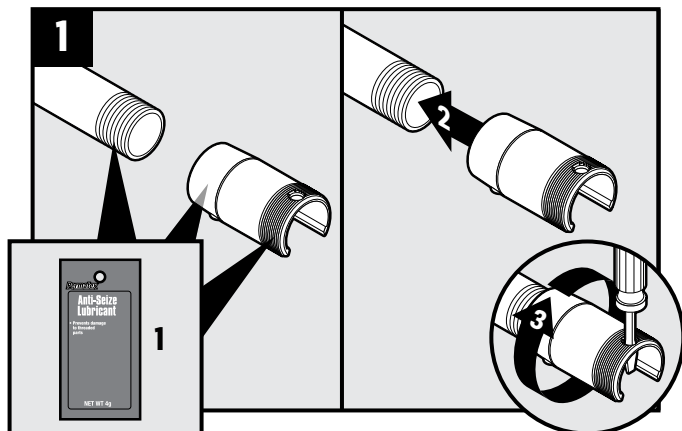
Cat5e Test Cable →   ← Supplied Cat5e Cable

With Bell in foam packaging, **(1)** connect camera cable to Junction Box upper connection. **(2)** Connect one end of CAT5e test cable to Junction Box lower connection and remaining end to the EPM Module "**LINE**" port. **(3)** Connect one end of supplied CAT5e cable to EPM Module "**EQUIP**" port and remaining end to Processor. Verify Bell image. Camera status light turns green in 2-3 minutes.

After successful equipment test, disconnect cables to Junction Box, EPM, Processor and laptop. Leave cable connected to Bell.
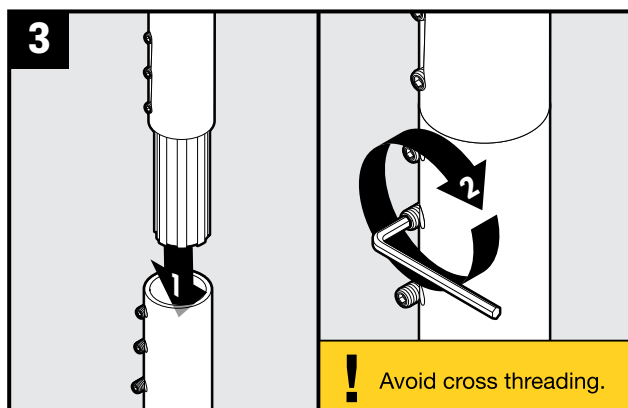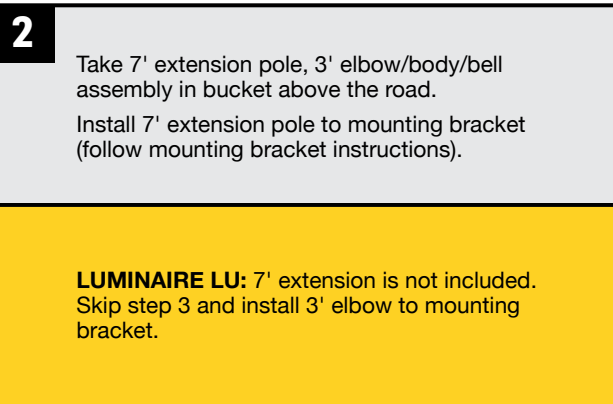
INSTALLATION

Helpful tip: Before proceeding, route 24 AWG gel-filled, shielded, burial grade CAT5e cable from traffic cabinet to the Bell mounting location.

1
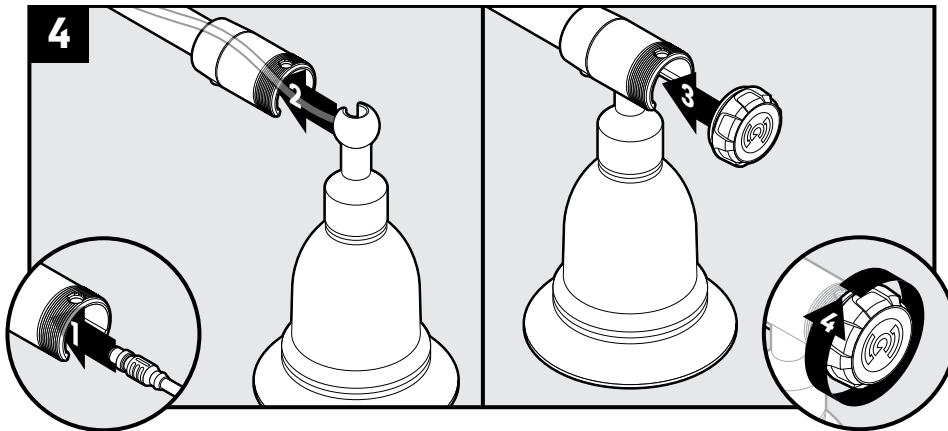

Anti-Seize Lubricant

(1) Apply anti-seize to 3' elbow and body threads. **(2)** Install body to upper end of 3' elbow **(3)** turning clockwise to secure. **NOTE:** Body opening must be facing down in final position.

2

Take 7' extension pole, 3' elbow/body/bell assembly in bucket above the road.

Install 7' extension pole to mounting bracket (follow mounting bracket instructions).

LUMINAIRE LU: 7' extension is not included. Skip step 3 and install 3' elbow to mounting bracket.

3

! Avoid cross threading.

(1) Insert 3' elbow connector into 7' extension using pole connector. **(2)** Tighten screws with Allen wrench to secure.
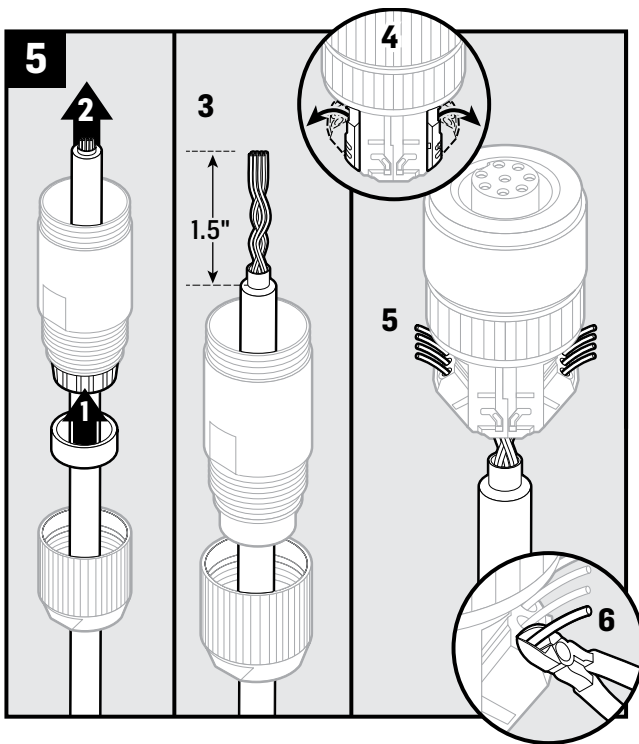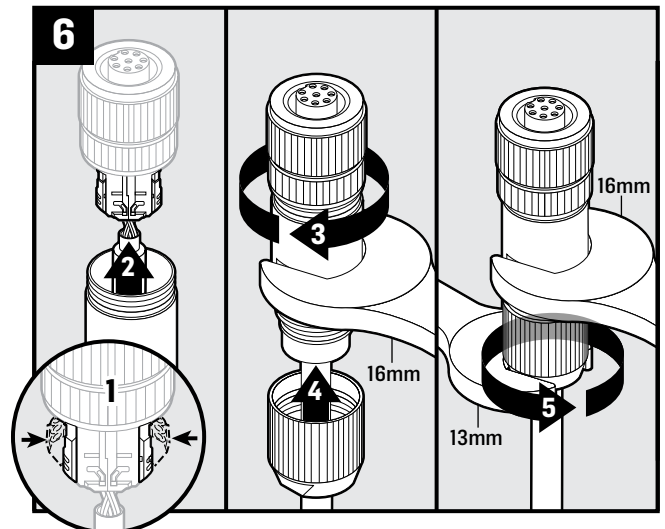
INSTALLATION (continued)

(1) Feed Bell cable through pole assembly. **(2)** Slide Bell ball joint into body, being sure the ball opening is well aligned with body/pole opening so as not to damage cable.

(3) Secure Bell to body with cap. Turn cap clockwise to tighten.

Note: The center set screw is tightend after the camera is leveled and "G" orientated. **See Step 9**
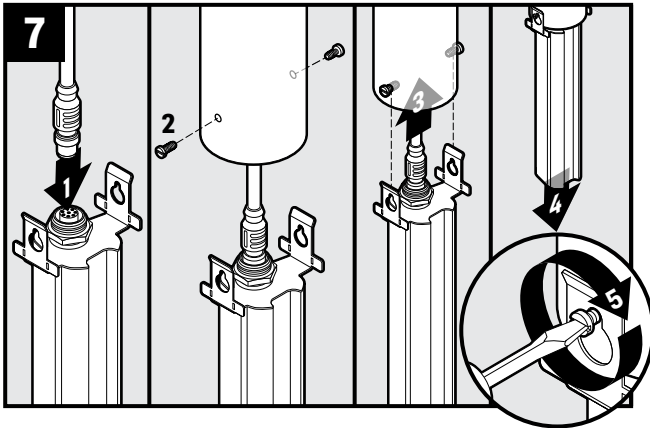

(1) Install the rubber cable gland into the black plastic fingers on the sleeve. **(2)** Install cable through pressure nut and sleeve. **(3)** Strip 1.5" off of cable. **(4)** Open both terminal blocks on connector. **(5)** Using the color code "B" above each terminal block, guide the individual wires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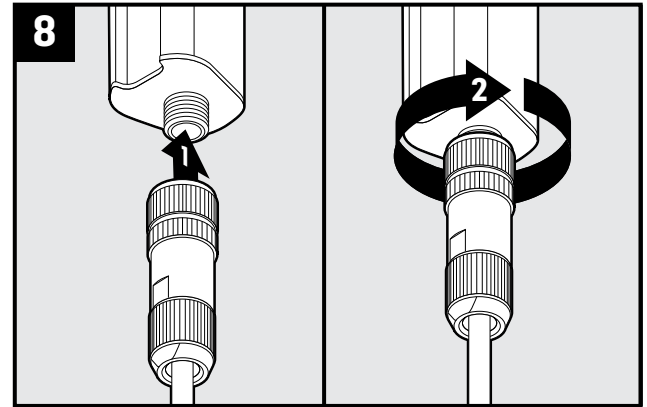

(1) Press terminal blocks IN to close and connect the wires. **(2)** Push the sleeve up to the front of the connector. **(3)** While holding the sleeve housing in place with a 16mm wrench, **(4)** screw on the connector until tight. **(5)** Continue holding the sleeve housing with a 16mm wrench and screw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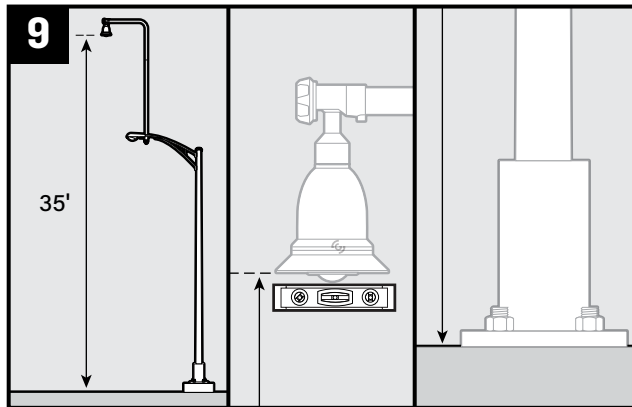
INSTALLATION (continued)

(1) Install Bell cable from pole assembly to junction box upper connection. **(2)** Install set screws. Align junction box tabs with set screws on outside of pole. **(3)** Slide tabs into upper pole assembly. **(4)** Pull down on junction box to lock tab key holes into set screws. **(5)** Tighten set screws with flathead screwdriver.

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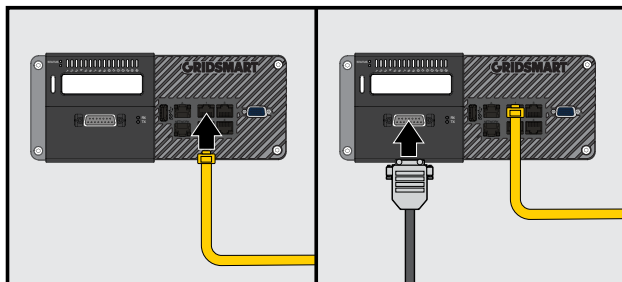
VERY IMPORTANT

Bell should be mounted at least 35' above the roadway. Using a tape measure, measure height of Bell. Record the height for use later to set up system. Orient the "G" logo away from area of consequence, ensure all approaches are fully visible, level the Bell and tighten the center set screw on the black cap.

> **!** Ensure luminaires, signal heads, and other potential obstructions do not block camera view of important regions.

GROUNDING AND FINAL INSTALLATION

STOP   Install your EPM, according to the instructions supplied with it, before continuing to next step.

After completing your EPM instructions, connect the supplied CAT5e cable to one of the Processor "1-4" ports or your ETA. Connect controller cable to Processor.