

**BlueTOAD™ Roadside Bluetooth™ Sensor Equipment  
Power over Ethernet (PoE) Configuration**

# BlueTOAD Installation Guide

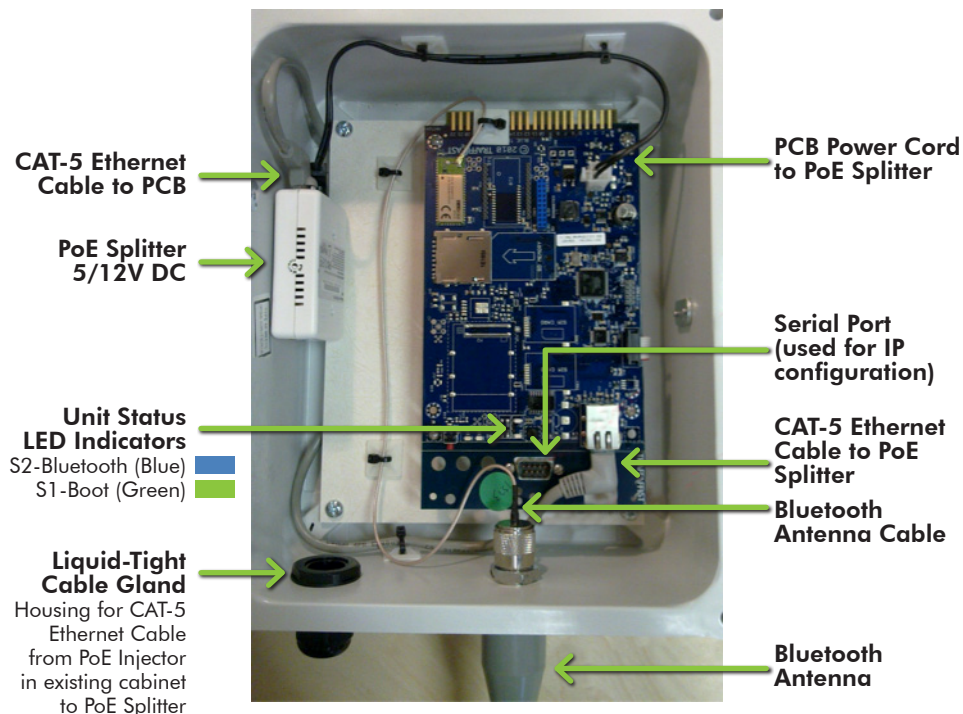
**Customer Support  
1-608-268-3941**



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## BlueTOAD Sensor Equipment Components



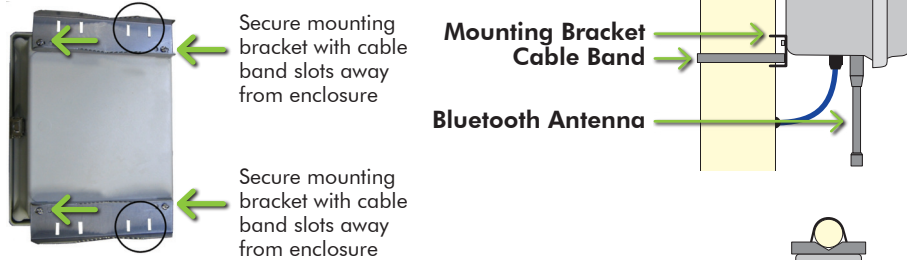
## BlueTOAD Unit Mounting How-To Basics

Category	Recommended Requirements
Mounting structure	Lamp or signal poles (BlueTOAD ~ 10 lbs.)
Height	Clear immediate obstacles - 10' – 14' ground clearance ideal
Antenna Clearance	The device should be mounted such that the external Bluetooth antenna is as unobstructed as possible and so that it has a clear line of sight to the target road segment
Antenna Alignment	Use the BlueTOAD front cover (enclosure door face) as an antenna reference.
	If the BlueTOAD unit is mounted on side of the road, place front cover parallel to the road.
	If the BlueTOAD unit is mounted on the center median, place the front cover perpendicular to the road.

# BlueTOAD Installation Guide

## 1 Mount BlueTOAD NEMA Enclosure to Structure

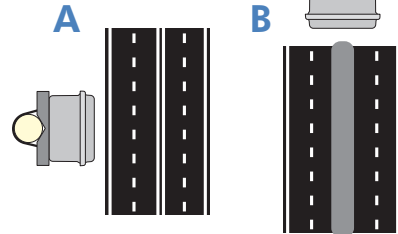
The BlueTOAD standard unit package includes two (2) mounting brackets and two (2) metal cable bands designed for mounting on, poles, I-Beams, or support structures up to a 14" diameter.



### BlueTOAD Unit Roadside Alignment

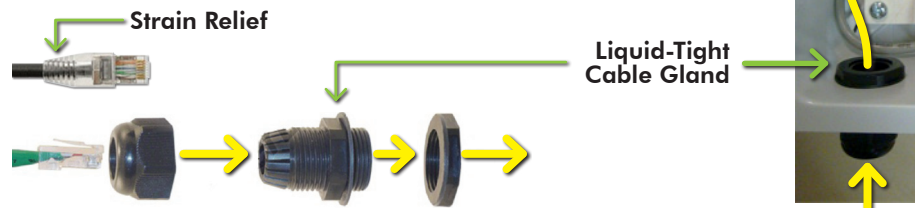
Alignment A: For roadside install, Front Cover mounted parallel to roadway.

Alignment B: For center median install, Front Cover mounted perpendicular to roadway.



## 2 Install CAT-5 Ethernet Cable

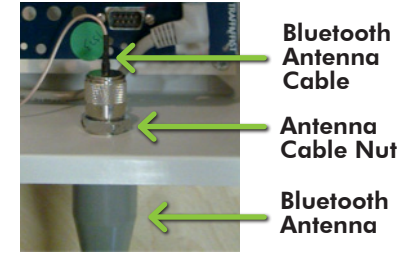
1. Run CAT-5 cable from the roadside cabinet to where the BlueTOAD unit is mounted
2. Pass the CAT-5 Ethernet cable through the Liquid-Tight Cable Gland. The strain relief on the cable will have to be removed in order to fit through the Cable Gland. The Strain Relief can be slid away from the RJ-45 connector without cutting the relief.
3. Insert the RJ-45 connector into the PoE Splitter
4. Tighten the Cable Gland



## 3 Connect Bluetooth Antenna

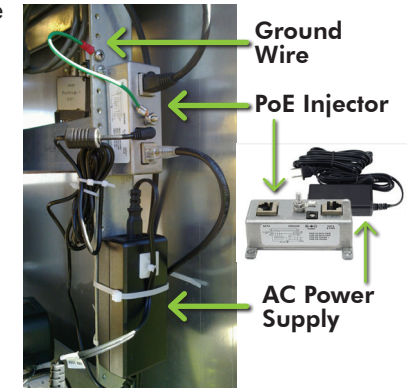
Attach Bluetooth Antenna. **Take extra precaution not to detach the cable from the connector on the BlueTOAD PCB.**

1. Secure antenna with Nut on inside of enclosure
2. Connect Bluetooth cable to antenna
3. Hand-tighten (with most connectors and antennae, hand-tension is preferred)



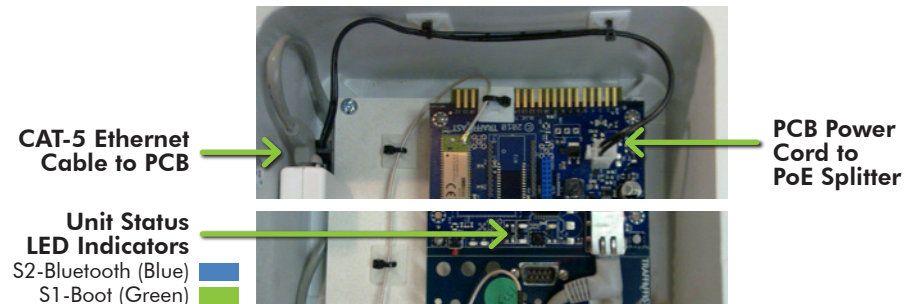
## 4 Install PoE Injector in Roadside Cabinet

1. Secure PoE injector onto flat surface inside roadside cabinet
2. Attach Ground Wire
3. The PoE injector has two (2) RJ-45 receptacles
  - Data – connects to network Ethernet switch, router, or hub
  - Data & Power – connects to the BlueTOAD unit (PCB)
4. Connect AC power supply to PoE Injector and "plug" the 110V cord to AC power outlet



## 5 Turn ON BlueTOAD Unit

To automatically turn ON the BlueTOAD unit, plug the power cord into the mated connector on the BlueTOAD PCB.



LED	Color	At Initial Start-up	At Normal State (May take up to 3 minutes)
S1- Boot	Green	Blink - 4 times per second	Blink - 1 time per 3 seconds
S2-Bluetooth	Blue	Off	Blink - 3 times per 3 seconds