

BlueTOAD Spectra PoE Layout Guidelines

After selecting the target road segment for a speed/travel time data collection, determine how many BlueTOAD detectors are necessary for your travel time study or reporting objectives by using the following guidelines:

BlueTOAD has an effective detection range of approximately 300 feet radius from the antenna.

- The minimum distance to space BlueTOAD:
 - BlueTOAD PoE or Cellular - 0.25 miles
 - BlueTOAD PoE or Cellular – Less than 0.25 miles with power control *

* Power Control allows User to shrink or adjust the detection zone.

The maximum distance is a function of the road type:

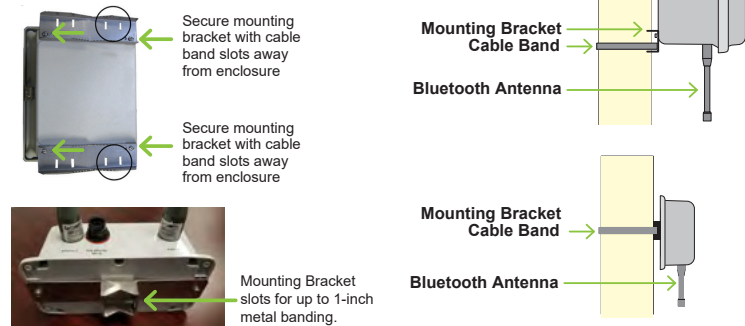
- Highway max is 4 to 5 miles.
- Arterial (no traffic lights) is 2 to 2 ½ miles.
- Arterial (with traffic lights) is 1 to 1 ½ miles.
- Dense urban area is 1 mile. The number of intersections, traffic signals, or exit ramps can affect the speed/travel time and should therefore be kept to a minimum.

In an Origin/Destination deployment, BlueTOAD detectors need to be installed before the destination, as well as after. The number of additional BlueTOAD detectors required is then based on driver options (i.e. can the driver turn left or right, which will then require one BlueTOAD for each direction of travel).

BlueTOAD Installation Guide

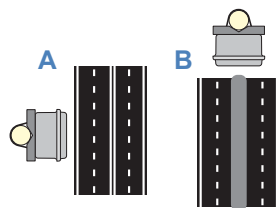
Mount BlueTOAD NEMA Enclosure to Structure

The BlueTOAD standard unit package includes one (1) mounting bracket (for BlueTOAD Spectra PoE) or two (2) mounting brackets (for BlueTOAD Spectra - Solar), suitable for up to 1-inch metal banding.



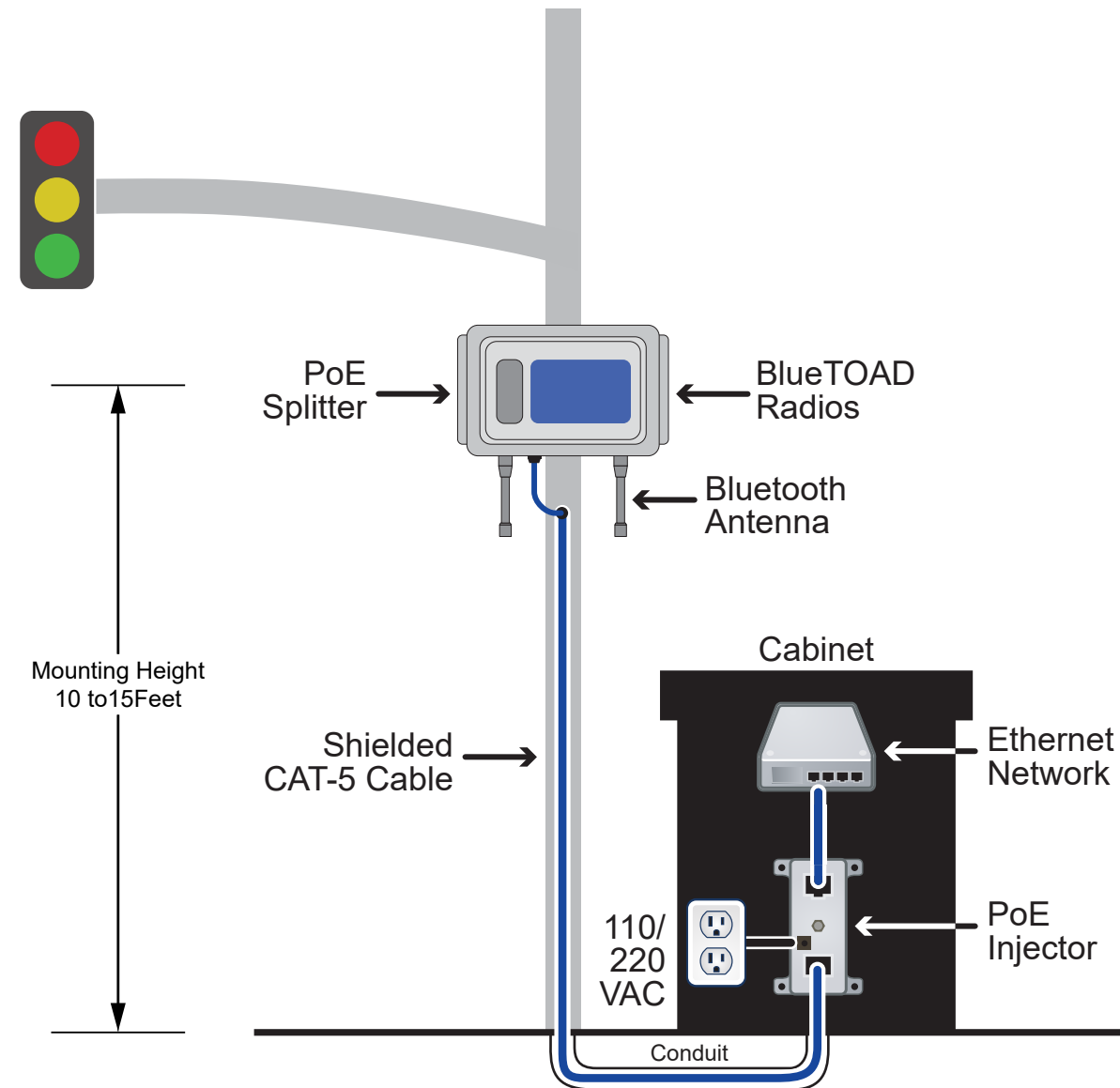
BlueTOAD Unit Roadside Alignment

- Alignment A: For roadside install, Front Cover mounted parallel to roadway.
- Alignment B: For center median install, Front Cover mounted perpendicular to roadway.



BlueTOAD[®] Spectra

(Discoverable and Non-Discoverable) Bluetooth Detector Mounting Detail



Ethernet-based Communications Power over Ethernet (PoE)

Ethernet BlueTOAD Spectra Pre-Installation

STEP 1 - Confirm site survey checklist has been completed for all locations.

STEP 2 - Confirm all parts are present.

STEP 3 - Confirm that the network setting (e.g. IP address, gateway, subnet mask, and DNS) are properly set and that all ports (69, 123, 8010) are open and set for outbound traffic.

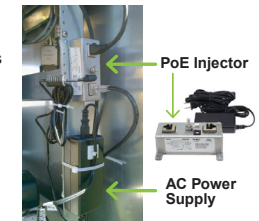
STEP 4 - After confirming the unit is configured properly, in the presence of Bluetooth signals, power up unit and confirm all LEDs are normal after the unit initializes.

STEP 5 - Call Iteris*, communicate the BlueTOAD device number, indicate that the unit has been powered up, LEDs are normal, and await Iteris to confirm the network is seeing data from this unit.

STEP 6 - After confirmation from Iteris, power off the unit before installation.

Install PoE Injector in Roadside Cabinet

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



Ethernet BlueTOAD Spectra Installation Guide

STEP 1 - After the BlueTOAD enclosure has been installed, plug the main CAT5 cable from the PoE injector in the PoE splitter.

STEP 2 - After unit has been powered on, confirm all LEDs are normal.

STEP 3 - Before leaving the location, call Iteris* after the unit has started detecting Bluetooth signals, communicated the device ID number and that the LEDs are normal, and confirm from Iteris that the network is transmitting the data from this unit.

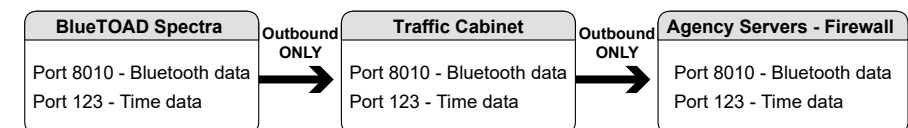
STEP 4 - Add each installed BlueTOAD unit to a compiled list of unit location data (keep a list of device ID, location, and installation date for each unit).

* Customer Support Number: 608-713-9299
 Iteris Support Website: <https://trafficcast.zendesk.com>
 (Iteris will schedule installation appointment)

Each BlueTOAD detector can be monitored using the web-based BlueARGUS software. Login credentials (Username and Password) are provided to each User, based on their predetermined Role (Admin or User) when the Account was initially setup

BlueARGUS Website: <https://bluetoad.trafficcast.com/>

BlueTOAD Spectra Network Configuration



IP Address Required:
 192.168.1.X