FootFall - Brickstream Installation Manual

Network Engineering Technologies

1/30/2015

UNLESS OTHERWISE APPROVED BY A MEMBER OF NET ALL TECHNICIANS ARE REQUIRED TO HAVE A WINDOWS BASED LAPTOP WITH AN ETHERNET PORT, STANDARD CABLING TOOLS, A VOLTAGE METER, AND A LADDER TALL ENOUGH TO REACH 12 FT. DO NOT ATTEMPT TO EXPLAIN HOW THE EQUIPMENT IS USED TO ANY MEMBER OF THE STORE PERSONEL UNLESS INSTRUCTED TO DO SO.

Purpose:

This technical overview is to provide specific technical information and the necessary steps for an installation of a Brickstream traffic counter. It is recommended that you read this document prior to arriving onsite. If after reading this document you still have questions; contact the NET Support team at 608-827-2235 for further details.

Note:

As you complete the installation of the Footfall equipment fill out the questionnaire at the end of this manual. This will reduce time spent during the logout process.

Minimum Tool and Material Expectations:

The technician should be prepared with the following:

- **A Windows based laptop with charger and working Ethernet port (No Linux or MacOS)**
- Smartphone with charger
- Ladder tall enough to reach 12 ft (Unless otherwise specified)
- Tape Measure (Electronic measuring tool preferred)
- Standard Cat 5 cabling tools
- General Hand Tools
- Voltage meter
- Label Maker
- Cat 5 cable tester
- Cat 5e Patch Cables
- Adequate Amount of Category 5e plenum cable in the event you need to run a cable
- RJ45 Jacks (Male & Female)
- Cable management materials (zip ties and velcro straps)

On-Site Arrival Requirements:

1) Check in with the store manager or general contractor
2) Locate the equipment that has been shipped to the site
   - The shipment typically contains
     - o Brickstream camera
     - o Brickstream mount
     - o Brickstream mounting screw
     - o Power over Ethernet device unless the site has POE switches
     - o USA Power cord
3) Contact your NET Helpdesk at 608-827-2235 to check in
   - DO NOT AUTO LOGIN

Cabling:

1. A homerun cable is required for each brickstream camera.

- Terminate both ends with a male RJ45 jack using 568B standard (confirm proper termination at pre-cabled sites)
- Label both ends "Footfall Sensor"
  - Labels must be printed (No handwritten labels)

Sensor Installation:

Placement:

Note: If there are obstructions that prevent placing the camera at the preferred location the technician should contact the NET Support team 608-827-2235 for guidance prior to mounting the camera.

1. The camera should be centered on the entrance. (If there are multiple devices at the same entrance refer to the multiple units section below)

2. Mount the camera centered 12 to 16 inches back from the threshold.

3. Connect the homerun cable to the Ethernet port on the camera

4. Measure the actual mounted height of the camera and record this on the questionnaire below (used for configuration and testing)

Mounting:

1. Cameras will mount with the Ethernet port facing the entrance and LEDs facing inside the store

Store Side

To the Outside or Mall
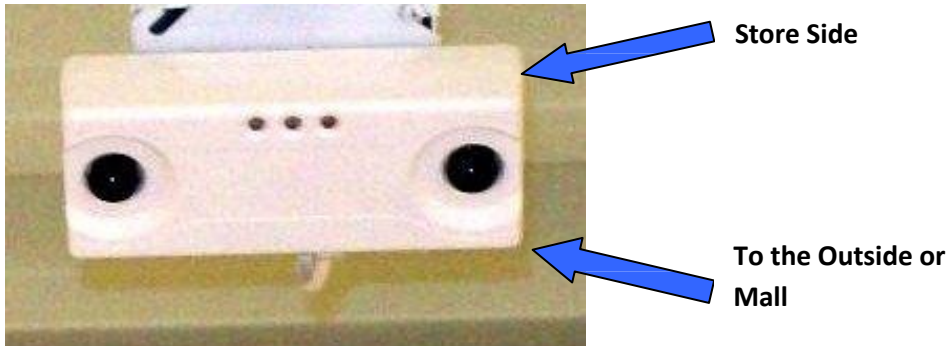
2. There are four types of mounts available for the brickstream camera (Shown below in mounting examples)

3. Cameras will mount inside the store unless otherwise specified by NET Support or the project manager.

4. Do not mount Brickstream cameras below 8 ft without authorization from the project manager.

Multiple Units:

1. When multiple cameras are being installed Camera 1 should be installed on the farthest entrance to the left. (As you stand in the store facing out)

2. Camera 2 should be installed to the right of camera 1 and continue this procedure until all cameras have been mounted appropriately. (Contact NET Support 608-827-2235 prior to mounting cameras if you have an questions)

3. When mounting multiple brickstream cameras in the same entrance use the following formula to determine spacing and placement. (See diagram below.

Brickstream Camera Spacing

$$\text{Distance between cameras} = \frac{\text{Entrance Width}}{\text{Number Of Cameras}}$$

$$\text{Distance from sidewall to first / last camera} = \frac{\text{Entrance Width}}{\text{2 X Number Of Cameras}}$$

Entrance

Brickstream		Brickstream
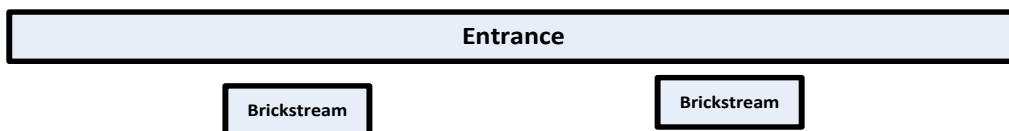
Mounting Examples

Surface Mount	Recessed Mount
Angle Bracket	**Conduit and J-Box**

Back Office:

1. If applicable mount the POE (power over Ethernet) injector near the network equipment

- POE should be securely mounted
- POE should be labeled "Footfall POE"
- POE should not block network maintenance from being performed

Network Switch

POE injector secured to wall
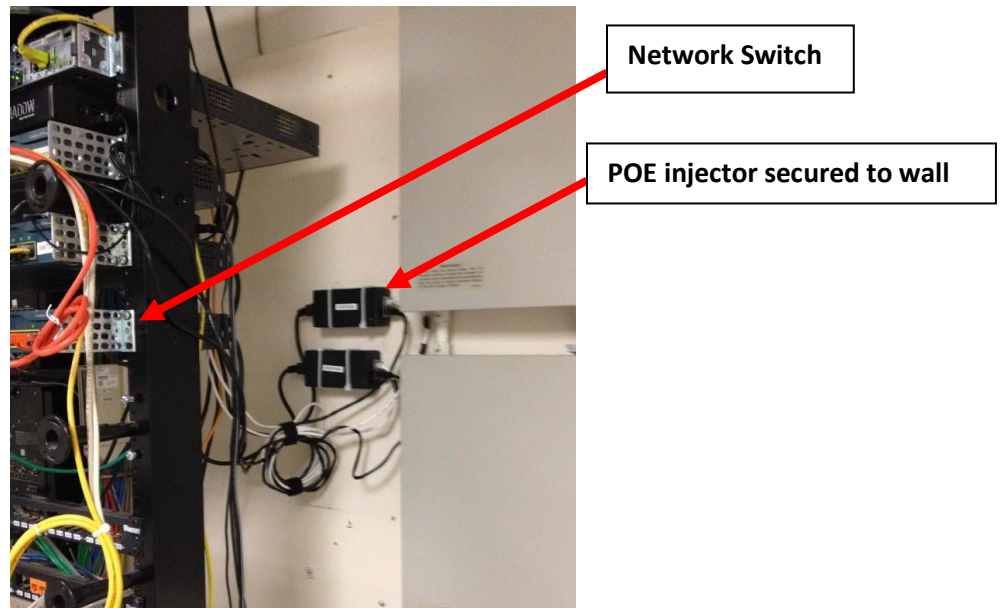
2. Plug the homerun cable coming from the brickstream camera into the data or power out port on the POE injector

3. Connect a patch cable from the data in port on the POE injector to the network switch.

   - Refer to your scope of work in your NET work order to determine if a specific network port is assigned


4. If the site has a POE capable switch the homerun will connect directly to the network port on the switch.

Cable 'Dressing'

1. It is the expectation that all cables will be tied up, neat, and mounted in such a fashion that they cannot come undone easily.

2. All loose cables should be clearly marked and labeled 'footfall sensor' to assist with potential troubleshooting later.

Deliverables:

1. Take the following pictures (these will be sent to NET from site)

   - Close up of each mounted device
   - Wide shot of each device showing the doorway floor to ceiling at the installation location
   - Wide shot of the network equipment / data rack
   - Close up of port used for each Footfall device
   - Wide shot showing the location of the POE injector/s
   - Picture of the completed Questionnaire at the end of this manual

2. Pictures must be actual size and clear
   a. Blurry or small pictures will not be accepted
3. E-mail photos to dss@nettechnology.com (Put work order number in [square] brackets for the Subject of the email.
   - Example [765432]
   - Once the pictures have been received you will get a confirmation email letting you know that NET has received them. This should not take more than 5 minutes.
   - If there is an issue sending pictures from the store the tech should step outside and retry using the cell network
   - If the tech is still having issues they should notify NET Support immediately
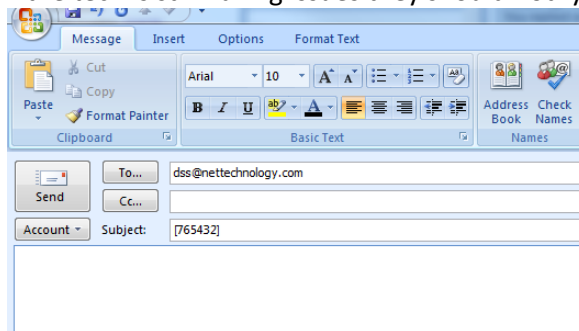
Configuration and Testing:

1. Once the installation is completed wait 5 minutes and check the color of the center LED on the brickstream camera

2. Call NET Support 608-827-2235 and report the color of the LED

3. NET Support will configure the device remotely

4. Once configured; you will be asked to complete a series walk tests to validate the accuracy of the configuration

Log Out Questionnaire

How many Footfall devices are installed total?	
Total number of customer entrances?	
Are the green lens covers removed from each device?	
What is the location of the network room?	
Where is the network equipment located in the network room?	
If applicable, describe where the POEs are located.	
What time zone are you in?	
List any additional materials used that were not provided.	
Is your work area clean?	
Manager's first and last name?	

	Door 1	Door 2	Door 3	Door 4
# of cameras at entrance				
Entrance Height (in inches)				
Entrance Width (in inches)				
Type of ceiling at mounting location				
Type of lighting at mounting location				
Type of floor at mounting location				
Type of door				
Manual or automatic				

Camera #	Serial Number	Mac Address	Mounting Height (in inches)	Switch and Port
Camera 1				
Camera 2				
Camera 3				
Camera 4				