

# MigmaCount™

for counting pedestrians and cyclists at street crossings

## Installation Instructions

### General Description

MigmaCount™ is a product that is specifically designed for counting pedestrians at street crossings who are going towards the opposite side of street or coming from. It can count multiple pedestrians walking in groups through advanced pedestrian tracking technology. The pedestrian counting sensor consists of stereo camera and scanning laser.

### Installation

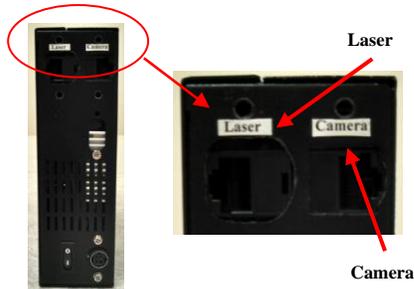
A MigmaCount™ unit comprises of one Single Board Computer (SBC), and one sensor (i.e., stereo camera and laser scanner). The SBC needs to be placed inside a cabinet. The sensor should be mounted to the existing signal poles at a desired height above ground, the height of 12 - 14 ft is recommended. DO NOT mount the sensor above 14 ft.

### Sensor and SBC Wiring

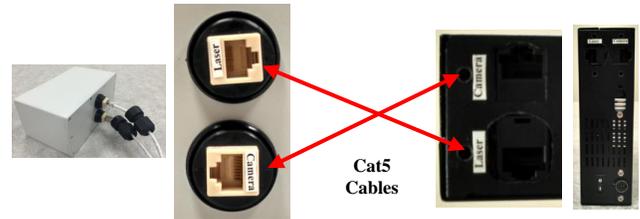
There are two waterproof Ethernet connectors at the back of the sensor, one for the stereo camera and the one for the laser scanner. Once you unscrew the connectors, you will find the labels indicating which connector is for the camera and which one is for the laser scanner.



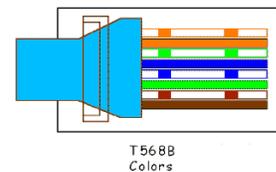
The SBC also has two Ethernet connectors, one for laser and the other for camera.



There will be two Cat5 cables, one for the laser and the other for the camera. Each Cat5 cable should connect to the corresponding connectors in the camera and laser scanner. For example, Cat5 cable for the camera should be plugged into the *camera* connector of SBC and *camera* connector of sensor. Similarly, the second Cat5 cable for the laser should be plugged into the *laser* connector of SBC and *laser* connector of sensor.



You need to crimp the RJ45 connectors to the Cat5 cable and follow the T568B standard of color order.



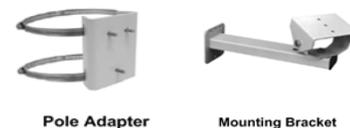
Make sure to use an Ethernet tester to make sure that there are no mismatched wires in the Cat5 cable.

### Network Communication

Configure IP address for SBC and connect one Cat5 cable between SBC and network switch in the cabinet.

### Sensor Mounting

- (1) Attach the pole adapter to the signal pole
- (2) Connect the mounting bracket to the pole adapter
- (3) Mount the stereo camera on the bracket



### Power for Stereo Cameras

The stereo cameras are powered over Cat5e cable (PoE).