

## **4090 SERIES AND DETOC SERIES DETECTOR INSTALLATION AND WIRING**

**ENSURE THAT ALL POWER SOURCES ARE DISCONNECTED FROM THE CABINET END OF THE M913 CABLE BEFORE INSTALLATION OF THE DETECTORS.**

### **INSTALLATION**

The 4090/DETOC series detector is equipped with a 3/4" female NPT threaded base for mounting and an internal terminal block for wiring termination. Any mounting that is stable and allows the M913 detector cable to enter through base can be used.

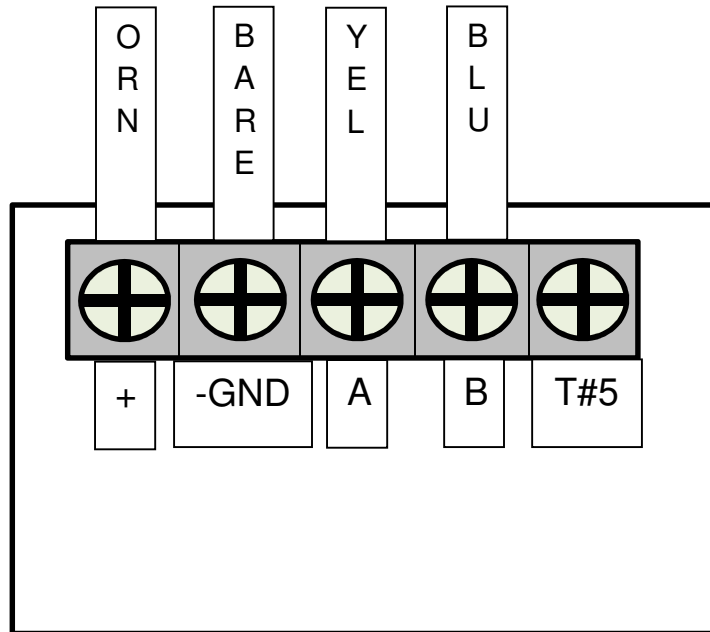
The Strobecom II system and the 4090/DETOC detectors use electronic methods for range control. For maximum range setting flexibility the detectors should be mounted with the sight tube(s) parallel to the slope of the roadway approach.

Final tilt/swivel adjustments in each detector head alignment may be done via an adjustable ball joint. Loosen the ring holding the ball joint to adjust the direction of the detector. When the desired position is obtained, finger-tighten the ring holding the ball joint. **DO NOT** over-tighten or use a tool to tighten as this may damage the holding mechanism.

### **WIRING**

Remove the 4 screws securing the top of the detector unit to gain access to the internal terminal block. Connect the orange, blue, yellow, and bare (drain) wires of the M913 detector cable per the label inside the detector. To insure proper operation, the bare wire(s) must be connected to the proper connector(s) inside the unit. The terminal block is equipped with wire clamping screws and no lugs or other connectors are necessary.

The 4090/DETOC series are fully protected from damage due to miswiring. However, system startup problems due to miswired heads can be difficult and expensive to troubleshoot. Double-check the wiring. Then secure the top of the 4090/DETOC to the base using the 4 screws removed earlier. **DO NOT** over-tighten the screws as the base may be damaged.



**WIRING PER DETECTOR TYPE**

**2-direction, 2-channel  
 Single (1) cable**

**MODELS: (x = color A, B, G, R, W)**

4090-22-SD  
 4090-22-SD-CL-x  
 4090-22-ST  
 4090-22-ST-CL-x  
 DETOC22  
 DETOC22-CL-x

+V IN Orange  
 -GND Bare Wire  
 SIG A Yellow  
 SIG B Blue  
 Terminal #5 No connection

## **OPTIONAL WIRING**

### **2-direction, 2-channel**

#### **Two (2) cables**

**MODELS: (x = color A, B, G, R, W)**

4090-22-SD

4090-22-SD-CL-x

4090-22-ST

4090-22-ST-CL-x

DETOC22

DETOC22-CL-x

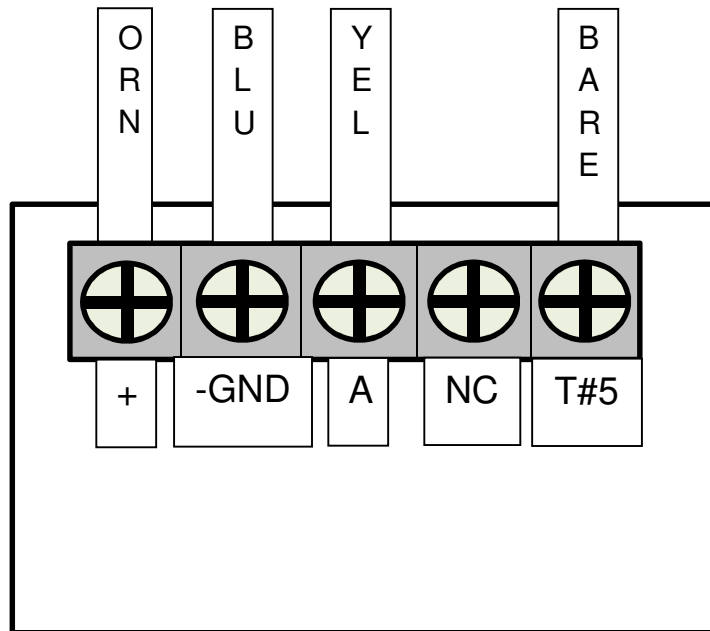
+V IN Orange (both cables)

GND Blue (both cables)

SIG A Yellow (cable 1)

SIG B Yellow (cable 2)

Terminal #5 Bare wire (both cables)



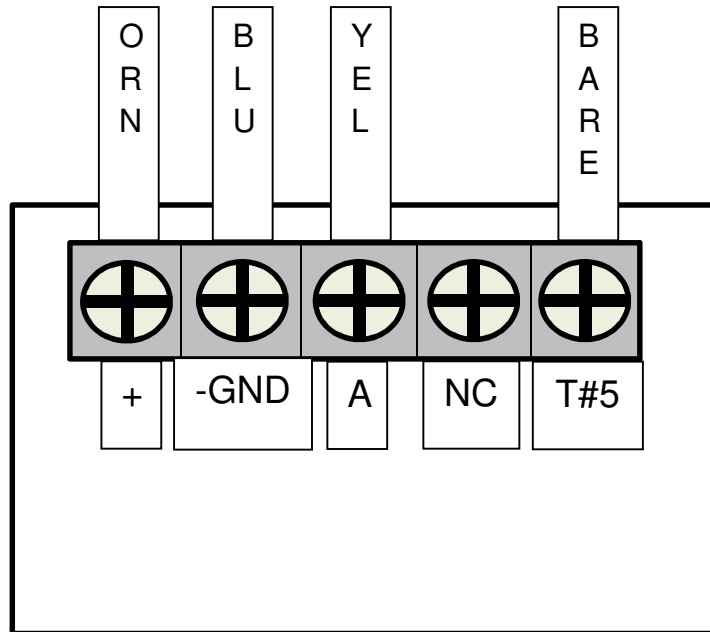
**WIRING PER DETECTOR TYPE**

**2-direction, 1-channel  
 Single (1) cable**

**MODELS: (x = color A, B, G, R, W)**

- 4090-21-SD
- 4090-21-SD-CL-x
- 4090-21-SD1CL-x
- 4090-21-ST
- 4090-21-ST-CL-x
- 4090-21-ST1CL-x
- DETOC21
- DETOC21-CL-x
- DETOC21-1CL-x

+V IN	Orange
-GND	Blue
SIG A	Yellow
SIG B	N/C No Connection
Terminal #5	Bare Wire



**WIRING PER DETECTOR TYPE**

**1-direction, 1-channel  
 Single (1) cable**

**MODELS: (x = color A, B, G, R, W)**

4090-1-SD  
 4090-1-SD-CL-x  
 4090-1-ST  
 4090-1-ST-CL-x  
 DETOC1  
 DETOC1-CL-x

+V IN Orange  
 -GND Blue  
 SIG A Yellow  
 SIG B N/C No connection  
 Terminal #5 Bare wire