



- ### Features/Benefits
- Clear Acrylic Rhombic Prism
 - Simple Electrical Connections
 - 12VDC Operation (Down To 9VDC)
 - Directional Detecting Infrared Sensors
 - Rugged Road Tested Signal Head Housing
 - Signal Head Easily Mounts Using SS 1/4"-20 Screws

Smart Crosswalk™ Activation Mechanisms Automatic Series – ISAD/UNIBOLLARD

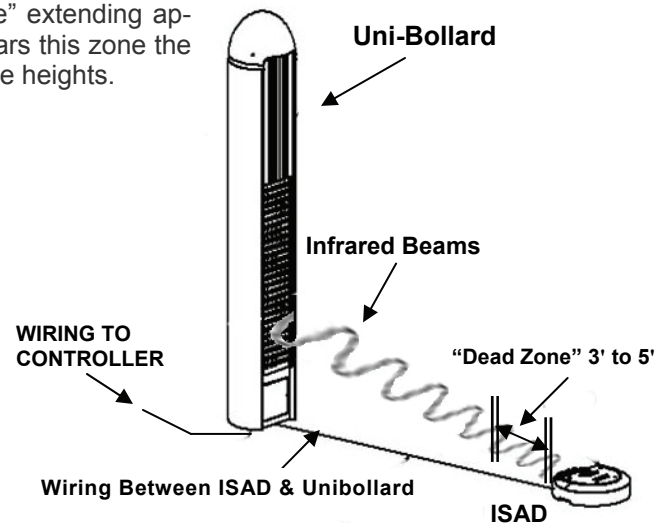
LightGuard Systems Part Number: LGS-ISAD/UNIBOLLARD-SET
Description: Automatic Pedestrian Detection Sensor (Pair)

Application Notes

The In-Surface Activation Device (ISAD) contains two infrared emitters set in precise alignment to the receivers inside a Uni-Bollard. The pair is intended to be positioned at the entrance to a crosswalk where vehicular traffic and sidewalk configuration prohibits a second vertical bollard placement. When the infrared beams are broken, the system will automatically detect the presence of pedestrians and send a signal to the controller to activate the system.

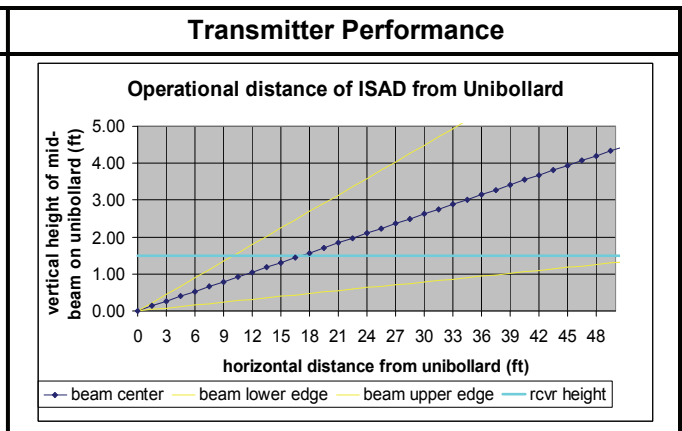
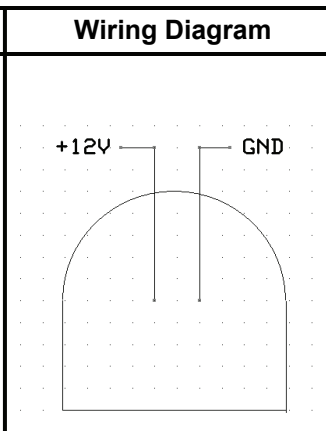
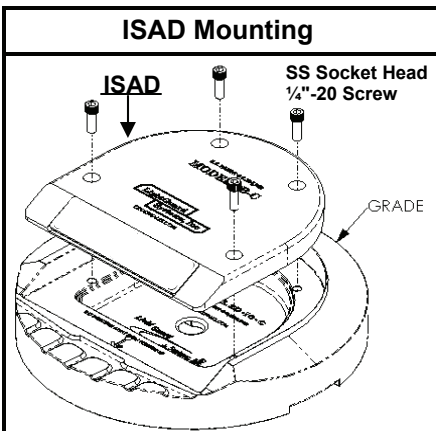
The ISAD transmitters point upward slightly at the receivers in the Uni-Bollard located 1.5 ft above the mounting height of the ISAD. The ISAD is secured directly into the standard LGS 10" base plate or snow plow resistant CHS-14 base plate. The ISAD module is installed into the road or into the walking surface so that the ISAD base plate is flush/level with the surface and the signal head in no more than 3/4 inch above the road. Should road installation require other than same level elevations, details must be specified prior to manufacturing.

The ISAD emits a narrow infrared beam creating a "Dead Zone" extending approximately 3 to 5 feet from the signal head. Once the beam clears this zone the system is designed to activate approximately from the calf to knee heights.



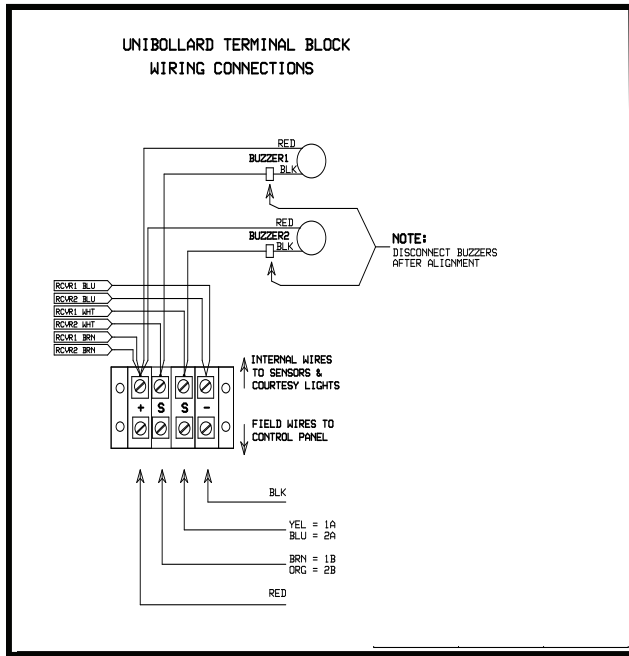
General Performance Specifications

| Parameter | Value |
|-----------------------------|-------------------------------|
| Maximum Separation Distance | 30 feet |
| Power consumption | 0.5 Watts |
| Operating Temp | -20° to +80°C |
| Operating Voltage | 9VDC to 15VDC |
| Color | Black |
| Material | Cast Aluminum, Anodized |
| ISAD Size | 7" x 7" x 3/4" (typical IRWL) |

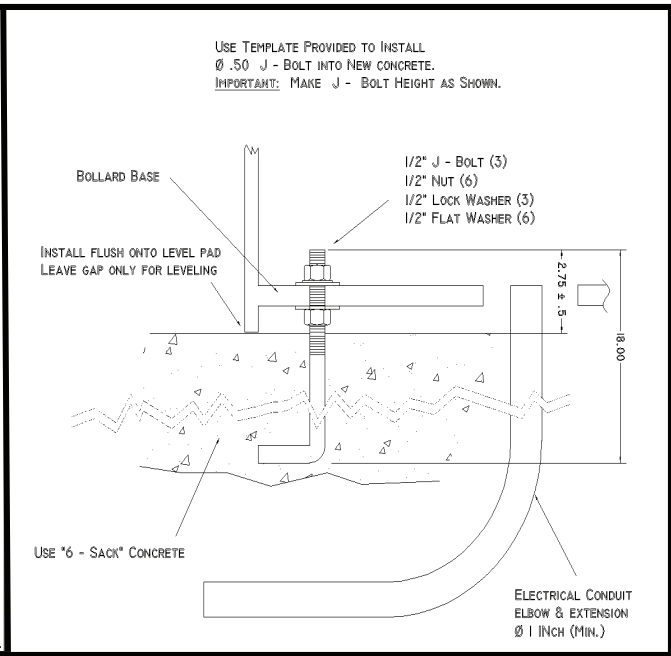


Installation Details

UniBollard Wiring Diagram

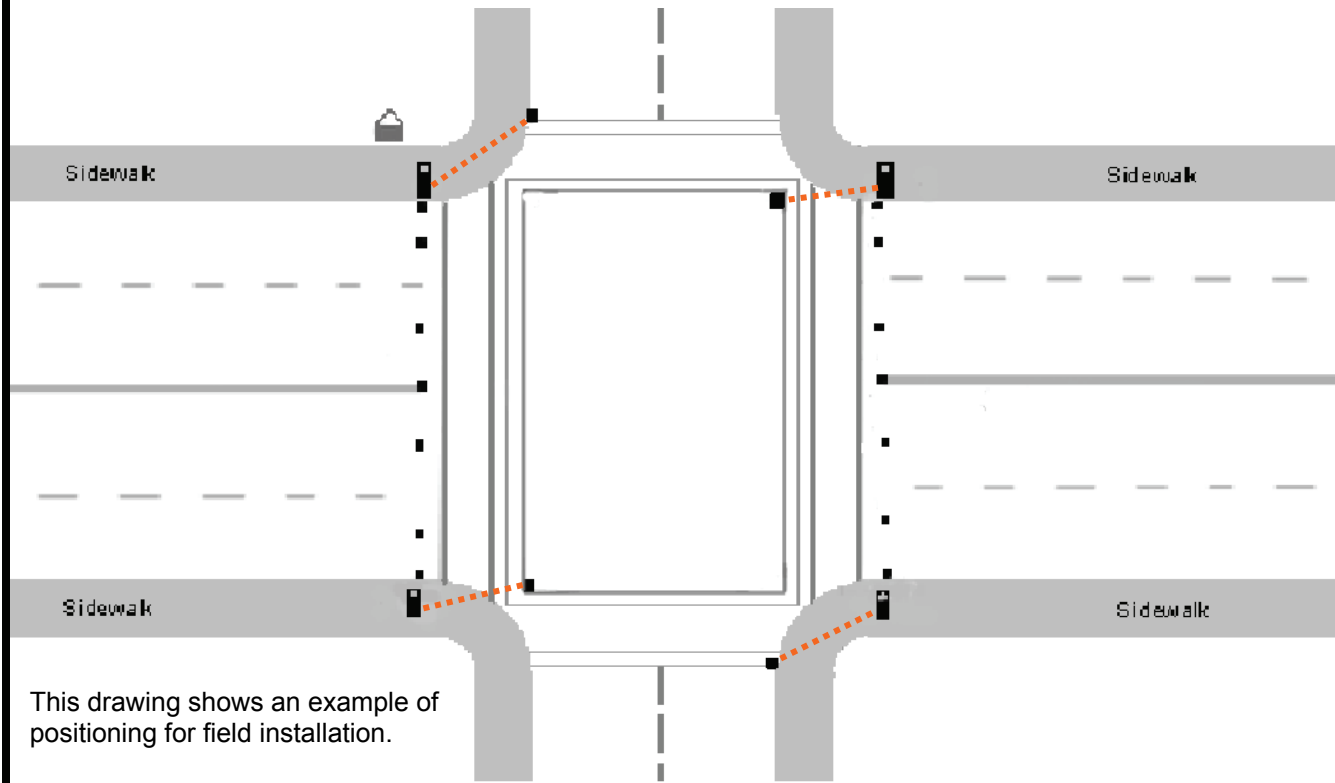


UniBollard Mounting Diagram



EXAMPLE UNI-BOLLARD/ISAD INSTALLATION DIAGRAM

Typical Uni-Bollard installations are arranged with an ISAD installed in the roadway and a Uni-Bollard installed on the sidewalk. The ISAD is intended for those crosswalks where vehicular traffic and sidewalk configuration prohibits a second vertical bollard placement, the ISAD is not meant for use as a replacement to a Bollard system.



This drawing shows an example of positioning for field installation.