



The user will create or change detection zones with a mouse on an image of the field-of-view. With the mouse or keyboard, it will be possible to size, orient, and configure detection zones to provide optimal road coverage for the detection objective. It will be possible to edit previously defined detector configurations, to adjust the detection zone size and placement, to add detectors for additional detection objectives, or to reprogram the detection module for different traffic applications, changes in installation site geometry, or traffic rerouting during construction projects.

It will be possible to download configurations from the PC to the detection module, to retrieve the detector configuration that is currently running, and to back up the complete detector configurations by saving them to the PC storage media.

### **2.6 Detection Zone Operation Verification**

It will be possible to verify the real-time detection operation by observing the detectors on the video overlay as vehicles pass through them. When a vehicle is occupying a detection zone, the detection zone's color or intensity on the live video will reflect the state of the detection, thereby visually verifying the proper operation of the detection system. The video may be viewed on an analog video monitor or digitally on a PC.

It will be possible to view assigned contact-closure outputs from the Front Panel application or on the detection module LED output display as controlled by a rotary switch. An LED shall be ON when its assigned detector output or signal controller phase input is ON.

It will be possible to select a color scheme that indicates the state of the detection delay and extension timing.

The supervisor computer will be able to display the real-time vehicle speed, length, classification, and actuation record in milliseconds. It will also be able to display the statistical traffic data listed above for the last complete user specified time interval.

### **2.7 Providing Optimal Detection**

The vehicle and bicycle detection system will provide optimal detection of passage and presence when the sensor is mounted 20 feet (6 m) or higher above the roadway detection area. The best sensor location is in front of the desired coverage area in line with a lane mark, and the distance to the farthest detection zone locations is not greater than 10 times the mounting height of the sensor. The recommended deployment geometry for optimal detection requires that there be an unobstructed view of each traveled lane where detection is required. The sensor, when placed at a mounting height that minimizes vehicle image occlusion and the zoom lens adjusted to match the width of the road, will be able to monitor a maximum of 6 to 8 traffic lanes simultaneously depending on the field of view. A designer's guide for intersection applications will be available from the manufacturer.

### **2.8 Demand Presence Detection Performance**

Using an installed sensor that meets the optimal viewing specifications described above, the system will be able to accurately provide demand presence detection. The demand presence accuracy will be based on the ability to enable a protected turning movement on an intersection stop line, when a demand exists. The probability of not detecting a vehicle for demand presence will be less than 1% error under all operating conditions. In the presence of artifact conditions, the detection module will minimize extraneous (false) protected movement calls to less than 2%.