

Advantages of Automatic Activation

A number of traffic engineers have expressed a concern that by manually activating an in-pavement signaling system and possibly “expecting” approaching vehicles to yield, a pedestrian might develop a “false sense of security” when entering an illuminated crosswalk. LightGuard Systems, Inc. innovated development of an automatic activation system as an alternative to manual push button activation systems.

During initial phases of testing the system, many different types of activation products were tested for use with the LightGuard Smart Crosswalk™ System. The automatic activation system now in use by LightGuard was chosen for a number of reasons. Studies show that manual activation is utilized by up to 60% of crossing pedestrians, leaving as much as 40% of the pedestrians exposed without the benefit of the illuminated crosswalk. It became clear that automatic activation significantly increased system activation. LightGuard developed the bollard device for automatic activation insuring an easily recognizable crossing point with a safe, reliable activation method not requiring effort from the pedestrian.

Automatic Activation System consists of “gateways” comprised of standardized bollards. Each bollard contains sensor circuitry drive electronics. The built-in sensor module projects infrared beams of modulated light to the respective receiver module. The bollard “gate” system is directionally sensitive; it is only activated when entering and not when exiting the crosswalk.

A pair of bollard devices is positioned opposing each other at either end of the crosswalk entrances. There are 4 bollards per crosswalk. They are placed so that as pedestrians entering into a crosswalk must pass between them automatically activating the Smart Crosswalk™ system. The bollards are designed and situated to “invite” pedestrians to enter a crosswalk at a desired location.

Bollards Provide

- The most reliable activation technology today without difficult issues such as “false activations” or non-activations. They will not re-trigger the system upon exiting the crosswalk.
- An activation mechanism without notification to the crossing pedestrian, thus allowing the pedestrian to use as much caution as needed to be safe minimizing the creation of a “false sense of security.”
- Internal low-level courtesy lighting provides easy nighttime pedestrian recognition of the location and entrance to the crosswalk, encouraging pedestrian crossing at the proper location.
- The bollard pair can be separated by as much as 60 feet apart to maximize the crosswalk entry zone area. Particular attention should be paid as to how far back pedestrians may “cut the corner” when entering the crosswalk.

