



"Pursuing Safety Through Technology"

## CHOOSING YOUR EQUIPMENT

For your information, we would like you to understand the "choices" that are usually considered for our system to be effective and complete. Hopefully, you have already contemplated this with our product representative for your quote.

### THERE ARE FOUR BASIC AREAS

1) **Number of in-roadway signal heads and base plates:** This is based upon the number of lanes. Usually one on the center line, one in each parking lane, and one in the center of each travel lane (under the license plate) in each direction, all facing outward and away from the crosswalk. Thereby, a two-lane road would normally have 10 in total and a four-lane road would use 14. There are two roadway base plate choices: 1) a 14" diameter snowplow blade resistant model, or 2) a 10" diameter standard model. Our layout pattern is based upon our studies and professional recommendations for approval of the system use in the U.S.

2) **Activation method:** This consists of either manual (push button) or automatic (Bollard). We prefer to recommend use of automatic activation, not just due to cost. The use of Bollards provides a visual entrance point "inviting" the pedestrian to a potentially safer place to cross the street. The bollards are a very reliable method of activation. They offer nearly 100% effectiveness, with no "conscious" pedestrian interaction, which may also help to reduce the creation of any "false sense of security." The manual push button devices are also a reliable and economic method of activation - when the pedestrian pushes the button. However, on average this has shown through studies to be approximately 60% of the time. This leaves 40% of the pedestrians potentially "exposed" to vehicles traveling through the crosswalk. The bollards can be placed up to 60 feet apart, and are activated only when the pedestrian "enters" the crosswalk, not exiting (They ignore that direction). Our Bollards are aesthetically pleasing and internally lighted for easy evening recognition. We have tried other methods of "automatic" activation (video, ultrasonic, etc.) but found these to be problematic and have non-reliable factors to offer them.

3) **Controller:** Your choices are A/C or solar powered controllers. If you have A/C power readily available, you should likely select this option. If you are in a location where A/C power is not close or available, and trenching to bring power in is a factor, choose the solar powered model. Our controllers have the ability to monitor and data log the usages, time and date, and movement in each crosswalk direction. They are also programmable to come on automatically at specific time and then revert to standby mode for normal operation. They also have instantaneous battery back up power in the event of power failure (A/C units). We also have an economy controller that does not offer those capabilities if costs are a major consideration here.

4) **Advance Warning "ActiveSigns™":** These are the final consideration. They can be placed on one or both sides of the crosswalk, back to back, or just one on each side. There are some locations that, due to the median being wide or trees blocking the opposite lanes, those particular in-roadway lights can be omitted or reduced in number, and the "ActiveSign™" warning signs are placed on the medium and curb, and the in-pavement lights are only used in the same lanes as direction of travel by the approaching motorist.

Those are the general choices in equipment. There are always variables, as we do not think we have seen two crosswalks exactly alike in over 14 years of experience! At four-way intersections, you can "treat" them as one giant crosswalk, and sort of get "two for one" ... The installation cost vary from contractor to contractor, and we recommend that the city public works actually installs the equipment, as it can be economical. Then they are familiar with the product should there be a need for any type of service. Also, costs not related to the installation (curb relief for ADA, and or decorative brickwork, etc.) should not be considered as the "installation cost" of the system. If desired, professional on-site supervision from a LightGuard Systems, Inc. is available for a nominal fee as part of the bid specification proposal.