



“Wireless” Traffic Control Solutions

APPLICATION: *Flashing Beacon Systems for Low-flying Helicopters*

LOCATION: U. S. Marine Corps Air Station, Miramar, CA U.S.A.

Description

Traffic control devices range from simple items such as a static, diamond-shaped yellow warning sign to a fully signalized intersection. Roadway flashing beacon systems fall between these two extremes and provide cautionary warnings to motorists or serve as a regulatory device such as a flashing red lamp at a stop sign.

One project recently completed for the U.S. Marines involved flashing beacon systems to warn motorists of low-flying helicopters crossing a road running through an air base. The flasher had to be configured to receive a signal from the communications radio system and turn on for a minimum of one hour. The timer had to be retriggerable yet only after the first 20 minutes of run-time.

The flasher required a display to show the maximum run-time programmed into the unit once it was activated, and the elapsed time since the last trigger. When not operating, the flasher control display had to show a running count of the number of activation commands the unit had received and a built-in test mode activated from a TEST button on the control panel.

For this “smart” traffic system, we chose the IDEC Smart Relay® with the LCD display. The flexibility of 8 digital inputs, two of which can be converted to analog, and the LCD, provide a means of both prototyping and producing solar flashers with the advanced features DoTs are seeking.

We were able to modify our standard flashing beacon designs to accommodate the U.S. Marine project by using a special VHF radio receiver and the Smart Relay. The project was designed, built and shipped in less than one month.



Flashing beacon warns motorists of low-flying helicopters



Take these steps to insure the success of your solar-powered project:

1. Location - identify the site of the application; for example, the nearest town, village or city and state.
2. Load - specify the number and size of lamps, timers or other controls (anything which draws power).
3. Duty Cycle - determine how many hours per day and which days per week the load will be drawing power.

Go to "Send us your requirements" at www.SolarTrafficControls.com/support/requirements.php for more details.

Solar Power: a free source of energy

STC's solar-powered systems are designed for quick and easy installation in the field. Our careful front-end engineering minimizes your installation costs and provides years of trouble-free operation. The standard solar power system includes the solar array, system enclosure with all the necessary electronics, color-coded wiring harnesses, sealed batteries and full documentation. DC LED lamp kits can also be purchased. These include the LED beacon, lamp housing and mounting hardware.

STC Systems are Cost Effective

Our solar flasher systems allow you to stretch your budget to obtain the traffic safety devices you need at affordable prices. Most systems are equivalent to the cost of obtaining an AC power drop. Battery life is typically three to six years; less expensive than grid electricity for the same period of time.

Solar Traffic Controls (STC) provides solar-powered traffic control systems for city, state and federal DOTs; police, firefighting and public works departments; facility maintenance and plant safety industries. Our primary products are solar-powered flashing beacon systems used for school zones and 24-hour applications. We also supply specialized flasher systems using environmental sensors and custom communications packages to control the flashing beacon systems. Our product spectrum also includes wireless power systems for ITS, EMS and HAR. STC's products and services are sold through a network of regional distributors who offer technical support for your project.

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