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Solar-Powered <Smart' Traffic Systems

by Joe Wise, Solar Traffic Controls, LLC

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, in some cases, serve as a regulatory device such as a flashing red lamp at a stop sign.

The **IDEC Smart Relay** has proven to be a key tool in developing and designing reliable and affordable solutions for advance traffic systems which my company designs and manufactures.

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 only after the first 20 minutes of run-time.

The flasher needed 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.

From the many control products IDEC offers, we chose one model of the Smart Relay: Model FL1A-H12RCE 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. Marines project by using a special VHF radio receiver and an IDEC Smart Relay. The project was designed, built and shipped in less than one month.

We expect to be incorporating IDEC Smart Relays into STC controls for high-water flasher systems, in pavement crosswalk lighting, fire station flasher systems, and we will continue to explore other possibilities as well .



Flashing beacon warns motorists of low flying helicopters.