For over 30 years, TOMAR Electronics, located in Gilbert, Arizona, has engineered, designed, and manufactured the highest quality, most reliable, and extremely efficient audible and visual warning signals. Tomar Electronics is dedicated to perfecting strobe and LED technology and continues to define the standard for warning light performance into the twenty-first century.

From assemblers to administration, TOMAR is continually improving manufacturing efficiencies while preserving the consistent quality of our work. We take great pride in our efforts toward providing innovative products that save lives.

Research and Development
The cornerstone of innovation.

The performance and reliability of TOMAR products evolves from over a quarter century of intensive research and development of high efficiency electronic circuit designs and innovative optics.

TOMAR's staff of highly specialized engineers employ state-of-the-art electronic design and testing equipment to create the most advanced warning signals available. TOMAR's testing and research equipment includes:

- An advanced computerized circuit simulator that defines critical tolerance parameters and troubleshoots for potential design weaknesses.
- Surface Mount Technology Computer Automated (SMT) Component Pick and Place Assembly
- A 100 foot automated light measurement tunnel which uses photometers calibrated to display measurements in candelas effective in accordance with FAA, and IES standards. High speed photodiodes are used to measure and display light pulse wave shapes to insure accuracy in light intensity output specifications.
- A fully equipped and certified test lab, capable of making all tests and measurements.
- A fast scanning spectroradiometer for color measurements.

Manufacturing and Quality Control
Striving to produce high quality products.

Rigorous quality control standards and detailed inspections are implemented at various stages in the production process. Fixture "burn-in" provides for an unprecedented 100% testing of all TOMAR products to ensure accurate and trouble-free performance for the life of the strobe. Statistical Process Control is used to monitor production quality with detailed precision. TOMAR's warranties are among the longest in the industry, made possible by the dedication to quality in both the design and manufacturing processes. A computerized system integrating order entry, inventory, and production control helps to facilitate rapid order fulfillment.

TOMAR Online
Visit our web site for the latest product updates, documentation and many other helpful information at: www.tomar.com
STROBECOM II is an Optical Preemption System designed and engineered to help emergency service professionals reach their destination quickly and safely. By communicating with the traffic control system located at each intersection, the approaching emergency vehicles are given a “green” light before entering the intersection, thus creating the ability to move through heavy traffic situations. STROBECOM II significantly increases the efficiency of the emergency response teams and allows them to reach their destinations SAFELY with DECREASED RESPONSE TIMES.

OPTICAL PREEMPTION DETECTORS

TOMAR’s 409X Model Optical Preemption Detectors sense the optical pulses emitted by properly equipped emergency or transit vehicles. Mounted to observe the approaches of an intersection the 409X are used with Tomar 4000 Series Optical Signal Processors to inform the traffic control system of the presence of designated vehicles. Using 409X detectors and Strobecom II throughout your traffic control system reduces emergency response time, allows emergency vehicles to travel with greater safety, and improves transit vehicles timeliness.

OPTICAL PREEMPTION EMITTERS

An Emitter is a Xenon strobe light system which is mounted on Emergency and Transit vehicles or within our Heliober™ and Scorpion™ lightbars.

The Emitter generates an optical signal. This signal is received by Strobecom II detectors located at the traffic intersection. The emitter is normally wired so that it automatically activates when the emergency lighting is active. TOMAR emitters also include an automatic shut-off, which can be connected to the vehicles parking brake or neutral safety switch. When the vehicle is in park or neutral, the emitter is automatically shut off preventing intersection lockup.

TOMAR also offers a Hand Held Battery Operated Portable Emitter, (pictured at bottom left), for convenient on-site testing of your Tomar Strobecom II Optical Preemption System intersections.

OPTICAL SIGNAL PROCESSOR CARDS

The Optical Signal Processor (OSP) receives the electrical signals from the optical preemption Detectors. While being received, the signals are processed to determine if the vehicle is a valid emergency or transit vehicle.

The OSP is connected directly to the preemption inputs of the traffic controller in the intersection in which it is installed. When a vehicle’s signal is accepted as valid, the OSP sends a preemption request to the proper input of the traffic controller.

The traffic controller then safely manipulates the traffic signals according to a preprogrammed algorithm. Depending on where the traffic controller was in its normal routine the vehicle will receive a “Green Light” after a minimum of 3 or more seconds. Traffic signals which are already green will stay green until the vehicle passes.

DETECTOR/LED CONFIRMATION LIGHT ASSEMBLY

New! Tomar is now offering a new Detector/LED Confirmation Light assembly option! This option provides the customer with an easy to install all in one Detector with super bright LED Confirmation Light assembly mounted together at the Factory. Power for the new LED confirmation Lights is supplied by the Strobecom II 4000 Series OSP preemption card in the Traffic Cabinet and uses only the standard detector wire to power both the detector and LED confirmation light combo assembly. There is no longer any need for 2 or 3 conductor 14 gauge wiring to be pulled to the confirmation lights on the mast arm or Load Switches to drive your confirmation lights in the traffic cabinet. The 4000 Series OSP Cards from Tomar are all programmable to provide several confirmation flash patterns to suit the customer needs. This NEW option is not only convenient and time saving, but also cost saving to installers.

FIRE STATION MOUNTED EMITTER SYSTEM

The model FSEM1T Fire Station Emitter System provides a way for emergency vehicles leaving a fire station to preempt nearby traffic intersections and clear traffic blocking the roadway in front of the fire station.

STROBESWITCH EMERGENCY VEHICLE ACCESS SYSTEM

The model 1790 STROBESWITCH™ is a compact low cost detector which detects a special strobe light signal and opens access gates to allow quick entrance. The detector is activated by the strobe emitters used by most fire department emergency vehicles to control traffic signals en route to a fire. The 1790–1014 STROBESWITCH™ interfaces with TOMAR Model 3065 Series or GTT OPTICOM® traffic preemption optical signal emitters. The model 1790 features a 1/2” female pipe hub mounting base.

Further information on these and other TOMAR preemption and traffic control products can be found at: www.tomar.com/traffic or contact your local distributor.