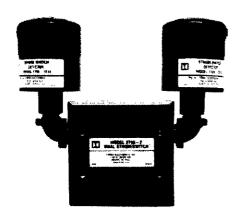
1790-1014 STROBESWITCH™

Gate and Door Access System



1790-1014 STROBESWITCH™



2795-2 Dual STROBESWITCH™ Assembly

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 the TOMAR model 780-1228-PRE or 3M OPTICOM® traffic preemption optical signal emitters. The model 1790 features a 1/2" female pipe hub mounting base.

HOW IT WORKS:

The emergency vehicle uses a special strobe light to transmit a continuously flashing optical signal. The TOMAR 1790-1014 STROBESWITCH™ receives this signal, and if the signal format is correct, activates a relay. The relay contacts may be used to control security gates, fire department garage doors, and other devices. Signaling is optical by line of sight, and the 1790 can operate indoors or outdoors, in bright sunlight, or in any weather. The unit is not susceptible to radio frequency interference, and uses digital frequency discrimination to reject unwanted signals, such as flashlights, emergency vehicle lighting systems, flashing signs, etc.



1790M-2 Power Module



**Hand Held Tester

^{*} Registered trademark of the 3M Corporation.

^{**}The sale of this item is restricted to state and local governments and to authorized distributors only.



The photo above depicts the use of a TOMAR 1790–1014 STROBESWITCH™ which detects the approach of a fire emergency vehicle and opens access gates to allow quick entrance. The fire department doesn't have to waste time with lock box key switches and can proceed directly to the emergency.

Specifications

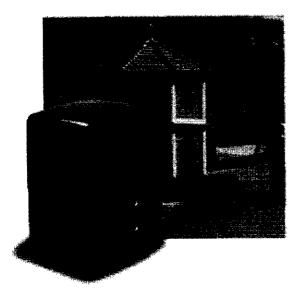
İtem	Description
Range	600 feet typical, but depends on intensity of strobe emitter
Field of View	10° vertical, 90° horizontal
Signal Acquisition Time	0.64 seconds
Function Indicator	The unit has a red LED that illuminates whenever a proper optical signal is received. The LED is visible thru the viewport and can be seen for 25 feet or more. This feature can be used with the optional Hand Held Tester to verify the unit's operation.
Frequency	F14 = 14.035 Hz ± .25 Hz (high priority) F10 = 10.000 Hz ± .25 Hz (low priority)
1790M-2 Power Module	12-24VDC AC/DC DPDT relay output 2A @ 30VDC, 0.6A @ 120VAC 0-30 minute time delay plus continuous latch mode Remote reset

Ordering Information

Model No.	Description
1790–1014	Strobeswitch only
1790-1014-\$&M2	Strobeswitch and power module
1790-M2	Power module only
2795–2	Dual Strobeswitch and power module

Available Options

Model No.	Description
1760–14	Hand held tester for Emergency band
1760–10	Hand held tester for Transit band



Modular Board - Uses LEDs to indicate all input and output functions of the gate operator.

ERD – If the gate hits a vehicle while closing, it reopens. If it hits a vehicle while opening, it stops, reverses 4 to 6 inches and stops again.

Digital Motor Protection – Entrapment sensor shuts off the motor after it reaches the stall amp for 3 seconds, reverses direction for several inches, and stops.

Electronic Inputs – Radio receiver, key switch, safety loop, center loop, telephone entry system, computer input, fire dept. key switch & 3-push-button station.

Timer -- Adjustable timer can be set from 0 to 60 seconds.

Power Input On/Off Switch – Controls power input to the board with convenient switch.

Power Management – Board includes electronic power management with over current shutdown and automatic recovery.

Magnetic Lock – With Omni Option board, magnetic lock system is incorporated, allowing you to easily add the "MG1300" electromagnetic locking system to the gate.

Burglar Alarm – With Omni Option board, interfaces with existing home alarm or alarm output.

3 Push Button Control - On board gate operator control for close, stop, and open.

The SL-3000-UL™ is smooth and exceptionally quiet. This unit can handle continuous cycles daily with gates up to 1000 lbs. and 37 ft. in length and has a traveling speed of 12 inches per second. It is designed for high traffic applications such as heavily accessed gated communities and commercial buildings.

The SL-3000 Series slide gate operators are used by high demand customers and are the most popular slide gate operators in the country. Users include large development and management companies, as well as prestigious residential gated communities and custom homes.

Electrical Specifications

intelligent Master/Slave – Precise, synchronized movement and communication between two gate operators using 3 wire RS-485 bi-directional technology.

Spike Suppressors – 20,000 Amps and near lightning protection with modular omni surge suppressor. Initial response time: 0.000000000001 seconds.

Alternate Outputs – With Omni Option Board 3 push button command control, burglar alarm input and output. QCC option available.

Gate Traveling Time – Adjusted by a precision mechanical device and electrical limit switch system.

Soft Stop – Gate travels through the cycle at normal speed and comes to a stop slowly for more accurate gate cycle. Equipped with integrated time delay for long mechanical life expectancy.

Integrated Loop Detectors – Easy to install,modular, plug in loop detector inputs for exit loop, center loop, and safety loop.

120 VAC Power – Built-in 120 VAC power receptacle (NEMA 5-15).

Motor Drive – Solid-State electronic motor drive system is incorporated into board.

Safety Alarm – If the gate hits an object twice while opening or closing, the system will shut down and alarm will sound for five minutes. After five minutes the system will automatically reset itself. To reset the system during the five minutes, a manual reset button must be used.



Design and specifications subject to change without notice.

Elite's operators are skillfully crafted in the USA. Every unit is carefully inspected both electronically and mechanically to provide the quality expected. Elite uses computer aided design to assure the most precise fit for their operator components. High quality and years of proven reliability places Elite SL Series slide gate operators ahead of the competition.

plastic

cover

- •#41 chain is guided by two slotted UHMW rollers which prevent the chain from slipping off of the drive sprocket, thereby requiring less maintenance.
- ·The SL Series use a solid steel, machined pulley and notched v-groove belt for highly efficient torque transfer from motor to gear reducer.
- •The 1/2 HP, instant reversing parking gate motor uses high speed ball bearings for a smooth and quiet operation.
- ·A highly efficient, extremely quiet, 30 to 1 worm gear reducer is used.

Limit switch device with high speed ball bearings Heavy duty. lubricated in Modular and oil bath Omni Control Board Gold zinc plating High density polyethylene sheet metal

Mecanical Specifications

Chassis - Constructed with 1/4" sanded, welded, and gold zinc plated sheet metal.

Worm Gear Reduction - 30-to-1 worm gear reduction in an oil bath.

Motor - 1/2 hp, instant reversing, 120VAC, 4 amp, 1625 rpm, high speed ball bearings.

Cover - High density polyethylene plastic for excellent heat and corrosion resistance.

Finishing - All metal parts are gold zinc plated for rust proof protection.

Weight - 112 lbs. Shipping - 130 lbs.

Emergency Release - Hand crank is standard. Best option is our DC-1000U™.

Cycles - Continuous

30:1 ratio

gearbox

1/2 HP

instant

motor

1/4"

chassis

reversing

Output Shaft - 1" cold rolled steel.

Capabilities - Maximum gate length 37'. Maximum gate weight 1000 lbs.

Gate Traveling Speed* - 12" per second average.

Dimensions - L18" X W19" X H25"

Approval - ETL and UL Listed and compliant to UL325 and UL991 standards.



FEATURES OF THE SL-3000-UL™ SLIDE GATE OPERATOR



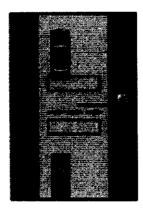
LIMIT SWITCH SYSTEM

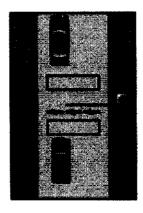
The SL-3000-UL™ is manufactured with a precision limit switch system. This system uses high speed ball bearings and high quality components for efficiency.

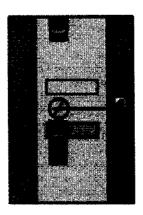


REVERSING SENSOR

The digital current sensor continuously monitors the motor current. It can be set for both the opening and closing cycles. If the gate is closing and hits a vehicle, the sensor detects the increased load on the motor and reverses. If the gate is opening and hits a vehicle, it stops and reverses 4 to 6 inches. The sensor is smart enough to operate on off-level installations and not to react to wind resistance.







QUICK CLOSE CIRCUIT

The QCC is a function of Elites' slide gate operators that can be enabled by installation of a optional "Code Button" into the OmniOption control board sold exclusively by Elite. Recommended for large gates, 16 feet and longer, this unit is ideal for industrial applications like storage facilities, warehouses, and gated communities with a guard house. The illustrations below visually describe the effectiveness of the QCC. Picture #1: The authorized command vehicle enters and leaves the loop. Picture #2: The gate closes as the authorized vehicle clears the loop. Picture #3: Unauthorized vehicle attempts to enter, but QCC stops the gate, which forces the unauthorized vehicle to either move ahead (if there is room) or back up. QCC will not reset until the unauthorized vehicle has cleared the loop.



OMNICONTROL BOARD

All new UL model Elite SL-3000-UL™ commercial slide gate operators now use the OmniControl™ board for enhanced, reliable operation conforming to the new UL-325 and UL-991 specifications. This advanced electronic control board now offers integrated functions to make all input and outputs of the gate operator easy to access. It offers solid state motor control, spike suppressors, safety alarm and many other unique features. The new OmniControl™ board assures the latest requirements and most advanced technology in the industry, keeping all Elite commercial operators in a class by themselves.

PLUG-IN LOOP DETECTORS

These high quality loop detectors are for use with the Elite Omni Board. The electronics are manufactured exclusively for Elite by Reno A&E, a respected name in loop detection technology. With Elite's proven design and integration technology, these component detectors will make installation and maintenance of loop detection systems simple. They are available for use with the SL-3000-UL™ for Exit Loop and Safety Loop.

STANDARD LIGHTNING PROTECTION

Elite undertook the project of protecting the Elite commercial gate operators against lightning strike with a level of protection up to a 50 foot radius of near lightning strike. The result of this project is a terminal block that has been specifically designed to prevent damage to the OmniBoard caused by lightning strike. The ability to handle high power and the fast response capability is accomplished by the use of a two-stage, hybrid network of surge suppressors integrated in the terminal block. This network of surge suppressors will protect a total of 11 lines for the gate operators (3 lines for the master/slave communication, and 8 lines for the various input commands). The 110 volt power line protection on the OmniBoard and the Plug-In Loop Detectors is built into the OmniBoard itself.

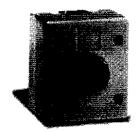


OPTIONAL ITEMS FOR THE SL-3000-UL™ SLIDE GATE OPERATOR

POWER WHEELS

The 4", 5" and 6" Power WheelsTM are manufactured by a computer controlled lathe machine and made from solid, cold rolled steel. They can be used on heavy gates and never require any maintenance. Power WheelsTM are 30% more efficient in torque transfer from wheels to operator than other wheels such as cast iron or plastic. They are available in two models, the gold zinc plated Power WheelTM or the heated treated Power Wheel 2TM, for extra durability and rust resistance.





ALARM RESET BUTTON

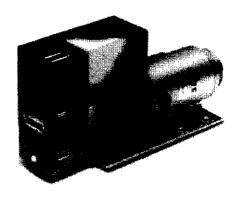
The optional safety alarm reset button will instantly reset the built-in safety alarm siren on all new OmniControl operators, allowing normal function without waiting for the alarm status to time out.

THE DC-1000 POWER BACKUP

Don't be a prisoner of your own gate. Using the DC-1000U™ keeps traffic moving during a power failure.

Set up A: In case of a power failure, the gate will open automatically. When the power is restored, the operator will return to normal condition.

Set up B: Gate will not open automatically until activated by a key switch, push button, or dry contact adjustable command.



GEARBOX HEATER

An optional gearbox heater is available to keep the gearbox running in it's optimum temperature range.

