

## INSTALLATION INSTRUCTIONS <u>MODEL SG30-RG-(INCANDESCENT LAMPS)</u> <u>and MODEL SG30-RG-LED (LED LAMPS)</u> STOP & GO COMMUNICATION LIGHTS

## **VOLTAGE REQUIREMENTS:**

- Provide either AC or DC power to the 12 and 24-volt incandescent models.
- Provide **ONLY** DC power to the 12 and 24-volt <u>LED</u> models. (<u>Important Note</u>: LED models require careful control of the DC input voltages if generated from AC power sources. Carefully measure "rectifying modules" that turn ac signals into dc signals and adjust the input ac voltages to insure the dc voltages do not exceed 26.4 vdc.)
- Warning: Excess peak voltages may cause this unit to prematurely fail, resulting in partial or total loss of the warning capabilities of this device. Insure that the dc voltage applied never exceeds 26.4 vdc as measured by a peak reading voltmeter.

## MODEL: SG30 (Combination System)

The SG30 consists of an SG20 (acting as the Control Unit with appropriate flasher and a center off switch. SG10 (acting as the Drone Unit), and a communication cable for interconnection. Switching the Control Unit causes the red or the green lamp to flash on the Control Unit and the opposite lamp to flash on the Drone Unit. The user is responsible for providing the proper power supply to the units, interconnecting the units, and choosing a switching means. (See the schematic diagrams that show the wiring of the two units.)

**INSTALLATION:** Choose an inside wall location for the SG20 (control unit containing switching capability and pre-wired interconnecting communication cable) that is clearly visible to the operators.

- 1) Choose an outside wall location for the SG10 (drone unit without switch) that is clearly visible to a driver when backing into the loading dock.
- 2) Determine the route for the communication cable between the two units.
- 3) Using the housing as a template, mark and drill the four mounting holes. Mounting hardware will depend upon the construction of the wall and is not included.
- 4) Mount the SG20 control unit with attached communication cable, using the gasket provided.
- 5) Make the connections to the drone unit (SG10 without a switch) external to the light using suitable 'wire nuts' or compression fittings, following the block diagram(s) provided. **Do not make any changes to the wiring inside either unit.**
- 6) Apply appropriate power and check operation: the switch on the inside-mounted control unit should cause either the red or green lamp to flash on the control unit and the opposite to flash on the drone unit. The center position will turn both units off. When installing a system that includes external sensors or logic other than that built into the SG30 we recommend you use SG10 units with your own flashing power source, or model SG20NS which is equipped with a flasher but not a switch. We do not recommend modifying any models.

| Part # | Incandescent Lamp Models | Part #  | LED Models                               |
|--------|--------------------------|---------|--|
| 203011 | Red lens w/ housing      | A1612R  | Red signal assembly, complete, 12 VDC    |
| 203012 | Green lens w/ housing    | A1612G  | Green signal assembly, complete, 12 VDC  |
| 420336 | 1156-style 12 v. lamp    | A1624R  | Red signal assembly, complete, 24 VDC    |
| 423036 | 2233-style 24 v. lamp    | A1624G  | Green signal assembly, complete 24 VDC   |
| 420705 | 25T7DC-style 120v. lamp  | A16115R | Red signal assembly, complete 120 VAC    |
| 533003 | Lamp Harness, 12v. 24v.  | A16115G | Green signal assembly, complete, 120 VAC |
| 533004 | Lamp Harness, 120 v. ac  |         | · · · · ·                                |

| All SG Models |   |         |                                |  |
|---------------|---|---------|--------------------------------|--|
| 203014T       | Housing with rear panel                   | 813008  | Wall gasket                    |  |
| 403005        | Switch                                    | 163296T | Flasher, solid state, 12 v. DC |  |
| 410403        | <sup>1</sup> / <sub>2</sub> ' EMT fitting | 163297T | Flasher, solid state, 24 v. DC |  |
| 630975        | X2 Capacitor (120/240 VAC)                | 553030  | Flasher, solid state, 120 v ac |  |
|               | Incandescent Lamp models only)            |         |                                |  |

