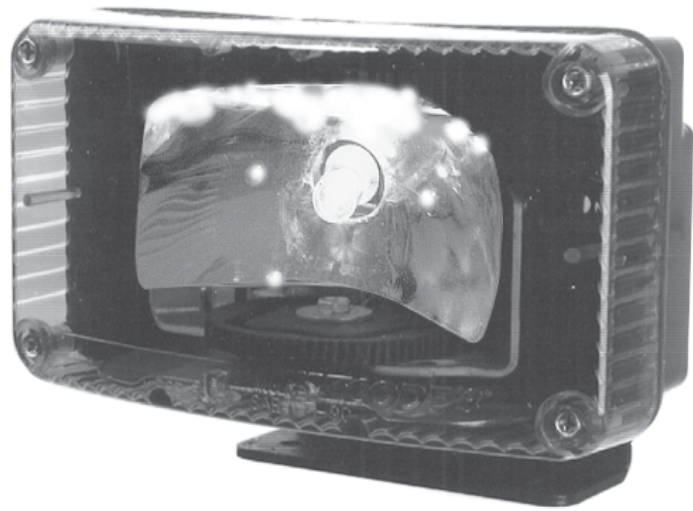


# INSTALLATION & OPERATION MANUAL

MODEL  
OLRD  
OLDM  
Patent Pending



Code 3,® Inc., a subsidiary of  
Public Safety Equipment, Inc.

**CODE 3**<sup>®</sup>  
PUBLIC SAFETY EQUIPMENT, INC.

# OSCILASER<sup>™</sup>

## OSCILASER<sup>™</sup>

### REAR DECK/DASH MOUNT

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**IMPORTANT:**

*Read all instructions and warnings before installing and using.*

**INSTALLER:**

*This manual must be delivered to the end user of this equipment.*

## Introduction

The OLRD is an oscillating warning light designed to be mounted with the "L" bracket included in the rear deck or front bumper of a vehicle. The OLDm is the same oscillating light assembly with the addition of a cord and cigarette lighter plug, as well as an adjustable mounting bracket for use in the front windshield area of a vehicle. Both of these highly effective warning light systems feature the Oscilaser™ light assembly with its constant 35 watt for 12V and 32 watt for 24V Halogen signal that covers all areas within its field of illumination at least once per second.



### WARNING!

The use of this or any warning device does not insure that all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. The effectiveness of this warning device is highly dependent upon correct mounting and wiring. Read and follow the manufacturer's instructions before installing or using this device. The vehicle operator should insure daily that all features of the device operate correctly. In use, the vehicle operator should insure the projection of the warning signal is not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions.

This equipment is intended for use by authorized personnel only. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should check all applicable city, state and federal laws and regulations.

Public Safety Equipment, Inc., assumes no liability for any loss resulting from the use of this warning device.

Proper installation is vital to the performance of this warning device and the safe operation of the emergency vehicle. It is important to recognize that the operator of the emergency vehicle is under psychological and physiological stress caused by the emergency situation. The warning device should be installed in such a manner as to: A) Not reduce the output performance of the system, B) Place the controls within convenient reach of the operator so that one can operate the system without losing eye contact with the roadway.

Emergency warning devices often require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.

**PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.**

## Unpacking and Preinstallation

Carefully unpack the unit and check the contents against the parts list on page # 5 of this booklet. Be careful to open the proper end of the Oscilaser light carton so the lens is not damaged or cut. Test the operation of the Oscilaser light assembly before installation by connecting the red power wire to applicable +12 or 24 volt D.C. lead and the black wire to ground (earth).

## Installation and Mounting



### WARNING!

Larger wires and tight connections will provide longer service life for components. For high current wires it is highly recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g. 3M® Scotchlock type connectors). Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. High ambient temperatures (e.g. underhood) will significantly reduce the current carrying capacity of wires, fuses, and circuit breakers. Use "SXL" type wire in engine compartment. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to



## WARNING!

anchor and protect all wiring. Fuses or circuit breakers should be located as close to the power takeoff points as possible and properly sized to protect the wiring and devices. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity. Ground terminations should only be made to substantial chassis components, preferably directly to the vehicle battery. The user should install a fuse sized to approximately 125% of the maximum Amp capacity in the supply line to protect against short circuits. For example, a 30 Amp fuse should carry a maximum of 24 Amps. **DO NOT USE 1/4" DIAMETER GLASS FUSES AS THEY ARE NOT SUITABLE FOR CONTINUOUS DUTY IN SIZES ABOVE 15 AMPS.** Circuit breakers are very sensitive to high temperatures and will "false trip" when mounted in hot environments or operated close to their capacity.

**NOTE :** All of the information listed in this booklet must be given to the end user by the installer.

### OLRD INSTALLATION:

#### Mounting the L Bracket

- 1) Choose a suitable location for mounting the Oscilaser. Using the square mounting holes in the bottom of the bracket as a template, mark the mounting hole positions. (NOTE: The bracket bottom "L" can be turned either direction based on mounting requirements.) Drill one (5/16)" hole at each mark.
- 2) Using the supplied lockwashers, nuts, and carriage bolts, mount the bracket to the drilled holes. (See Figure 2.) Insure that the fasteners are sufficiently tight.

#### Mounting the Oscilaser:

- 3) To install the Oscilaser to the "L" Bracket, remove four lens screws and pull lens from housing. Pull the Oscilaser oscillating unit (Part #2) from housing.
- 4) Insert the supplied plastic inserts (Part #7) into the back of the bracket. (Note: push the inserts in from the side that the light will be mounted on.)
- 5) Using the supplied screws and washers (Parts #5 and #6, see Figure 1), attach the housing to the inserts in the bracket. Insure that the fasteners are sufficiently tight.
- 6) Reassemble the Oscilaser, making sure not to pinch the wires when tightening the lens screws.

### OLDM INSTALLATION:

The OLDM can be mounted with the "L" Bracket in the same fashion as described above or it can be mounted using the adjustable bracket.

- 1) Assemble the Dash Mount bracket according to Figure 2 or 3 per applicable mounting.
- 2) Find a suitable flat mounting position for the unit.

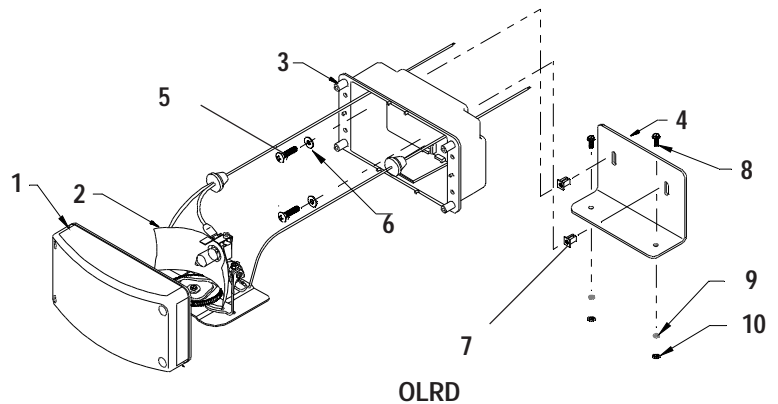


FIGURE 1

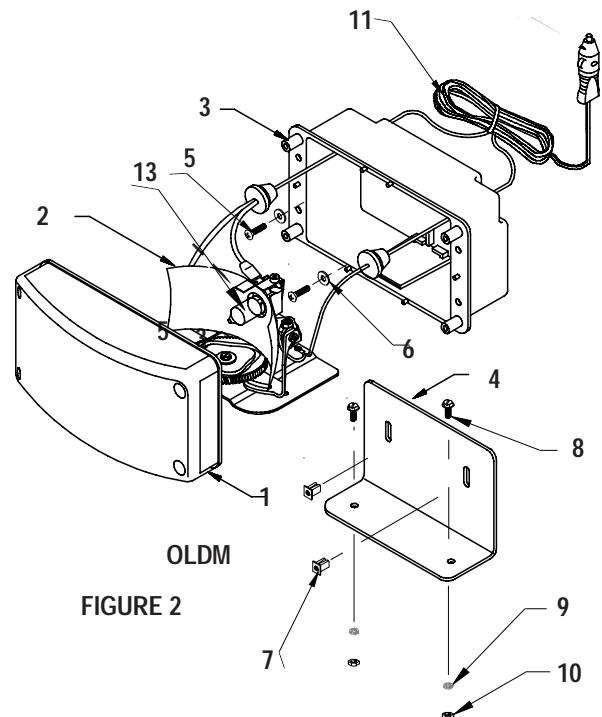


FIGURE 2

- 3) Peel the protective paper backing from one side of a piece of the double-sided tape and stick it to the top of the bracket, (See Figure 3) for modes with adjustable mounting brackets.
- 4) Peel the remaining side of the paper and attach the bracket to the Oscilaser .
- 5) Peel the paper backing from one side of the other piece of double-sided tape and stick it to the bottom of the bracket.
- 6) Remove the remaining side of paper and adhere it to the desired surface.

#### WIRING THE OSCILASER:

- 1) Using one of the supplied butt splices, connect the red power wire to the appropriate switched positive(+) lead from the lighting control.
- 2) Using the remaining butt splice, connect the black ground (earth) wire to the vehicle chassis or a negative (-) wire lead.  
(For fusing purposes, each Oscilaser draws approximately 4 amps.)



When mounting the Oscilaser™ units inside the vehicle on the rear deck, make sure they are securely fastened so that in the event of a collision they do not break free and injure the vehicle occupants.

#### WARNING!

## Maintenance

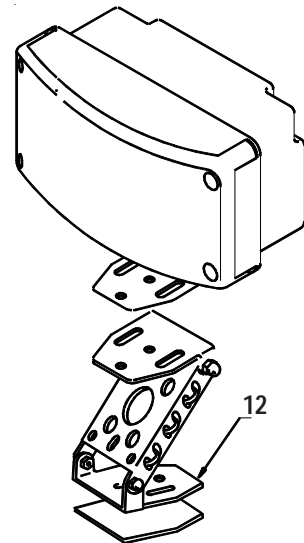
If necessary, maintenance of your Oscilaser involves the cleaning of the lens and the replacement of the lamp on the Oscilaser assembly.

## Cleaning

Clean with soap and water to remove all salt, dirt or mud. Do not use any abrasive cleaners or harsh chemicals, because the polycarbonate lens will scratch very easily. Polish the lens with PSE lens polish and a soft paper cloth or towel.

## Changing Lamps

To remove the lens, remove the 4 corner #8 x 5/8" stainless steel screws. Using a glove or cloth for hand protection, push in the defective lamp and turn counter clockwise until the lamp can be removed. Install a new Osram 64170 AX or equal bayonet-base lamp (non ceramic base lamps are recommended) and replace lens.



ADJUSTABLE MOUNTING BRACKET

FIGURE 3



Lamps are extremely hot! Allow to cool completely before attempting to remove. Gloves and eye protection should be worn when handling halogen lamps as they are pressurized and accidental breakage can result in flying glass.

#### WARNING!

## Troubleshooting guide

PROBLEM (OSCILASER™ LIGHT)	PROBABLE CAUSE	REMEDY
NO LIGHT AND NO OSCILLATION	1) OPEN CIRCUIT IN WIRING 2) LAMP AND MOTOR ARE DEFECTIVE 3) SHORT CIRCUIT	1) CLOSE CIRCUIT BY CHECKING CONNECTIONS 2) RETURN OSCILASER ASSEMBLY FOR REPAIR 3) CHECK FOR SHORTS IN LAMP ASSEMBLY OR WIRING
OSCILLATES WITH NO LIGHT	1) LAMP IS DEFECTIVE 2) WIRING TO LIGHT, IS LOOSE OR DISCONNECTED.	1) REPLACE LAMP 2) RECONNECT WIRE TO OSCILASER LIGHT
LIGHT IS ON WITH NO OSCILLATION	1) MOTOR IS DEFECTIVE 2) WIRING TO MOTOR IS LOOSE OR DISCONNECTED	1) RETURN ASSEMBLY FOR REPAIR 2) RESOLDER WIRE TO MOTOR
LIGHT IS ON WITH SLOW OR ERRATIC MOVEMENT OF OSCILASER	1) OSCILASER ASSEMBLY IS DEFECTIVE 2) LOW VEHICLE VOLTAGE	1) RETURN ASSEMBLY FOR REPAIR OR REPLACEMENT 2) CHECK VEHICLE VOLTAGE
WATER IS COLLECTING IN HOUSING	1) WIRING HOLES ARE NOT SEALED PROPERLY 2) HOUSING GASKET IS DEFECTIVE	1) RESEAL HOLES WITH CAULK 2) REPLACE HOUSING GASKET ASSEMBLY
UNIT BURNS FUSES/TRIPS CIRCUIT BREAKERS	1) SHORT CIRCUIT	1) CHECK ASSEMBLY AND WIRING FOR SHORT CIRCUIT

## Parts & Exploded Views

<u>Ref.</u>	<u>Description</u>	<u>Part No.</u>
1	Green Lens	T05530
	Clear Lens	T05531
	Red Lens	T05532
	Blue Lens	T05533
	Amber Lens	T05534
2	OsciLaser Assembly	S50031
3	Housing	T03759
	Gasket	T06512
4	"L" Bracket	S85897
5	Sheet Metal Screw (6 x 1/2, "B" pt)	T06213
6	#6 Flat washer	T10155
7	Plasti - Grommet	T06521
8	C-Bolt, 5/16 - 18 x 3 1/2"	T06716
9	5/16" Split Lockwashers	T00245
10	Nut, Hex Head, 5/16" T00244	
11	Cordset	T01590
12	Adjustable Mounting Bracket	S18314
13	Lamp 35 watt Halogen for 12V	T01542
	Lamp 32 watt Halogen for 24V	T05160

### Parts Not Shown

Mounting Kit - Rear Deck and Dash mount  
HEYCO Snub bushings

T09004  
T06523

(2) for OLDLM model only





# WARRANTY

This product was tested and found to be operational at the time of manufacture. Provided this product is installed and operated in accordance with the manufacturer's recommendations, Code 3, Inc. guarantees all parts and components except the lamps for a period of 1 year from the date of purchase or delivery, whichever is later. Units demonstrated to be defective within the warranty period will be repaired or replaced at the factory service center at no cost.

Use of a lamp or other electrical load of a wattage higher than installed or recommended by the factory, or use of inappropriate or inadequate wiring or circuit protection causes this warranty to become void. Failure or destruction of the product resulting from abuse or unusual use and/or accidents is not covered by this warranty.

Code 3, Inc. shall in no way be liable for other damages including consequential, indirect or special damages whether loss is due to negligence or breach of warranty.

**CODE 3, INC. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS OR MERCHANTABILITY, WITH RESPECT TO THIS PRODUCT.**

# PRODUCT RETURNS

In order to provide you with significantly faster service, if you are going to return a product for repair or replacement\*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you mail the product to PSE. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit. All plastic domes and optical lenses are NOT returnable for credit or exchange.

\*PSE reserves the right to repair or replace product at its discretion. PSE assumes no responsibility or liability for expenses incurred for the removal and/or reinstallation of products requiring service and/or repair.

**NEED HELP? Call our Technical Assistance Hotline - (314) 996-2800**

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Public Safety Equipment, Inc.

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