

## Model VALS

Visalert® Strobe Light on Horns and Speakers  
256886 Rev I2 0623

**Limited Warranty:** This product's limited warranty can be found at [www.fedsig.com/SSG-Warranty](http://www.fedsig.com/SSG-Warranty)

**SAFETY MESSAGES TO INSTALLERS AND USERS** :  
Products should be installed by a licensed electrician and follow all safety instructions. Failure to do so may result in property damage, serious injury, or death.

- Read and understand all instructions before installing or operating this equipment.
- Disconnect power before installation or maintenance.
- In order to be an effective warning device, this product produces bright light that can be hazardous to your eyesight. The possibility exists that rapid flashing lights could induce photosensitive epilepsy. Do not stare directly at the light.
- Establish a procedure to routinely check the light system for proper activation and operation.

**OVERVIEW** - This sheet provides the user with instructions for the installation of Strobe Warning Lights on horns and speakers. All instructions assume that mounting provisions have been completed and electrical power has been routed to the installation site.

The warning light can be weatherproofed by installing the supplied gasket. The audible signal or adapter plate should be weatherproofed by using the proper electrical box.

**Unpacking the Device:** After unpacking the device, examine it for damage and verify parts. If a part is missing or damaged, do not attempt to install, and contact Federal Signal Customer Support.

## Installing the Device

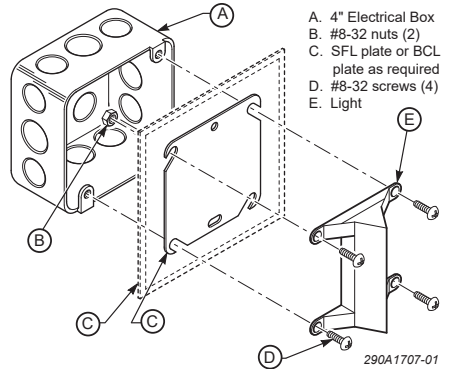
### Installing on Adapter Plate

**Use only 14 to 18 AWG wire for power connection. Strip no more than 0.25-inch of wire insulation from the ends of the power leads.**

1. Insert bushing (supplied) into adapter plate. Route power leads through the slot in the BCL or SFL Adaptor Plate, as shown in Figure 1.
2. Snap the front cover of the light off. Route power leads through board assembly as shown in Figure 2.
3. Connect the power leads to the terminals of the two position connector by inserting the stripped ends of the wire into the connector as far as they can travel, polarity **MUST** be observed on DC units. Make sure supply lead insulation is flush with connector. If stranded wire is used, be sure that there are no loose strands outside the connector plug that could touch the adjacent lead and cause a short circuit.
4. Replace cover on light, lens should snap onto board assembly.
5. Attach the light to the adapter plate, using two of the 8-32 screws and nuts supplied.
6. Attach the adapter plate to the 4-inch electrical box with two 8-32 screws.

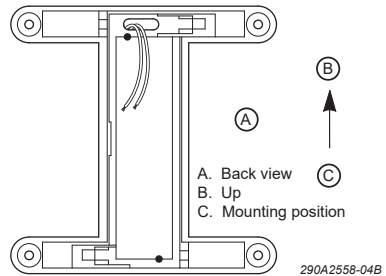


**Figure 1 Exploded view**



2. Snap the front cover of the light off. Route power leads through board assembly as shown in Figure 2.

**Figure 2 Route power leads**



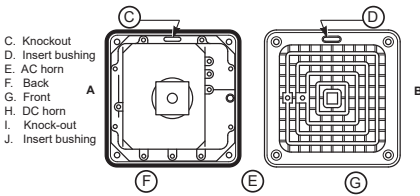
3. Connect the power leads to the terminals of the two position connector by inserting the stripped ends of the wire into the connector as far as they can travel, polarity **MUST** be observed on DC units. Make sure supply lead insulation is flush with connector. If stranded wire is used, be sure that there are no loose strands outside the connector plug that could touch the adjacent lead and cause a short circuit.
4. Replace cover on light, lens should snap onto board assembly.
5. Attach the light to the adapter plate, using two of the 8-32 screws and nuts supplied.
6. Attach the adapter plate to the 4-inch electrical box with two 8-32 screws.

## Installing on Four-inch Horns

Use only 14 to 18 AWG wire for power connection. Strip no more than 0.25-inch of wire insulation from the ends of the power leads.

1. Turn off power to the horn and detach the horn from its mounting location by removing the slotted screws. Disconnect all electrical connections to the horn.
2. Using a small blunt tool, such as a pin punch, knock out the slot in the horn housing from the rear. See Figure 3. Figure 3 shows the mechanism removed from the horn for clarity. DO NOT remove the mechanism before knocking out the slot.

Figure 3 Knockout

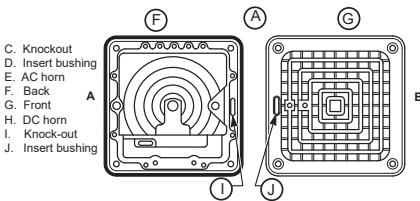


- C. Knockout
- D. Insert bushing
- E. AC horn
- F. Back
- G. Front
- H. DC horn
- I. Knock-out
- J. Insert bushing

3. Insert the supplied nylon bushing into the slot from the front of the horn as indicated in Figure 4.

**NOTE:** In order to properly seat the bushing, excess burrs must be removed from the slot area.

Figure 4 Bushing



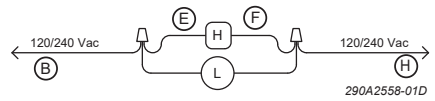
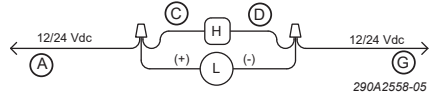
- C. Knockout
- D. Insert bushing
- E. AC horn
- F. Back
- G. Front
- H. DC horn
- I. Knock-out
- J. Insert bushing

4. Remove the two Phillips head screws from the corners of the horn. Retain the screws.
5. Route power leads through the horn and through the nylon bushing.
6. Snap the front cover of the light off. Route power leads through board assembly as shown in Figure 2.
7. Connect the power leads to the terminals of the two-position connector by inserting the stripped ends of the wire into the connector as far as they can travel, polarity MUST be observed on DC units. Make sure supply lead insulation is flush with connector. If stranded wire is used, be sure that there are no loose strands outside the connector plug that could touch the adjacent lead and cause

a short circuit. Replace cover on light, lens should snap onto board assembly.

8. If the horn is to be flush mounted, attach the accessory plate at this time. Position the light so that the wires are directly over the nylon bushing and the wires will not be visible after the light is attached. Attach the light to the horn, using the two screws that were removed in step 4.
9. Connect the light leads following the diagram in Figure 5. Insulate all splices.

Figure 5 Wire connections



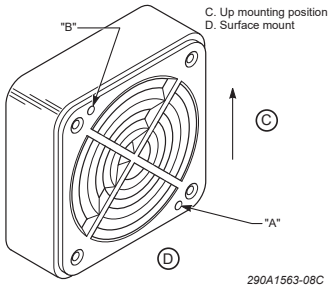
- A. Positive (+)
- B. Phase
- C. Red
- D. Black
- E. Black
- F. White
- G. Negative (-)
- H. Common

## Installing on Four-inch Speakers

Use only 14 to 18 AWG wire for power connection. Strip no more than 0.25-inch of wire insulation from the ends of the power leads.

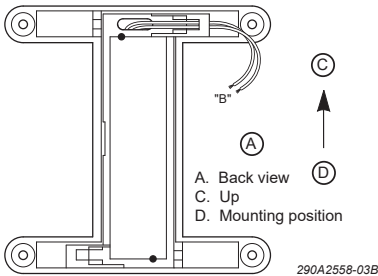
1. Remove the two Phillips-head screws from the front of the speaker. Retain the screws.
2. Using a small pin punch or similar blunt tool, knock out hole "B" from the rear of the speaker, if a two wire light is being installed. If a four wire light is being installed, knock out both holes "A" and "B" from the rear of the speaker. If the speaker is housed in a metal enclosure, use a round file to remove any burrs that may be present. Figure 6 shows a basic 4-inch speaker enclosure containing no parts other than the speaker. However, some 4-inch speaker units do include components in addition to the speaker. DO NOT remove any parts before knocking out the holes indicated in Figure 6.

**Figure 6 Speaker enclosure**



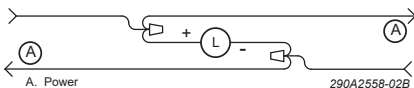
3. Route power leads through the horn and out of knockout hole "B", see Figure 6.
4. Snap the front cover of the light off. Route power leads through board assembly as shown in Figure 7.

**Figure 7 Route power leads**



5. Connect the power leads to the terminals of the two-position connector by inserting the stripped ends of the wire into the connector as far as they can travel, polarity **MUST** be observed on DC units. Make sure supply lead insulation is flush with connector. If stranded wire is used, be sure that there are no loose strands outside the connector plug that could touch the adjacent lead and cause a short circuit. Replace cover on light, lens should snap onto board assembly.
6. Connect the leads to the power source. Polarity on AC units does not matter. Insulate all splices. See Figure 8.

**Figure 8 Power**

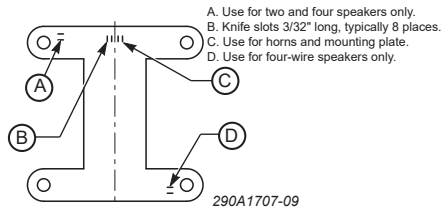


## Installing the Gasket

The light can be weatherproofed by installing the supplied gasket and mounting on a weatherproof horn/speaker, or by using the BCL plate to mount the strobe on a WB backbox. Slots are provided in the gasket which allow the light wires to pass to the audible device.

The slots can be located by gently pulling on the gasket near the applicable slots. See Figure 9. Note that there are four slots in the upper-center of the gasket. These slots should be used when the light is to be installed on a horn or mounting plate. To install, merely run the light wires through the applicable slots and seat the gasket firmly on the light. See Figure 9.

**Figure 9 Slots**



Refer to the previously described applicable installation instructions.

## Replacing the Strobe Tube

Disconnect power from the electrical circuit. Wait five (5) minutes before removing lens. Remove the screws fastening lens to mounting surface. Snap lens off of mounting plate. Carefully remove the burnt out strobe tube, it is best to lift from both sides at once.

Replace the new tube making sure all three pins enter the board connectors applying pressure slowly to ends of tube, preferably the outer leads. Place the outer lens back into position, reinstall referring to appropriate previous installation instruction as necessary.

## Maintenance and Service

**Technical Assistance:** Contact our Technical Support Team at +1 708-587-3587 or [signalsupport@fedsig.com](mailto:signalsupport@fedsig.com).

**Repair Service:** A return authorization is required. Contact your Authorized Distributor or Federal Signal Customer Support. Defective products under warranty will be repaired or replaced at Federal Signal's discretion.

**Product Returns:** Returns require authorization from Federal Signal. Contact your Authorized Distributor for more information on our return policy or to request a return.

## Replacement Parts

Contact the factory for spare parts availability and part numbers. Typical spare parts are listed below. Due to certification, certain component parts are not available for field replacement. Units with this type of damage must be either replaced entirely or returned to Federal Signal for service.

Description	Part Number
Strobe Tube	K149128A



## FEDERAL SIGNAL Safety and Security Systems

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Additional translations available at [signaling.fedsig.com](http://signaling.fedsig.com)

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