

# WHELEN<sup>®</sup>

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## Installation Guide: 9M Mini Edge<sup>®</sup> Lightbar

### Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**
- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr any holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**
- **If this product is mounted with tape or Velcro<sup>™</sup>, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.**
- **Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owners manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.**
- **For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post.**
- **If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.**
- **Do not attempt to activate or control this device in a hazardous driving situation.**
- **This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.**
- **Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.**
- **It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.**
- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

### **Mounting your Lightbar / Permanent style:**

Refer to the Lightbar mounting guide included with your lightbar.

### **Mounting your Lightbar / Magnetic style:**

Place the lightbar onto the vehicle and connect to power.

**WARNING! The use of any magnetically mounted warning light on the outside of a vehicle, while in motion, is not recommended and is at the sole discretion and risk of the user.**

### **Wiring:**

Models featuring a cigar plug adaptor are simply plugged into your vehicles cigar lighter for a power connection.

For models with an 11 conductor cable, the wire function chart below provides necessary wiring and fusing information.

**WARNING! All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and FUSED at the battery to carry that load. DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

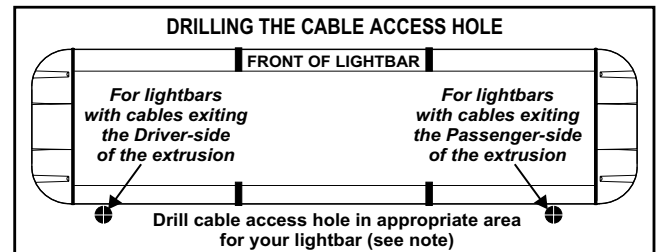
### **11 Conductor Control Cable:**

<u>WIRE</u>	<u>To</u>	<u>FUNCTION</u>	<u>Fuse Wire @</u>
RED	+12VDC	9M412 Power Supply	10 Amps
GREY	+12VDC	Activates Front Corner Strobes	1 Amp
WHITE-BLUE	+12VDC	Activates Rear Corner Strobes	1 Amp
WHITE	+12VDC	Powers Driver's Alley Light	5 Amps
YELLOW	+12VDC	Powers Passenger's Alley Light	5 Amps
WHITE-BLACK	+12VDC	Powers Take Down Lights	10 Amps
WHITE-VIOLET	+12VDC	Powers Inboard Strobes	5 Amps
VIOLET	+12VDC	Activates Strobe Low Power	1 Amp
BLACK	Ground	9M412 Power Supply	N/A
BLACK-WHITE	Ground	Accessories	N/A
BLACK-YELLOW	Ground	CS225 Power Supply	N/A

### **Routing your Lightbar Cable:**

1. To protect the headliner from damage caused by drilling the cable access hole, allow a 5" to 7" distance between roof and headliner by lowering the headliner before drilling.
2. Using a 1" hole saw, drill the cable access hole.

**WARNING! There may be a roof support member that spans the distance between the driver's and passenger's side. DO NOT DRILL THROUGH THIS MEMBER! Adjust the location until the hole can be drilled without contacting this support.**



3. Using a round file, smooth and de-burr the edges of the hole. Insert a 1" grommet (user supplied) into the cable access hole.
4. Insert the cable(s) through the cable access hole into the vehicle. Use RTV silicone to weatherproof the access hole after the cable is pulled completely into the vehicle.
5. Route the cable(s) one at a time to their respective destinations (power cable to vehicle battery; control cable to customer switch panel). It is left to the installation technician's discretion to select a path for these cables that will both protect the cables from possible damage and not interfere with the operation of any other vehicle components or equipment. Refer to the instructions included with your switches for switch wiring information.

**Internal Fuses:**

Your lightbar has reverse polarity protection. If the lightbar will not turn on, inspect the internal fuse. If blown, disassemble the lightbar and replace with one of an identical rating. See diagram at right

**Maintenance:**

If you need to add or replace lighthead or filler panels or service your lightbar, the diagrams below will show you how to gain access to the lightbar.

**WARNING!**The strobe light power supply is a high voltage device. Do not remove the strobe tubes or dismantle the strobe lighthead in the system while the unit is in operation. Wait 10 minutes after turning off power before starting work on the system.

