



Connector Snow Plow Array Instructions

The following is a list of recommended practices for the installation and operation of your light.

FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY AND/OR DEATH TO YOU AND YOUR PASSENGERS

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures. You may need to consult a professional for installation.
- SWS Warning Systems Inc. recommends the use of waterproof butt splices and/or connectors for all electrical connections. It is recommended that the use of good dielectric grease be used on all connections where possible.
- SWS Warning Systems Inc. does not recommend leaving a magnetically mounted light on a vehicle while the vehicle is in motion. The owner does so at their own risk.
- 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. Also de-burr the holes and remove any metal shards or remnants. Grommets are recommended for all wire holes.
- Do not mount the light close to antennae or radio equipment, as they may cause electromagnetic interference. After installation of the light, it is necessary to test all electronic equipment simultaneously to ensure that they operate free of interference from other components within the vehicle.
- Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communication equipment.
- Do not install this product or route any wires in the deployment area of your air bag or areas that interfere with the operation of the vehicle. Refer to your vehicle owner's manual for the air bag deployment area and recommended mounting areas for warning lights and other equipment.
- Do not attempt to activate or control the device with the vehicle in motion or in a hazardous driving environment. The vehicle should be stopped and in park before control of the light is attempted.
- Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the product. Use of other chemicals could result in degradation and discolouration of the lens/dome.
- Do not use a pressure washer to clean this product.
- Inspect and operate this product regularly to confirm its proper operation and mounting condition.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.
- SWS Warning Systems Inc. and its subsidiaries are not responsible for any damages due to improperly mounted or improperly wired lighting equipment.

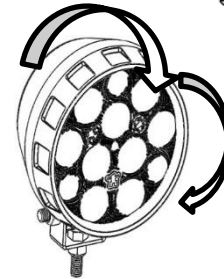
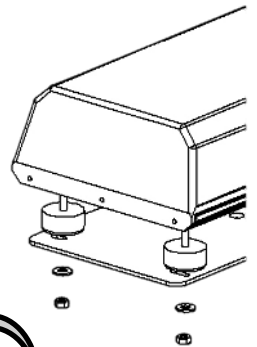
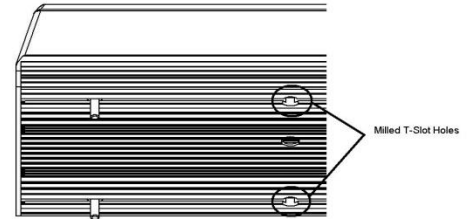
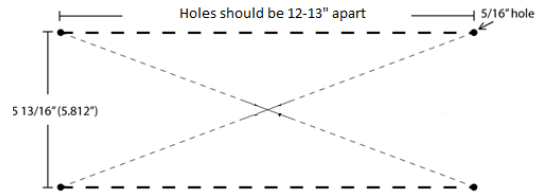
Mounting

- The Main Junction Box can be mounted anywhere on the vehicle, to facilitate the connection requirements and summer/winter modifications as per the owners requirement.

Minibar Permanent Mount

Select a surface where the light is visible and free of obstruction. Mounting brackets are available from the manufacturer if required.

- A straight level is highly recommended to ensure the light is level on two axes.
 - Ensure the vehicle is on level ground when installing.
 - Outer dome does not require removal for installation.
 - Take note of the "Pattern Starts Here" label. It must face the front of the vehicle.
1. If you are not using an SWS mounting bracket, use the images on the right as a guide. Drill four $\frac{5}{16}$ " holes as shown and wire holes of appropriate size (if desired).
 2. Take the four $\frac{1}{4}$ "-20 bolts and insert them into the T-slots on the bottom of the base of the light. Look for the milled holes to insert the bolt heads.
 3. Slide one bolt to each corner of the base approximately 1.5 - 2 inches in from the edge.
 4. Place the large rubber grommet into the hole drilled in the mounting surface for wires.
 5. Place the 4 rubber standoffs on each bolt from the underside of the light.
 6. If your light has an external connector, connect the wiring pigtail to the connector prior to the next step. A small amount of dielectric grease is recommended.
 7. Pass the bolts through the mounting surface keeping the rubber standoffs between the light and the mounting surface. Be sure to pass the wires through their grommet.
 8. From the underside of the mounting surface, place a flat washer and self-locking nut onto each bolt.
 9. Tighten the nuts with a $\frac{7}{16}$ " wrench while using a straight level to ensure the light is level.



Flashing Floodlight Permanent Mount

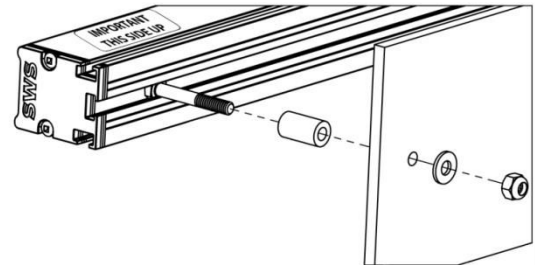
Select a surface where the light is visible and free of obstruction.

1. Drill a $\frac{3}{8}$ " hole into the mounting surface.
2. Pass the vertical bolt through the mounting surface and secure with the supplied nylock.
3. Adjust the pivot to the desired position, and then tighten with a $\frac{1}{2}$ " wrench or socket.
4. Adjust the tilt to the desired location, and then tighten the horizontal bolt.

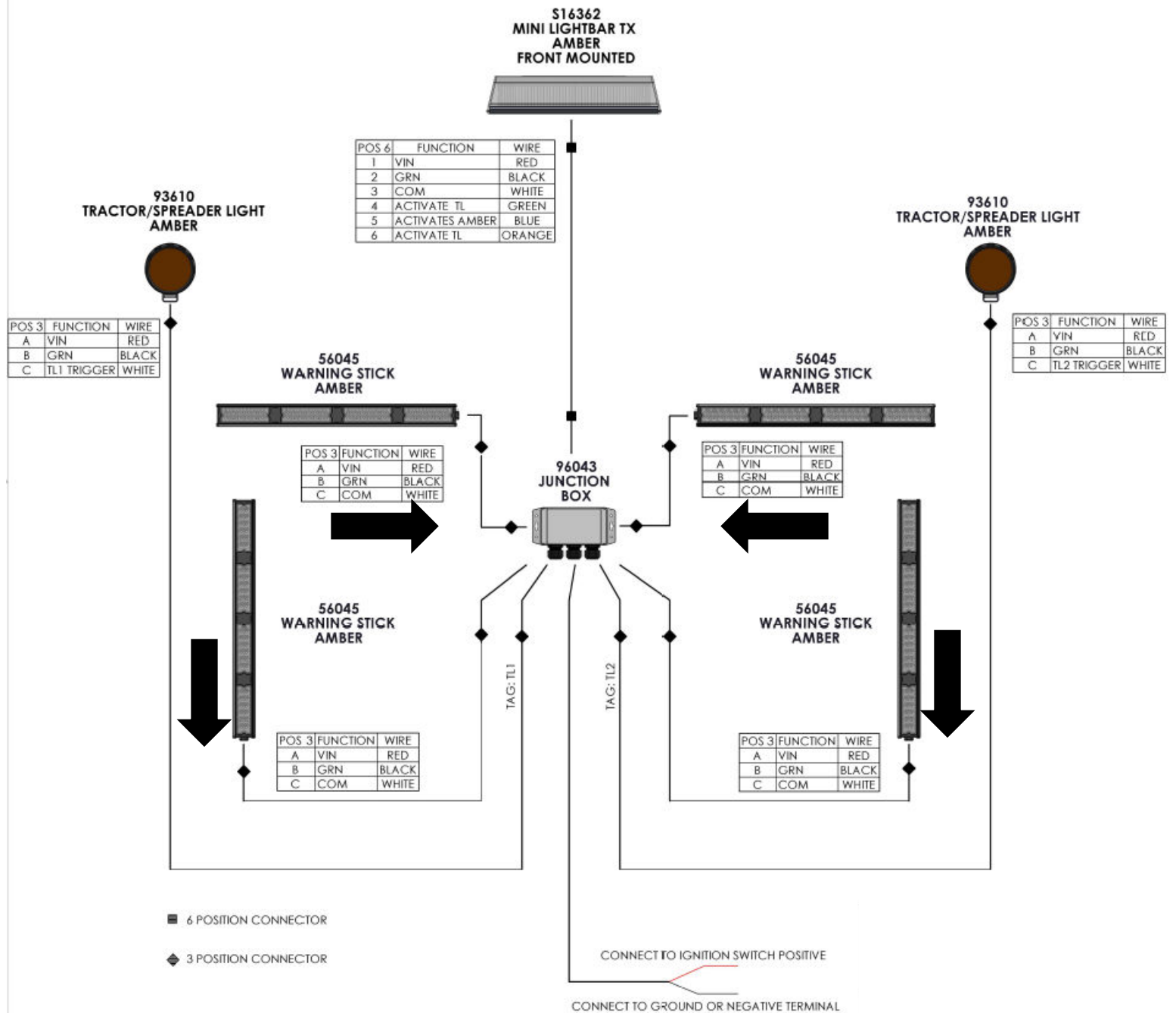
Warning Stick Permanent Mount

- Select a surface where the light is visible and free of obstruction. Mounting brackets are available from the manufacturer.
- A straight level is highly recommended to ensure the light is level.
- Ensure the vehicle is on level ground when installing.
- Vertical sticks should have the wires to the bottom of the mounting orientation.

1. If you are not using SWS mounting brackets, you must drill $\frac{5}{16}$ " diameter holes in the mounting surface. A minimum of two per stick are required.
2. Slide the head of the $\frac{1}{4}$ "-20 bolt into one of the T-slots in the body of the light. The T-slots can be accessed through the endcap.
3. Place a nylon spacer onto each bolt, then pass the bolt through the mounting surface.
4. From the opposite side of the mounting surface, place the flat washers and self-locking nuts onto the bolts.
5. Tighten the nuts with a $\frac{7}{16}$ " wrench or ratchet and socket.



Array Orientation/Layout



Wiring

- This snowplow system is meant to connect to the Main Junction Box for all devices.
- Connect all devices to the 3 position connectors of the junction box, using your desired extension cables. Floodlights must be connected to the connectors labeled **TL**.
- Using the minibar extension cable, connect the minibar to the 6-position connector of the junction box.
- The Main Junction Box will distribute power and communication connections to all connected devices.
- The Minibar controls the flashing nature of the system.
- Connect the RED (or White) wire on the junction box to the Positive of the vehicle (this should be done via the ignition switch or a switch), and the BLACK wire to the Ground/Negative of the vehicle.

Minibar

The minibar is the master light in the system and will control the flashing of the other lights.

- Using the supplied extension cable for the Minibar, connect it to the Junction box's 6 position connector.
- Connect the other end to the minibar's 6 position connector.
- Connect the BLUE wire from the minibar extension harness to a POSITIVE switch to activate the flashing of the system.

Extra Floodlights

- If you are using extra floodlights, connect the Y-harness (sold separately) between two floodlights.
- These Floodlights will now flash together.

Troubleshooting

If your light fails to work, please follow these troubleshooting tips before calling the factory:

- Check all connections for breakage or corrosion.
- If no light is working and power is confirmed: Check communication line from the Master/Transceiver Light
- If the Front Minibar is working but nothing on the back is, check communication from the Front Minibar.
- If either of the tractor lights are not working, check the connections, check to see if the tractor light works alone and check the rear minibar to see if it is working.
- For the sticks, if one stick is out, check the connections and check to see if the stick works on its own.
- If the package does not light up when the switch is flipped, check the wiring on the switches.
- Check to see if the fuse has blown within the vehicle. If it has, replace with a fuse of the exact same amp rating.
- For long power wire lengths, ensure the voltage at the light connection is adequate. If not, you may have to shorten the length or increase the wire gauge.
- Ensure vehicle's battery is charged and that the charging system is functional.
- If the light fails to come out of AutoDim, be sure the top of the dome/lens of the minibar/beacons is clear of debris.

CALL SWS (1-877-357-0222) FOR FURTHER ASSISTANCE