

77504 Control Box Instructions

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

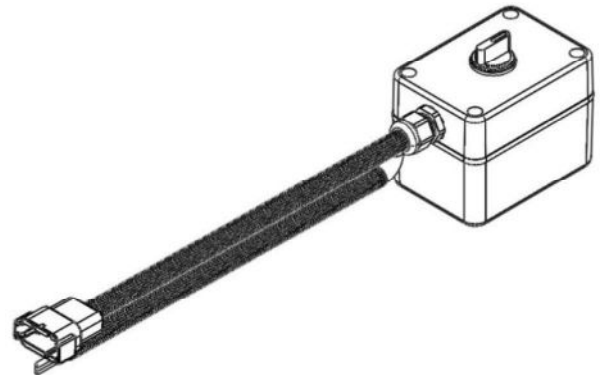
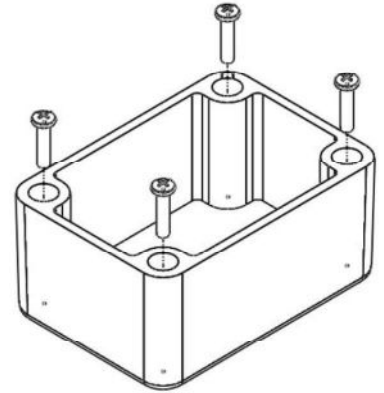
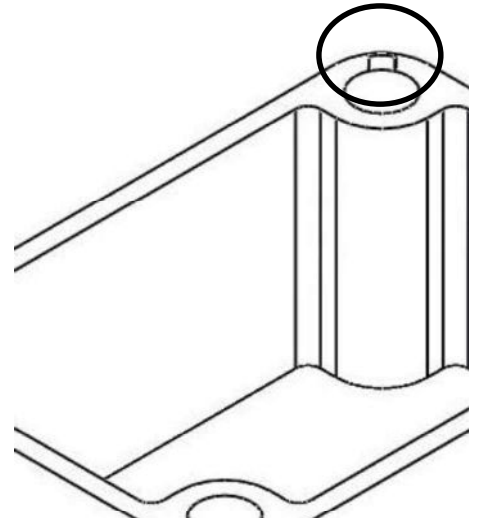
FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY AND/OR DEATH TO YOU AND YOUR PASSENGERS

- 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.
- 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.
- Never mount this product with magnets as its weight may cause the product to slip and alter the intended direction of travel.
- Arrows and Traffic Directors are meant to be mounted rear facing (unless otherwise labeled). Any other orientation or movement into any other orientation may result in damage to the product or void the warranty. If you have a unique application or orientation, please contact SWS before proceeding.
- 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.
- Always be aware of the pattern and its effect on traffic when activating the Traffic Directing Device.
- 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 endeavours to maintain installation instructions for its products according to the latest requirements of vehicle manufacturers. SWS cannot guarantee, and shall not be held liable for, changes or updates a vehicle manufacturer may make which render SWS's products inoperable or otherwise.
- SWS Warning Systems Inc. and its subsidiaries are not responsible for any damages due to improperly mounted or improperly wired lighting equipment.

Mounting

- The lower portion of the control box can be mounted before mounting the top portion.
- The underside of the lower portion has measurements in millimeters for the location of the mounting holes.
- The wires must exit down when mounting is complete. Failure to do so may compromise the watertight nature of the control box.

1. Drill four (4) mounting holes into your mounting surface for each corner of the lower portion of the control box.
2. Pass the mounting screws through the openings in each corner and ensure that they come out the bottom of the lower portion.
3. Place a rubber washer onto each screw.
4. Locate the small tab on the one corner of the lower portion of the box. This must be located at the top left corner when mounting.
5. Secure the box to the mounting surface. If you require different mounting hardware, the control box is designed for #8 screws.
6. Pass the supplied control box screws through the top portion of the control box.
7. Align the top portion with the lower portion using the small tab, and secure the top portion to the lower portion until the gasket is compressed and the seam is bottomed out.



Wiring

- For the three power leads, a minimum of 16AWG wire is recommended for short runs. If you require longer runs (>20ft.), it is recommended that you increase the gauge of your wire appropriately.
 - An inline fuse is supplied, and should be connected to the positive voltage line for the **Direct Power** wire. **This connection should be made in a watertight area.**
1. The wiring harness between the product and the control box, has two connectors and can be installed by simply connecting them to the pigtail and the product.
 2. The connectors are keyed to prevent improper alignment, and do not have a polarity.

Software Selection

The control box is factory pre-set to Mode 1 or Traffic Director. To change the function to use with an Arrow, use the dip switches on the circuit inside the control box.

Dip Switch Position	Software Function
Mode 1 (both OFF)	Traffic Director
Mode 2 (1 to ON, 2 to OFF)	Traffic Arrow

Operation

- After connecting the power, you can select your pattern by turning the knob to one of the desired pattern modes.
- Note that for the left and right modes **for arrows**, the modules closest to the arms will not light up. This is expected and programmed into the pattern.
- Be sure to return the knob to the OFF position when transporting, moving, or storing the vehicle as the light will continue to function.

Trouble Shooting

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

- Check all connections for breakage or corrosion.
- Ensure all connectors are locked and in place.
- Check to see if the fuse has blown within the vehicle or the inline fuse. 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.

CALL SWS WARNING SYSTEMS INC. (1-877-357-0222) FOR FURTHER ASSISTANCE