

Dual Colour 16” Minibars

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.
- Do not use circuit breakers when installing these products. Use automotive grade fuses only.
- 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 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.

Wiring

- All extension wires need to be appropriately sized depending upon the length that they are to travel. SWS recommends a minimum of 20AWG and that for every additional 10ft. of length, the gauge be increased.
- If you are unsure of your wire gauge or want to use a lesser gauge, check the voltage at the product wire connection to ensure the light will receive adequate power.

Be sure to confirm your product part number before wiring. Different products have different wire functions.

Wire Colour	Wire Gauge	Wire Function – Dual Colour 163xx	Wire Function - 16884
Red	18-20 AWG	Positive	Positive
Black	18-20 AWG	Ground	Ground
Green	22 AWG	Pattern Select	Pattern Select
Violet	22 AWG	Dimming	Dimming
Yellow	22 AWG	Primary Colour Enable	Colour Selection
Blue <i>*if applicable</i>	22 AWG	Secondary Colour Enable	-

**not all models have all wires populated, according to functionality of that model*

For Dual Colour models, the noted wires MUST be activated in order for the product to light up – see chart above as well as further instructions under the Features and Operation - Colour Enabling section.

Features and Operation

Colour Enabling

- To enable the primary colour, connect the YELLOW wire to the RED (POSITIVE) wire.
- To enable the secondary colour, connect the BLUE wire to the RED (POSITIVE) wire.
- To enable **both** colours, connect **both** the YELLOW and BLUE wires to the RED (POSITIVE) wire.

16884 only:

- To enable the amber colour, connect the YELLOW wire to the RED (POSITIVE) wire.
- To enable the blue colour, connect the YELLOW wire to the BLACK (NEGATIVE) wire.
- To enable **both** colours, make no connection with the YELLOW wire.

Pattern Select

- The GREEN wire allows you to select amongst a number of different flash patterns.
- To scroll through the patterns, momentarily touch the GREEN wire to the RED (POSITIVE) wire or momentarily touch the GREEN wire to the BLACK (GROUND) wire.
- A momentary switch kit will allow you to cycle through patterns.
- After the desired pattern is selected secure the GREEN wire away with a wire nut or tape to ensure no accidental pattern change.

Dimming

- The VIOLET wire allows for dimming. If you are not using the dimming feature, isolate and stow away the VIOLET wire.
- To use the AutoDim feature (not present in 16884 model), connect the VIOLET wire to the BLACK (NEGATIVE) wire. The internal sensor will be activated and automatically adjust the light output when darkness is detected.
- To manually dim the light, connect the VIOLET wire to the RED (POSITIVE) wire. This should be done via an external switch.

Battery Monitor

The Intelligent Battery Monitor is a factory-installed feature that will detect the voltage across your vehicle's battery. If your battery's voltage goes below an ideal preset value, the light will switch to a unique alert pattern prompting you to start your vehicle to charge your battery. Once the battery goes above the ideal level, the light will resume its previous operation.

Troubleshooting

Dome Removal

- There are no user serviceable parts inside these lights.
- Unless dome is damaged and must be replaced, removal of dome may void warranty.

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

- Check all connections for breakage or corrosion.
- 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.
- The product must be connected to power and the colour-enabling wires must be activated in order for dual colour minibars to light up – refer to wire function chart and Colour Enabling section.
- Ensure vehicle's battery is charged and that the charging system is functional.
- If the Battery Monitor feature kicks in, you will not be able to change pattern away from the unique alert pattern until your battery returns to ideal levels.
- 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 WARNING LIGHTS INC. (1-877-357-0222) FOR FURTHER ASSISTANCE