

Intelligent Series LED Beacon 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

- Mounting the light in any orientation other than vertically (i.e. base down and lens/dome up), is not advisable. Doing so may void the warranty.
- 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 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.
- 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

- Refer to the instructions inside the mounting kit for the various mounting options that apply to your light.

Wiring

- All extension wires need to be appropriately sized depending upon the length that they are to travel. SWS recommends a minimum of 18AWG wire for the power leads and that for every additional 10ft. of length, the gauge be increased (i.e. for a length of 11ft, the minimum gauge for power wires would be 16AWG).
- 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.

Wire Colour	Product Wire Gauge	Wire Function
Red	18-20 AWG	Positive (+)
Black	18-20 AWG	Negative/Ground (-)
Green	22 AWG	Pattern Select (Where applicable)
Violet	22 AWG	AutoDim/Manual Dim Enable
Blue	22 AWG	Master/Slave Select
White	22 AWG	LIN Communication

Operation

Pattern Selection

- If you wish to have only one (1) pattern, select the pattern by momentarily touching the GREEN wire to the BLACK (Ground). After the desired pattern is selected, secure the GREEN wire away with a wire nut, or tape the end to ensure no further pattern change.
- If you have a model with the GREEN wire connected to a momentary switch, the different patterns can be cycled through (switch kit #766163).

Flash Pattern	Frequency	FPM
Single Flash	1.33	61
Double Flash	1.33	159
Triple Flash	1.07	193
Quad Flash	1.13	272
Quint Flash	1.03	310
Fast Flicker	1.41	677
Double Flash Illusion Gen2	N/A	N/A
Flicker Flash with Night Indicator	N/A	N/A
CCW Rotating Fast	2	120
CCW Rotating Slow	1	60
CW Rotating Fast	2	120
CW Rotating Slow	1	60
Steady Burn (PWM)	N/A	N/A
SOS	N/A	N/A

AutoDim and Manual Dim

- Magnetic Mount lights **do not** have the ability to dim.
- The VIOLET wire allows for dimming. If you are not using the dimming feature, isolate and stow away the violet wire.
- To engage the AutoDim function, permanently connect the VIOLET wire to GROUND. This will engage the internal photosensor, and the light will automatically dim based upon the ambient lighting intensity level.
- To manually dim the light, connect the VIOLET wire to POSITIVE. This should be done via an external switch.

Intelligent Network

- Magnet Mount versions **do not** have the ability to connect to the intelligent network.
- The BLUE and WHITE wires are used for the intelligent network to synchronize up to 16 lights. If the light is to operate independently or if there is only one light present, these wires can be stowed away for future use if desired.
- Choose a master. The master light will control the features of itself and all slaves in the network (dimming, pattern select etc.) to make the light a **master**; connect its WHITE wire with all other WHITE wires.
- To make the light a **slave**, connect its WHITE wire with all other white wires and isolate and stow away its GREEN and VIOLET wires as the light will take the pattern select and dim commands from the master light.
- To make the slave light **synchronize**; connect its BLUE wire to the RED (POSITIVE) wire.
- To make the slave light **alternate**, connect its BLUE wire to the BLACK (NEGATIVE) wire.

Intelligent 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 factory set voltage, the light will switch to a unique alert pattern prompting you to start your vehicle to charge your battery. Once the battery recovers to an ideal preset voltage, the light will resume its previous operation.

- To disable this feature, turn the power to the light off.
- Hold the GREEN pattern select wire to ground/negative. For Mag. Mount lights, hold down the momentary pattern select switch.
- With the pattern select wire/switch held to ground, turn the power on to the light.
- Hold the wire/switch until the light flashes **once**. Release the pattern select wire/switch to disable the battery check feature.
- To re-enable the feature, repeat the first three steps, but wait for the light to flash **twice** before releasing the pattern select wire/switch.
- If you do not release the pattern select wire/switch after the double flash, the light will resume operation with whatever setting was present prior to entering the selection process.

Trouble Shooting

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 wire lengths, ensure the voltage at the light's connections is adequate. If not, you may have to shorten the length or increase the wire gauge.
- Check power to vehicle cigarette plug receptacle (may have blown fuse / may require ignition to be turned on).
- Check fuse in cigarette plug (access through threaded tip of plug). If fuse is blown, replace with fuse of exact same rating.
- Ensure vehicle's battery is charged and that the charging system is functional.

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