



First in LEDs...The solid state warning light leader.™

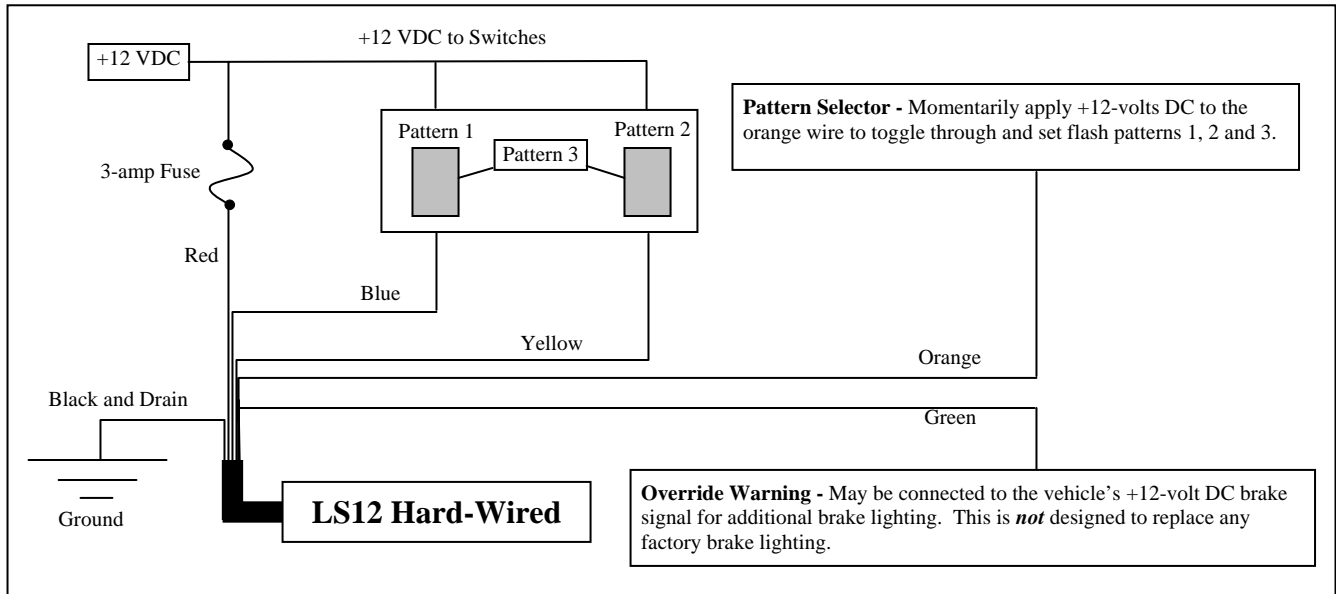
# OPERATING INSTALLATION GUIDE LS12 & LS12SW revision 2 LS12STT

The newest revision of the LS12 is designed to provide more effective warning patterns and user configurability. **911EP recommends bench testing this product using a 12-volt DC automotive battery or power supply prior to installation.** Never operate the LS12 from a battery charger of any kind.

## LS12 Hard-Wired Version

### Wires

The LS12 has seven wires used for main power and pattern activation. All connections should be securely connected to a 12-volt DC electrical system. Use the following schematic as a guide when wiring the LS12.



### Main Power

**Red wire** - Connect to the vehicle's +12-volt DC source. **Fuse this connection with a 3-amp fuse** as close to the power source as practical. This can either be connected to the vehicle's constant +12-volt DC supply or behind the vehicle's ignition circuit.

**Black wire and Drain wire** - Connect to the vehicle's ground. Notice that the drain wire may be encased in black heat-shrink tubing.

### Pattern Activation and Selection Wires

The pattern activation wires are activated by a +12 volt DC input and operate as follows:

**Blue wire** – Pattern # 1. See “Flash Pattern List” for default pattern.

**Yellow wire** – Pattern # 2. See “Flash Pattern List” for default pattern.

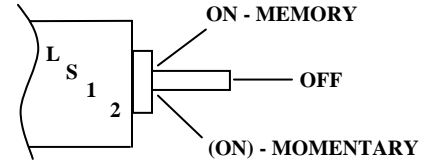
**Blue wire + Yellow wire** - Pattern # 3. See “Flash Pattern List” for default pattern.

**Green wire** – Override warning pattern. This wire may be connected to the vehicle's +12-volt brake signal for additional brake lighting in rear-facing applications (Ideal when used in conjunction with the 3<sup>rd</sup> brake light mounting bracket number 640044). **Note: This is designed only to add additional brake lighting and not to replace any factory installed brake lights.**

**Orange wire** – Pattern selector wire – With pattern 1, 2 or 3 activated, momentarily apply +12 volts DC to this wire to toggle through the available flash patterns (See “Flash Pattern List”).

## LS12 Switched Version

The LS12 Switched version is powered from a **3-amp** fused cig plug adapter and operated from a three-position switch located on the LS12. The downward position of the switch is momentary and is the pattern selector. Moving the switch in and out of the momentary position will toggle through the available flash patterns (see “Flash Pattern List”). The last pattern selected in the momentary position will remain in the LS12’s memory and will be flashed when the light is switched to the “ON - MEMORY” position. The LS12 will retain its pattern memory when it is unplugged.



## Flash Pattern List – LS12 / LS12 Switched

### **Flash Pattern Notes:**

- Pattern #10, Steady-On, can be used in conjunction with a 12-volt flasher (911EP LED Commander #640153). This will allow two or more LS12s to be synchronized.
- Patterns #11 and #12 incorporate two steady-on LED segments with the flash pattern for California steady-red requirements.
- Patterns #13 and #14 are low-intensity flash patterns. These are designed solely for nighttime operations.
- Pattern #15 cycles through patterns #1-#8, pausing on each for approximately 7 seconds.

### **Pattern Name and Number**

1. Wig-Wag – Pulsar
2. Double 64 Flash
3. Wig-Wag – Double Pop
4. Wig-Wag – Chicago
5. 64 Flash
6. Wig-Wag – Accelerator
7. Chaser
8. Double Pop
9. Wig-Wag
10. Steady-On
11. Cali – Chicago
12. Cali – 64 Flash
13. Night – Wig-Wag – Chicago
14. Night – 64 Flash
15. Cycle (Patterns 1-8)

### **Factory Default**

- Blue wire
- Yellow wire
- Blue + Yellow wires

## LS12 Stop-Turn-Tail

The LS12 Stop-Turn-Tail is designed to provide auxiliary brake and tail lighting in two different models. The LS12STT is a drone which relies on the vehicle’s built-in taillight flasher to flash the left and right turn signals. The LS12STT/BIF (Built-In Flasher) does the turn signal flash intelligently and relies on a constant +12 volts for activation.

### Main Power

**Red wire** - Connect to the vehicle’s +12-volt DC source. **Fuse this connection with a 3-amp fuse** as close to the power source as practical. This can either be connected to the vehicle’s constant +12-volt DC supply or behind the vehicle’s ignition circuit.

**Black wire and Drain wire** - Connect to the vehicle’s ground. Notice that the drain wire may be encased in black heat-shrink tubing.

### Pattern Activation Wires

The pattern activation wires are activated by a +12 volt DC input and operate as follows:

**Yellow wire** – Left Turn.

**Orange wire** – Right Turn.

**Blue wire** – Stop.

*Note: This is designed only to add additional brake lighting and not to replace any factory installed brake lights.*

**Green wire** – Running Lights.

## LIMITED WARRANTY

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911EP®, Inc. (the “Warrantor”) will replace parts, in case of defects in materials or workmanship, for five years subject to the following conditions and limitations:

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