

# ShourtLine.com SL 8452403 Precision Train Throttle & LED controller

The **SL 8452403 Precision Train Throttle** is a low cost \$6.29 Voltage Regulator Board with input voltage range from 0 to 30 Volts DC and adjustable output voltage of 1.2 to 30 volts, 3 amps @ 15 watts without a heat sink. Use a bridge rectifier or 4 diodes for AC, analog track power or DCC power. Perfect for LED control for layout, loco motor speed control, pulse smokers, sound systems and train car lighting. It provides superior train car lighting with bright LED output at the lowest track voltage of any device available.

The **SL 8452403 Precision Train Throttle** utilizes a DC to DC converter buck regulator with up to 94% efficiency. The output voltage is set by a 25 turn pot for setting a precise voltage. The throttle output is 1.2 to 24 volts DC, 3 amp max. @ 15W. The throttle is can be used independently or with the dimmer for powering and dimming from 1 to 300 LEDs wired in parallel. Parallel wiring has the advantage of easy wiring and changing the number of LEDs without adjusting the circuit. The **SL 8452403 Precision Train Throttle** can also be used to power trolleys, locos, automatic reversing modules, motors, bulbs, LEDs, sound or other devices.

Parallel LED wiring is only possible with our **SL 8452403 Precision Train Throttle** that provides a stable output voltage regardless of the number of LEDs or variable input voltage. Serial LED wiring is more complex and requires the use of a dropping resistor and a stable voltage from a regulated power supply. The **SL 8452403 Precision Train Throttle** can use a variable power supply and in fact provides the best LED performance at both low and high track voltages so it is perfect for both analog and DCC train operations.

The **SL 8452403 Precision Train Throttle** provides the brightest train car lighting of any product available with easy LED parallel wiring and no dropping resistors or other components required. We offer a full line of low cost LED drop ceiling products and kits for LGB, PIKO, Harland Locomotive Works, USA, Aristo-Craft and Bachmann products. Add exterior coach, tail, stove & toilet lighting or place LEDs anywhere you desire without extra components or changes to circuitry.

## Specifications:

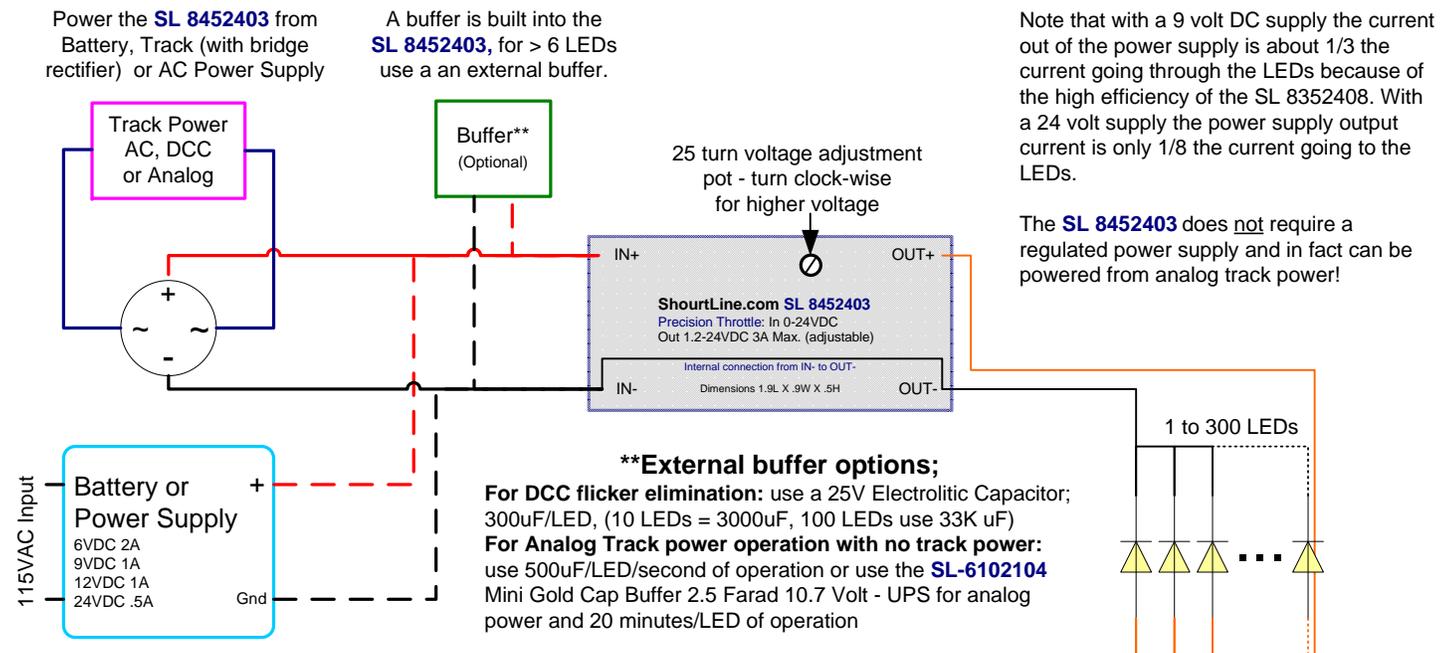
Input: 0-24VDC, Output adjustable; 1.2-24VDC 3 Amps @ 15W Max. without heat sink, use a heat sink for > 15 watts.  
Dimensions: 1.9L X .9W X .5H

## Mounting:

Two mounting holes are provided on the board for mounting. 3M 2 side outdoor adhesive pads can also use used to mount. Mount locations include; inside locos, cars or buildings, or for indoor layouts mount on the bottom of any G scale railroad car.

For AC or analog track power, solder-less hookup and weather proof installations use the Shourt Line model **SL 8552403 AC, DC, DCC Precision Train Throttle** \$49.95. The **SL 8552403 AC, DC, DCC Precision Train Throttle** includes **SL 8452403** inside a weather proof box with a full wave bridge, terminal strip for easy hookup without soldering and instructions with hookup drawings.

## SL 8452403 Wiring Diagram for 1 to 300 LEDs



Shourt Line by Soft Works Ltd

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Phone: 310-622-4431 email: info@ShourtLine.com Web: [ShourtLine.com](http://ShourtLine.com)

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Diagram #1 – How to Set-Up and Wire 1 to 300 LEDs wired in parallel

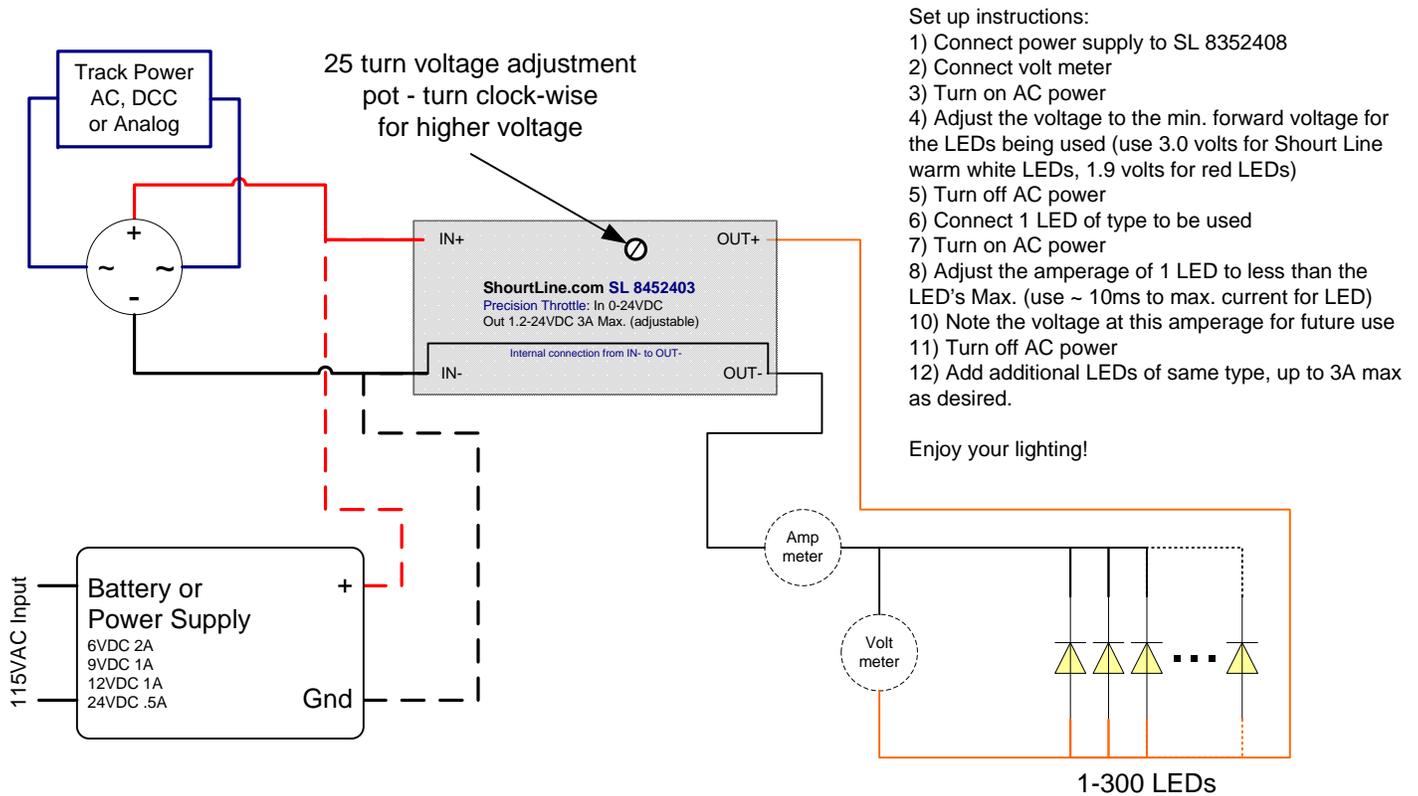
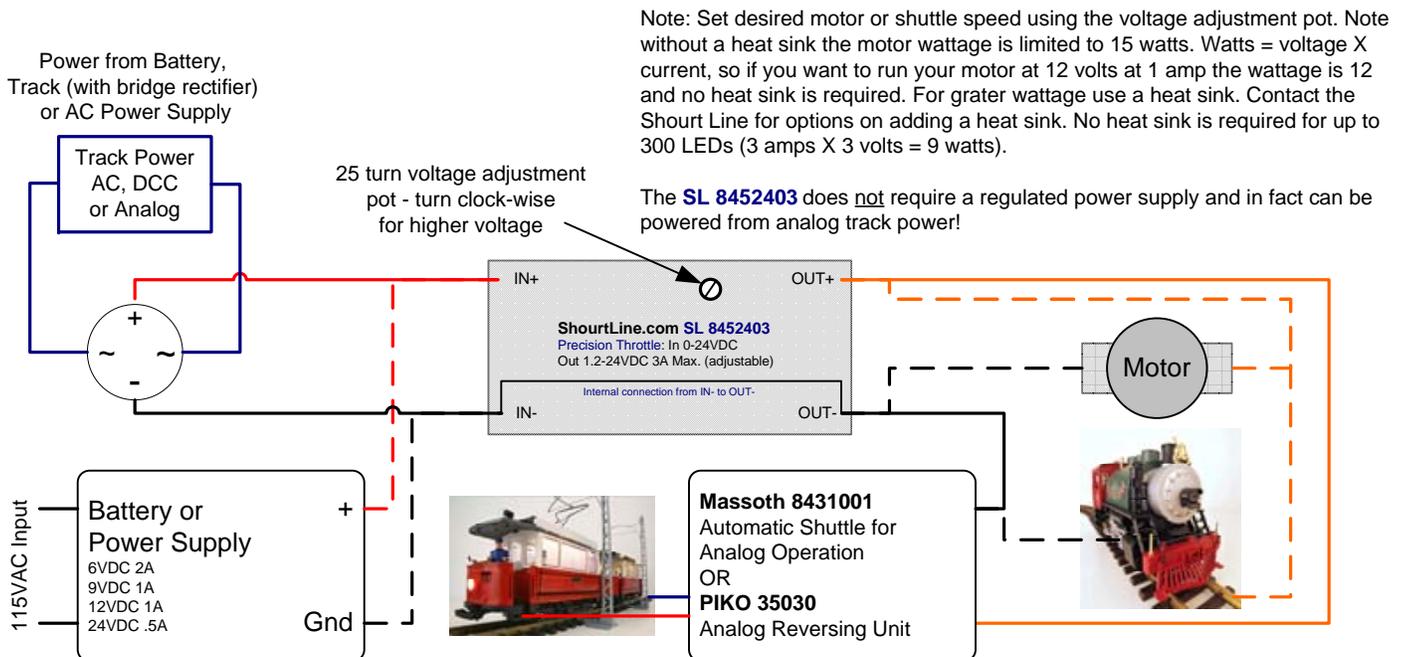


Diagram #2 – Wiring for Locos, motors or automatic train reverse modules



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