



Circuits.vi Readme

This VI demonstrates the difference between a series and parallel circuit. Each of the four lights can be turned on and off. There are controls for the resistance of each light, the battery voltage, and the breaking capacity of the fuse. The total current on the circuit is displayed.

The total current, I , is calculated as $I = \frac{V}{R}$, where V is the voltage and R is the total resistance on the circuit. For a series circuit, the total resistance, R , is calculated as $R = R_1 + R_2 + R_3 + R_4$ with R_i as the resistance of one of the lights. For a parallel circuit, $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \frac{1}{R_4}$ is used to calculate R .

This VI was built using LabVIEW 8.5 on a Mac running OS X. The VI will run in Windows with LabVIEW 8.5 or later installed.

Please direct all comments and questions regarding the contents of this document to:

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Warm regards,

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