Circuitron
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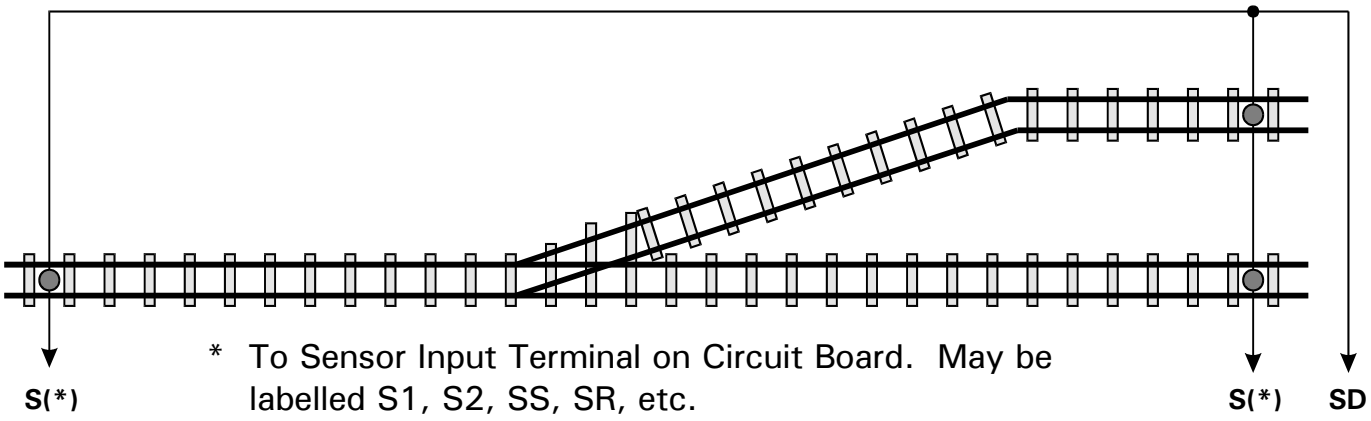
AN-0003

ADDING ADDITIONAL OPTO-SENSORS TO ANY CIRCUITRON DETECTION CIRCUIT

The input section(s) of CIRCUITRON's Opto-Electronic Detection Units (DT-1, DT-2, DT-3, DF-1 Grade Crossing Detectors, DT-4 Rolling Stock Detector, BD-1 Block Detector, AR-1 and AR-2 Reversing Circuits) all have similar circuitry. In many cases, additional Opto-Sensors may be added to extend detection to additional sidings, etc. These additional sensors are wired in *SERIES* with the originals. We recommend a maximum of 3 Opto-Sensors wired in series to any one detector input. The reason for this is that the sensitivity of the circuit decreases with each sensor added. With two sensors in series, the sensitivity is 1/2 the original, with three sensors in series, it is down to 1/3 the original. Adding additional sensors will result in a situation where it will be impossible to get one or more of the sensors to work. This will not harm the circuitry in any way, it will just be difficult or impossible to properly adjust the sensitivity.



TYPICAL APPLICATION: