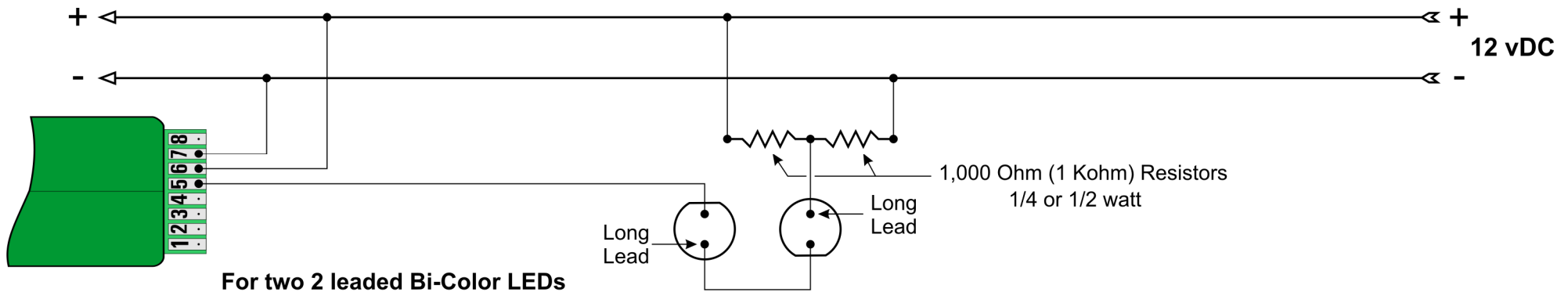
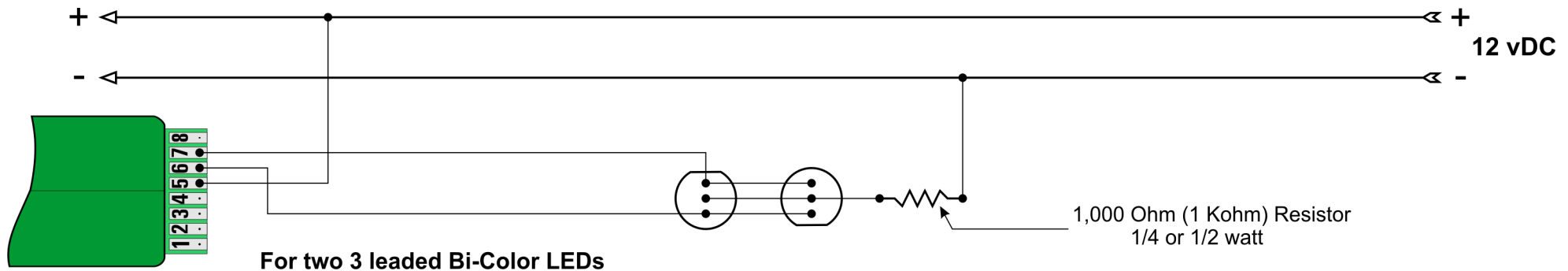


AN6000-08 Wiring Bi-Color LEDs to the TORTOISE™ or SMAIL™



If LEDs light correctly but both the wrong color, reverse connections to terminals 6 & 7. If LEDs are not bright enough, reduce resistor values. Use 560 ohms for the minimum. If only one Bi-color LED is desired on the panel, just eliminate the second and connect the long lead of the first LED to the center of the resistor divider. Power supply voltage can be anything DC as long as it is at least 5-6 volts. Resistor values may need to be adjusted for most pleasing brightness depending upon your LED efficiency.



If LEDs light correctly but both the wrong color, reverse connections to terminals 6 & 7. If LEDs are not bright enough, reduce resistor values. Use 560 ohms for the minimum. If only one Bi-color LED is desired on the panel, just eliminate the second. Power supply voltage can be anything DC as long as it is at least 4-5 volts. Resistor values may need to be adjusted for most pleasing brightness. *NOTE: This hookup assumes a bi-color LED with a common (center terminal) connection to Ground (-). This is the way most 3-legged Bi-colors are constructed but there are some that are wired common anode (+) to the center terminal. If yours are this way, you will need to reverse the + and - connections to the power supply from how they are drawn.*

NOTE: Although using bi-color LEDs seems like a clever way to do panel indicators, we find that it can be confusing, especially if you are looking at the panel from some distance. And it requires a bit of "thinking". Because there will be a light illuminated on each track segment, you will have to interpret what this means. We feel a much more intuitive setup is to use standard red and green LEDs with green indicating for the main and red for diverging. In this way, only one route is lit, and you can tell with a quick glance which way the train is going to go without really having to think about it.

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