

## HE-LR Load resistors and decoders

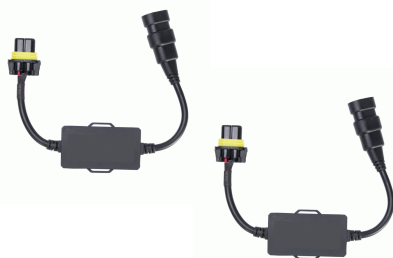
When upgrading to LED bulbs on newer vehicles, it is important to balance the circuit so that the LED bulbs are not mis-detected as blown. This issue is caused by the reduced current draw and circuit load that the LED presents to the system compared to the factory filament bulbs. If this error occurs, some of the common issues that appear are a bulb-out warning light on the dash, a check engine code, and in some cases no light output due to the vehicle shutting down power to the circuit. All of the LED bulbs in the DaytonaLights line have special circuitry to prevent these issues from occurring; but due to the variety of requirements by different vehicles, occasionally additional parts are needed to balance the circuit.

LED bulbs have two different part options to balance the circuit, and can be used independently or in conjunction.

**Canbus decoders (DL-xxxxD)** are the go to staple for balancing the circuit. They are plug and play, and are installed in between the vehicle and the LED bulb (one per bulb). DaytonaLights offers decoders for all bulb sizes carried in the line.

**Load resistors (HE-LR)** can also be used to balance the circuit. They are installed across the positive and negative leads of the light bulb. The load resistor is not directional and can be installed either way. If being used along with canbus decoders, the load resistor is placed between the vehicle and the decoder (one per bulb). Please note that load resistors can become hot during use and should be mounted to a solid metal surface to prevent damage to wires or plastic parts.

### Canbus decoders



### Load resistors

