# DIODE DYNAMICS

### 100% PLUG AND PLAY CONVERTS TAIL LIGHT INTO TURN SIGNAL



This document provides basic information regarding the operation and installation of the do-it-yourself (DIY) version of the Tail as Turn<sup>®</sup> Module. This module is intended for installation in vehicles that come with LED tail lights from the factory, but use an incandescent bulb as the turn signal.

## **OPERATION**

This module will analyze two input signals, and output one combined signal. In recommended use, it analyzes the brake light and turn signal signals, and outputs one combined "high" signal, which will function as both the brake and turn signal.

## PACKAGE CONTENTS

One pair (two) Tail as Turn® Modules, with butt terminal connectors

# **SPECIFICATIONS**

Maximum current: 1A Maximum voltage: 20V Minimum voltage: 8V Input circuit leakage voltage: <1V Forward Voltage: <.6V Operating Temperature: -40 to 95 degrees C

# INSTALLATION

Remove modules from package, and identify the three wires: yellow, red, and white. Yellow and red are "input" wires and the white wire is "output."



1. Locate and cut the turn signal positive wire, and the brake light positive wire. You will now have an input side (going to the vehicle harness) and an output side (going to the vehicle tail light).

2. Connect the yellow wire on the module to your vehicle's turn signal power wire (input/vehicle side). Using the proper tools, strip 4-8mm of insulation from factory wires, and crimp the included butt connectors down, to make a secure connection. For demonstration, see our video online.

**3.** Using the same procedure, connect the red wire to your vehicle's brake light power wire (input/vehicle side).

4. Connect the white wire, which is the output of the module, to your tail lamp's brake (high power) wire. This will make the LED tail lamp's brake light illuminate as both the brake and turn signal. Your running light will be unaffected.

This completes installation. You will be left with an unused wire, which connects to your original turn signal lamp. You can connect this wire to any other wire in the harness, such as your backup light power, for example, to make the old turn signal light up as an extra backup light. If you choose to tap into another circuit, you must use an LED bulb in order to avoid excessive power consumption.

If desired, you can add load resistors to slow hyperblinking (sold separately). This occurs because your vehicle is using much less power to activate the LEDs rather than the factory incandescent bulb, so your vehicle thinks the bulb is out. The resistor should be connected to any ground or black wire, and to the yellow wire in the module (positive turn signal input).

For additional installation information, please contact our technical support team at contact@diodedynamics.com or call 314-205-3033.