# ADVANCED FLASHER MODULE

# INSTALLATION INSTRUCTIONS

# DL-UFM10



### **OVERVIEW:**

The Dapper Lighting Advanced Flasher Module is a simple replacement and upgrade for standard flasher relays. The module is compatible with incandescent lighting, LED lighting, or both. The flashing period is not affected by the current load placed on it. Regardless of how much or how little the current load, the module's flashing frequency remains digitally precise.

### **MODULE SPECIFICATIONS:**

**Size:** W - 0.6" (15mm), L - 1.9" (47mm), H - 0.4" (10mm)

Lead Length: 6.1" (155mm)

**Weight:** 1 oz (15 g)

Input Voltage: 5 - 18 Volts

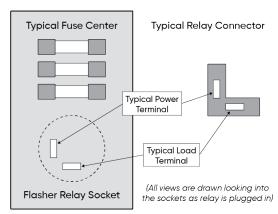
Output Voltage: 5 - 18 Volts, equal to input voltage

**Output Current:** 10 amps maximum Standby Current Draw: ~0.008 amps

Connection Polarity: Negative ground wiring systems

Flash Frequency: 1.6 Hz (cycles On for 0.3 sec, Off for 0.3 sec) Internal Switching: Solid State, no mechanical relay contacts External Connectors: 1/4" blade terminals, ring terminal for ground

Maximum Ambient Operating Temperature: 120°F / 50°C



Fugure 1

# **TOOLS NEEDED:**

Screwdriver and Voltmeter or 12V Test Lamp (recommended)

### **INSTALLATION:**

- 1. Locate and remove the vehicle's turn signal flasher. It may be plugged into a connector or mounted in the fuse block (see Figure 1).
- 2. Identify which terminal has +12V:
  - 2.1. With ignition OFF, connect a voltmeter or test lamp between chassis ground and each terminal.
  - **2.2.** If no voltage is present, turn ignition ON and retest.
  - 2.3. The terminal with +12V is the POWER terminal.
  - **2.4.** The terminal without voltage is the LOAD terminal.
- 3. Connect the black wire to any clean chassis ground.
- 4. Connect the white wire to the LOAD terminal (identified in Step 2.4).

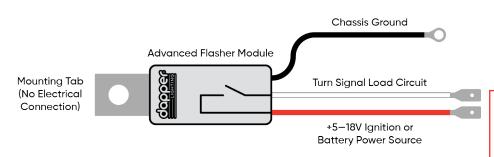
NOTE: The module draws ~0.008A continuously from the red wire. To prevent long-term battery drain, connect it to an ignition-switched source, not a direct battery source (which may apply to the POWER terminal found in Step 2.3).

- 5. Connect the red wire to the POWER terminal.
- **6.** Mount the module using the metal tab or zip-tie it to a secure location.

NOTE: The metal tab is not electrically active and does not need to contact the chassis, but it acts as a heatsink.

7. Installation complete.

# WIRING DIAGRAM:



### **OPERATION:**

With power on and the white wire connected to a load (grounded on the other side), the module supplies power for 0.325 sec, pauses for 0.325 sec, and repeats until power is removed or the load is disconnected.

## **⚠ WARNING ⚠**

Do not connect the black ground wire to a +12V power source. Doing so will damage the module and will void your warranty. Always connect the ground wire to a clean chassis ground point only.



