

# M-SERIES

## 24V DC Installation Guide

20W - 300W Magnetic DC Drivers (20W - 96W are Class 2)



### General

The transformer is to be installed in accordance with Article 450 of the National Electric Code (NEC). The transformer must be installed in a well-ventilated area, free from explosive gases and vapors. Proper operation requires for free flow of air. Since this transformer is hardwired, it should only be installed by a qualified electrician.

### Precautions Before Installation

Check the label and ensure the transformer has the proper input voltage and wattage. Check the wire markings to ensure they match the wiring diagram, below.

### Mounting

Select a suitable location capable of supporting the weight of the transformer. Use the two keyholes in the transformer case to mount it. It is recommended that the transformer is mounted vertically, with the wiring compartment pointing downward. If you are installing multiple drivers, keep a minimum space of 5" between each driver.

### Boost-Tap (200W-300W Only)

The orange Boost-Tap wire, if available, provides a 10% voltage boost, which can compensate for voltage drop between the driver and the fixture. If the fixture is receiving 21.5V or less, we recommend substituting the black wire with the orange Boost-Tap wire. To calculate voltage drop, please refer to the link below:

<https://magnitudeinc.com/resources/voltage-drop-chart/>

### Quick Specs

Input Voltage	120V AC
Output Voltage	24V DC
Max. Ambient Temp.	-30°C to 45°C
Enclosure	NEMA 3R - Damp or Dry
Min. Install. Space Between Drivers	5"

### Input Connections / Grounding

Remove the wiring compartment knockouts and install strain reliefs. With the power turned off, route the input wires through a strain relief and connect one wire to black and one wire to white. For all wire connections, use only UL Listed wire nuts and connectors of suitable size and type. The transformer case **MUST** be grounded in accordance with the NEC. Connect the ground wire to the transformer's green wire.

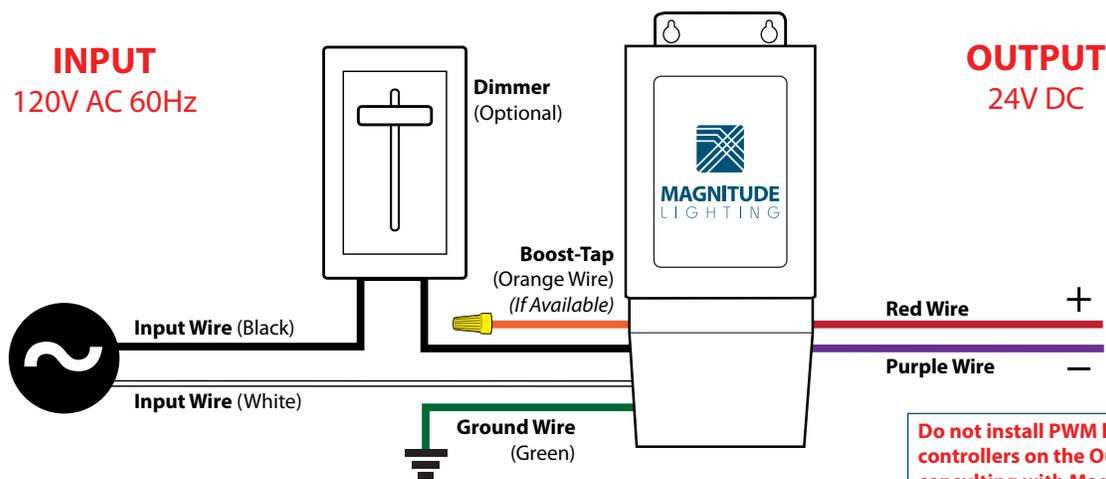
### Output Connections

Bring the wires of the light fixture through the other open knockout and connect them to the transformer wires – positive (+) to the red wire and negative (-) to the purple wire.

### Dimming

Dimmable with any standard MLV TRIAC (Leading Edge) dimmer switch. The dimmer switch is to be installed on the Input (120VAC) side of the driver. 50% load is required if not being used with a dimmer. Please visit our website for a full dimmer compatibility list ([www.magnitudeinc.com](http://www.magnitudeinc.com)).

## ↓ WIRING DIAGRAM ↓



**Do not install PWM low voltage controllers on the Output without consulting with Magnitude Lighting.**