

# 24W Universal Dimming LED Driver

Model: MD24W12VA, Item: 840240

## Outstanding LED lighting dimming performance, architectural quality brightness control, guaranteed dimmer compatibility.

Armacost Lighting constant voltage Universal Dimming LED Drivers are compatible with virtually all dimmers, including older incandescent triac dimmers and new universal dimmers and lighting controls. An integrated microprocessor automatically senses and optimizes dimming performance based on the load and type of dimming technology being used. Expect wide range, flicker-free dimming performance whether powering a 1 watt mini LED light or up to 200 watts of strip lighting.

- Ultra smooth, wide range dimming performance; requires no minimum lighting load
- Microprocessor delivers desirable fade-on and fade-to-dark performance
- Soft start, no pop-on or drop-out as dimming reaches its lowest setting
- Connect multiple LED drivers to one AC dimmer for larger lighting applications
- Excellent thermal management for extended life: Rated for 30,000 hours when on at 100% power continuously, 24 hours a day; rated at 50,000 hours if only on 8-12 hours a day
- Whether used with a standard incandescent dimmer or a high-end lighting control system, expect smooth, stable dimming with absolutely no loss of light output at 100% brightness

## Installation Guidelines

- ETL Listed, suitable for dry and damp locations. For locations that could be exposed to rain or splashing water, install driver in suitable wet location power supply enclosure.
- Shock hazard. Turn off power at circuit breaker before connecting to AC main power.
- Total wattage of all LED fixtures used must not exceed the 24 watt rating of this power supply.
- Use only insulated staples or plastic ties to secure cords and wires.

- Route and secure wires so they will not be pinched or damaged.
- All wiring must be in accordance with national and local electrical codes, low voltage Class 2 circuit. For wire runs inside of walls, use properly certified CL2 or better cabling and appropriate mounting hardware. If you are unclear as to how to install and wire this product, contact a qualified electrician. Failure to install this device properly may result in electrical shock or fire.
- Do not install Class 2 low voltage wiring in the same runs as AC main power. If AC and low voltage wires cross, keep them at 90-degree angles.

## Hardwire Installation



Built-in terminal block connectors make for easy direct wire installation. Remove end caps to access connectors for both AC input and DC outputs. Depending on location, use appropriately rated cable for your installation. Use type NM-B indoor or UF-B outdoor 14/2 (Romex® style 14 gauge) to tie in with 120V AC line voltage. For 12V low voltage output side, 18/2 cable is recommended. Be sure wire is properly seated inside and under the terminal block screw clamp. Tighten down clamp with screw. Do not over-tighten.

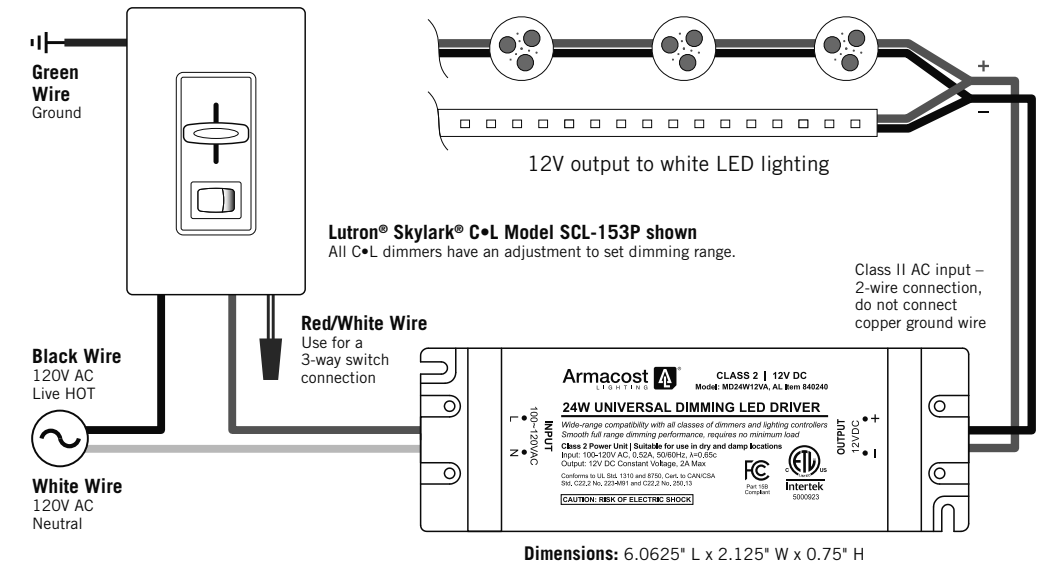
**Note: Do not use AC ground wire.** This LED driver utilizes Class II AC inputs with a fully isolated plastic case, no ground wire is required.

This Armacost Lighting 24 watt LED driver is compatible with both forward phase (leading edge, triac, incandescent) and reverse phase (electronic low voltage, ELV and trailing edge) AC dimmers. It is also compatible with low voltage PWM dimmers and higher-end lighting controls such as Lutron GRAFIK Eye® systems.

Although any dimmer will work with Armacost Lighting Universal Dimming LED drivers, Armacost Lighting recommends Lutron C•L and Leviton Decora LED/CFL Universal Dimmers. They are readily available in a wide range of styles and colors and feature an adjustment to set the low end dimming range.

For large applications and multiple zones of lighting, one 120V AC dimmer can be connected to multiple 24 watt dimming drivers. Do not exceed 40% of your AC dimmer's rated maximum allowable incandescent/halogen wattage capacity. If the dimmer states 600 watts maximum incandescent load, connect no more than ten 24 watt Armacost Lighting dimming drivers (max combined load of 240 watts). If the dimmer is rated for 2000 watts incandescent, connect no more than 33 LED drivers (max combined load of 792 watts).

Armacost Lighting Universal Dimming LED Drivers require no minimum load.



## SPECIFICATIONS

- Full shut off protection in case of lighting overload, open circuit, short circuit, over-temperature or other fault. Unit will automatically restart after the fault has been corrected
- 100% full load burn-in testing, can connect up to 100% of the rated maximum load
- Input Voltage: 100-120V AC, 0.99A, 50/60Hz, λ=0.65c
- Output: 12V DC Constant Voltage, 24W, 2A Max
- Class II AC input (2-wire connection, requires no ground)
- Complies with FCC Part 15B

Limited 5-year warranty. Failure to use this power supply for its intended purpose or improper installation will void warranty. The warranty does not cover labor or any other costs or expense to remove or install defective, repaired or replaced products.



Conforms to UL Std. 1310 and 8750, Cert. to CAN/CSA Std. C22.2 No. 223-M91 and C22.2 No. 250.13