

### Features

- No derating - 100% full duty cycle for all models: 5, 10, 15, and 20 Amp units
- Overheat and over current protected
- Convection cooled with thermal sensor
- May operate as a Non-Dim for inductive loads
- 10,000 AIC rating per dimmer
- Dims standard or low-voltage incandescent, quartz, fluorescent, neon, and cold-cathode sources within the same enclosure.
- 120/240VAC (1 Ø) and 120/208VAC (3 Ø) models available
- Available Class II low-voltage control circuitry in DMX 512A format
- 3-digit dimmer addressing
- LED indicators on front panel
- Assignable Worklight control
- UL Listed
- Optically isolated Remote Panic and Worklight switching from over 1000 feet away
- Convertible Main Input for single, dual, and three phase wiring

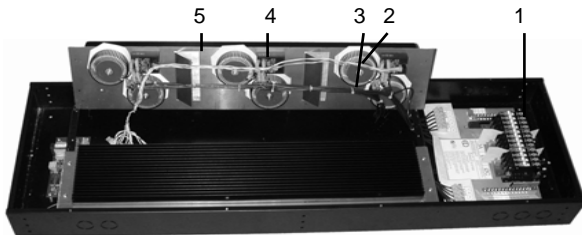


### Description

Designed for simplicity, the **MVP 6/12 Pak Dimmer** provides exceptional noise suppression at all levels. The **MVP 6/12 Pak Dimmer** accepts DMX 512 or analog signal and can be easily setup by setting the start address using the 3 rotary switches. New three phase power supply means that there is no worry of losing control if one phase drops out. Multiple units can be setup to work on the same starting address if needed. A removable, one screw panel is featured, giving easy access to low voltage components. The **MVP 6/12 Pak Dimmer** is made to the same rugged construction and quality standards used throughout EDI product lines.

### Component Information

MVP 6/12 Pak Dimmer side view with cover plate removed



1. Primary circuit breakers (1.8kW and 2.4kW only)  
Fully magnetic, 10,000 AIC circuit breakers provide short circuit and overload protection, as well as on/off switch for the dimmer.
2. Toroidal chokes  
Heavy-duty, iron-core, copper-wound toroidal chokes assure quiet operation with minimum lamp filament vibration.

3. Thermal sensors  
Monitors heat sink temperature. Dimmer output turns off when a heat sink temperature exceeds 185°F. (85°C). Normal operation automatically resumes when the temperature returns to the safe region.
4. Solid-State Relay  
The solid-state relay devices include two (2) silicon controlled rectifiers each, in an inverse parallel configuration, snubber network and all required gating circuitry on the high voltage side. Complete isolation is integral to the device by means of an opto-coupled control voltage isolator. The rectifiers provide symmetrical alternating current output to loads at any output level from off to full intensity.
5. Heat sink  
An integral component of the dimmer module, the heat sink dissipates heat produced by the solid-state relay. The solid-state relays are mounted to an extruded aluminum heat sink with a minimum of 380 sq. in. of radiating surface per relay. Heat sink have interlocking mounts for repairing critical components inside.

### Ordering Information

- |                                |                                     |                                      |   |   |
|--------------------------------|-------------------------------------|--------------------------------------|---|---|
| <b>6/12 Dimmer module</b>      | <b>Dimmers</b>                      | <b>Input Voltage</b>                 | <b>Options</b>                                  |   |
| <input type="checkbox"/> 600W  | <input type="checkbox"/> 6 dimmers  | <input type="checkbox"/> 120VAC, 1 Ø | <input type="checkbox"/> DMX                    | <input type="checkbox"/> Worklight Card       |
| <input type="checkbox"/> 1.2kW | <input type="checkbox"/> 12 dimmers | <input type="checkbox"/> 240VAC, 1 Ø | <input type="checkbox"/> Analog                 | <input type="checkbox"/> Pass thru input lugs |
| <input type="checkbox"/> 1.8kW |                                     | <input type="checkbox"/> 120VAC, 3 Ø | <input type="checkbox"/> Fluorescent Card _____ |   |
| <input type="checkbox"/> 2.4kW |                                     | <input type="checkbox"/> 208VAC, 3 Ø | <input type="checkbox"/> Set-and-Forget Card    |   |

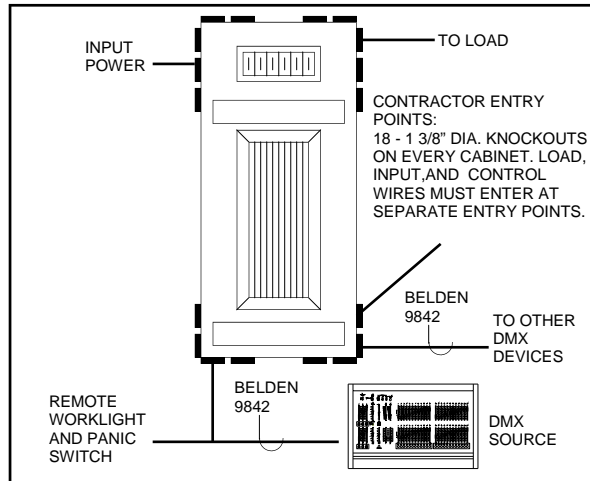
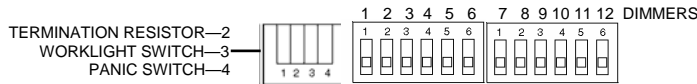
# Architectural Dimmers

## Electrical Characteristics

**Input Power** Three Phase, 120/208VAC, 50/60 Hz. 80 A/Ph. Max.  
 Single Phase, 120/240VAC, 50/60Hz. 240 A/Ph. Max.  
 Main Breaker: by others

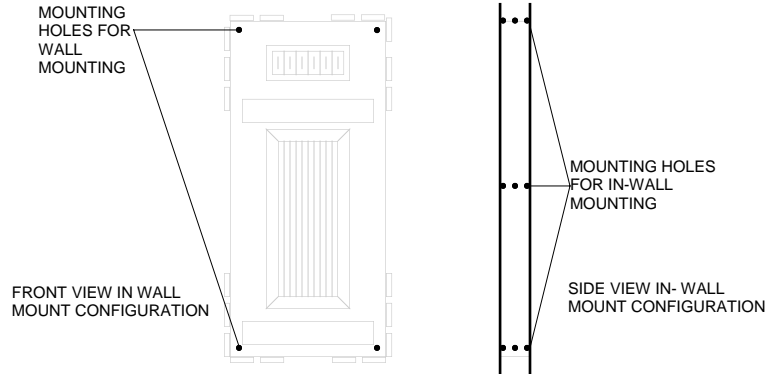
**Operating** Temperature range: 32° F. (0° C) to 104° F. (40°C). Humidity range: 0% - 90% non-condensing.

### Worklight Assignment / Panic



## Enclosure Dimen-

Channel	Dimensions
<b>6 Channel</b>	
600W dimmer	14.25" W x 33"H x 4"D (32.2cm x 63.5cm x 10.2cm)
1.2kW dimmer	14.25"W x 41"H x 4"D (32.2cm x 99.1cm x 10.2cm)
1.8k/2.4kW dimmer	14.25"W x 47.5"H x 4"D (32.2cm x 116.8cm x 10.2cm)
<b>12 Channel</b>	
600W dimmer	14.25" W x 33"H x 4"D (32.2cm x 63.5cm x 10.2cm)
1.2kW dimmer	14.25"W x 41"H x 4"D (32.2cm x 99.1cm x 10.2cm)
1.8k/2.4kW dimmers	14.25"W x 47.5"H x 4"D (32.2cm x 116.8cm x 10.2cm)



## Specifications

- The enclosure shall be in-wall or surface mount.
- The enclosure shall accommodate 6 or 12 dimmers.
- The dimmer shall dim standard and low voltage incandescent and quartz. It will dim standard and/or dimming ballast fluorescent, and neon, or cold-cathode per 2 circuits.
- The dimming system shall be convection cooled. The module shall include a thermal sensor per heat sink to shut down the dimmer if the heat sink temperature exceeds 185° F. (85° C).
- The dimmers shall use an encapsulated pair of silicon controlled rectifiers to provide symmetrical alternating current output to the load at any output level from OFF to FULL intensity. Dimmer heat sinks without an individual thermal sensor shall not be acceptable.
- Each module shall have a toroidal, copper-wound, iron-core high performance choke. Performance rise time shall be no less than 325 μS. All measurements are from 10% to 90% at full load.
- The maximum heat loss for each 2.4kW dimmer shall be no greater than 48 watts per dimmer or 100 BTU's per hour per connected kW of load.
- The dimmers shall operate over an input voltage range of 90 to 140 VAC. Nominal input voltage shall be 120 VAC. (120 VAC dimmers only).
- Incandescent dimmers shall function properly with any load from 25 watts to rated capacity.
- (Digital board only) The dimmer shall be controlled by a standard USITT DMX-512 control signal.
- (Digital board only) All dimming functions shall be microprocessor controlled with no internal trim potentiometers or other adjustments.
- (Digital board only) The dimmer shall automatically compensate for 50 or 60Hz input power.
- (Analog board only) The dimmer shall have at maximum 12 analog 0-10V inputs.
- (Analog board only) The control card shall have 2 option card slots for DMX, Set and Forget, Twilight 9, and Worklight cards.
- All control electronics shall be incorporated on a single double-sided FR4-G10, U.L. Listed, printed circuit board.
- The dimmer enclosure and modules shall be U.L. Listed.
- The MVP 6/12 Pak Dimmer series shall be manufactured by Electronics Diversified, Inc., Hillsboro, Oregon 97124. U.S.A.

