

Universal Dimmer

FOR INCANDESCENT, QUARTZ, LOW VOLTAGE, COLD CATHODE & CERTAIN FLUORESCENT BALLASTS

FEATURES

- 120, 240, 277, & 347 VOLT UNITS AVAILABLE
- MODULAR PLUG-IN DIMMER UNITS
- SOLID STATE ELECTRONIC DESIGN
- SILICON CONTROLLED RECTIFIERS
- TOROIDAL FILTER CHOKES
- FACTORY ASSEMBLED AND TESTED
- MULTIPLE CONTROL OPTIONS
- UL LISTED

APPLICATIONS

- HOUSES OF WORSHIP
- HOTEL PUBLIC SPACES
- MEETING AREAS
- RESTAURANT DINING AREAS
- THEATRE HOUSELIGHT

CONTROL OPTIONS

- MANUAL REMOTE SYSTEM
- MULTI-SCENE PRESET SYSTEM
- DIGITAL PRESET SYSTEM
- PHOTOCCELL CONTROLS
- TIME CLOCK CONTROLS

Leviton Lighting Control Division's Universal dimmers are designed to control standard incandescent lighting sources including quartz and Tungsten-Halogen lamps. They can drive step down transformers contained in low voltage lighting fixtures, dim several types of electronic fluorescent dimmer ballasts, and drive normal power factor neon and cold cathode transformers. These dimmers are used in churches, office buildings, restaurants, ballrooms, A/V presentation spaces, and meeting rooms. When used with incandescent lighting, whether the lamps are line voltage types or low voltage types, these dimmers provide a 0% to 100% dimming range. When used with electronic solid state dimmer ballasts the range is typically 5% to 100%, but the exact range is determined by ballast limitations not the dimmer. When used with neon and cold cathode the range will depend on the transformer chosen, the wiring distance between the transformer and lamps, and the quality of construction of the discharge tubes themselves. In all cases, the dimmers instantaneously respond to all control changes.

Leviton Lighting Control Division's dimmers are UL Listed and are available in 120 through 347 volt ratings at either 50 or 60 Hz.



The modular, plug-in dimmer unit uses all silicon solid state semiconductor electronic devices. Due to their superior surge current capacity, Leviton Lighting Control Division uses Silicon Controlled Rectifiers (SCR's) for power handling rather than Triacs. Within the dimmer module, the control circuitry is mounted on a plug-in printed circuit board. The dimmer drive circuit employs feedback technology for long life and stability. The Universal dimmers utilize toroidal filter chokes to minimize radio frequency interference and lamp filament noise. Their power cores have no steel laminations to vibrate and make noise, resulting in a much quieter dimmer. Any of Leviton Lighting Control Division's modular dimmers can be combined in a system with other Leviton Lighting Control Division dimmers. Careful factory design, manufacturing and testing insure quality and reliability. Control options for the Leviton Lighting Control Division UNIV dimmer are virtually limitless. Manual controls, in attractive flush mounting panels provide one slider controller for each channel of control. Control transfer and join/separate (link) features are also available. Preset control systems utilize multiple pre-established lighting levels that can be recalled at remote preset select stations. Automated Control Systems offer photocell, time clock and occupancy sensor components that can monitor and maintain predetermined lighting schedules. See the Control section of our catalog for more detailed information.

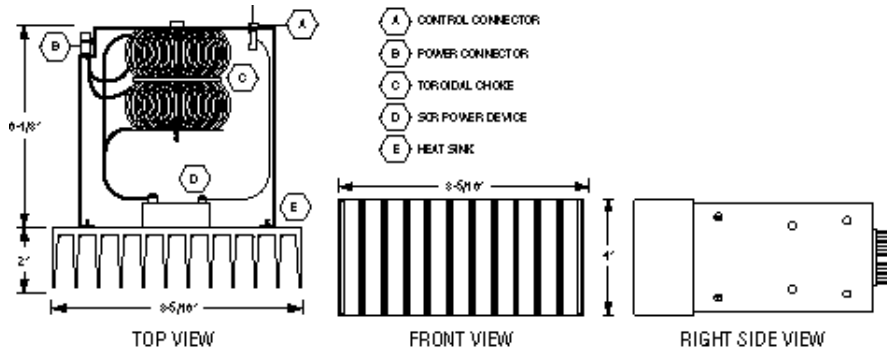
UNIV Universal Dimmer

SPECIFICATIONS SUBMITTAL

JOB NAME: <input type="text"/>	CATALOG NUMBERS: <input type="text"/>	
JOB NUMBER: <input type="text"/>	<input type="text"/>	<input type="text"/>

Product Specifications

UNIV



PERFORMANCE SPECIFICATIONS

Dimming Curve	Modified Square Law
Dimming Range	0% to 100%
Rise Time	500 μ s (0% to 90% with rated load at 90° firing angle)
Minimum Operating Load	25 Watts
Maximum Operating Load	100% of Rating
Full Output Voltage	98% of Feed Voltage
Power Control Device	Silicon Controlled Rectifiers
Power Device Rating	45 Amps, 150 Amps, 290 Amps
AMP Interrupting Capacity	10,000 AIC/120v, 14,000 AIC/277V
Voltage Isolation	2400 Volt Minimum
Power Connector Rating	30 Amps, 60 Amps, 180 Amps
Heat Loss	2% Connected Load
Cooling	Natural Convection (fans available)
Control Voltage	0 to 10 Volts DC
Voltage Regulation	Yes

120 VOLT DCI DIMMER CAPACITIES

MOD.NO.	CAPACITY	C.B.	HEIGHT
*DCI 1440+	1440 WATT	15A/1P	4"H
*DCI 1920+	1920 WATT	20A/1P	4"H
DCI 2500+	2500 WATT	30A/1P	4"H
DCI 3750	3750 WATT	40A/1P	4"H
DCI 5000	5000 WATT	50A/1P	4"H
DCI 7200	7200 WATT	70A/1P	12"H
DCI 9600	9600 WATT	100A/1P	12"H
DCI 12000	12000 WATT	125A/1P	12"H

* UL listed 2500 watt dimmer with lower rated primary circuit breaker.

+ Furnished as dual dimmers in same size 4" high module.

- Dimmers are available in 220/240, 277, and 347 volt ratings, 50 or 60 Hz.
 - Branch circuit breakers must be used to meet local electrical code requirements. The branch circuit breakers are built into the dimmer output circuit as required by the dimmer schedule. Dimmer capacity is calculated based upon the National Electrical Code 805 load circuit breaker rule.

TECHNICAL SPECIFICATION

Dimmer modules shall be Leviton Lighting Control Division's Universal series. Dimmers shall be a self-contained plug-in module specifically designed for dimming a multiplicity of load types including Incandescent, Quartz, Low Voltage, Neon, Cold Cathode, and a number of different types of solid state electronic fluorescent dimmer ballasts. Dimmers and the cabinet assembly containing them shall be listed by Underwriters Laboratories (UL) as an assembly. Dimmers shall be designed for natural convection cooling utilizing a finned aluminum extrusion at the front face of the dimmer module. The rear of the module shall contain plugs for control and power connections. Dimmers requiring bolt-on wiring shall not be acceptable.

Dimmers shall use Silicon Controlled Rectifies (SCR's) as the power handling devices due to their superior surge current capacity. Triacs are not acceptable. The single cycle surge current rating of the SCR's shall be at least 15 times the normal current rating of the dimmer so as to withstand inrush current from cold tungsten filaments and violent end of life tungsten failures. Dimmers shall respond instantly to control changes without time delay or "soft-start" circuits.

Dimmers for 120 volt service shall be available with ratings of 1440 watts, 1920 watts, 3750 watts, 5000 watts, 7200 watts, 9600 watts, and 12,000 watts. Dimmers shall also be available for voltages up to 347 volts in either 50 or 60 Hz.

Dimmers shall contain toroidal type filter chokes to minimize Radio Frequency Interference (RFI) and reduce audible lamp filament noise. The chokes shall have a soft powdered iron core and no steel laminations. Dimmers shall have a rise time not less than 500 microseconds as measured from 0% to 90% at 90 degree conduction under full rated load.

Dimmer control voltage shall be the industry standard 0 to 10 volts DC. All equipment in the dimmer system shall be supplied by one manufacturer. Base bid shall be for equipment manufactured by Leviton Lighting Control Division, Tualatin, Oregon. Alternate bids using other manufacturers will be accepted only as an add or deduct from the base bid.

LEVITON SPECIFICATION SUBMITTAL

JOB NAME: <input type="text"/>	CATALOG NUMBERS: <input type="text"/>
JOB NUMBER: <input type="text"/>	<input type="text"/>

Leviton Mfg. Co., Inc.
 P.O. Box 2210 • Tualatin, Oregon 97062 • Phone: (503)404-5500 • Fax: (503) 404-5600

