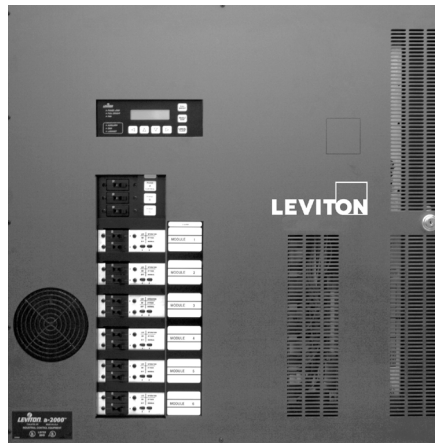


a-2000® Cabinets

Dimming performance and precision control



DESCRIPTION

The a-2000® is a compact, high-performance dimming cabinet that combines theatrical grade performance with the ability to control a wide variety of architectural load types. It is an ideal solution for applications such as cafeterias, multi-purpose rooms, ballrooms and all spaces requiring a single dimming source for a broad range of loads.

The a-2000s modular design enables rapid servicing of both dimming modules and control electronics. The shallow enclosure can be easily flush-mounted and fits within two stud widths. The a-2000 digital module cabinets are easy to install and work with virtually all types of lighting including LED. This state-of-the-art cabinet integrates seamlessly with preset or manual controls, building automation, daylight harvesting and time clock systems. The a-2000 is a highly versatile dimming platform supporting a broad array of control requirements.

FEATURES

- Fully programmable from front panel
- Plug-in dimmer modules for easy maintenance
- Communication protocols: DMX512, Luma-Net III, full bright, emergency and +0-10VDC analog
- Capacity of up to 48 dimmer circuits
- Each dimmer channel rated to 20A continuous (20A modules only)
- All load types supported - see Dimmer Module data sheet for more information

- Rugged dual-SCR dimmer circuitry for superior dimming performance and reliability over triac dimmers
- Individual per-dimmer bypass worklight functions
- Restoration feature restores the last lighting look in the event of power failures
- Lifetime non-volatile memory
- Super quiet, redundant ball-bearing fan design for added reliability
- Contractor friendly design for easy installation with a large wiring space
- Compact 30 3/8-inch cabinet width holds up to 48 dimmer circuits and fits between two stud widths
- Surface or recessed mounting
- Top, bottom or side feed

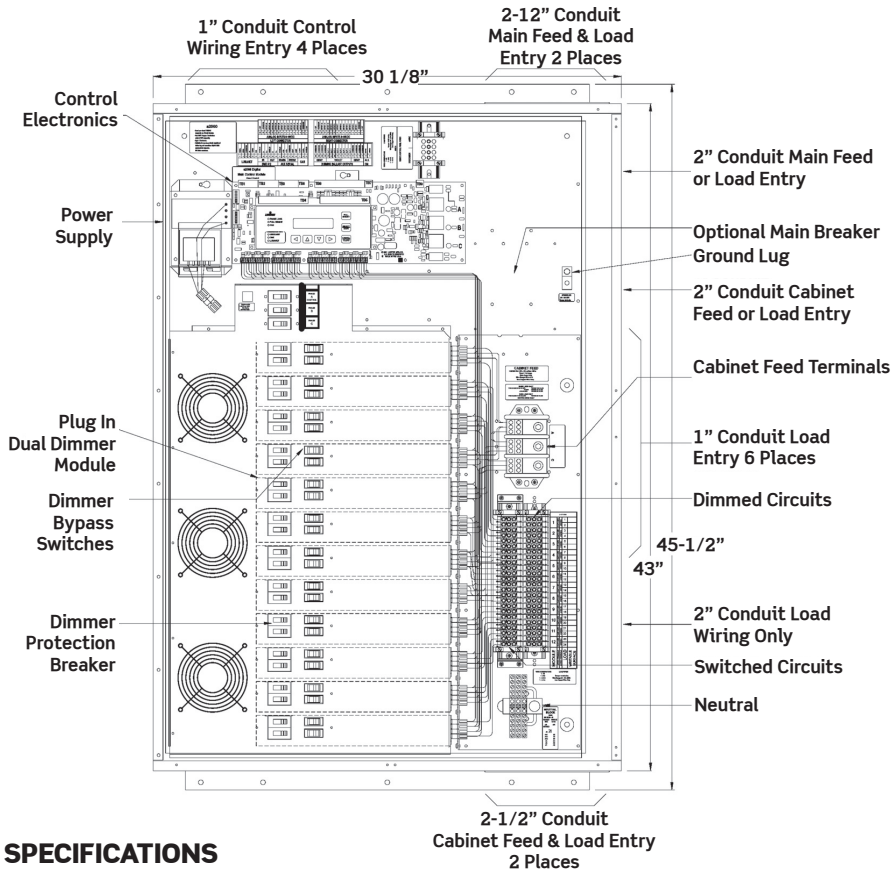
APPLICATIONS

- Office spaces
- Cafeterias
- Ballrooms
- Auditoriums
- Houses of worship
- Lecture halls
- Conference rooms
- Restaurants
- Multi-purpose rooms
- Spaces requiring a single dimming source for a broad range of loads
- Spaces requiring daylight harvesting control

PRODUCT DATA

WIRING DIAGRAM

Surface Mount Hardware Shown
Flush Mount Version Available



SPECIFICATIONS

ENVIRONMENTAL

- Enclosure: NEMA Type 1, #14 U.S. gauge steel, indoors only
- Operating Temperature Range: 32–104° F (0–40° C)
- Relative humidity: Less than 90% non-condensing
- Mounting: surface or flush

COMPATIBLE CONTROLS

- Dimensions® D8000
- Dimensions D4200
- DMX Controllers
- Analog 0-10VDC
- Contact factory for other compatibility options

STANDARDS

- UL and cUL Listed (Reference: UL File E123072)
- Backed by a limited two-year warranty

POWER

- Input Power: 120V, 230V, 277V
- Single phase or three phase
- All voltage 60 Hz, phase-to-neutral
- Branch circuit breakers: UL listed fully magnetic (no thermal nuisance tripping)
- Per circuit bypass switches

AIC RATINGS

- 120V Cabinets - 10,000A
- 277V Cabinets - 10,000A

SOURCES/LOAD TYPES*

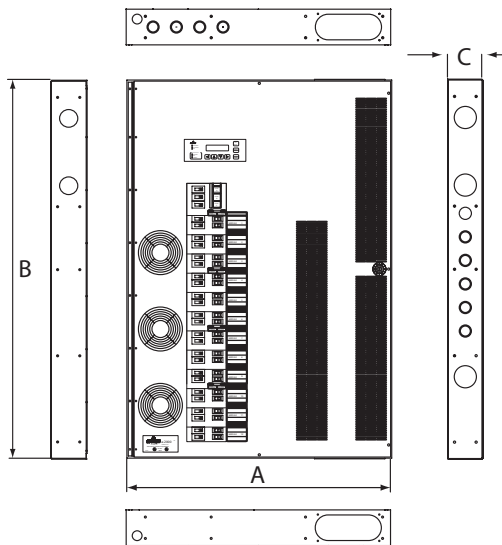
- Incandescent (halogen)/tungsten
- Magnetic low voltage
- Advance Mark 10®†
- 0-10VDC fluorescent dimming ballasts and LED driver (8 per control module)
- 3-wire fluorescent dimming ballasts and LED driver (Lutron Hi-lume® & Eco-10™)†
- HID (non-dim only)
- Electronic low-voltage (factory approved transformer only)**

*Refer to Dimmer Module data sheet

** May require additional equipment

† Mark 10 is a registered trademark of Advance Transformer Company. Eco-10 is a trademark and Hi-lume is a registered trademark of Lutron Electronics, Inc

DIMENSIONS



CABINET	A*	B*	C*
12	30.12" (765.04mm)	29.87" (758.69mm)	4.12" (104.64mm)
24	30.12" (765.04mm)	43" (109.2mm)	4.12" (104.64mm)
36	30.12" (765.04mm)	72.87" (1850.89mm)	4.12" (104.64mm)
48	30.12" (765.04mm)	86" (2184.4mm)	4.12" (104.64mm)

*Flush trim adds 2" (50.8mm) to overall length and width

SPECIFICATIONS

CABINET WEIGHT		
Cabinet Size	Shipping Weight*	Installed Weight*
12	145 lbs (66 kg)	126 lbs. (57.4 kg)
24	185 lbs (84.2 kg)	155 lbs. (70.6 kg)
36	311 lbs (141.6 kg)	285 lbs. (129.7 kg)
48	343 lbs (156.1 kg)	310 lbs. (141.1 kg)

*Dimmer modules not included. Dimmer modules weigh approximately 3.25 lbs. (1.25 kg)

HEAT OUTPUT

# OF CHANNELS	MAXIMUM* (BTUs/HOUR)
6	1179
12	2358
18	3537
24	4715
36	7073
48	9431

*Assumes connected load of 1920W w/circuit in continuous use, 97% dimmer efficiency

FEED CAPACITY

CABINETS WITH MAIN BREAKERS (FACTORY INSTALLED)		
Main Breaker Size (A)	Cabinet Sizes	Wire Size
30, 50, 60	12, 24	#14-#2 AWG
40*	24	#14-#2 AWG
70, 80, 100	12, 24	#12-2/0 AWG
90	24	#12-2/0 AWG
100, 125	24	#12-2/0 AWG
125 (1Ø only)	12	#4-250kcmil
150	24, 36	#4-250kcmil
175*, 200	24, 36	#4-250kcmil
225	36	#4-250kcmil

*Call factory for availability

CABINETS WITH MAIN LUGS			
Cabinet Size	Phase	Maximum Feed Size	Wire Size
12	1	125A	#14-2/0 AWG
12	3	80A	#14-2/0 AWG
36	1	250A	#6-250kcmil
36	3	250A	#6-250kcmil
24	1	250A	250kcmil-#6
24	3	175A	#4/0-#6
48	1	500A	2x250kcmil-#6
48	3	350A	2x250kcmil-#6

Leviton Mfg. Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062 1-800-736-6682 Tech Line: 1-800-959-6004 Fax: 503-404-5594 www.leviton.com/les
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ORDERING INFORMATION

CAT. NO.	DESCRIPTION
Cabinets	
A2B1L-112	a-2000 Universal Cabinet, 6 module, 12 circuit, 1 phase, 120/240VAC, with analog input card
A2B1L-124	a-2000 Universal Cabinet, 12 module, 24 circuit, 1 phase, 120/240VAC, with analog input card
A2B3L-112	a-2000 Universal Cabinet, 6 module, 12 circuit, 3 phase, 120/208VAC, with analog input card
A2B3L-124	a-2000 Universal Cabinet, 12 module, 24 circuit, 3 phase, 120/208VAC, with analog input card
A2B3L-212	a-2000 Universal Cabinet, 6 module, 12 circuit, 3 phase, 277/480VAC, with analog input
A2B3L-224	a-2000 Universal Cabinet, 12 module, 24 circuit, 3 phase, 277/480VAC, with analog input card
A2D1L-112	a-2000 Universal Cabinet, 6 module, 12 circuit, 1 phase, 120/240VAC
A2D1L-124	a-2000 Universal Cabinet, 12 Module, 24 circuit, 1 phase, 120/240VAC
A2D1L-136	a-2000 36 Circuit Cabinet, 1 phase, 120/240VAC, consists of (1) 24-ckt and (1) 12-ckt cabinets factory bussed
A2D1L-148	a-2000 48 Circuit Cabinet, 1 phase, 120/240VAC, consists of (2) 24-ckt cabinets factory bussed
A2D3L-112	a-2000 Universal Cabinet, 6 module, 12 circuit, 3 phase, 120/208VAC
A2D3L-124	a-2000 Universal Cabinet, 12 module, 24 circuit, 3 phase, 120/208VAC
A2D3L-136	a-2000 36 Circuit Cabinet, 3 phase, 120/208VAC, consists of (1) 24-ckt and (1) 12-ckt cabinets factory bussed
A2D3L-148	a-2000 48 Circuit Cabinet, 3 phase, 120/208VAC, consists of (2) 24-ckt cabinets factory bussed
A2D3L-212	a-2000 Universal Cabinet, 6 module, 12 circuit, 3 phase, 277/480VAC
A2D3L-224	a-2000 Universal Cabinet, 12 module, 24 circuit, 3 phase, 277/480VAC
A2D3L-236	a-2000 36 Circuit Cabinet, 3 phase, 277/480VAC, consists of (1) 24-ckt and (1) 12-ckt cabinets factory bussed together
A2D3L-248	a-2000 48 Circuit Cabinet, 3 phase, 277/480VAC, consists of (2) 24-ckt cabinets factory bussed together
Main Breaker options, factory installation required. Order with cabinet. (Single cabinet configurations only)	
For 3 Phase, 120/208V Cabinets:	
A2K3B- ____	Indicate breaker size in amps: 30, 50, 60, 70, 80, 100, 125, 150, 175, 200, 225
For 3 Phase, 277V Cabinets	
A273B ____	Indicate breaker size in amps: 30, 50, 60, 70, 80
Accessories	
A2KFL-012	a-2000 Flush Mount Trim Kit for a 12 channel cabinet
A2KFL-024	a-2000 Flush Mount Trim Kit for a 24 channel cabinet
A2KFL-036	a-2000 Flush Mount Trim Kit for a 36 channel cabinet
A2KFL-048	a-2000 Flush Mount Trim Kit for a 48 channel cabinet

a-2000® Cabinets

Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

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