CURBELL MEDICAL

PATIENT ROOM CONTROL

FOR LIGHTING, DOORS, DRAPES, AND BLINDS

CURBELL MEDICAL

OUR LONG HISTORY

Curbell has been supplying hospitals and long-term care facilities with innovative products for over 50 years. We have strong relationships with bed, television, and nurse call system manufacturers, and we work closely with them to ensure that our products work properly and safely with all types of equipment. Most importantly, we work with you, to create custom solutions that meet your requirements and specifications.

NURSE CALL EXPERIENCE

From our beginning, Curbell has been involved in connecting hospital room equipment to various types of nurse call systems. Since then, we've become an industry leader in nurse call system integration, and we use this expertise to make sure that our equipment properly interfaces with your nurse call system, no matter what brand it is.

OUR COMMITMENT TO QUALITY

Curbell works to continuously improve our operations, products, and services. We are medical device manufacturer registered with the FDA. Our quality management system complies with ISO 13485:2016, and we are compliant with all government and industry regulations.

LOW VOLTAGE CONTROLLERS

GIVE YOUR PATIENTS CONTROL OF THEIR ROOM ENVIRONMENT

Curbell's low voltage controllers allow patients to safely operate high-voltage circuits such as lights, electric doors, and drapes with their pillow speaker or bed communication side rail. We offer models to mount either in the wall/headwall or in the lighting fixture itself. Our dimming low voltage controllers (page 4) are our most advanced low voltage controller yet, with the ability to control up to three loads with dimming.

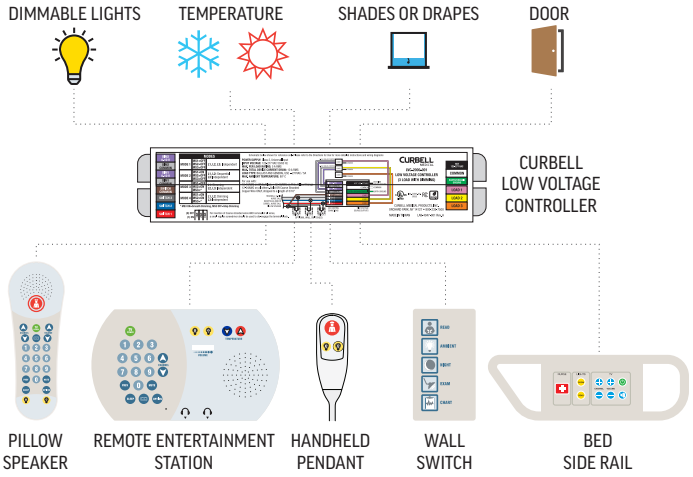
CONTENTS

GETTING THE MOST FROM YOUR NURSE CALL SYSTEM

INCREASE PATIENT SATISFACTION

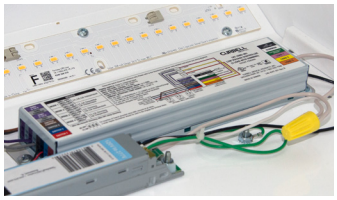
Studies have shown that a patient's ability to control their room lighting enhances the healing process[1]. Now, hospitals can give their patients increased lighting and environmental control through the use of Curbell's advanced low voltage controller.

The LVC-2000 series of low voltage controllers from Curbell can give your patients control of up to three room features, including dimmable lights, heating/cooling, and even motorized shades, drapes, or doors.

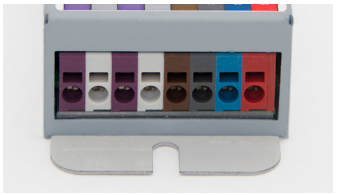


MAXIMIZE EFFICIENCY

Curbell offers low voltage controllers that are compatible with incandescent, fluorescent, and LED lighting.



Curbell's low voltage controllers cover all your needs throughout your hospital, with models available to mount in the wall or light fixture.



Color-coded push pin connectors reduce installation time.

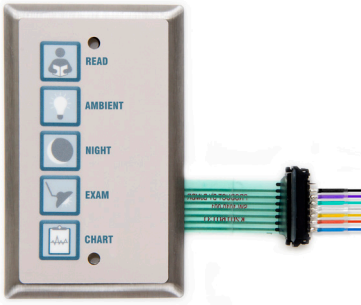
1. http://www.hermanmiller.com/research/research-summaries/patient-rooms-a-changing-scene-of-healing.html

CHOOSING THE RIGHT LOW VOLTAGE CONTROLLER

The chart below gives a quick overview of the main differences between our various low voltage controllers. Our most popular configurations are listed, but if you have specific requirements, we can create a custom configuration to meet them. Contact your contact representative for more information.

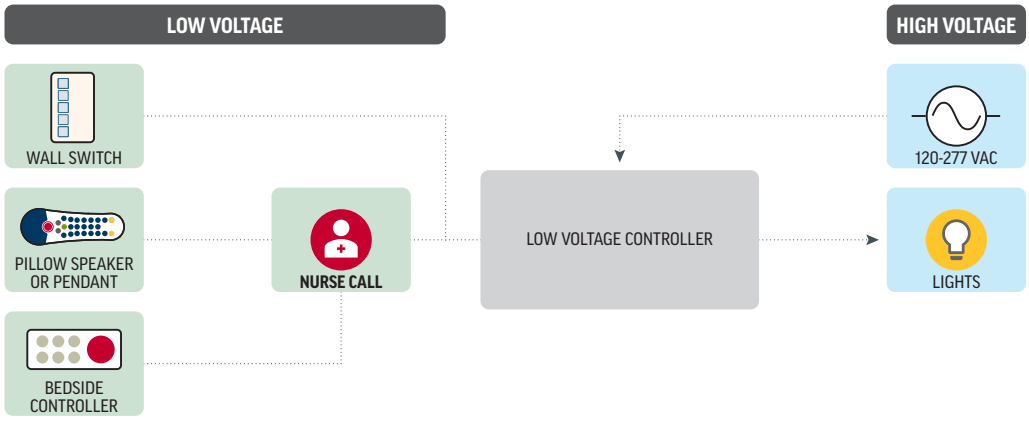
	LVC-2000 Series (page 4)	LC-060 (page 6)	LVC-3000-001 (page 7)
Dimming	Yes	—	—
Mounting	Five gang box (ceiling or wall)	Five gang box (ceiling or wall)	Two gang box (ceiling or wall)
	Lighting fixture	Lighting Fixture	
Compatible Lamps	LED (all LVC-2000 series)	LED	LED
	Fluorescent (LVC-2000-001)	Fluorescent	Fluorescent
Number of Loads	Three	Two	Two
Voltage Range	120-277	120-277	120-277

Give your staff easy access to patient room lighting with the Low Voltage Controller Wall Switch. It can be placed at the entrance of the room, next to the patient's bed, or anywhere in the patient room that is convenient for the staff. See page 8.



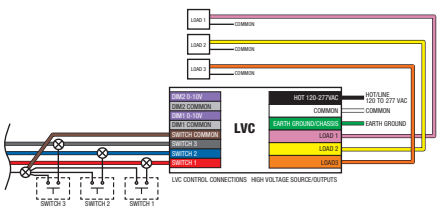
INSTALLATION AND WIRING

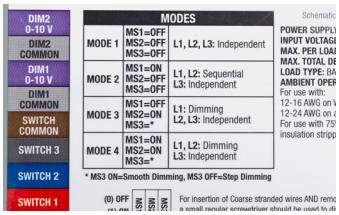
A qualified electrical contractor or a hospital staff electrician should do the installation to make sure that all national and local electrical codes are followed. There are many different room layouts, but what's pictured here is a fairly common setup.

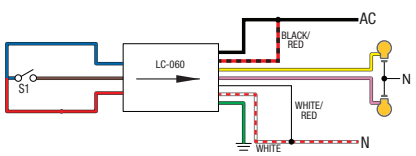


WIRING DIAGRAMS

Wiring diagrams and mode settings for our low voltage controllers are included in the directions for use, as well as on our website: **www.curbellmedical.com/lvc-wiring**

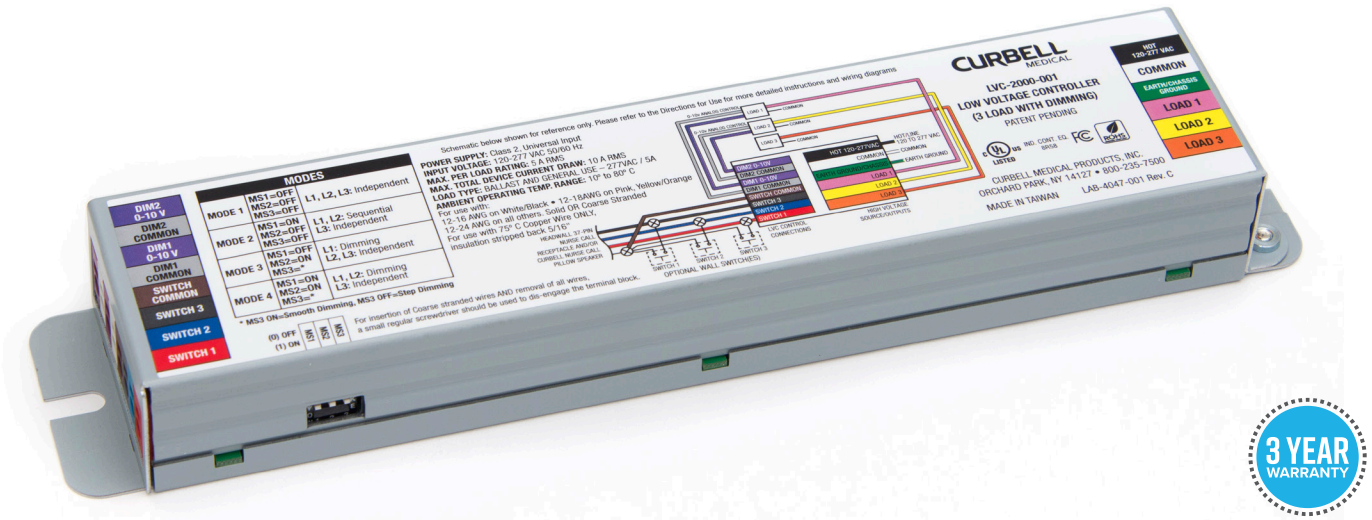






DIMMING LOW VOLTAGE CONTROLLER

FOR LIGHTING FIXTURE, HEADWALL, AND CEILING APPLICATIONS



The LVC-2000 is our most capable and flexible low voltage controller. Its small size allows mounting into lighting fixtures and masonry boxes, and its ability to control three loads gives you lots of options for various lighting configurations. Most importantly, it allows dimming, giving your patients the ability to set the lighting to the level that makes them the most comfortable.

- True universal voltage (120-277 VAC)
- Can be used to operate high-voltage circuits such as lights, electric doors, blinds, and drapes
- For use with fluorescent, LED, and other lamp types
- Can be controlled from a pillow speaker, bed side rail, or wall switch with normally-open momentary dry contacts
- Can be set up for multiple modes of operation:
  - Three loads independently (on/off)
  - Two loads sequentially (on/off) and a third load independently (on/off)
  - One load independently (on/off) with 0-10V dimming control and second and third load independently (on/off)
  - Two loads independently (on/off) with 0-10V dimming control and a third load independently (on/off)
- Safe for use near medical equipment that is sensitive to electromagnetic noise

CONFIGURATIONS

Our most popular configurations are shown below. other low voltage controllers with different configurations are available, and we can also create a custom configuration to meet your requirements.

LVC-2000-001

- 0-10V dimming with LED lights (with dimming driver) or fluorescent lights (with ballast)
- Supports one direction smooth or step dimming from 100% to off

LVC-2000-004

- 0-10V dimming with LED lights (with dimming driver)
- Supports bi-directional smooth dimming from 25% to 100% with quick on/off

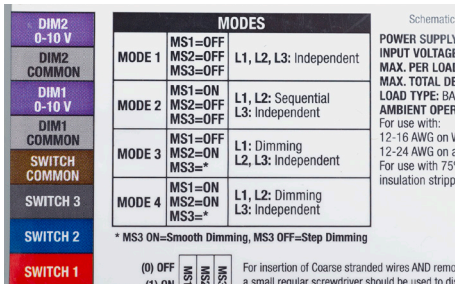
- Supports one direction step dimming from 100% to off

LVC-2000-006

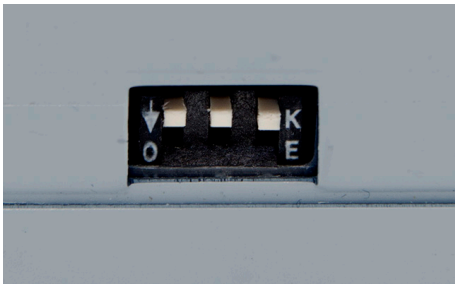
- 0-10V dimming with LED lights (with dimming driver)
- Supports bi-directional smooth dimming from 100% to off

- Supports one direction step dimming from 100% to off

- Exam light override (turns two loads to maximum brightness)

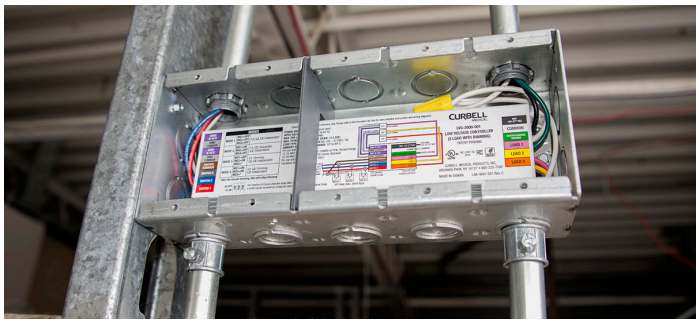


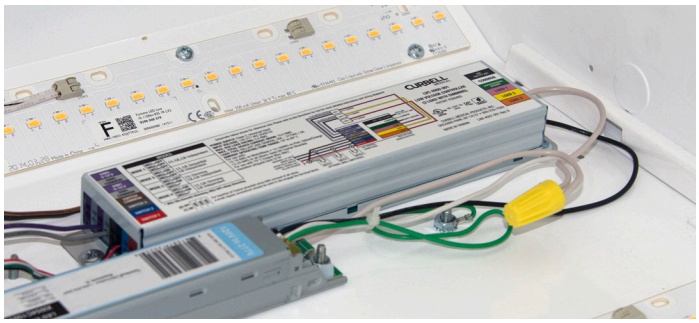
Four modes allow for numerous dimming and non-dimming configurations.



Side-mounted DIP switches let you switch between modes before installation.

Color-coded push pin connectors make installation quick and simple.





These pictures are for reference only and depict a typical LVC-2000 installation. Many alternate luminaires and installations may exist. Please consult with local NEC Codes and other applicable agency listing requirements for specific installations requirements.

COMMON SPECIFICATIONS

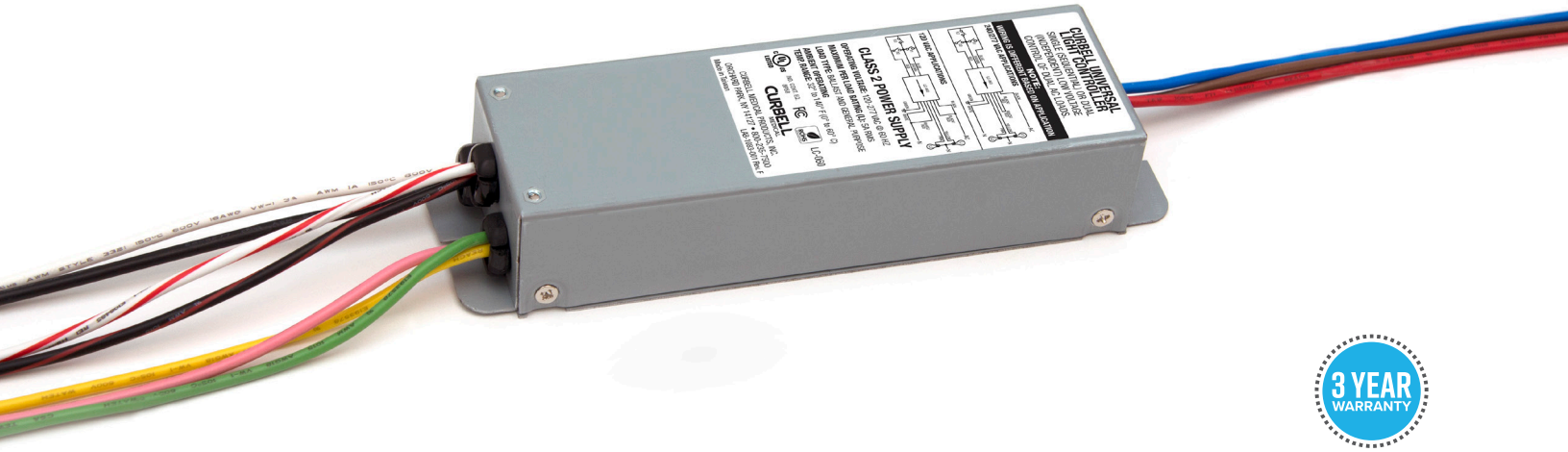
Input Voltage	▸ 120-277 VAC, 50/60 Hz ▸ 277 VAC, 5 A, General Use ▸ 277 VAC, 5 A, Ballast ▸ RMS current should not exceed 5 amps per load
Load Type	▸ 277 VAC, 5 A, General Use per Load ▸ 277 VAC, 5 A, Ballast per Load ▸ Maximum total device current: 10 A +10% to accommodate brief intermittent line swells
Output Voltage	120-277 VAC, 50/60 Hz
Output Devices	Three 30 amp relays driven by low voltage microcontroller, ESD protected
Low Voltage Momentary Switch Requirements	Dry contacts, momentary, normally open, capable of switching 5 VDC @ 0.5 mA
Power Supply Classification	UL listed switch mode power supply
Ambient Operating Temperature Range	50° to 176° F (10° to 80° C)
External wires	▸ White/Black: 12-16 AWG, solid or coarse stranded ▸ Pink, Yellow, Orange, Green: 12-18 AWG, solid or coarse stranded ▸ All other wires: 12-24 AWG, solid or coarse stranded ▸ For use only with 75° C copper wire, insulation stripped back 5/16" ▸ Ensure that wire used exceeds corresponding voltage ratings
Mounting	▸ Mounts in a lighting fixture, ceiling, or headwall ▸ May be mounted in a five gang masonry box with physical separation between high and low voltage
Housing	.032" Galvanized Zinc-Plated Steel
Dimensions	9" with tabs (L) x 1.90" (W) x 1.10" (H)
Warranty	Three Years
Regulatory Listings and Compliance	▸ UL/C-UL Listed to UL 508 ▸ Compliant with FCC, Title 47 CFR 15 – Class B ▸ This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. ▸ Compliant with CAN ICES-3 (N/NMB-3(B) ▸ RoHS compliant

UNIQUE SPECIFICATIONS

	LVC-2000-001	LVC-2000-004	LVC-2000-006
Lamp Type	▸ LED with dimming driver ▸ Fluorescent with ballast (ballast must have a power factor of 0.9 or greater)	▸ LED with dimming driver	▸ LED with dimming driver
Dimming Control	▸ Current sourcing ▸ 0-10V step and smooth ▸ One direction smooth or step dimming from 100% to off	▸ Current sourcing ▸ 0-10V step and smooth ▸ Bi-directional smooth dimming from 25% to 100% with quick on/off ▸ One direction step dimming from 100% to off	▸ Current sourcing ▸ 0-10V step and smooth ▸ Bi-directional smooth dimming from 100% to off, or one direction step dimming from 100% to off ▸ Exam light override (turns two loads to maximum brightness)

NON-DIMMING LOW VOLTAGE CONTROLLER

FOR LIGHTING FIXTURE APPLICATIONS



3 YEAR WARRANTY

LC-060

- For mounting into lighting fixtures or a five gang masonry box
- Can be used to operate high-voltage circuits such as lights, electric doors, blinds, and drapes
- For use with fluorescent, LED, and other lamp types
- Can be controlled from a pillow speaker, bed side rail, or wall switch with normally-open momentary dry contacts
- Controls two loads independently (on/off), or two loads sequentially (on/off)
- Safe for use near medical equipment that is sensitive to electromagnetic noise

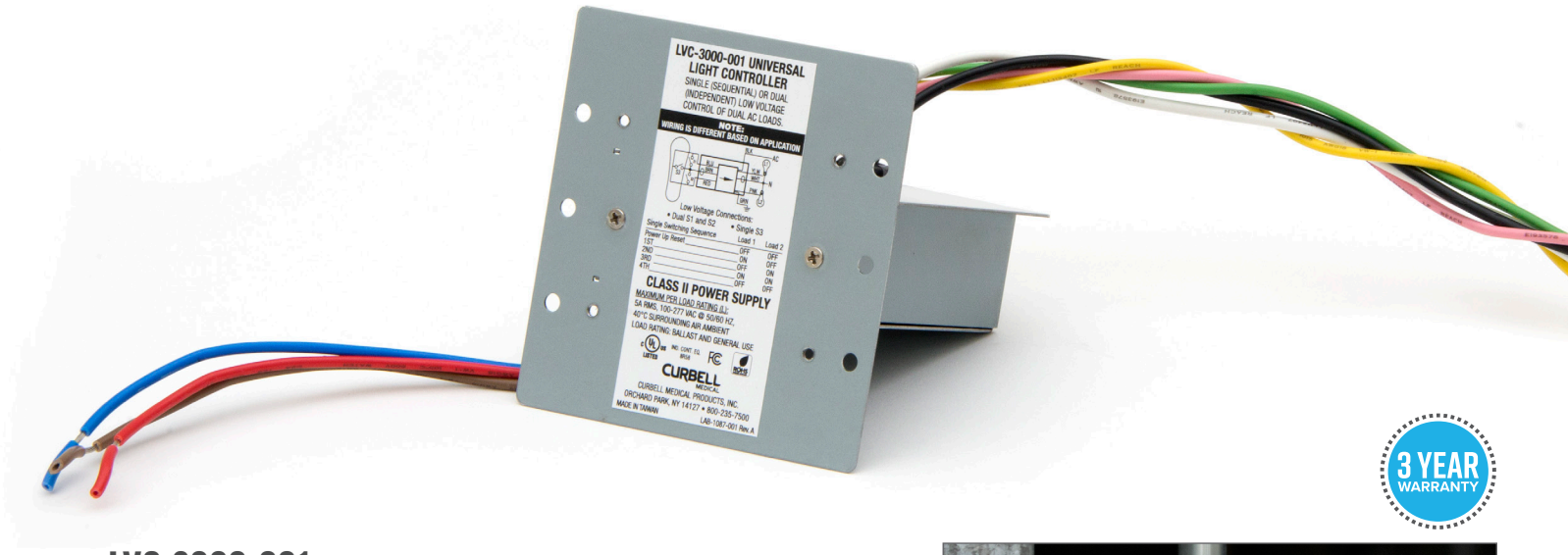
This picture is for reference only and depict typical installations. Please consult with local NEC Codes and other applicable agency listing requirements for specific installations requirements.

SPECIFICATIONS

Input Voltage	▸ 120-277 VAC, 50/60 Hz ▸ 277 VAC, 5 A, General Use ▸ 277 VAC, 5 A, Ballast ▸ RMS current should not exceed 5 amps per load
Load Type	▸ 277 VAC, 5 A, General Use per Load ▸ 277 VAC, 5 A, Ballast per Load ▸ Maximum total device current: 10 A +10% to accommodate brief intermittent line swells
Lamp Type	Fluorescent, LED, and other lamp types
Output Voltage	120-277 VAC, 50/60 Hz
Output Devices	Two 10 amp relays driven by low voltage microcontroller, ESD protected.
Dimming Control	NA
Low Voltage Momentary Switch Requirements	Dry contacts, momentary, normally open, capable of switching 5 VDC @ 0.5 mA
Power Supply Classification	Isolation from line voltage via a Class 2 transformer
Ambient Operating Temperature Range	32° to 140° F (0° to 60° C)
External wires	White/Black: 16 AWG stranded, all other wires: 18 AWG stranded
Mounting	▸ Mounts in a lighting fixture, ceiling, or headwall ▸ May be mounted in a five gang masonry box with physical separation between high and low voltage
Housing	.032" Galvanized Zinc-Plated Steel
Dimensions	6.75" with tabs (L) x 1.90" (W) x 1.20" (H)
Warranty	Three Years
Regulatory Listings and Compliance	UL/C-UL Listed to UL 508 | Compliant with FCC, Title 47 CFR 15 – Class B | RoHS compliant

NON-DIMMING LOW VOLTAGE CONTROLLER

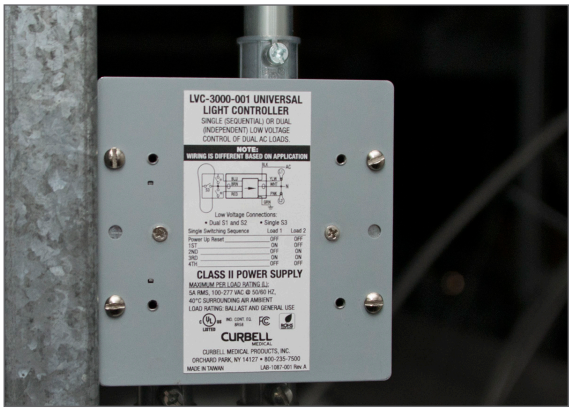
FOR HEADWALL AND CEILING APPLICATIONS



3 YEAR WARRANTY

LVC-3000-001

- For mounting into walls or ceilings in a two gang masonry box
- Can be used to operate high-voltage circuits such as lights, electric doors, blinds, and drapes
- For use with fluorescent, LED, and other lamp types
- Can be controlled from a pillow speaker, bed side rail, or wall switch with normally-open momentary dry contacts
- Controls two loads independently (on/off), or two loads sequentially (on/off)
- Safe for use near medical equipment that is sensitive to electromagnetic noise



This picture is for reference only and depict typical installations. Please consult with local NEC Codes and other applicable agency listing requirements for specific installations requirements.

SPECIFICATIONS

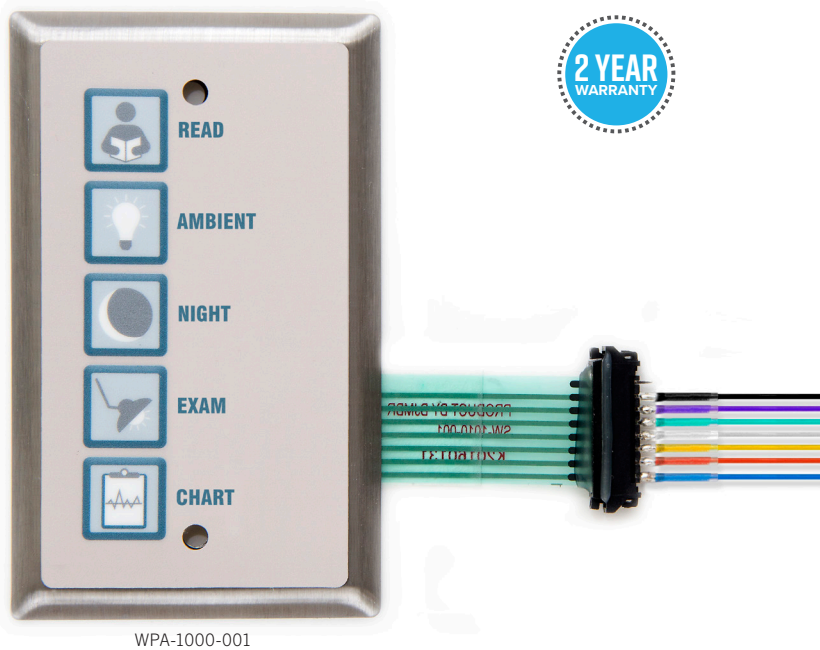
Input Voltage	▸ 120-277 VAC, 50/60 Hz ▸ 277 VAC, 5 A, General Use ▸ 277 VAC, 5 A, Ballast ▸ RMS current should not exceed 5 amps per load
Load Type	▸ 277 VAC, 5 A, General Use per Load ▸ 277 VAC, 5 A, Ballast per Load ▸ Maximum total device current: 10 A +10% to accommodate brief intermittent line swells
Lamp Type	Fluorescent, LED, and other lamp types
Output Voltage	120-277 VAC, 50/60 Hz
Output Devices	Two 10 amp relays driven by low voltage microcontroller, ESD protected
Dimming Control	NA
Low Voltage Momentary Switch Requirements	Dry contacts, momentary, normally open, capable of switching 5 VDC @ 0.5 mA
Power Supply Classification	UL listed switch mode power supply
Ambient Operating Temperature Range	40° to 105° F (5° to 40° C)
External wires	White/Black: 16 AWG stranded • All other wires: 18 AWG stranded
Mounting	3.5" deep masonry box, two gang minimum
Housing	.032" Galvanized Zinc-Plated Steel
Dimensions	3.5" (L) x 3.5" (W) x 3.8" (D)
Warranty	Three Years
Regulatory Listings and Compliance	UL/C-UL Listed to UL 508 | Compliant with FCC, Title 47 CFR 15 — Class B | RoHS compliant

LOW VOLTAGE LIGHTING CONTROLLER WALL SWITCHES

FOR HEADWALL AND CEILING APPLICATIONS

Curbell's Low Voltage Controller Wall Switch is designed to allow the clinical staff to easily access patient room lighting. It can be placed at the entrance of the room, next to the patient's bed, or anywhere in the patient room that is convenient for the staff. Different control configurations can be used together to create customized access without needlessly complicating the installation. The low voltage switch is wired in parallel with the pillow speaker, handheld pendants, bed side rail, and/or Curbell Remote Entertainment Station to the low voltage side of the Curbell low voltage controller.

- Provides easy access for clinicians
- Controls up to five separate lights/loads
- Seamlessly integrates with any nurse call system
- Allows staff to dim the lights (when used with a Curbell dimming LVC)
- Quick on/off of any light/load
- Two year warranty



WPA-1000-001

CONFIGURATIONS

Shown here are our most popular configurations, but many more are available, and we can also create a custom configuration to meet your requirements. Contact your Curbell representative for more information.

WPA-2000-043

WPA-2000-054

WPA-2000-065

WPA-2000-077

WPA-2000-093

WPA-2000-123

SWITCHES	CONFIGURATION	MODEL	PART NUMBER
	Ambient	WPA-2000-065	29315
1	Exam	WPA-2000-077	29316
	Sink	WPA-2000-135	29322
	Ambient, Exam	WPA-2000-284	29337
	Ambient, Night	WPA-2000-106	29319
	Ambient, Read	WPA-2000-264	29335
2	Exam, Ambient	WPA-2000-114	29320
	Read, Ambient	WPA-2000-054	29314
	Shade Up, Shade Down	WPA-2000-154	29324
	Ambient, Exam, Night	WPA-2000-203	29329
	Ambient, Exam, Read	WPA-2000-193	29328
	Ambient, Read, Exam	WPA-2000-093	29318
3	Read, Ambient, Exam	WPA-2000-163	29325
	Read, Ambient, Night	WPA-2000-043	29313
	Read, Ambient, Sink	WPA-2000-123	29321
	Entry, Ceiling, Wall, Night	WPA-2000-142	29323
	Exam, Ambient, Room, Chart	WPA-2000-232	29332
4	Night, Room, Ambient, Exam	WPA-2000-222	29331
	Read, Ambient, Night, Exam	WPA-2000-032	29312
	Ambient, Ambient, Read, Exam, Night	WPA-2000-081	29317
	Blank, Read, Night, Ambient, Exam	WPA-2000-021	29311
5	Entry, Ambient, Exam, Read, Family	WPA-2000-181	29327
	Read, Ambient, Night, Exam, Chart	WPA-2000-011	29310

OTHER PRODUCT LINES

In hospital rooms around the world, patients are dealing with demands on their health, and staff members are dealing with demands on their time. Curbell Medical is at the center of it all, with product lines that have set the standard for hospital room integration. For more than 50 years, we have made sure that patients can expect the best possible experience. And our salespeople make sure that our customers can expect the same, bringing decades of experience to partnerships that are built for the long haul. Whether it's a visionary product or a tried-and-true relationship, there's integrity in everything we build.


NURSE CALL AND TV

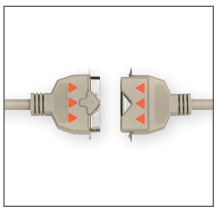
- Pillow speakers
- Call cords
- Jumper cables


PATIENT MONITORING

- Reusable ECG cables and lead wires
- Disposable lead wires
- SPO2 probes and adaptors


FALL MANAGEMENT

- Chair and bed monitors
- Cordless sensor pads
- Floor cushions and sensors




BED CABLES

- Bed communication cables
- Bed breakaway cables


INSTALLATION

- Receptacle kits
- Dummy plugs
- Wall plates


MATTRESSES AND COVERS

- Bed mattresses and covers
- Stretcher mattresses and covers

ORDERING AND WARRANTY INFORMATION

PLACING ORDERS

Orders may be subject to a minimum order requirement. Part numbers, product availability, and pricing are subject to change without notice.

VIA PHONE

Call Curbell toll-free anywhere in the US or Canada at 1-800-235-7500. Outside of the US, call 1-716-667-2520.

VIA FAX

Fax us at 716-667-7775

E-MAIL

We want to hear from you. Contact us with your comments and suggestions at info@curbellmedical.com

PAYMENT TERMS

- Net 30 days terms are extended to established accounts
- Payment with order: send check or money order. Please call our toll-free number for the exact shipping charge
- COD: Pay the full amount including shipping upon receipt
- Visa, MasterCard, Discover, and American Express are gladly accepted
- Shipping and handling charges will be added to every order

SELLER'S LIMITED WARRANTY

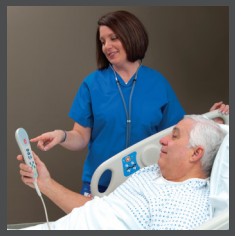
Unless otherwise stated in the limited warranty contained in literature that is shipped with the product (in which case the product literature limited warranty will in all respects apply), the Seller warrants the Buyer that the products will be free from defects in workmanship and materials under normal use for the period of two years from the date of the applicable invoice for pillow speakers and a period of one year from the date of the applicable invoice for all other products and repair services. Repair of pillow speakers is under a 90-day limited warranty against defects in materials and workmanship.

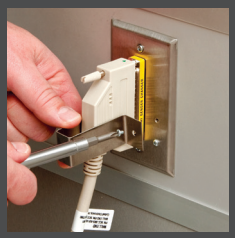
HOW TO RETURN MERCHANDISE

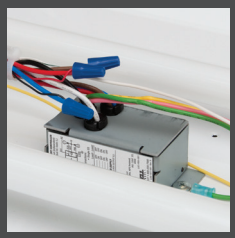
All returns must be processed within 60 days of delivery date and are subject to a 25% restocking fee. Product must be in new, resalable condition, and in the original packaging. Custom-made items are non-returnable. Contact Customer Service at 1-800-235-7500 and ask for a return merchandise authorization number (RMA#). Enclose this RMA# with the item, print the RMA# on the outside of the package, and mail it to:

Curbell Medical Products, Inc.
20 Centre Drive
Orchard Park, NY 14127

Curbell Medical Products, Inc.
7 Cobham Drive
Orchard Park, NY 14127
1-800-235-7500 • Fax 716-667-7775
e-mail: info@curbellmedical.com







Hospital patient rooms depend on connectivity — between patients and nurses, and the various technologies that impact the patient experience.

Curbell Medical is a crucial part of the ever-evolving interface that makes all of these connections possible. By combining our deep institutional knowledge and decades of experience, we create innovative solutions that make hospitals more efficient, and improve patient comfort and safety. It's instant peace of mind, and it's as easy as pressing a button.

 MAP1703G