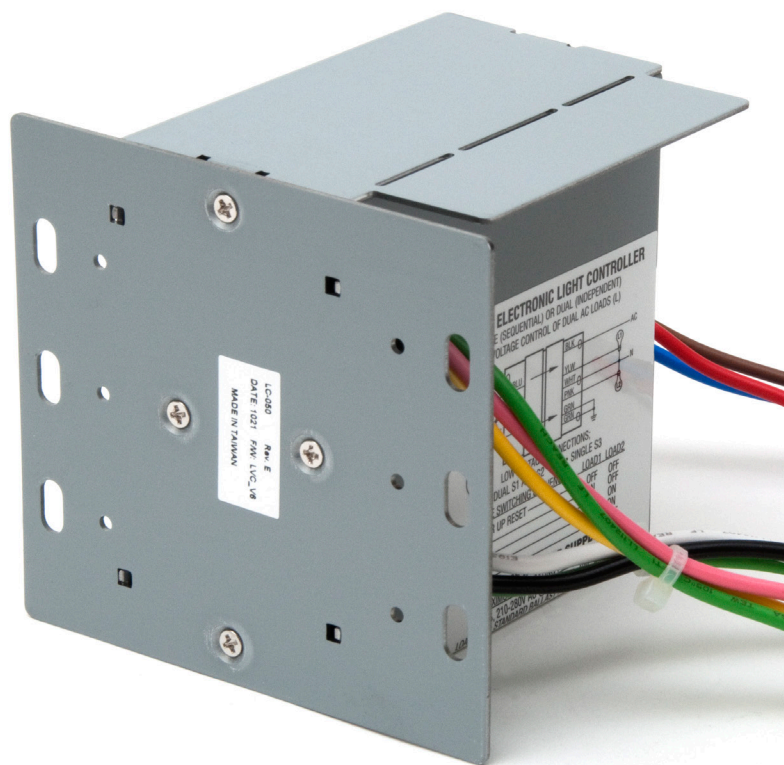





LC-040 and LC-050 LOW VOLTAGE CONTROLLERS

- ▶ 100-130 or 210-280 input voltage
- ▶ Mounts in four-gang or larger masonry box
- ▶ Control for up to two loads

Low Voltage Controllers enable users to safely operate the high-voltage lighting found in hospital and nursing home rooms with their pillow speaker or bed communication side rail. They're tested and approved for use with all Nurse Call systems that use a switch with normally-open momentary dry contacts for auxiliaries.

- ▶ For use with fluorescent, LED, and other lamp types
- ▶ Can be used to operate high-voltage circuits such as lights, electric doors, and drapes
- ▶ Can be controlled from a pillow speaker, bed side rail, or wall switch with normally-open momentary dry contacts
- ▶ Controls two loads independently, or two loads sequentially
- ▶ Safe for use near medical equipment that is sensitive to electromagnetic noise

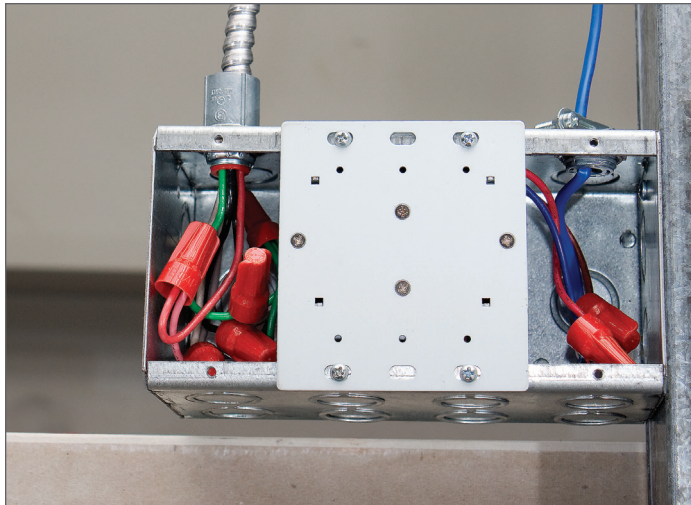


	LC-040 100-130V Low Voltage Controller	LC-050 210-280V Low Voltage Controller
Input voltage	100-130 VAC, 60 Hz RMS current should not exceed 5 amps	210-280 VAC, 60 Hz RMS current should not exceed 5 amps
Load Type	277 VAC, 5 A, General Use per Load 277 VAC, 5 A, Ballast per Load Maximum total device current: 10 A	277 VAC, 5 A, General Use per Load 277 VAC, 5 A, Ballast per Load Maximum total device current: 10 A
Output voltage	100-130 VAC, 60 Hz	210-280 VAC, 60 Hz
Output devices	<ul style="list-style-type: none"> • Two 10 Amp relays driven by low voltage microcontroller • ESD protected 	<ul style="list-style-type: none"> • Two 10 Amp relays driven by low voltage microcontroller • ESD protected
Dimming Control	NA	NA
Low Voltage Momentary Switch Requirements	Dry contacts, momentary, normally open, capable of switching 5 VDC @ 0.5 mA	Dry contacts, momentary, normally open, capable of switching 5 VDC @ 0.5 mA
Lamp	No restrictions	No restrictions
Switching circuits operation voltage	5 VDC at 2.3 mA	5 VDC at 2.3 mA
Power Supply Classification	Isolation from line voltage via a Class 2 transformer	Isolation from line voltage via a Class 2 transformer
Operating Temp. Range	40° to 105° F (5° to 40° C)	40° to 105° F (5° to 40° C)
External wires	White/Black: 16 AWG stranded All other wires: 18 AWG stranded	White/Black: 16 AWG stranded All other wires: 18 AWG stranded
Mounting	3.5" deep masonry box, four gang min.	3.5" deep masonry box, four gang min.
Housing	.058" Galvanized Zinc-Plated Steel	.058" Galvanized Zinc-Plated Steel
Dimensions	3.5" (L) x 3.5" (W) x 3.8" (D)	3.5" (L) x 3.5" (W) x 3.8" (D)
Warranty	One Year	One Year
Regulatory Listings and Compliance	 UL/C-UL Listed to UL 508  Compliant with FCC, Title 47 CFR 15 – Class B	 RoHS compliant

©2016 Curbell Medical Products, Inc. MAP010E

Product Design and Application

The light controller is designed to mount inside a four gang, 3 1/2" deep masonry box. All connections should be made within this box and be capped with wire nuts. The National Electrical Code requires that barriers separate the low voltage and line voltage wiring in all hospital and nursing home patient rooms. To effectively use the barriers provided with the Light Controller, low voltage and line voltage must be in separate conduits, which enter the box at opposite ends, or top and bottom. All box connections must be kept isolated/separate from other circuits. A qualified electrical contractor or a hospital staff electrician should do the installation.



Wiring

The three wires on the low voltage side of the unit are designated as red, blue, and brown. When wiring as a single switch, sequential controller, you must connect the red and blue wires together to one side of the switch. The brown wire is the other side of the switch. This wiring can be done to a receptacle, or directly to a pillow speaker if it is hard wired to the nurse call system (Figure 1). When wiring as a two switch, combination control, the brown wire is common for the two switches. Blue is S1 and red is S2 (Figure 2).

On the other side of the control housing is the high voltage side, which has two groups of three wires. One group is the AC voltage in. It consists of a black wire (hot), a white wire (neutral), and a green wire (ground). The other group of wires is the AC voltage out to the load (lights). It consists of a yellow wire (hot, load 1), a pink wire (hot, load 2), and a green wire (earth ground). These connections go directly to the room lights, or other devices being controlled.

Momentary Switch States - Sequential Controller

Switches will reset to off position if power is interrupted for more than one second.

	Load 1	Load 2
After power up	Off	Off
1st Switch	On	Off
2nd Switch	Off	On
3rd Switch	On	On
4th Switch	Off	Off

Figure 1: For one SPST momentary switch, sequential

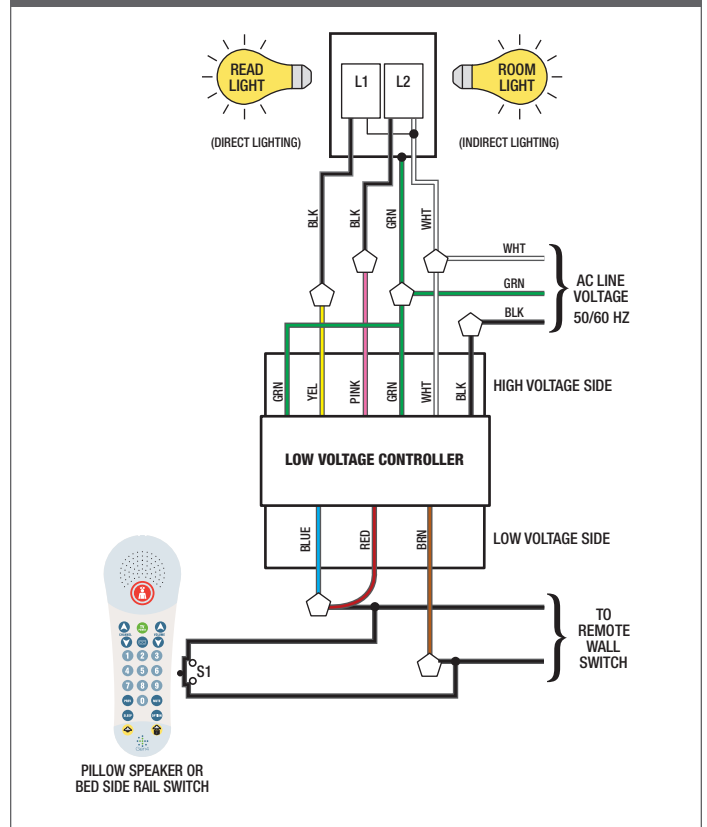
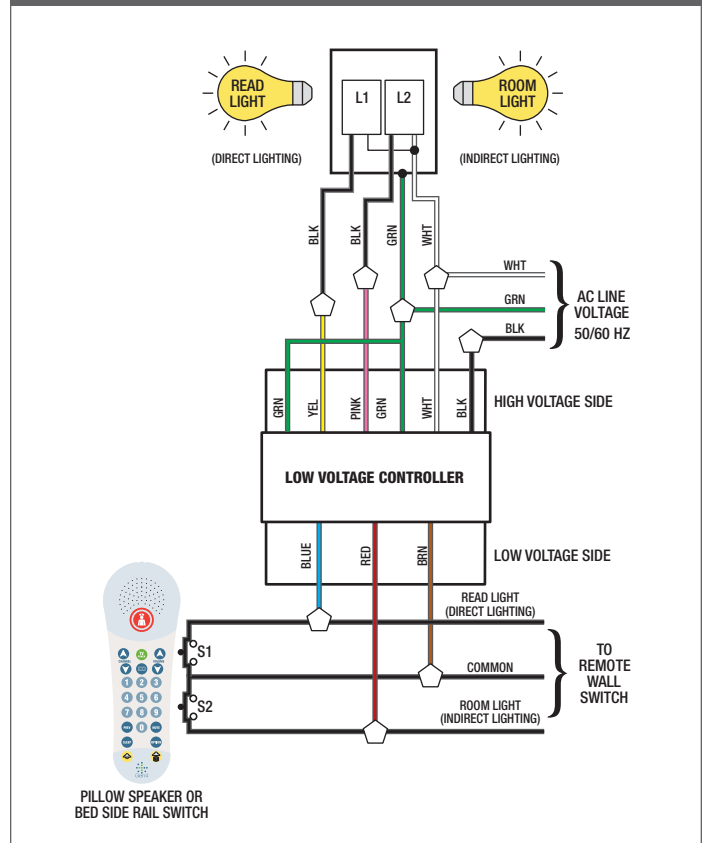


Figure 2: For one or two individually controlled SPST momentary switches, combination



These illustrations are not intended for installation purposes. For complete instructions, refer to the Directions For Use provided with the unit.