Light Controller
LC-040C

Description: A low voltage light control system is used in order to turn lights on or off, or control other high voltage devices in a hospital or nursing home room using a pillow speaker. The light controller is a device, which allows the patient to safely turn on and off high voltage lighting found in hospital and nursing home rooms. The controller can also be used to operate other high voltage circuits, like electric doors or drapes.

When used to operate lights, the controller can control one or two lights with one switch, or two lights independently with two switches. The controller is available for 100-130 VAC applications.

Operation: 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.

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. When wiring as a two switch, momentary control, the brown wire is common for the two switches. Blue is S1 and red is S2.

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 (ground). These connections go directly to the room lights, or other devices being controlled.

Mounting: Designed to mount into a four gang 3 1/2” deep masonry box.

Engineering Specifications: The contractor shall install and program the light controller (LC-040C) to predetermined specifications. The unit shall be installed inside a four gang masonry box.

Technical Information:
- **Input Voltage**: 100-130 VAC, 50/60 Hz
- **Output Voltage**: 100-130 VAC, 50/60 Hz
- **OUTPUT DEVICES**: Two 10 Amp relays driven by low voltage microcontroller, ESD protected
- **Switching Circuits Operating Voltage**: 5 VDC @ 2.3 mA
- **Dimensions**: (L) 3.182” x (W) 3.312” x (H) 3.338”
- **Operating Temperature**: 0º to 40º Celsius/40º to 105º Fahrenheit
- **External Wires**: 18 AWG stranded, pre-stripped, six inches long