

#### Building a Connected World

# Wall Mounted Dimmer Racks Installation and Maintenance Manual Supplement Applies to i24, i24e and i48 Quad

Enclosed is a copy of the Installation and Maintenance Manual for the original product. The wall-mounted units are very similar to the floor-supported units except in the way they mount and the size of the feeder lugs. The Quad version also includes additional load lugs. This supplement serves as a modifier to that manual for the wall-mounted product. Please follow the instructions in the manual except where modified below.

Page 2, Chapter 3 – The wall-mounted units are separate stand-alone dimmer racks. They may be mounted side-by-side but are not fastened together. Disregard this chapter.

Page 7, Chapter 4 – The wall-mounted units are provided with concentric knock-outs top and bottom in lieu of un-punched conduit entry panels. Two 1.5 / 2 / 2.5" T.S. and Eight 0.5 / 0.75 / 1 / 1.25" T.S. knock-outs are provided in both locations.

Page 10, Chapter 5 – Also allow 1" clearance on the left side so that the door can fully open.

Page 10, Chapter 6 – The wall-mounted units are attached to the wall via four holes in the back to accept 5/16" bolts. The rack must be mounted in a substantial manner to support its 179 lbs. plus the weight of any field wiring and conduit. The use of Unistrut or similar steel channel is recommended.

Page 11, Chapter 9 – The i24 and i24e are provided with single feeder lugs with the option for a second set. The i48 Quad is provided with dual feeder lugs.

Page 12, Table 1 – Line Lugs (rated for 90°C copper only at 75°C ampacity)

6 AWG – 250 kcmil. 375 in-lbs.

Ground Lug

14-10 AWG 35 in-lbs. 8 AWG 40 in-lbs. 6-4 AWG 45 in-lbs. 2-1/0 AWG 50 in-lbs. Page 13, Table 2 – The load terminals are as shown in the table. The load neutral terminals are as shown below.

| 14-10 AWG | 35 in-lbs |
|-----------|-----------|
| 8 AWG     | 40 in-lbs |
| 6-4 AWG   | 45 in-lbs |

Page 13, Table 3 – The Quad modules are as shown below.

```
4-1001 120V 15A 1.8kW i350 Quad Dimmer
4-1002 120V 20A 2.4kW i350 Quad Dimmer
```

Page 14, Paragraph 1 – The Quad rack has a second pair of load terminals to the left of those shown. The wiring to the right pair passes behind the left pair through openings in the support system for the left pair. The terminal set is wired in the same relationship as the circuit breaker arrangement in the dimmer module, upper left, upper right, lower left and lower right.

Page 36, Specifications – The following specifications are different than those shown.

Rack Capacity: 24 – 20/25A circuits max. (48 circuits for Quad)

12 – 50A circuits max.

Dimensions: 30.75" H x 15.5" W x 15.38" D

Weight: 78 lbs. empty (83 lbs. for Quad)

168 lbs. full (179 lbs. for Quad)

Max. Fan Noise Rating: 50 dba

Max. Feeder Size: 200A (400A for Quad)

## **Luma-Net Control Signal Installation Requirements**

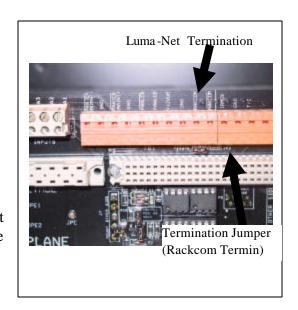
For i Series e dimmer racks which require the termination of a Luma-Net control run, follow these instructions.

#### Connection

The Luma-Net link connects to the backplane of the rack on TB1 as follows:

| Signal | Luma -Net 3 | Rack     | Rack Label |
|--------|-------------|----------|------------|
|        | Terminal    | Terminal |            |
| Rem +  | 1           | 9        | RAKCOM     |
| Rem -  | 2           | 10       | RAKCOM     |
|        |             |          | overlined  |
| Common | 3           | 8        | GND        |
| +V     | 4           | 7        | +12V       |

Although most Luma-Net phoenix style connectors have six terminals, there is no terminal 5 nor terminal 6 connection at the dimmer rack. Terminal 6 which is used for the hardware lock feature has no use at the dimmer rack and the "terminate" feature which is handled by terminal 5 is handled by the termination jumper.



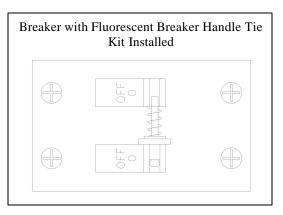
#### Termination

If the rack is at the end of the run, Jumper JP2 (Rackcom Termin.) must be installed in the backplane to terminate the run. The jumper is shipped installed by factory default.

Now the dimmer rack is capable of receiving and processing Luma-Net commands.

### **Special Installation Requirements for HiLume Dimming Circuits**

The HILUME feature is only usable in i Series e. This style of fluorescent dimming ballast requires (3) wires, (1) switched, (1) dimmed, and (1) neutral. To accommodate these requirements, the software will couple the odd-numbered dimmer with the next even-numbered dimmer. The odd-numbered dimmer is the variable component and the even-numbered dimmer is the switched component. The breakers for these dimmers must be tied together with the CTP-4-0307 fluorescent handle-tie kit and the rack slot labeled. Installation instructions for this are included with the kit.



The odd/even breakers in the i Series Quad are not below each other so they cannot be tied together; therefore, HILUME is not a quad feature. When the HILUME feature couples the dimmers the second address is dropped unless the subsequent addresses are moved up dimmer by dimmer. For this reason it is a good idea to put the HILUME dimmers at the end.