

# Troubleshooting Guide

## LightLEEDer 4 Load Room Controller

LL-4RC Part #LL002304

### General Issues

- Is there proper voltage from Transformer? 24vac Red to Red and 12vac Yellow to Red.
- Check Status LEDs:
  - Power- ON solid
  - OK- Blinking = CPU running
  - Com- Blinking = Data Communication Ok
- Are all relay ribbon cables firmly seated?
- Verify correct low voltage wiring for Occupancy Sensors, Photo Sensors, and Dimming Outputs.

### Communication Issues

- Is the Room Controller addressed correctly? (Remember 0s down for proper reference)
- Are Data Cables connected to correct In/Out ports and seated properly? IN port does not pass power to other downstream devices.
  - Test Data Cables for damage and verify data cables are terminated properly (T568B standard) using a cable tester.
- Is there more than one Room Controller or LightSync device with the same address?

### Occupancy Sensor not controlling lights

- Is there proper voltage to and from the sensor?
  - Out to sensor- 24vdc Black to Red (If 0 does voltage return when Blue wire removed?)
  - Return from sensor- 24vdc Black to Blue (if sensor detecting movement)
- Verify Input power current does not exceed 200Ma.
- Is the Input properly configured? Maintained on/off (or Maintained off only for vacancy sensor)?
- Are the correct Relays/Outputs properly mapped to the Input?

### Occupancy Sensor does not turn lights off

- “Stuck” inputs are usually due to a bad sensor head. Remove the blue wire. Does input open?
  - If multiple sensors on the same input, it only takes one bad one to hold up the entire run. Disconnect all sensors and reconnect one at a time until you find the bad one.
- Check sensitivity and time settings on the sensor and adjust if necessary.

### Photocell not controlling lights

- Is there proper voltage to and from the sensor?
  - Out to sensor- 5vdc Black to Red (If 0 does voltage return when Blue wire removed?)
  - Return from sensor- 0-5vdc Black to Blue (may fluctuate due to digital signal)
- Remove the blue wire. The fixtures should ramp down to 0 and Open relays.
- Is the Input properly configured? On and Off levels properly set?
- Are the correct Relays/Outputs properly mapped to the Input?

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Address switches for setting a unique Sub-Node address (FF used for standalone operation) See TB0004 for address details

RJ45 connector for communication from Expansion Controller's Local LightSync port

RJ45 connector to additional Room Controllers

Low voltage termination details

Occupancy Sensor Inputs

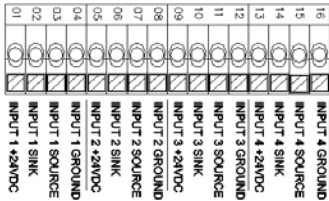
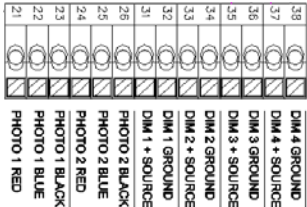


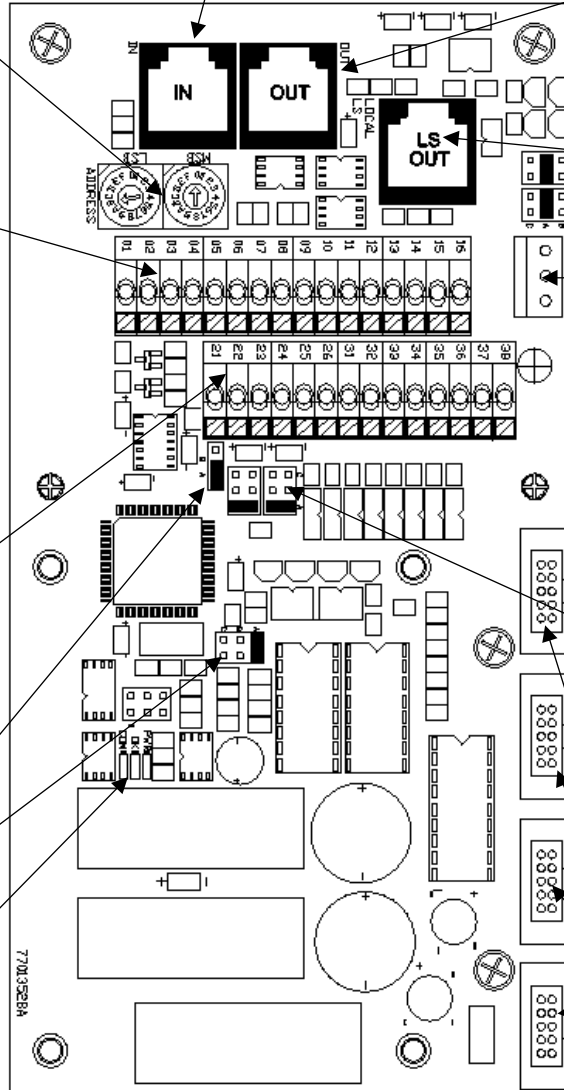
Photo Sensor Inputs 0 to 10v Dimming Outputs



Jumper A for Ground

Jumper C for Ground

Status LEDs



RJ45 connection for local LightSync Devices

Transformer Input

**Note:**  
For 0-10V pre-installation testing procedures see Tech Bulletin TB0608 "0-10V Dimmer Testing and Connections"

Jumpers for setting dimmer types  
A= Direct drive 10vdc (10mA per channel)  
B= Source Voltage 10vdc (100mA per Channel)  
C= Sink voltage for 0-10v dimming ballast/driver (100mA per channel)

Relay ribbon cable connectors