Troubleshooting Guide LightLEEDer EVO Controller

LL-EVO Part #97013556

General Issues

Status and Setup

- Check Status LEDs:
 - o Power- ON solid
 - Com- Blinking = Data Communication Ok
 - OK- Single Blink = CPU running in Network/Panel mode
 Four Blinks = CPU Running in Application Mode
- Function Select Jumper Position:
 - ON = Applications Mode
 - OFF = Network/Panel Mode
- Are all Data Cables firmly seated?
- Verify correct low voltage wiring for Occupancy Sensors, Photo Sensors, and Dimming Outputs.

Communication Issues

- Is the 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 Controller or LightSync device with the same address?
- Are the Network Protocol jumpers correct? Brn for EVO, Blu for EVO-RC.

Occupancy Sensor Inputs (LS:03)

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?)
 - o Return from sensor- 24vdc Black to Blue (if sensor detecting movement)
- Verify Input power total current draw 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.



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Photocell Inputs (LS:01 & 02)

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?)
 - o 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?

Dimming

The dimmable lights do not dim

- Verify proper 0-10V dimming control voltage from fixtures: 9-15vdc when disconnected from the Dimming Module. Lights should be at full brightness when wires are separated and dimmed to the lowest level when shorted together. If the lights do not change level, then you may have an open connection.
- Failure to dim is often caused by a reversal of polarity somewhere in a run of multiple ballasts/drivers.
- Verify all terminations in problem circuit.

The dimming does not ramp down past a certain point, or the lights are dim all the time.

- Check polarity on the dimming outputs. Polarity is important: Purple +, Gray/Purple –
- Failure to dim completely is usually caused by a bad dimming ballast/driver. Due to the ballasts and drivers being parallel if one ballast or driver is bad and is at a low voltage output it will be at a low level. To troubleshoot, remove all except the first in line and keep adding one at a time back online until you determine which one brings down the run.



