Installation Training Seminar

ILS-2600-0IR
ILS-3600-0IR

ILS-2600-0IR
White (L-865(L)) LED Lighting Systems

ILS-3600-0IR
Dual (L-865(L)/L-864(L)) LED Lighting Systems

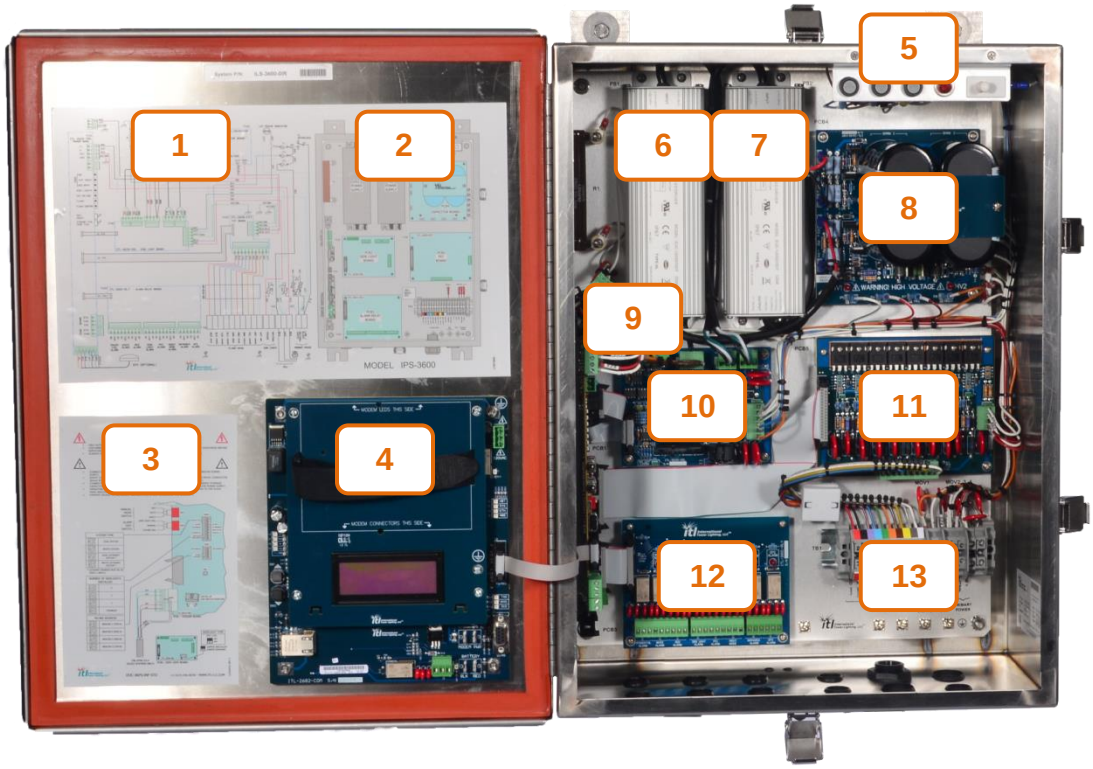
Toll Free: +1 (866) 624-8309 ● www.itl-llc.com

itl International Tower Lighting, LLC™

Front Matter

Copyright & Trademarks

Power Supply Layout



1	System Wiring Diagram	8	Capacitor Board PCB4
2	System Layout	9	Timing and Trigger Board PCB1
3	Configuration Settings Description	10	Side Light Control Board PCB2
4	MON-2682 Communication Board	11	FET Driver Board PCB5
5	Fuses (Input Power/PEC/Side Light) and Interlock Switch	12	Alarm Status / Contacts PCB3
6	Power Supply #1	13	Flash Head / Side Light / PEC / Input Power Terminal Block TB1
7	Power Supply #2		

Cable Stripping / Termination

- Individual conductor's outer insulation not cut/damaged. (Usually where outer jacket was removed) (Fig. 2)
- Conductors stripped without removing wire strands. (Use correct stripping tool for wire gauge) (Fig. 3)

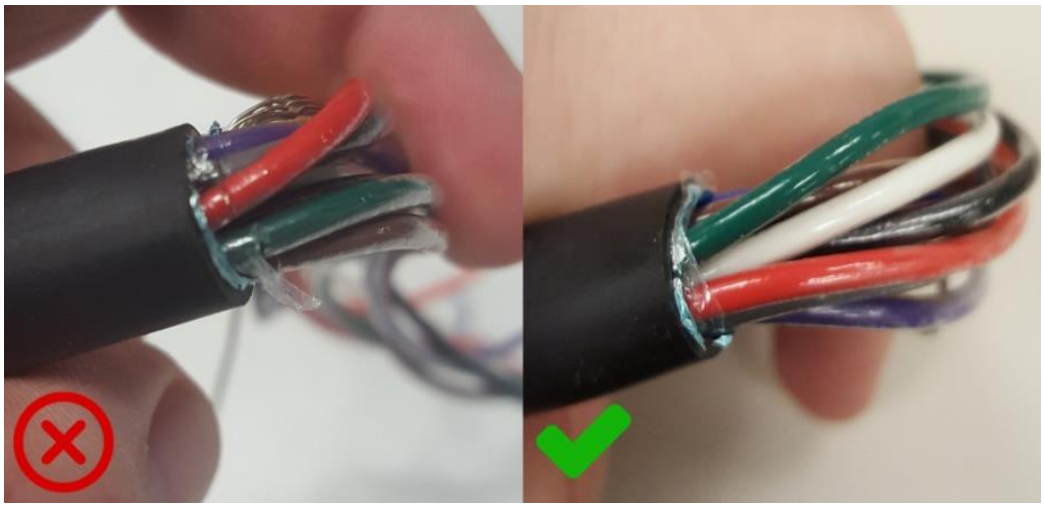


Figure 2

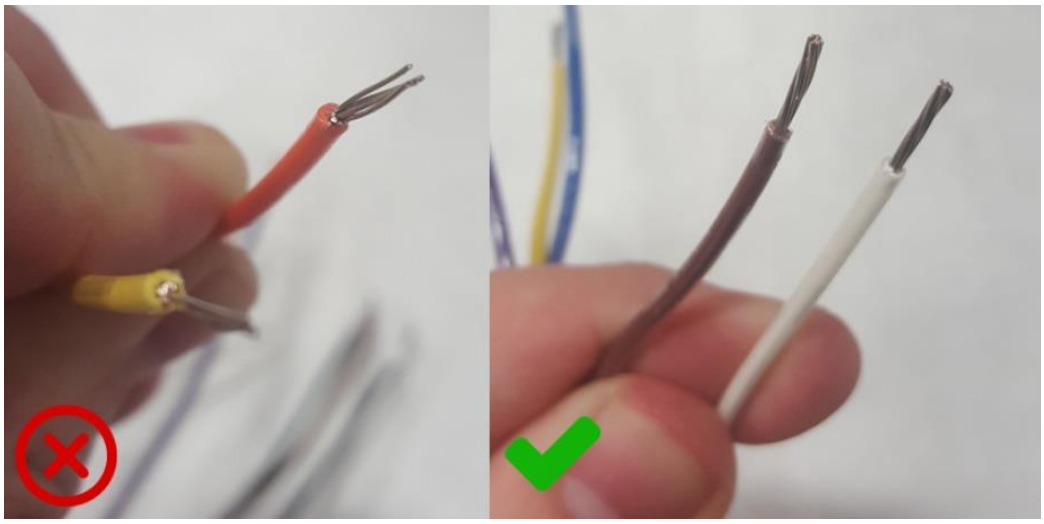


Figure 3

Flash Head / Flash Head Cable Install

- ☐ Lightning rod installed no less than 18” away from and 36” above flash head (Fig. 3)
- ☐ Flash head mounted with bolts included without obstructions allowing 360° view (Fig. 4)
- ☐ Cable gland secured around cable to prevent water intrusion (Fig. 4)
- ☐ Drip loop created on cable exiting flash head (Fig. 4)
- ☐ Cable secured to tower no more than 12” away from flash head with no stress on cable gland (Fig. 4)
- ☐ Level the flash head both the North-South and East-West directions with user supplied level (Fig. 5)
- ☐ Cable secured to the tower utilizing 2-3-4 method no more than every 5’ (See Manual)
- ☐ Cable secured 6” directly above and below and cross angles or tower leg flanges leaving 1” of space between cable and flange/angle (Fig. 6)
- ☐ Cable mounted behind and not extending past any climbing pegs (See Manual)
- ☐ Stainless steel cable support installed below service loop and secured to tower (Fig. 7)
- ☐ 24-48” service loop installed vertically to the tower below the flash head (Fig.8 See Fig. 9 for incorrect Service loop)
- ☐ Cable connections on terminal block wired to provided color code (Fig. 10)
- ☐ Drain wire secured to ground lug and as short as possible (Fig. 10)
- ☐ 24-48” service loop installed at base of tower near flash head surge suppressor (Fig. 11)
- ☐ 24-48” service loop installed at base of tower near power supply (Fig. 12)
- ☐ Drip loops created before entering lighting controller (Fig. 13)

Flash Head / Flash Head Cable Install

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

Flash Head / Flash Head Cable Install

Figure 12

Figure 13

Side Light / Side Light Cable Install

- Side Lights secured to tower using supplied mounts no more than 2’ from tower (Fig. 14)
- All cable glands secured around cable to prevent water intrusion (Fig. 14)
- Stainless steel cable support installed below service loop and secured to tower (Fig. 15)
- Cable secured to the tower utilizing 2-3-4 method no more than every 5’ (See Manual)
- Junction box mounted to tower securely in correct orientation and service loop mounted below junction box vertically (Fig. 16 & Fig. 17)
- Cable secured 6” directly above and below and cross angles or tower leg flanges leaving 1” of space between cable and flange/angle (Fig. 18)

Figure 14

Figure 15

Figure 16

Figure 17

Figure 18

Flash Head Surge Suppressor

- Mounted close to the tower ground buss bar (Fig. 19)
- Supplied ground wire should be grounded to tower ground buss bar without extending (Fig. 19)
- Cable glands secured to prevent water intrusion (Fig. 19)
- Enclosure cover secured with provided gasket and six mounting screws (Fig. 19)
- Flash head cable mounted to right terminal block following provided color code. Cable to lighting controller mounted to left terminal block following provided color code (Fig. 20)
- Drain wires mounted to grounding lugs and as short as possible (Fig. 20)

Figure 19

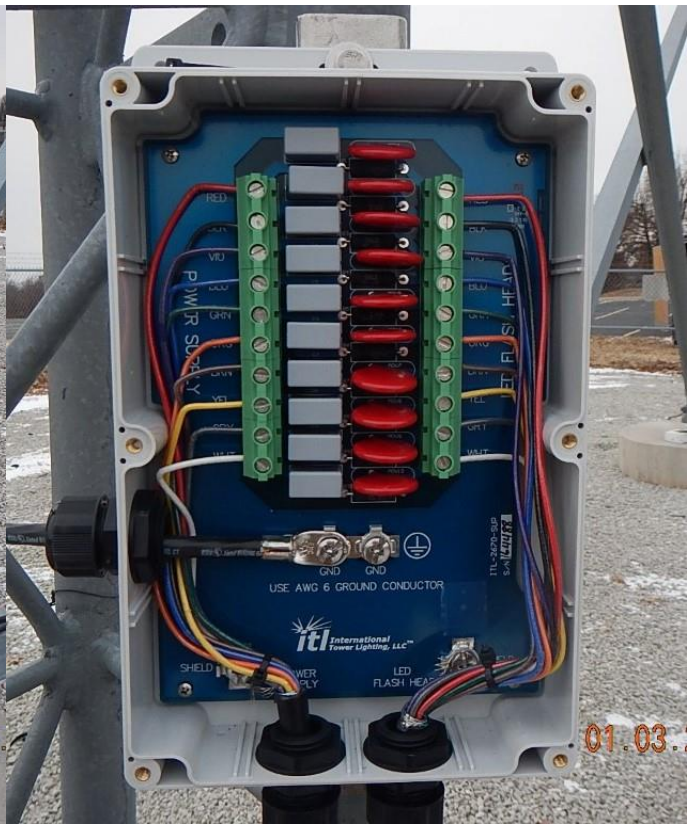


Figure 20

Photo Electric Cell (PEC)

- PEC mounted vertically with supplied materials
- PEC facing north with no obstructions or light sources to affect proper operation

Power Supply Install

- System mounted upright away from and direct RFI (Radio Frequency Interference)
- No holes created in system other than the bottom of the enclosure (Fig. 22)
- All unused holes sealed to prevent intrusion of debris/animals/insects (Fig. 22)
- Door must open 180 degrees freely without obstruction
- Flash head cable wires connected to TB1 positions 1-10 following color code on TB1 (Fig. 23)
- Side Light cable installed on TB1 positions 11 & 12 with ground connected to ground lug (Fig. 23)
- Photo Electric Cell (PEC) cable installed on TB1 positions 13-15 (Fig. 23)
- Input power cable installed on TB1 positions 16 & 17 with ground connected to ground lug (Fig. 23)

Power Supply Install

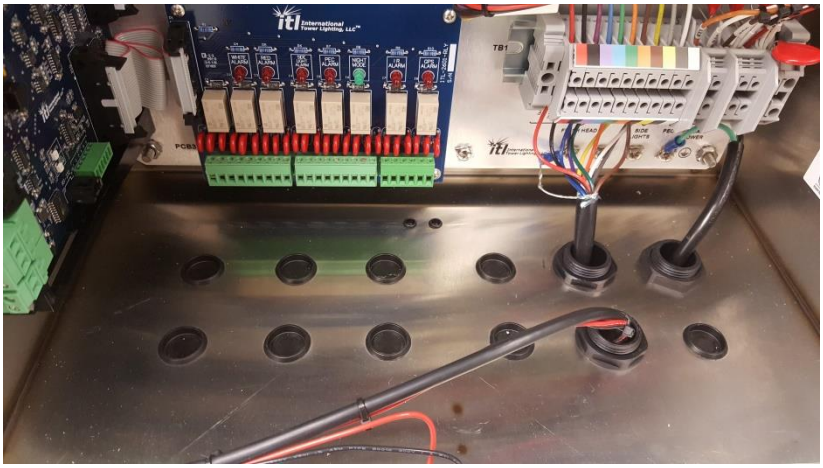


Figure 22

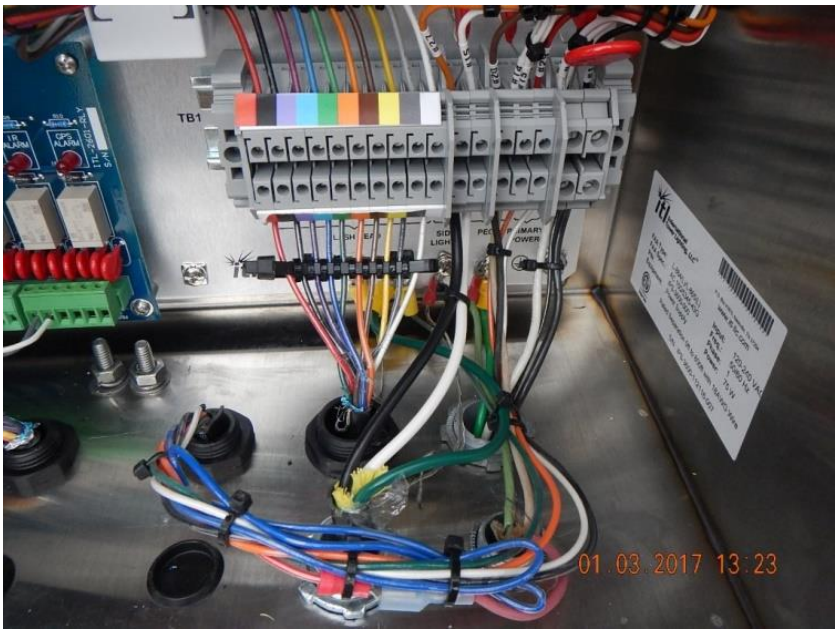


Figure 23

Testing

- System operates in day mode for 10 consecutive minutes without any alarm LEDs on PCB3
- With PEC covered system switches to night mode within one minute
- With PEC covered and system in night mode verify operation with no alarm LEDs on PCB3 for at least 10 consecutive minutes