



Certified to current FAA Advisory Circular 150/5345  
Specification for Runway and Taxiway Signs  
View our FAA Certificate of Conformance

### Installation Instructions: LED Size 4 Guidance Signs

#### DO NOT DISCARD

Important Information for the Airport Maintenance Department

1. Locate the frangible couplings (item #1 see Underground Sign Detail) and floor flanges (#2) that are provided with the sign. (Small sign orders may be packaged in the box with the sign. Larger order will have a separate carton containing this hardware). Coat the threads of the frangible coupling with anti-seize compound or petroleum jelly. Then screw them hand tight into the floor flanges.

**Note:** It is also crucial that the correct couplings be used with the sign. The coupling size and mode are etched on the outside of the coupling. Incorrectly sized couplings will not meet FAA frangibility requirements.

2. Locate the power cord (#4). It will be visible protruding from the power leg slip fitter.

**Note:** The power cord and electrical components are located in the module nearest the nameplate on the end of the sign.

3. Slip the coupling/floor flange assemblies into each slip fitter (#3) on the bottom of the sign. Tighten the set screws (#5) just enough to hold them in place. Floor flanges must be oriented with mounting holes perpendicular to sign base. For the power cord leg, pull enough power cord slack from the sign to connect with the isolation transformer secondary extension cord (#6).

**Note:** The provided power cord is extra-long to allow exiting the sign through any leg desired.

**Note:** In a typical remote L-867 base can installation, the sign leg is connected to the remote can with 2" rigid galvanized steel (RGS) conduit. An isolation transformer secondary extension cord (#6) is fed through the conduit and connects the sign power cord plug to the isolation transformer secondary plug.

4. Locate the cable clamp (#7, provided with the sign for most new sign installations). Tighten the cable clamp (#7) onto the isolation transformer secondary extension cord female plug at grade level. Ensure the cable clamp side labeled "TOP" is facing up. The cable clamp should nest on the underside of the floor flange (#2) and on top of the conduit (#8) that is flush with the surface of the concrete mounting pad. Insert the power cord plug (male) into the isolating transformer secondary extension cord (female).

**Note:** As required by the FAA, this step, in conjunction with step 6, ensures that the power cord will be disconnected/unplugged if the sign is knocked over.



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5. Lift the sign upright into place on the cement pad. Use the sign as a template to locate and mark mounting holes. Place sign off to one side and install anchor bolts. Recommended anchor bolts: 3/8" x 5" for mode 2 signs, 5/8" for mode 3 signs. Position the sign over the anchor bolts and fasten the floor flanges to the cement pad with lock washers and nuts. Temporarily loosen the slip fitter set screws (#5). Tighten the frangible couplings 1/4 - 1/2 turn into the Floor Flanges with a pipe wrench. (Warning: Do not use the wrench above the shear groove.) Ensure that the sign is level and the modules are aligned by sighting down the length of the tops. Tighten the slip fitter set screws using a socket wrench.

6. Locate the strain relief clamp (#9) inside of the sign on the light bar (#10). Remove the sign cover (#11) nearest to the nameplate on the end of the sign by unscrewing the two turn fasteners (#12) and slide out the legend panels. Remove all slack in the power cord between the plug and the strain relief clamp, then tighten the set screw on the strain relief clamp. The extra cord can be coiled & put in the bottom of the sign. (As required by the FAA, this step, in conjunction with Step 4 ensures that the power cord will be disconnected/unplugged if the sign is knocked over.)

7. Electrical adjustments are now required. Power supply settings have been factory set but must be rechecked with an RMS meter once installed in the airfield environment. Please refer to the "Parts & Electrical Information" sheet for the installed lighting system. Follow the "Installation" portion of those directions to ensure that the electrical settings are correct.

8. Replace any covers removed.

**Note:** Sometimes, legend panels seem to obstruct the re-installation of the top covers. If panels are not engaging on the underside of the top cover into the gasket channel, please try the following:

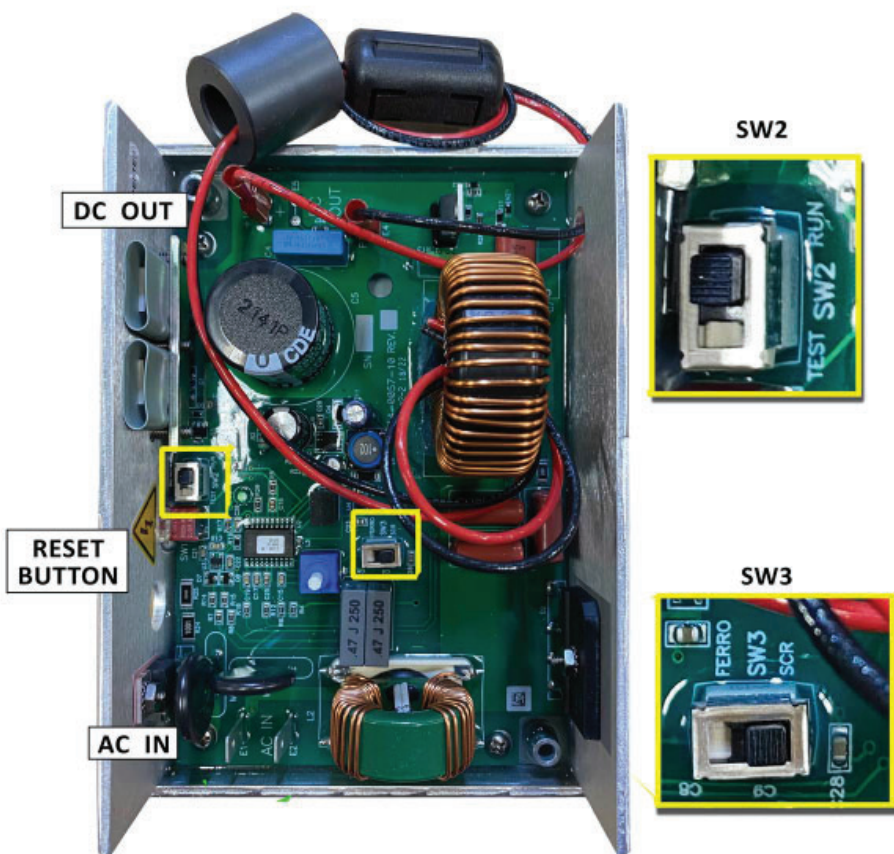
Engage the turn fasteners loosely. With the palms of your hands, slap or "pop" the centers of the opposing panels inward simultaneously. The internal pressure should apply a force that allows the top to drop into place. Apply pressure downward on the top. The technique worked and if panels are correctly installed. The resistance to tightening the turn fasteners will be eliminated.



### LED LIGHTING SYSTEM L-610 Controller

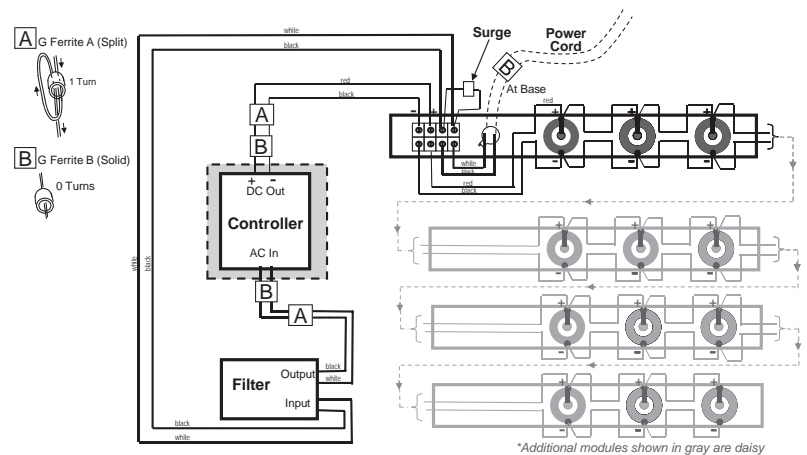
#### L610 CONTROLLER

- Switch SW2 (Run & Test) is used to isolate controller programming functions when troubleshooting (1 out all out).
- Switch SW3 (Ferro & SCR) is used to set controller functions with constant current regulators (CCR's)



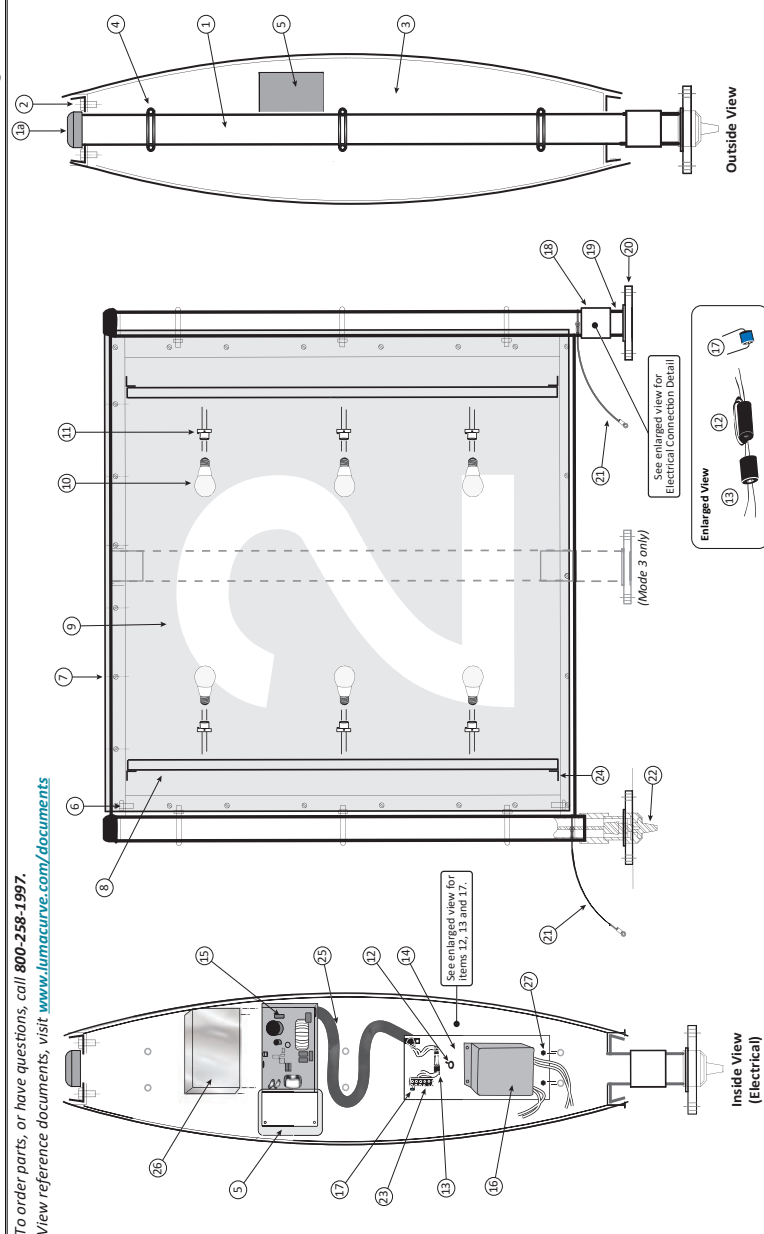
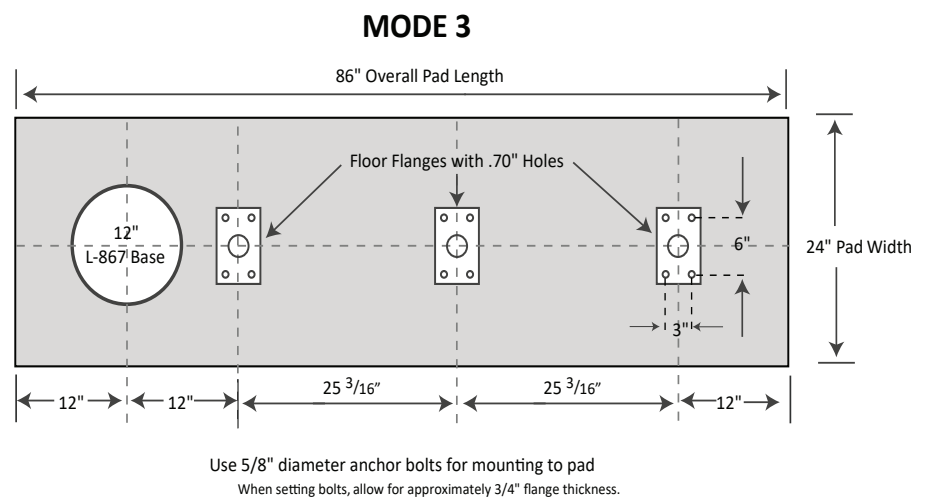
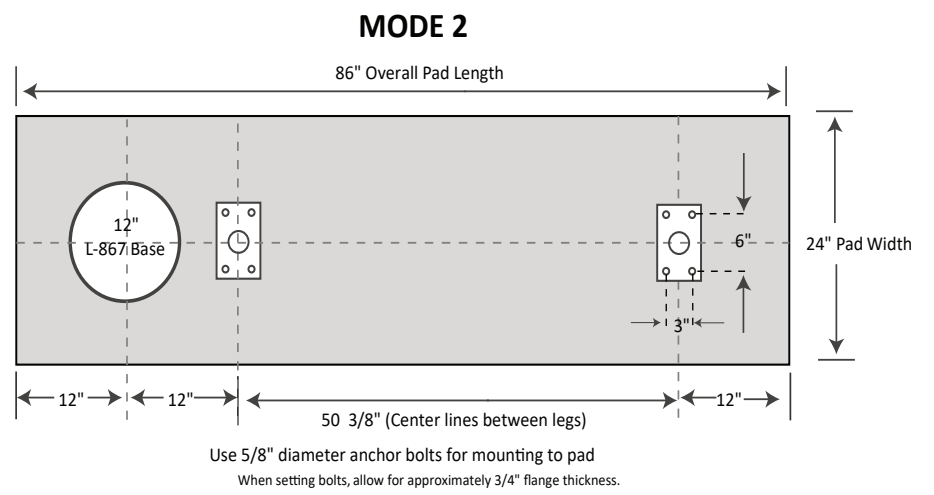
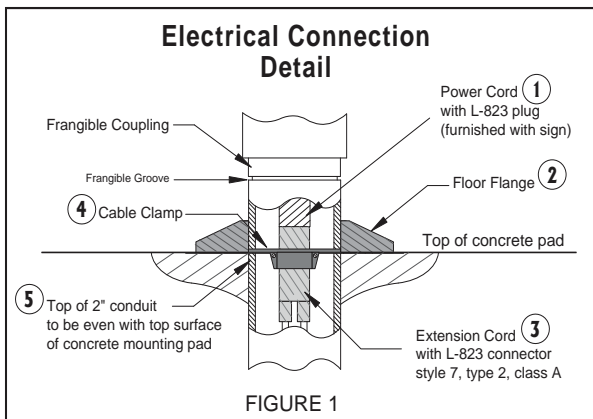
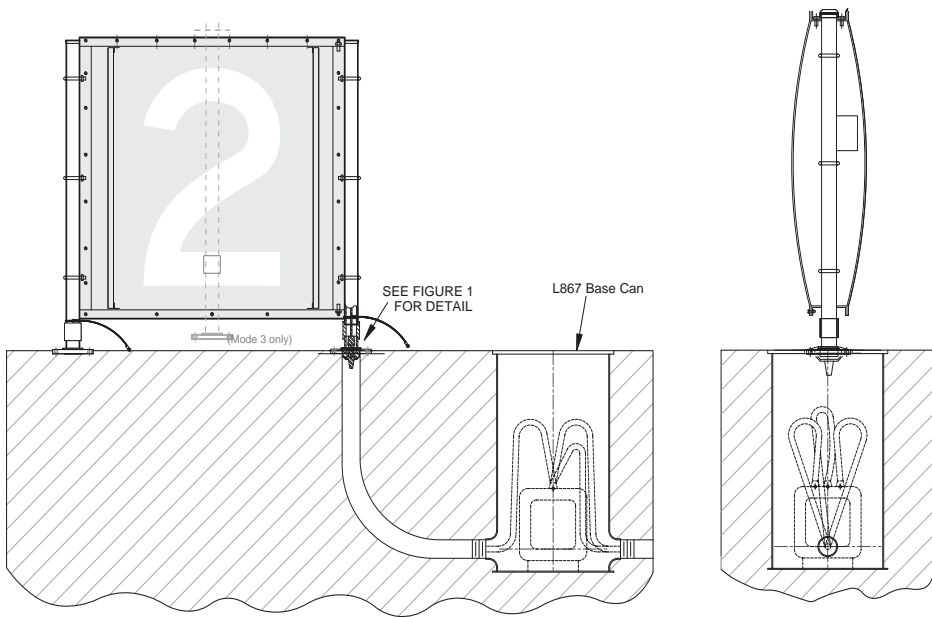
### DISTANCE REMAINING SIGN LED LIGHTING SYSTEM

Electrical Wiring Diagram  
VA Loads, PF, ISO Trans



#### LED VA Loads, Power Factors and Isolation Transformers

SIGN SIZE & MODULE LENGTH	LAMPS	FAA Style 2 (4.8A-6.6A) FAA Style 3 (2.8A-6.6A)			FAA Style 5 (5.5A)			
		ISO XFMR	MAX VA	POWER FACTOR	ISO XFMR	MAX VA	POWER FACTOR	
Size 1, 1-mod	2	100W	49	.94	100W	37	.94	
	2-mod	4	100W	64	.88	100W	48	.89
	3-mod	6	100W	67	.89	100W	50	.90
	4-mod	8	100W	73	.90	100W	56	.91
Size 2, 1-mod	3	100W	62	.87	100W	46	.88	
	2-mod	6	100W	67	.89	100W	50	.90
	3-mod	9	100W	74	.90	100W	58	.92
	4-mod	12	100W	78	.91	100W	62	.93
Size 3, 1-mod	3	100W	62	.87	100W	46	.88	
	2-mod	6	100W	67	.89	100W	50	.90
	3-mod	9	100W	74	.90	100W	58	.92
	4-mod	12	100W	78	.91	100W	62	.93
Size 5, 1-mod	3	100W	62	.87	100W	46	.88	
	6	100W	67	.89	100W	50	.90	



To order parts, or have questions, call 800-258-1997.  
View reference documents, visit [www.lumacurve.com/documents](http://www.lumacurve.com/documents)

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ITEM	DESCRIPTION
1a.	DCLT-1A Leg Cap
*1.	D-1 Leg
2.	D-2XHD Top/Bottom Channel
3.	DTG-2 End Panel
*4.	D-4/D-4AA/370/360 U-bolts w/ nuts & washers
5.	D-3/D-3B Access Door
6.	215/220/230/232 1/4" Hardware
7.	394 Face Hardware 1/4" x 3/4" Hex Head
8.	D-8P Light Bar
9.	D-15 48" x 48" Legend Panel
10.	LED Lamp 4W LED Lamp
11.	500 Lamp holder
12.	G Ferrite A Ferrite Core Split
13.	G Ferrite B Ferrite Core Not Split
14.	480 Cable Clamp
15.	L610 LED PCB Controller, DC (1-12 lamps)

ITEM	DESCRIPTION
16.	G Low Pass Filter ALD Low Pass Filter
17.	E416 Surge Protector
*18.	2" AL Coupling 2" Pipe Coupling
*19.	140A Frangible Coupling - 2600 ft/lbs
20.	15-XHDT 5" x 8" Aluminum Floor Flange
21.	190 - 3/16" Tether
22.	430 Cord & Plug
23.	420 Terminal Strip (6 block)
24.	PS Bracket Angle Brackets
25.	3/8" Conduit Flexible Conduit
26.	G EMI Shield Screen Controller Screen
27.	360 3/8" Hardware

\* Mode 3 parts may be different or not listed here  
Please see the DM MODE 3 parts list

