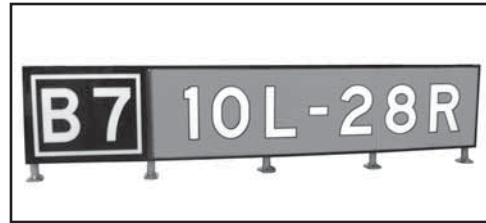


## Signature Series™ LED L-858Y, L-858R, L-858L & L-858B Internally Illuminated Sign



### Compliance with Standards

**FAA:** L-858Y, L-858R L-858L and L-858B  
AC 150/5345-44 (Current Edition) and the FAA  
Engineering Brief No. 67 “Light Sources other than  
Incandescent and Xenon for Airport Lighting and  
Obstruction Lighting Fixtures.” ETL Certified

### Uses

**L-858Y**—Direction, Destination, and Boundary (Informational Sign)

**L-858R**—Mandatory Sign

**L-858L**—Runway/Taxiway Location Sign

These signs are designed to guide pilots to a particular point on the field, identify holding positions, identify taxiway and runway intersections, and prohibit aircraft entry into designated areas.

**L-858B**—Runway Distance Remaining Sign

The L-858B is used at 1,000-foot intervals adjacent to the runway edge in order to provide runway distance remaining information to pilots during takeoff and landing operations.

### Sign Legends

Type	Purpose	Legend Color	Background Color
L-858Y	Direction, Destination & Boundary	Black	Yellow
L-858R	Mandatory Sign	White with Black Outline	Red
L-858L	Runway/Taxiway Location	Yellow	Black
L-858B	Runway Distance Remaining	White	Black

### Operating Conditions

Temperature: -40°F to +131°F (-40°C to +55°C)

Humidity: 0 to 100%

Wind:

- ADB Mode 2 signs withstand wind velocities up to 225 mph
- ADB Mode 3 signs withstand wind velocities up to 327 mph

### Features

- Virtually eliminates runway shutdowns due to LED light source
- Direct replacement for existing sign
- Creates a highly uniform distribution of light, eliminating hot spots and shadows
- Operates on ferroresonant or thyristor CCRs that are designed in compliance with FAA requirements
- Operates on 3-step, 5-step and 5.5A series circuits
- Eliminates re-lamping expenses and reduces on-going maintenance costs
- Improved safety — low, regulated DC voltage inside sign
- Sign lumen maintenance of 70% (L<sub>70</sub>) minimum for greater than 10 years (assuming sign operates an average of 12 hours per day)

### Dimensions

#### Sign Heights

Type	Sign Size No.	Sign Face Height in (cm)	Legend Height in (cm)	Sign Style No.	Sign Class No.	Overall
						Mounting Height in (cm)
L-858Y/R/L	118	12	2,3,5	1,2	29.7	(75.5)
	1(45.7)	(30.5)	2,3,5	1,2	29.7	
L-858Y/R/L	224	15	2,3,5	1,2	35.7	(90.8)
	2(61)	(38.1)	2,3,5	1,2	35.7	
L-858Y/R/L	330	18	2,3,5	1,2	41.7	(106)
	3(76.2)	(45.7)	2,3,5	1,2	41.7	
L-858B	448	40	2,3,5	1,2	58.2	(147.8)
	4(122)	(101.6)	2,3,5	1,2	58.2	
L-858B	530	25	2,3,5	1,2	41.7	(106)
	5(76.2)	(63.5)	2,3,5	1,2	41.7	

#### Sign Lengths

##### Inches (Centimeters)

Size No.	1 Module	2 Module	3 Module	4 Module
1	29.4 (75)	58.6 (149)	87.9 (223)	117.2 (298)
2	35.9 (91)	71.6 (182)	107.4 (273)	143.2 (364)
3	42.4 (108)	84.6 (215)	126.9 (323)	169.2 (430)
4	47.9 (122)	N/A	N/A	N/A
5	42.4 (108)	N/A	N/A	N/A

**Note:** Sign depth is 9.39 in (23.85 cm).

### Construction

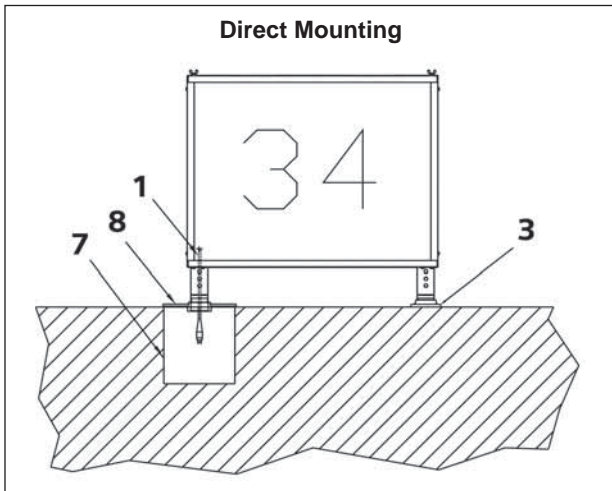
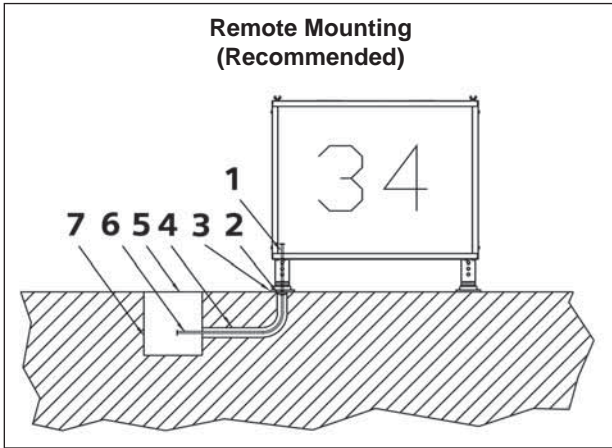
Corrosion-resistant sign construction requires minimal maintenance.

- Aluminum housing
- Acrylic sign legend panels
- Stainless steel hardware
- Retroreflective sheeting

### Installation

Each sign is furnished complete with mounting flanges for installation on a concrete pad, which is the recommended method of installation. Refer to ADB sign manual for typical sign installations. Contact ADB Sales Department for more information on sign installation hardware.

1. L-823 Cord Set
2. Cable Clamp
3. Floor Flange
4. 2-inch Conduit Elbow (contractor supplied)
5. L-867 Blank Cover Plate with Gasket
6. L-823 Extension Cord (purchased separately)
7. L-867 Base (purchased separately)
8. L-867 Base Plate (special - purchased separately)



### Electrical Supply

Signs are internally lighted. The signs are connected to a series circuit using the appropriately-sized 50 or 60Hz L-830/L-831 isolation transformer(s).

Style No.	Power Source
2	4.8-6.6A (3-Step CCR)
3	2.8-6.6A (5-Step CCR)
5	5.5A (Dedicated sign circuit)

### Packaging Data

Signs are shipped with L-823 cord set(s), frangible couplings, and floor flanges—ready for installation.

Description	Gross Weight <sup>1</sup>		Carton Dimensions	
	(lb)	(kg)	(in)	(cm)
Size 1, Module 1	46	21	34 x 34 x 13	87 x 86.4 x 33
Size 1, Module 2	78	35	34 x 63 x 13	87 x 160 x 33
Size 1, Module 3	115	52	34 x 92 x 13	87 x 234 x 33
Size 1, Module 4	169	77	34 x 121 x 13	87 x 307 x 33
Size 2, Module 1	71	32	40 x 40 x 13	102 x 102 x 33
Size 2, Module 2	104	47	40 x 76 x 13	102 x 193 x 33
Size 2, Module 3	153	70	40 x 112 x 13	102 x 285 x 33
Size 2, Module 4	220	100	40 x 147 x 13	102 x 374 x 33
Size 3, Module 1	81	37	46 x 46 x 13	117 x 117 x 33
Size 3, Module 2	131	60	46 x 89 x 13	117 x 226 x 33
Size 3, Module 3	199	90	46 x 131 x 13	117 x 333 x 33
Size 3, Module 4	252	114	46 x 173 x 13	117 x 440 x 33
Size 4, Module 1	1221	561	62 x 52 x 13	158 x 132 x 33
Size 5, Module 1	85	39	46 x 46 x 13	117 x 117 x 33

<sup>1</sup> Estimated weight

### Spare Components

Description	Part No.
Floor flange (2-bolt)	62A2142
Floor flange, high wind speed (4-bolt)	62A2146
Frangible coupling, size 1	60A2678-10
Frangible coupling, size 2	60A2678-20
Frangible coupling, size 3 or 5	60A2678-30
Frangible coupling, size 4	60A2678-40
Legend panel, retroreflective, size 1*	44A6084-1110
Legend panel, blank, size 1	44A6084-1120
Legend panel, retroreflective, size 2*	44A6084-2110
Legend panel, blank, size 2	44A6084-2120
Legend panel, retroreflective, size 3 and 5*	44A6084-3110
Legend panel, blank, size 3 and 5	44A6084-3120
Legend panel, retroreflective, size 4*	44A6084-4110
Legend panel, blank, size 4	44A6084-4120
Tether	94A0054
LED light engine, Size 2, 3, and 5	94A0537-20
LED light engine, Size 1 and 4	94A0537-10
LED (tube) sign power supply lead assy	44A6920
LED (tube) sign lead terminator assy	44A6921
LED (tube) sign lead jumper assy 18"	44A6922-18
LED sign power supply assembly	44A6631-LT

\* Customer to provide legend information.

## Sign Load & Transformer Requirements

In the table below, the number for the total VA load imposed on the CCR represents the actual load imposed on the regulator and accounts for power factor and load imposed by the transformer.

Sign Size	Sign No. of Modules	Transformer	Power Factor	Volt Amp VA Load
<b>Style 2, 3-Step LED Signs</b>				
1	1	200W	0.84	68
1	2	200W	0.84	86
1	3	200W	0.88	120
1	4	200W	0.90	138
2, 3	1	200W	0.82	84
2, 3	2	200W	0.91	92
2, 3	3	300W	0.91	189
2, 3	4	300W	0.91	227
4	1	200W	0.84	86
5	1	200W	0.82	84
<b>Style 3, 5-Step LED Signs</b>				
1	1	200W	0.83	66
1	2	200W	0.84	86
1	3	200W	0.89	105
1	4	300W	0.88	146
2, 3	1	200W	0.82	83
2, 3	2	300W	0.88	118
2, 3	3	500W	0.85	206
2, 3	4	500W	0.88	234
4	1	200W	0.84	86
5	1	200W	0.82	83
<b>Style 5, Single-Step LED Signs</b>				
1	1	100W	0.89	63
1	2	100W	0.88	84
1	3	100W	0.90	105
1	4	200W	0.90	124
2, 3	1	100W	0.83	71
2, 3	2	200W	0.90	101
2, 3	3	300W	0.86	166
2, 3	4	300W	0.87	205
4	1	100W	0.88	84
5	1	100W	0.83	71

## Ordering Code SXXX-7XX3XX0

### Lamp Type

R = LED  
S = LED High Wind<sup>1</sup>

### Sign Size

1 = Size 1  
2 = Size 2  
3 = Size 3  
4 = Size 4  
5 = Size 5

### Module

1 = 1 Module  
2 = 2 Modules  
3 = 3 Modules  
4 = 4 Modules

### Style

7 = LED Style 2, Style 3, and Style 5

### Face

1 = Single  
2 = Double

### Total Number of Panels

X = To be determined by ADB Sales Department based on legend and module configurations.

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### Power

1 = Power through leg without ON/OFF switch  
2 = Power through leg with ON/OFF switch  
3 = Power through side without ON/OFF switch  
4 = Power through side with ON/OFF switch  
5 = Customer-provided entry without ON/OFF switch<sup>2</sup>  
6 = Customer-provided entry with ON/OFF switch<sup>2</sup>

### Tether

0 = No tether<sup>3</sup>  
1 = One tether on one end of sign  
2 = Two tethers, one on each end  
3 = One tether per leg

### Notes

- For LED Sign Retrofit Kits, contact the ADB Sales Department
- Customer to provide legend information and power connection side. It is important to match power cord exit location with legend side.

<sup>1</sup> Use high wind signs in locations where actual wind speed exceeds FAA specifications (Mode 3). High wind signs are tested to a minimum wind load of 327 mph as recommended by FAA technical paper DOT/FAA/AR-TN00/32: Evaluation of Wind-Loading on Airport Signs. High wind signs require four anchor bolts per floor flange except Size 1, which uses the standard 2-bolt foot.

<sup>2</sup> Cord set coiled up inside. Customer provides entry hole.

<sup>3</sup> Not ETL Certified

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