



# Signaling Specifications

Bulletin Numbers 854J, 854K, 855B, 855BS/BM/BL, 855D, 855E, 855F, 855H/HM, 855L, 855P, 855R, 855T, 855W, 855X/XM, 856T

Topic	Page
Summary of Changes	2
Bulletin 855P Panel-mount Signaling Alarms	3
Panel-mount Sounder	3
Panel-mount Combined Sounder with LED Beacon	3
Panel-mount Strobe	3
Panel-mount Selectable Steady or Flashing LED Beacon	3
Panel-mount Dual-circuit Alarms	5
Bulletin 855L Panel Light Bars	9
Bulletin 855H Industrial Horns	11
General-purpose Electronic Horns	11
High-performance Electronic Horns	13
Recordable Electronic Horns	21
Recordable Electronic Horns with Attached LED Beacons	21
High-performance Electronic Metal Horns	25
High-performance Electronic Metal Horns with Attached LED Beacons	25
Bulletin 855B Industrial Beacons	28
Miniature Square Beacons	28
Industrial Round Beacons	30
Bulletin 855R Industrial Round Beacons	39
110 mm Complete Beacons	39
110 mm LED Modules	40
110 mm Bases	40
Bulletin 855D/855F Compact Control Tower™ Stack Lights	47
30 mm Compact Control Tower Stack Lights	47
70 mm Compact Control Tower Stack Lights	52

Topic	Page
Bulletin 854J/854K Control Tower™ Stack Lights	57
40 mm Control Tower Stack Lights	57
60 mm Control Tower Stack Lights	66
Bulletin 855E/855T Control Tower™ Stack Lights	75
50 mm Control Tower Stack Lights	75
70 mm Control Tower Stack Lights	83
Bulletin 856T 70 mm Control Tower Stack Lights	97
Light Modules	97
Sound Modules	98
Power Modules	98
IO-Link Module	99
Base Mounting Adapters	99
Pre-assembled Bases	100
Pre-configured Control Tower Lights, 1...7 Modules	101
Bulletin 855W Wall-mount Signal Light	111
Pre-assembled Wall-mount Signal Lights, 2...5 Light Levels	111
Bulletin 855X Hazardous Location Horns, Beacons, and Combination Units	114
Alarm Horn Sounders	114
Xenon Strobe Beacons	115
Combined Horn Sounder and Strobe Beacons	115
Additional Resources	131

## Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

Topic	Page
Added Bulletin 855R Industrial Round Beacons Section	39

## Overview

Our signaling devices are intended for use in industrial signaling applications. They are designed for fast, flexible, and easy installation to save you time with advanced modular assembly and unparalleled performance and reliability.

Our signaling devices are available in two types:

- Audible Devices
  - general and high-performance electronic horns,
  - panel mount signaling alarms, and
  - hazardous location horns and beacons.
- Visual Devices
  - panel mount xenon strobes,
  - mini square beacons,
  - panel-mount with selectable steady or flashing light indicators,
  - wall-mount signal lights, panel light bars,
  - industrial round beacons, tower lights,
  - stack lights, and
  - panel-mount dual circuit alarms.

# Bulletin 855P Panel-mount Signaling Alarms

This product line includes sounders, status indicator beacons, xenon strobes, and sounders with status indicator combination and dual-circuit alarms. These alarms significantly reduce panel space requirements and installation time. Our panel-mount alarms are rear-securing and fingersafe, which adds a high level of environmental integrity to your panel.

## Panel-mount Sounder



855P - B 10 ME 22  
a b c d

a	
Housing Color	
Code	Description
B	Black

b	
Voltage	
Code	Description
30	12...24V AC/DC
10	120V AC
20	240V AC

c	
Size	
Code	Description
SE	30 mm, fully enclosed, smooth front, 72 dB
SH	30 mm, high output, 80 dB
ME	45 mm
LE	65 mm

d	
Mounting Hole	
Code	Description
22	22.5 mm

## Panel-mount Combined Sounder with LED Beacon



855PC - B 10 ME 3 22  
a b c d e

a	
Housing Color	
Code	Description
B	Black

b	
Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c	
Size	
Code	Description
ME	45 mm
LE	65 mm

d	
Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

e	
Mounting Hole	
Code	Description
22	22.5 mm

# Panel-mount Strobe

30 mm



45 mm



65 mm



855PS - B 10 ME 3 22  
 a b c d e

a	
Housing Color	
Code	Description
B	Black

b	
Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC
30	12...24V AC/DC

c	
Size	
Code	Description
SE	30 mm <sup>(1) (2)</sup>
ME	45 mm <sup>(3) (4)</sup>
LE	65 mm <sup>(3) (4)</sup>

d	
Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

e	
Mounting Hole	
Code	Description
22	22.5 mm

- (1) 30 mm units are LED type.
- (2) Only available in 12V AC/DC, 24V AC/DC, 120V AC, or 240V AC.
- (3) 45 mm and 65 mm units are Xenon strobe.
- (4) Only available in 12...24V AC/DC, 120V, or 240V AC.

# Panel-mount Selectable Steady or Flashing LED Beacon

30 mm



45 mm



65 mm



855PB - B 10 ME 3 22  
 a b c d e

a	
Housing Color	
Code	Description
B	Black

b	
Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c	
Size	
Code	Description
SE	30 mm
ME	45 mm
LE	65 mm

d	
Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

e	
Mounting Hole	
Code	Description
22	22.5 mm

# Panel-mount Dual-circuit Alarms

Half-lens Illumination



Full-lens Illumination



Combined Sounder with LED Beacon



855PD - B 24 ME F 3 4 22  
 a b c d e f g

a	
Housing Color	
Code	Description
B	Black

b	
Voltage	
Code	Description
12 <sup>(1)</sup>	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c	
Size	
Code	Description
SE	30 mm <sup>(2)(3)</sup>
ME	45 mm
LE	65 mm

d	
Function	
Code	Description
F	Two-color, full-lens illumination
H	Two-color, half-lens illumination with barrier
C	Combined sounder with LED beacon <sup>(3)</sup>

- (1) Voltage code 12 is only valid for sounder with LED devices.
- (2) 30 mm available in 24V AC/DC only, for 2-color versions.
- (3) The sounder with LED is not available in the 30 mm size.

e	
LED Color <sup>(1)</sup> /Sound	
Code	Description
1	Sound
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

f	
LED Color <sup>(2)</sup>	
Code	Description
3	Green
4	Red
5	Amber <sup>(3)</sup>
6	Blue
7	Clear
8	Yellow <sup>(3)</sup>

g	
Mounting Hole	
Code	Description
22	22.5 mm

- (1) Voltage code 12 is only valid for sounder with LED devices.
- (2) For two-color devices, the first color code that is listed in the catalog number corresponds to the same side as the panel tab found on the housing. For example: Catalog Number 855PD-B24MEH4322 indicates that the red color is on the same side as the panel tab and the green color is on the opposite side as the panel tab.
- (3) The color combination of yellow and amber is not allowed because of their similarity.

## Accessories

Description	Cat. No.
22.5...30.5 mm hole adapter kit	855P-AHA1

## Specifications

Table 1 - Standards and Certifications

Standards Compliance	Certifications
<ul style="list-style-type: none"> <li>EN/IEC 60947-1</li> <li>EN/IEC 60947-5-1</li> <li>UL 508</li> <li>CSA C22.2 No. 14</li> </ul>	<ul style="list-style-type: none"> <li>c-UL-us Listed (File No. E14840, Guides NKCR, NKCR7)</li> <li>CE Marked</li> </ul>

## Panel Sounder and Single-/Dual-circuit Panel Sounder with LED

Table 2 - Technical

Attribute	Detail	
Housing	Base Material	Polycarbonate, black
	Lens	Polycarbonate, red, amber, yellow, green, blue, and clear
Protection class	UL Type 4/4X/13, IP65	
Terminals	Plug-in terminal block, up to 2.5 mm <sup>2</sup> (14 AWG), IP2X	
Operation temperature range	-25...+60 °C (-13...+140 °F)	
Storage temperature range	-25...+85 °C (-13...+185 °F)	
Mounting	Central mounting for bore holes 22 mm or 30.5 mm with hole adapter kit (catalog number 855P-AHA1)	
Mounting nut torque	1.7 N•m (15 lb•in)	

Table 3 - Electrical

Attribute	Sounder			Sounder with Warning Light		
	65 mm	45 mm	30 mm	65 mm	45 mm	
Supply voltage range	12V AC/DC - 50/60 Hz	—	—	±10%	±10%	
	24V AC/DC - 50/60 Hz	—	—	±10%	±10%	
	12...24V AC/DC - 50/60 Hz	8...26V AC/DC	8...26V AC/DC	10...26V AC/DC	—	—
	120V AC - 50/60 Hz	50...140V AC	50...140V AC	80...140V AC	±10%	±10%
	230/240V AC - 50/60 Hz	150...260V AC	150...260V AC	180...260V AC	±10%	±10%
Nominal current – single circuit (dual circuit)	12V AC/DC - 50/60 Hz	—	—	50 mA (62 mA)	35 mA (48 mA)	
	24V AC/DC - 50/60 Hz	57 mA	20 mA	20 mA	73 mA (95 mA)	58 mA (73 mA)
	120V AC - 50/60 Hz	40 mA	40 mA	20 mA	60 mA (52 mA)	40 mA (51 mA)
	230/240V AC - 50/60 Hz	42 mA	42 mA	20 mA	63 mA (52 mA)	42 mA (51 mA)
Turn-on leakage current	≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA	
Sound level, max (average)	105 dB(A) @ 1 m (3.3 ft)	100 dB(A) @ 1 m (3.3 ft)	SE: 72 dB(A) @ 1 m (3.3 ft) SH: 80 dB(A) @ 1 m (3.3 ft)	103 dB(A) @ 1 m (3.3 ft)	98 dB(A) @ 1 m (3.3 ft)	
Sound level, min	< 85 dB	< 85 dB	—	< 85 dB	< 85 dB	
Sound level adjustment	Stepless	Stepless	—	Stepless	Stepless	
Sound main frequency	3300 Hz	3300 Hz	3500 Hz	3300 Hz	3300 Hz	
Sound types	Continuous	Yes	Yes	Yes	Yes	
	Pulsing <sup>(1)</sup>	Yes	Yes	Yes	Yes	
	Alternating frequency <sup>(1)</sup>	Yes	No	No	Yes	No
Sound selection	Externally by terminal connection					
Weight	65 g (2.3 oz)	35 g (1.2 oz)	25 g (0.9 oz)	85 g (3 oz)	55 g (1.9 oz)	

(1) Single circuit only.

## Panel Strobe and Single/Two Color LED Lights

**Table 4 - Technical**

Attribute		Bulletin 855P
Housing	Base material	Polycarbonate, black
	Lens	Polycarbonate, red, amber, yellow, green, blue, and clear
Protection class		UL Type 4/4X/13, IP2X, IP65
Terminals		Plug-in terminal block, up to 2.5 mm <sup>2</sup> (14 AWG), IP2X fingersafe
Operation temperature range		-25...+60 °C (-13...+140 °F)
Storage temperature range		-25...+85 °C (-13...+185 °F)
Mounting		Central mounting for bore holes 22 mm or 30.5 mm with hole adapter kit (Cat. No. 855P-AHA1)
Mounting nut torque		1.7 N•m (15 lb•in)

**Table 5 - Electrical**

Attribute		LED Beacon – Steady/Flashing			Strobe Light		
		65 mm	45 mm	30 mm	65 mm	45 mm	30 mm
Supply voltage range	12V AC/DC, 50/60 Hz	±10%	±10%	±10%	–	–	±10%
	24V AC/DC, 50/60 Hz	±10%	±10%	±10%	–	–	±10%
	12...24V AC/DC, 50/60 Hz	–	–	–	8...26V AC/DC	8...26V AC/DC	–
	120V AC, 50/60 Hz	±10%	±10%	±10%	±10%	±10%	±10%
	230/240V AC, 50/60 Hz	±10%	±10%	±10%	±10%	±10%	±10%
Nominal current – single circuit (dual circuit)	12V AC/DC, 50/60 Hz	75 mA	60 mA	30 mA	–	–	15 mA
	24V AC/DC, 50/60 Hz	54 mA (full: 71 mA half: 44 mA)	35 mA (full: 46 mA half: 39 mA)	25 mA (full: 28 mA half: 30 mA)	–	–	10 mA
	12...24V AC/DC, 50/60 Hz @ 12V	–	–	–	150 mA	110 mA	–
	12...24V AC/DC, 50/60 Hz @ 24V	–	–	–	140 mA	100 mA	–
	120V AC, 50/60 Hz	25 mA (full: 61 mA half: 41 mA)	25 mA (full: 35 mA half: 35 mA)	20 mA	30 mA	20 mA	10 mA
	230/240V AC, 50/60 Hz	25 mA (full: 61 mA half: 41 mA)	25 mA (full: 35 mA half: 34 mA)	20 mA	20 mA	12 mA	10 mA
Turn-on leakage current		≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA
Steady/Flashing light		Externally by terminal connection			–	–	–
Flashing frequency		2 Hz	2 Hz	2 Hz	1.4 Hz (min)	1.4 Hz (min)	1.4 Hz (min)
Light source		LED			Xenon tube		LED
Flash energy		–	–	–	1 J	1.5 J	–
Weight		60 g (2.1 oz)	40 g (1.4 oz)	40 g (1.4 oz)	80 g (2.8 oz)	60 g (2.1 oz)	40 g (1.4 oz)

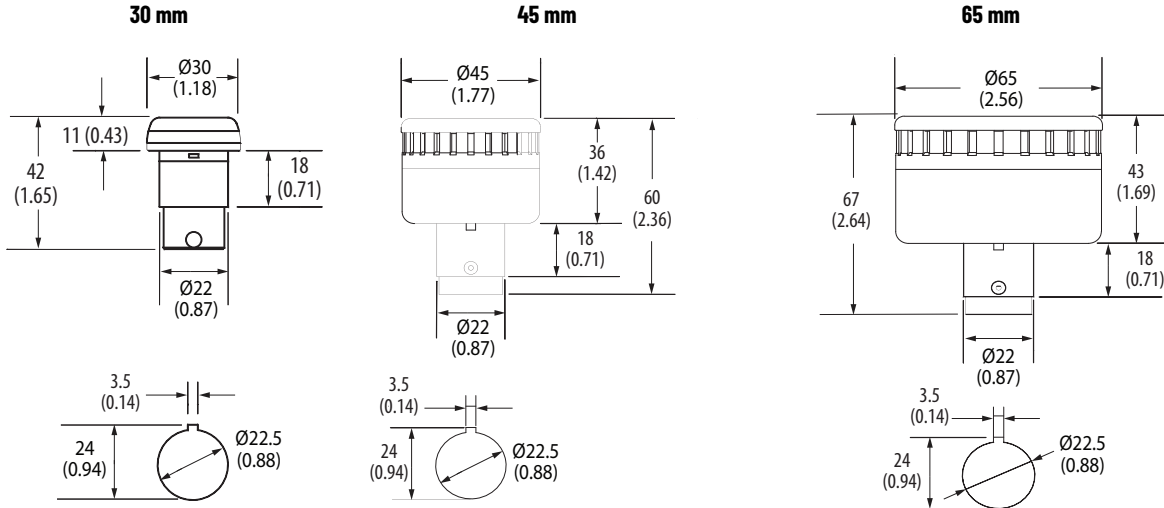
# Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

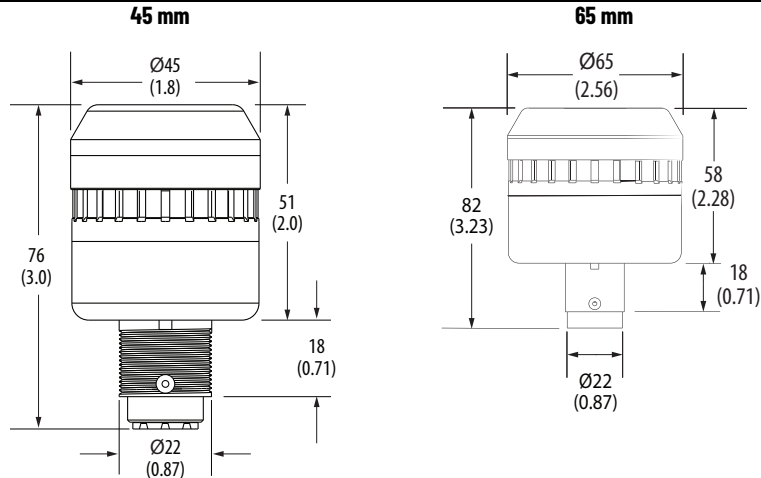
Terminal connector for 30 mm devices adds 14 mm (0.55 in.) to back-of-panel depth

Terminal connector for 45 mm and 65 mm devices adds 9 mm (0.35 in.) to back-of-panel depth

**Sounder:**



**Combined Sounder with LED Beacon:**



**LED:**

30 mm

45 mm

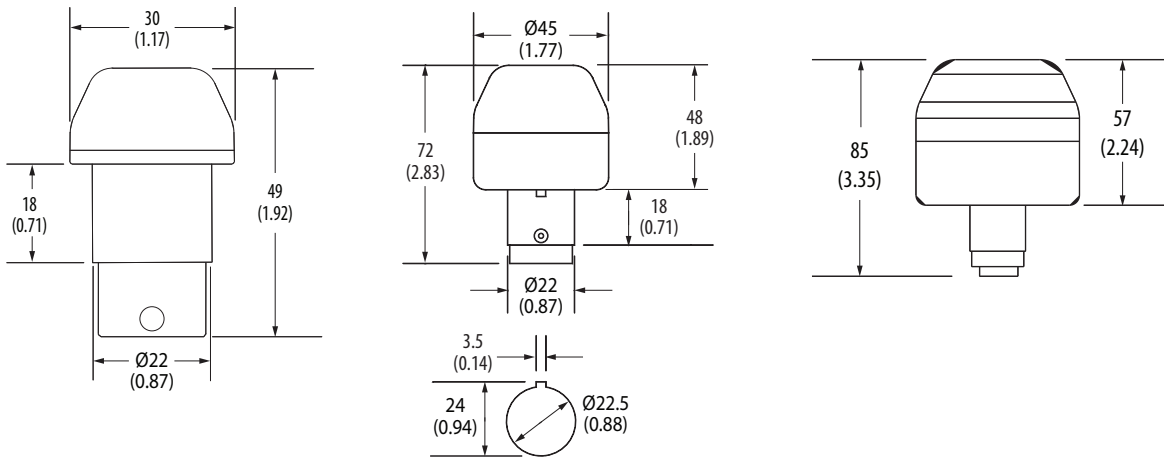
65 mm

**Strobe:**

30 mm

45 mm

65 mm





## Panel Light Bars

These panel light bars are ideal for OEMs and panel builders who want to reduce the quantity of components without the loss of design reliability or functionality. These devices remove your need for a separate fluorescent lamps purchase. They can be left ON continuously due to low power consumption and minimum heat generation of modern status indicator technology.



## Specifications

Attribute	855L-NX1 (24...48V with ON/OFF Switch) 855L-NX2 (24...48V - No Switch)	855L-NX3 (110...240V with ON/OFF Switch) 855L-NX4 (110...240V - No Switch)
Nominal Input Voltage	24...48V AC/DC, 50/60 Hz	855L-NX3: 110...240V AC, 50/60 Hz 855L-NX4: 110...240V AC/DC, 50/60 Hz
Input Voltage Limits	17...63V DC 17...53V AC, 50/60 Hz	90...320V DC (855L-NX4 only) 90...250V AC, 50/60 Hz
Nominal Current	~300 mA @ 24V DC/ ~150 mA @ 48V DC	<70 mA @ 120V AC/ <55 mA @ 240V AC
Inrush Current	1 A @ 24V DC, ~2 A @ 48V DC, 25 °C (77 °F)	~3.5 A @ 120V AC/ ~7 A @ 240V AC
Leakage Current Immunity	>8 mA DC	>3 mA AC/~1 mA DC
Ingress Protection	855L-NX1: NEMA 1, IP40 855L-NX2: NEMA 1, IP44	855L-NX3: NEMA 1, IP40 855L-NX4: NEMA 1, IP44
Operating Temperature Range	-35...+60 °C (-31...+140 °F)	
Storage Temperature Range	-35...+85 °C (-31...+185 °F)	
Wire Size	22...14 AWG (0.5...2.5 mm <sup>2</sup> )	
Light Beam Angle	~70°	
LED Color	White	
Light Output, min	470 lumens	
Lens Material	Polycarbonate (clear)	
Base Material	Polycarbonate (light gray)	
Mounting Orientation	No restrictions	
Mounting Screws (not provided)	2 X 1/4 in. (M5/ M6)	
Weight	380 g (<1 lb)	
LED MTFB	50,000 hr	

**Table 6 - Standards and Certifications**

Standards Compliance	Certifications
<ul style="list-style-type: none"> <li>EN61000-6-2</li> <li>EN61000-6-3</li> <li>EN60947-5-1</li> </ul>	<ul style="list-style-type: none"> <li>CE Marked</li> <li>cULus File No. E14840</li> </ul>

# Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

