

EDWARDS SIGNALING

Installation Instructions for Cat. 105 Series Adverse Location Visual Signals

Description

The 105 Series visual signals are heavy duty, reliable, UL listed and CSA certified beacons when assembled in accordance with installation instructions constitute a UL listed NEMA 4X enclosure. They are designed for use in industrial applications or in applications where a NEMA 4X enclosure is required. The units

are available in steady-on halogen or LED, flashing halogen or LED, 3 Joule strobe or 8 Joule high intensity strobe. The 105 Series visual signals are UL listed for Marine Use and the following Division 2 Hazardous Locations listed in Table 1.

For specification details, see Table 2.

Table 1. Ratings

Cat. No.	Class	Division	Group	Temp. Code
105FINH*-G1	I	2	A, B, C, D	T3 (200°C, 392°F)
105SINH*-G1	I	2	F, G	
	III			
105FINH*-N5	I	2	A, B, C, D	T2A (280°C, 536°F)
105SINH*-N5	I	2	F, G	
105HIST*-N5	III			
105HIST*-R5				
105ST*-G1	I	2	A, B, C, D	T3C (160°C, 320°F)
105ST*-N5	I	2	F, G	
105ST*-R5	III			
105FLED*-N5				
105SLED*-N5				
105FLED*-G1	I	2	A, B, C, D	T5 (100°C, 212°F)
105SLED*-G1	I	2	F, G	
	III			

Installation



WARNING

To prevent electrical shock, do not connect power until instructed to do so.

Installation must be in accordance with local codes. The lens should be positioned up for outdoor applications.

1. Select a mounting configuration (Figure 5).

NOTE: When mounting using the Cat. No. 105BM mounting bracket, the Cat. No. 105BX outlet box attachment must also be used as shown in Figure 1.

2. Pull field wiring into the mounting attachment.
3. Install the mounting attachment as follows:



WARNING

The 105BX junction box, 105BM mounting bracket and 105PM pipe mount attachments are non-conductive plastic fixtures and do not provide earth-ground continuity when attached to metallic wiring systems. **Therefore, they are intended for use with the 105 series visual signals only when earth-grounding is not required.**

The 105BX junction box, 105BM mounting bracket and 105PM pipe mount attachments **can** be used with metallic wiring systems **only** when installed at the end of a run.

- a. **Cat. No. 105BX:** Screw the outlet box attachment to the mounting surface using two screws (not supplied).

suitable for the surface. Attach the adhesive backed gasket to the top of the 105BX mounting box, being careful to line up the holes in the gasket with the mounting holes in the outlet box.

- b. **Cat. No. 105BM:** Using the four supplied screws, secure the mounting bracket to Cat. No. 105BX outlet box attachment as shown in Figure 1. Attach the adhesive backed gasket to the top of the 105BM mounting bracket, being careful to line up the holes in the gasket with the mounting holes in the outlet box.
- c. **Cat. No. 105PM:** Install 3/4" (19 mm) conduit. Screw the pipe mount attachment onto the 3/4" (19 mm) conduit. Attach the adhesive backed gasket to the top of the 105PM pipe mount attachment, being careful to line up the holes in the gasket with the mounting holes in the outlet box.

NOTE: It is not necessary to remove the Hi-Intensity Strobe Base to install the 105HIST series beacons.

4. Mount 105SLED, 105FLED, 105SINH, 105FINH, and 105ST Series as follows. **For 105HIST Series proceed to step 7.** Unscrew the gasketed base from the lens assembly as shown in Figure 2 and remove the clear gasket from around the base.
5. Secure the base to the appropriate mounting attachment using four screws (supplied). Replace the clear gasket on the base with the flared, open end facing down.
6. Attach the unit's wire leads to the field wiring as shown in Figure 4.
7. Ensuring that the light source is in place, screw the lens back on the base.
8. **Mount the 105HIST Series as follows.** Secure the hi-intensity strobe base to the appropriate mounting attachment using four screws (supplied) as shown in Figure 3.

NOTE: When mounting the 105HIST Series, the lens is not removed from the base for installation.

9. Apply power and verify operability.

Maintenance

The lens should be periodically cleaned using a mild detergent and water on a soft, clean, lint-free cloth.

Light Source Replacement



WARNING

To prevent electrical shock, before starting work on units disconnect power and, for strobe modules wait 5 minutes for stored energy to dissipate.

1. Unscrew the lens from the base.



CAUTION

Do not touch the strobe tube or halogen bulb with bare fingers. Grasp the light source either by the base or using a soft, clean cloth.

2. For Halogen Bulb Replacement:
 - a. While pressing down on the bulb, turn and then pull straight up and out of the socket.
 - b. Insert the new halogen bulb into the socket, press down and turn until the bulb is locked into place.
3. For Strobe Tube Replacement:
 - a. Grasp the strobe tube by its base and pull straight up out of the strobe tube socket (Figure 2).
 - b. Grasp the new strobe tube by the strobe tube base and press into the strobe tube socket.
4. Screw the lens onto the base.
5. Apply power and verify operability.

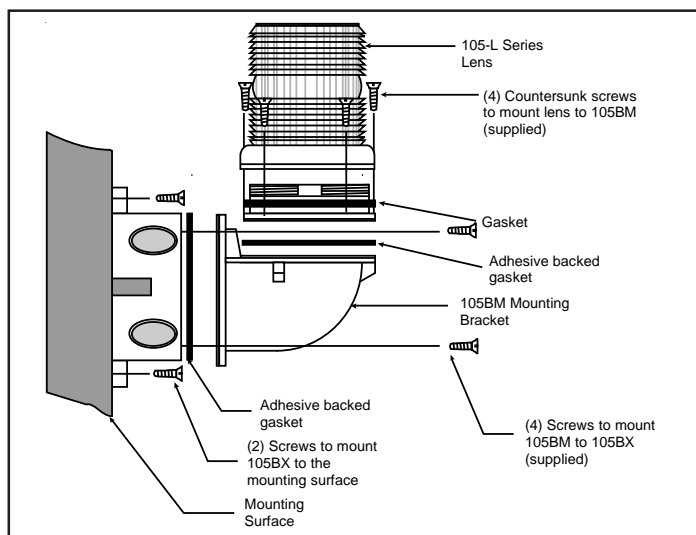


Figure 1. Mounting Cat. No. 105BM Mounting Bracket

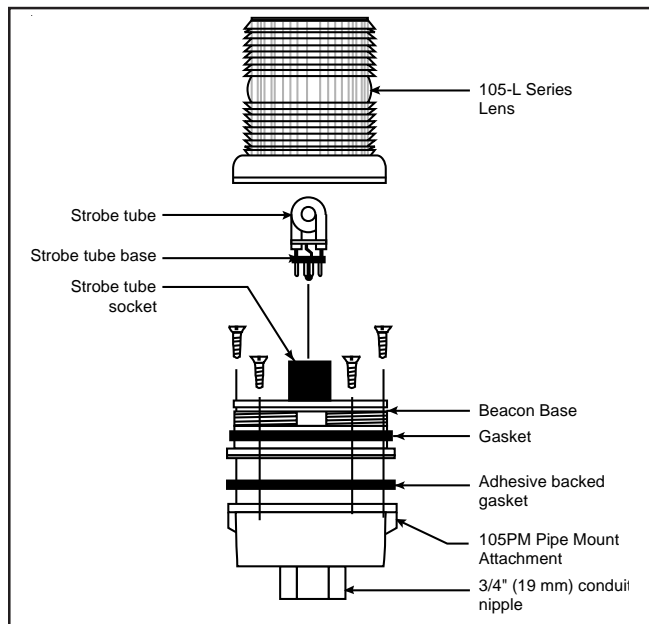


Figure 2. Securing the Beacon to the Mounting Attachment (Pipe Mount Attachment shown)

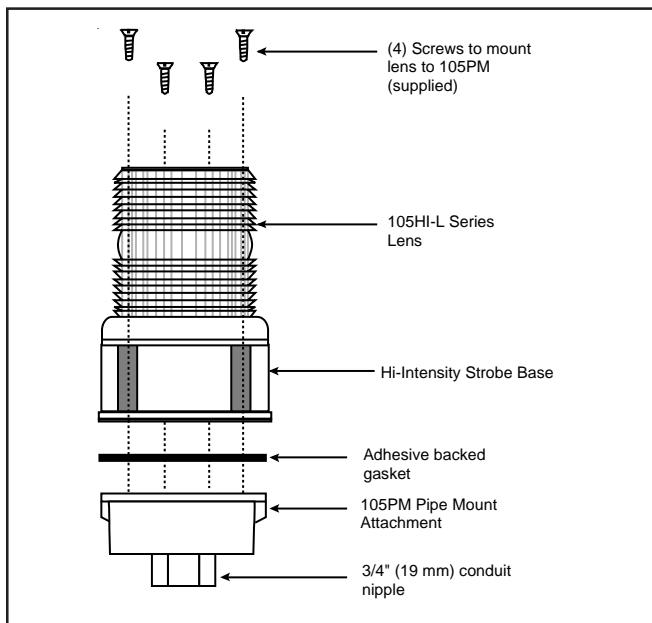


Figure 3. Securing the 105HIST Beacon to the Mounting Attachment (Pipe Mount Attachment shown)

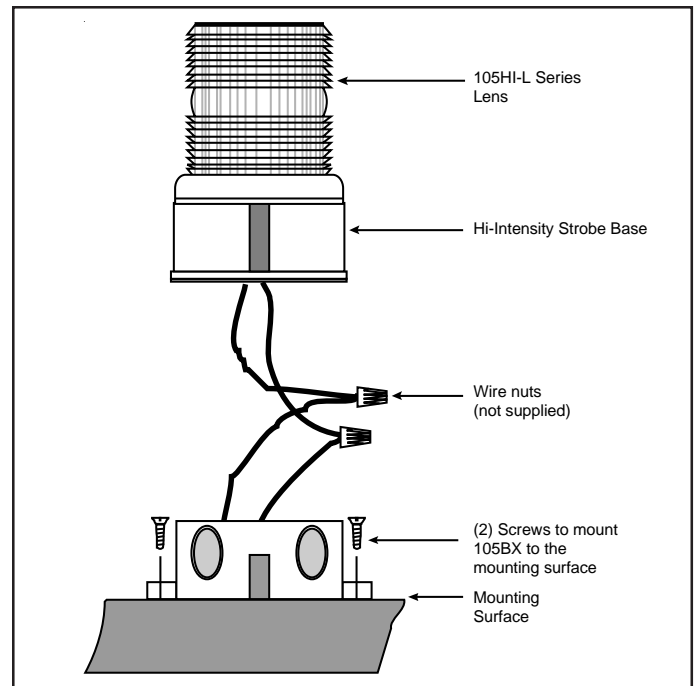
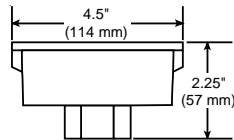
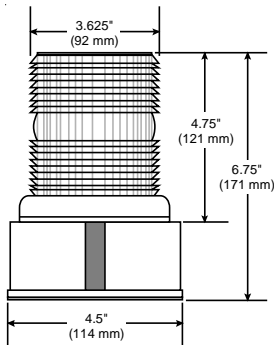
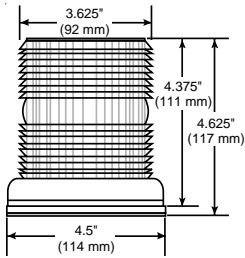


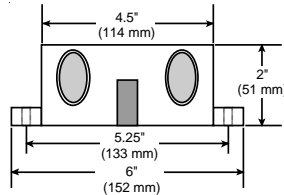
Figure 4. Wiring the 105 Series Beacons (Hi-Intensity Strobe shown)

Table 2. Specifications

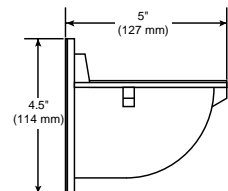
Cat. No.	Module Type	Lamp Ratings	Voltage	Current
105SLED*-G1	Steady-On LED	100,000 hours ^{1,2}	24V DC	0.062A
105SLED*-N5	Steady-On LED	100,000 hours ^{1,2}	120V 60 Hz	0.022A
105FLED*-G1	Flashing LED	100,000 hours ^{1,2}	24V DC	0.062A
105FLED*-N5	Flashing LED	100,000 hours ^{1,2}	120V 60 Hz	0.022A
105SINH**-G1	Steady-On Halogen	20W, 226 Lumens, 20,000 hours ^{1,2}	24V DC	0.8A
105SINH**-G5	Steady-On Halogen	20W, 226 Lumens, 20,000 hours ^{1,2}	24V 60 Hz	0.8A
105SINH**-N5	Steady-On Halogen	25W, 175 Lumens, 20,000 hours ^{1,2}	120V 60 Hz	0.2A
105FINH**-G1	Flashing Halogen	20W, 226 Lumens, 20,000 hours ^{1,2}	24V DC	0.8A
105FINH**-G5	Flashing Halogen	20W, 226 Lumens, 20,000 hours ^{1,2}	24V 60 Hz	0.8A
105FINH**-N5	Flashing Halogen	25W, 175 Lumens, 20,000 hours ^{1,2}	120V 60 Hz	0.2A
105ST**-G1	3 Joule Strobe	300,000 Peak Candela, 3,000 hours ³	24V DC	0.3A
105ST**-N5	3 Joule Strobe	300,000 Peak Candela, 3,000 hours ³	120V 60 Hz	0.1A
105ST**-R5	3 Joule Strobe	300,000 Peak Candela, 3,000 hours ³	240V 60 Hz	0.02A
105HIST**-N5	High Intensity 8 Joule Strobe	800,000 Peak Candela, 3,000 hours ³	120V 60 Hz	0.1A
105HIST**-R5	High Intensity 8 Joule Strobe	800,000 Peak Candela, 3,000 hours ³	240V 60 Hz	0.05A



105PM Pipe Mount Attachment



105BX Outlet Box Attachment



105BM Mounting Bracket
(use with 105BX)

*Lens and light source (LED) color: A - amber, B - blue, G - green, R - red.

**Lens color: A - amber, B - blue, C - clear, G - green, M - magenta, R - red.

¹At nominal operating voltage.

²Projected lamp life based on manufacturer's calculated lamp life @ 65 fpm and 50% duty cycle.

³Strobe tube life @ operating power to 75% efficiency.

	105SLED, 105FLED, 105SINH, 105FINH, 105ST Series	105HIST Series
Mounted on a Cat. No. 105PM Pipe Mount Attachment		
Mounted on a Cat. No. 105BX Outlet Box Attachment		
Mounted on a Cat. No. 105BM Mounting Bracket with the Cat. No. 105BX Outlet Box Attachment		

Figure 5. Mounting Configurations