

## Description

The 105XBRM Series visual signals are heavy duty, reliable, UL, cUL (General Utility) (misc. device/control unit accessory) beacons which, when assembled in accordance with installation instructions, constitute a UL listed Type 4X enclosure and are UL Listed for Marine Use. They are designed for use in industrial applications or in applications where a Type 4X enclosure is required. The 105XBRM LED Series are factory shipped in a steady-on mode. The device can be easily set to 65 fpm flashing mode. When assembled in accordance

with these instructions, the 105XBRM Series visual signals are UL Listed for use in Hazardous Locations with Operating Temperatures listed in Table 1.

For specification details, see Table 2.

## Mechanical Specifications

Outdoor Locations

Temperature Ratings ..... -31F to +150F (-35C to +66C)

Table 1. Hazardous Location Ratings

Cat. No.	Class	Division	Group	Operating Temperature
105XBRM( )24D	I	2	A, B, C, D	T4A (120C, 248F)
105XBRM( )120A	II	2	F, G	T4A (120C, 248F)
	III			T4A (120C, 248F)

## 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.

### 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 105XBRM 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.**

3. Install the mounting attachment as follows:
  - a. **Cat. No. 105BX:** Secure 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.

4. Unscrew the lens from the base.
5. The 105XBRM Series Visual Indicator is supplied with a default setting of steady-on. If 65 fpm pattern is desired, set dipswitch as shown in Figures 2 & 4.
6. 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.
7. Attach the unit's 18" wire leads to the field wiring as shown in Figure 3.

8. Ensuring that the light source is in place, screw the lens back on the base.
9. Apply power and verify operability.

## Maintenance



## WARNING

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

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

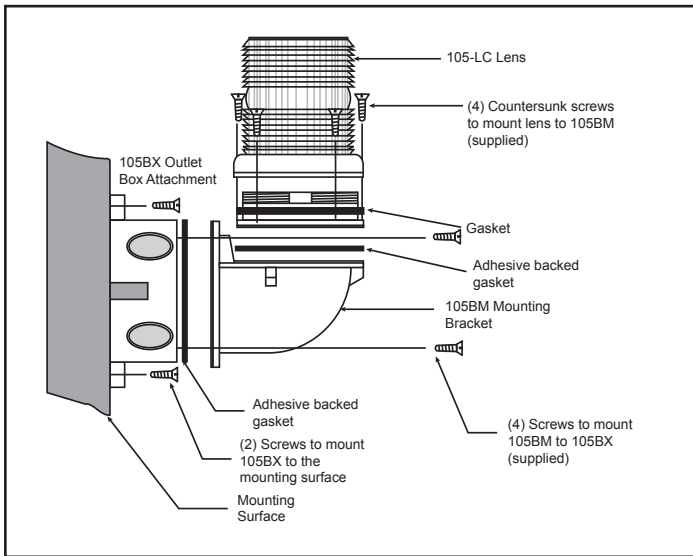


Figure 1. Mounting Cat. No. 105BM Mounting Bracket

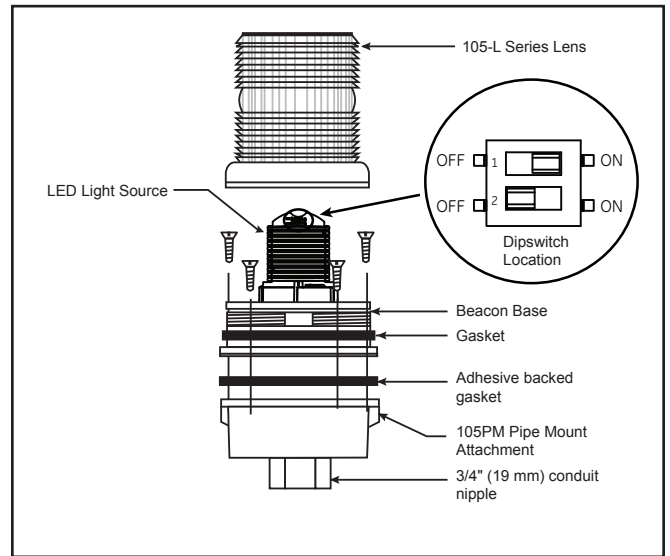


Figure 2. Securing the Beacon to the Mounting Attachment

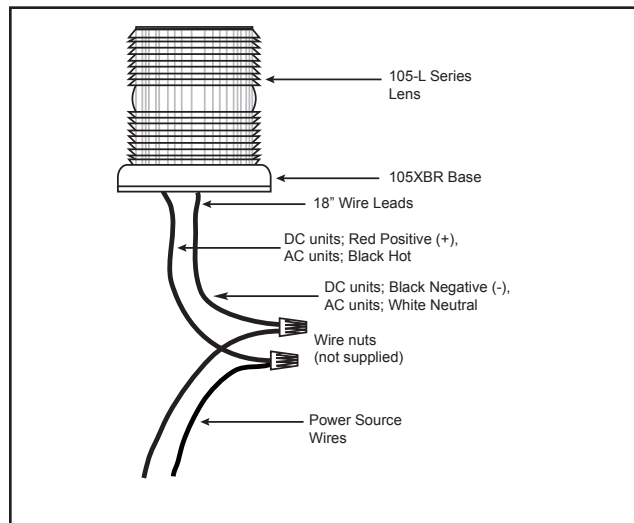
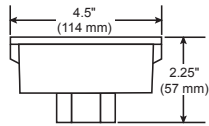
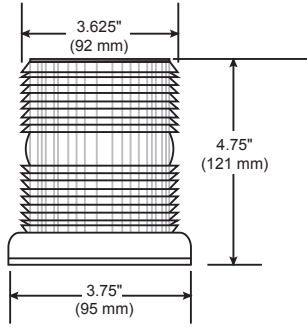


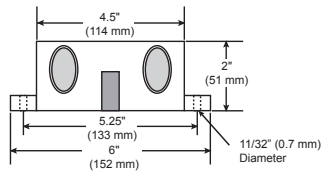
Figure 3. Wiring the 105XBR Series Beacons

Table 2. Specifications

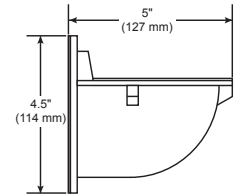
Cat. No.	Module Type	Median LED Life (L70)	Voltage	Current
105XBRM*24D	Multi-selectable	148,000 hours <sup>1</sup>	24V DC	0.215A
105XBRM*120A	Multi-selectable	148,000 hours <sup>1</sup>	120V 50/60 Hz	0.108A



105PM Pipe Mount Attachment



105BX Outlet Box Attachment



105BM Mounting Bracket  
(use with 105BX)

<sup>1</sup>Lens and LED color: A - amber, B - blue, G - green, R - red, W - white.

<sup>1</sup>Based on LED manufacturer's projections. Refer to <http://www.philipsumileds.com/pdfs/WP15.pdf>.

Table 3. Replacement Parts

Replacement Lens	
Color	Catalog No.
Amber	105-LA
Blue	105-LB
Green	105-LG
Red	105-LR
Clear (White)	105-LC

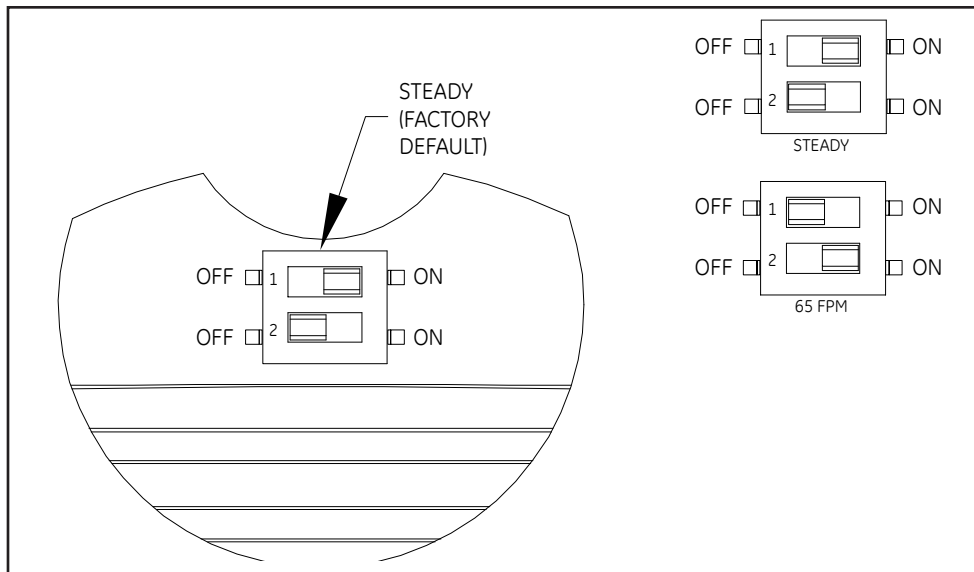


Figure 4. Flash Pattern Dipswitch Settings


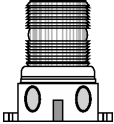
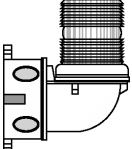
	105XBRM Series
<p><b>Mounted on a Cat. No. 105PM Pipe Mount Attachment</b></p>	
<p><b>Mounted on a Cat. No. 105BX Outlet Box Attachment</b></p>	
<p><b>Mounted on a Cat. No. 105BM Mounting Bracket with the Cat. No. 105BX Outlet Box Attachment</b></p>	

Figure 5. Mounting Configurations