

Figure 1. Mounting Options

## Description

The 116EXMLED Series AdaptaBeacon LED signaling appliances are intended for general utility signaling use. When assembled with an available mounting subassembly (116EX-P, 116EX-C, 116EX-S, or 116EX-C with 116EX-B) and in accordance with these instructions, the 116EXM LED visual signal is UL Listed as a Visual Signal Appliance. The 116EXMLED is UL and cUL listed for use in Class I, Division 1, Groups C and D, Class I, Division 2, Groups A, B, C and D, Class II, Division 1, Groups E, F and G, Class II, Division 2, Groups F and G, and Class III Division 1 and 2 hazardous locations with operating temperature codes per Table 2.

The beacons are UL and cUL Listed for outdoor use with Type 3R, 4X, and Marine rated enclosures.

The LED beacon flashes a 360-degree beam of light with 14 user selectable flash patterns.

The LED beacons are available in pendant, bracket, ceiling, or stanchion mount models (Figure 1).

## Installation



### WARNING

**To reduce the risks of ignition of hazardous atmospheres and shock, do not apply power to the unit until installation has been completed and unit is tightly assembled and secured.**

Install this unit in accordance with the applicable requirements in the latest edition of the National Electrical Code and Canadian Electrical Code.

1. Mount using the following applicable method.

- a. **Pendant Mount Models** (Figure 2): Install the catalog number 116EX-P, pendant mounting module, to the main housing, tighten set-screw. Install explosion-proof hanger box (not supplied). Secure 3/4" (19 mm) NPT threaded conduit (not supplied) to the box. Install the unit on the conduit. Ensure conduit engages at least

5 full threads and then tighten the set-screw to secure the pendant mount module to the conduit. Make electrical connections in accordance with Figure XX. Refer to Table 2 for required supply wire temperature ratings.

- b. **Ceiling Mount Models** (Figure 3): Install the catalog number 116EX-C, ceiling/wall mounting module, using appropriate hardware (not supplied) suitable for the mounting surface. Make electrical connections in accordance with Figure 6. Refer to Table 2 for required supply wire temperature ratings. Install main housing to ceiling mount module. Tighten the set-screw to secure the 116EXMLED main housing to the ceiling mount module.
- c. **Bracket Mount Models** (Figure 4): Install the catalog number 116EX-C ceiling/wall mounting module using appropriate hardware (not supplied) for the mounting surface. Connect field earth ground wire to ground screw or earth ground via conduit system. Install the catalog number 116EX-B wall mounting elbow to the 116EXMLED main housing (feed the units wiring through the 116EX-B elbow). Tighten the set-screw to secure the 116EX-B elbow to the main housing. Make electrical connections in accordance with Figure 6. Refer to Table 2 for required supply wire temperature ratings. Install main housing and 116EX-B elbow subassembly to ceiling mount module. Tighten the set-screw to secure the 116EX-B elbow to the ceiling mount module.
- d. **Stanchion Mount Models** (Figure 5): Install the catalog number 116EX-S, stanchion mount module to the main housing and tighten set-screw. Mount the 116EX-S to the 1-1/4" conduit, tighten set-screw. Ensure conduit is connected to the appropriate junction box. Install the unit on the conduit. Make electrical connections in accordance with Figure 6. Refer to Table 2 for required supply wire temperature ratings.

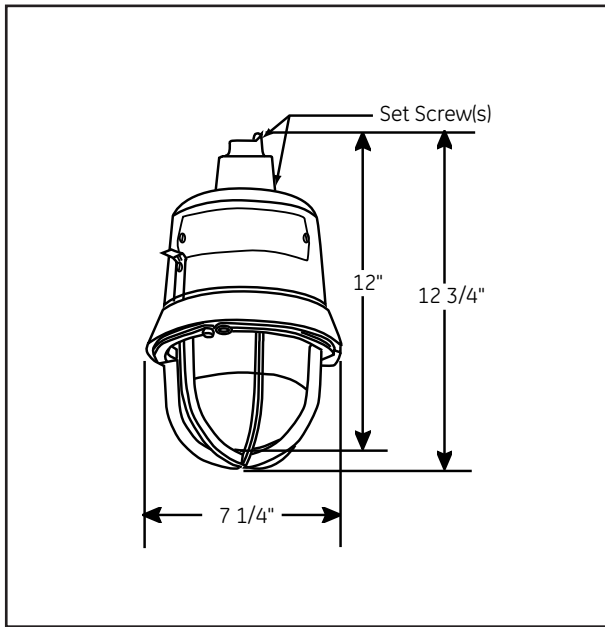


Figure 2. Detail of Pendant Mounting

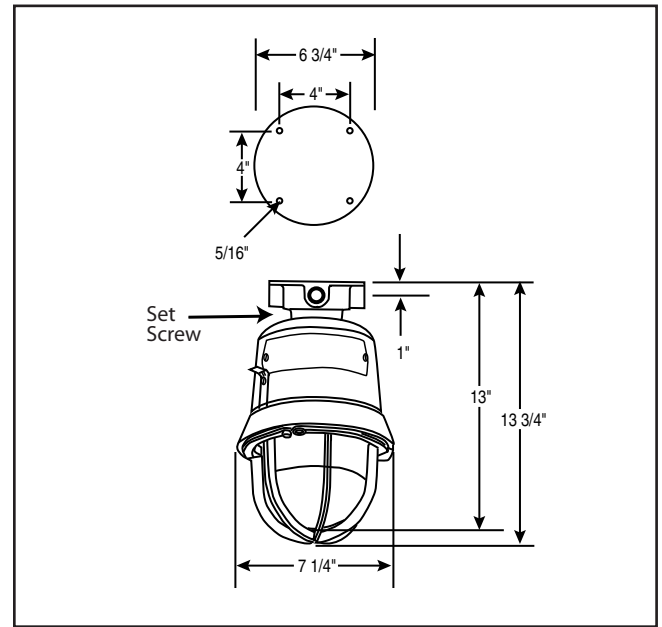


Figure 3. Detail of Ceiling Mounting

2. Adjust flash rate. Beacons are factory defaulted to mode "Flash 3" (65 flashes per minute).
  - a. Remove globe section; loosen the globe and ring assembly set screw. Insert a suitable tool into the notches in the globe and ring assembly and loosen the assembly by prying in a counterclockwise direction. Remove the ring and globe assembly.
  - b. Set dipswitch (Figure 7) for desired flash rate. Refer to Table 3 for dipswitch settings.
  - c. To replace, simply screw the globe assembly unit on until it seats firmly onto its gasket. Tighten the unit another 1/8 to 1/4 turn. Tighten the set-screw.



### WARNING

**To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.**

**To reduce the risk of ignition of hazardous atmospheres and shock, disconnect from the supply and circuit and allow five (5) minutes for stored energy to dissipate before disassembling the unit.**

3. Apply power to the unit and ensure proper function.

## Maintenance



### WARNING

**To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.**

Disassemble the unit as follows (Figure 8):

1. Loosen the (3) guard screws and remove the guard.
2. Loosen the globe and ring assembly set screw. Insert a suitable tool into the notches in the globe and ring assembly and loosen the assembly by prying in a counterclockwise direction. Remove the ring and globe assembly.
3. Refer to Table 1 for the correct replacement catalog number and replace the necessary part.
4. To replace, simply screw the unit on until it seats firmly onto its gasket. Tighten the unit another 1/8 to 1/4 turn. Tighten the setscrew.
5. Reinstall the guard, where applicable, and secure using the three supplied screws.
6. After the unit is assembled, apply power and make sure the unit functions properly.

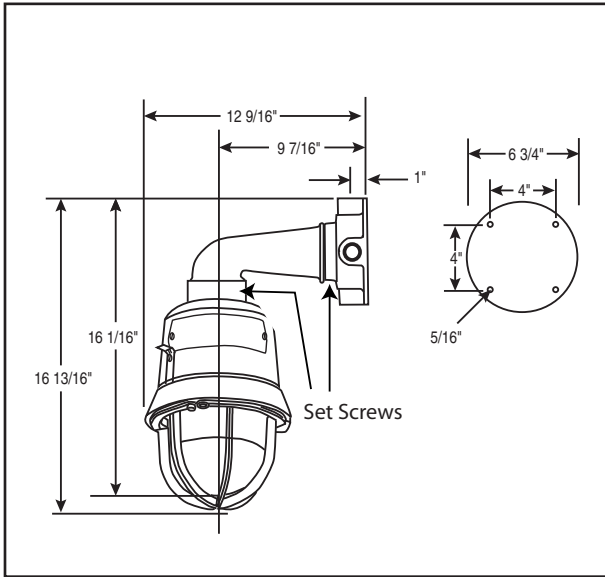


Figure 4. Detail of Wall Bracket Mounting

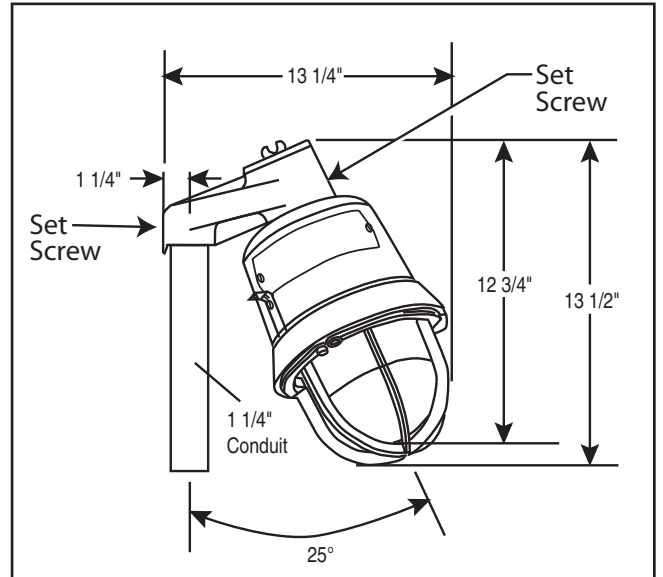


Figure 5. Detail of Stanchion Mounting

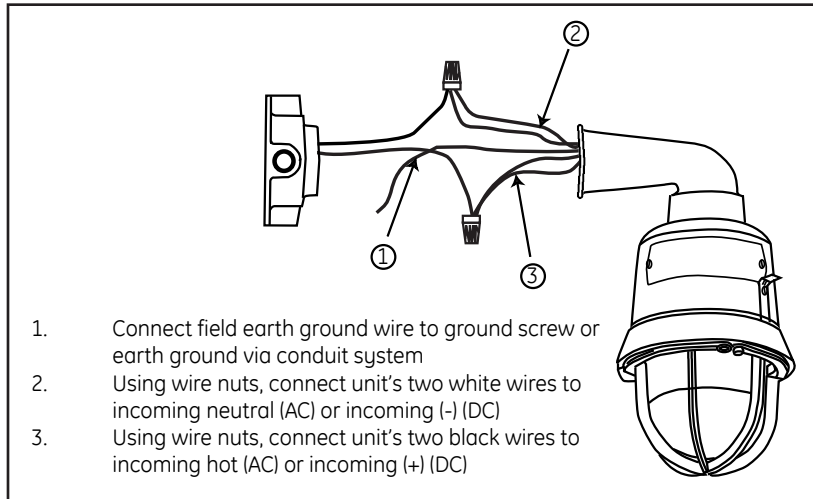


Figure 6. Wiring (Bracket Mount Version Shown)

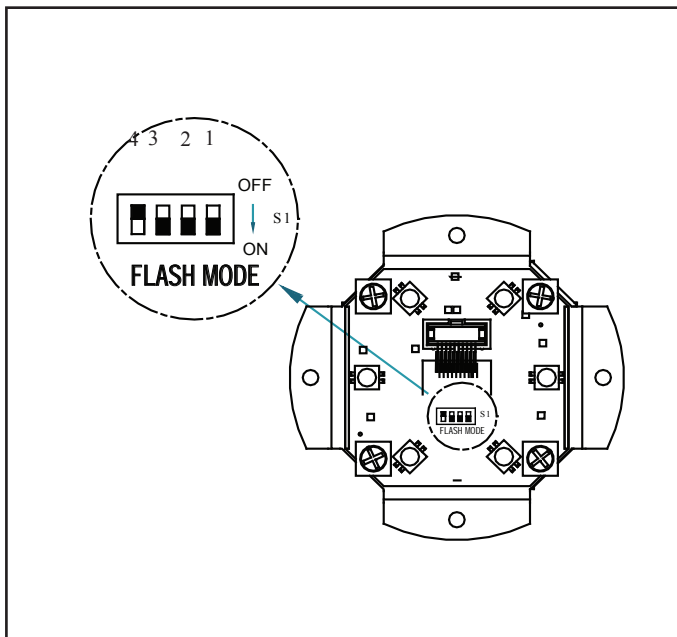


Figure 7. Detail of Dipswitch Location

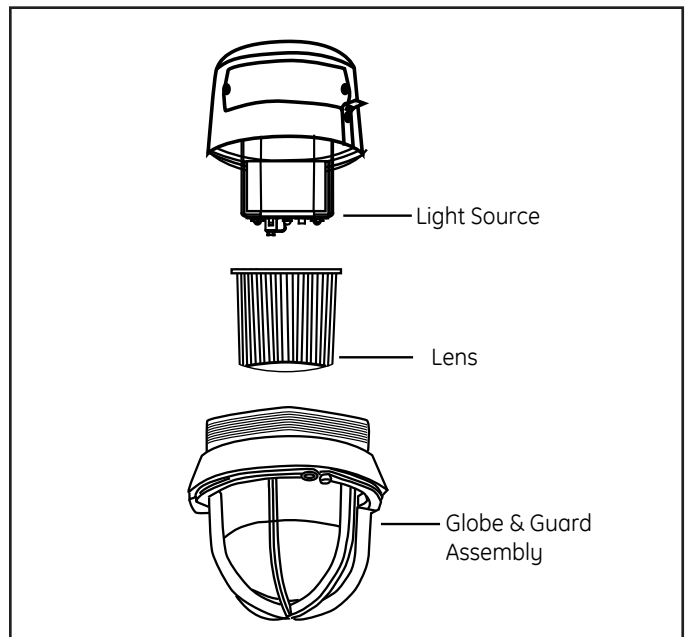


Figure 8. Disassembly of the 116EXMLED Series AdaptaBeacons

Table 1. 116 Series AdaptaBeacons

Description	Catalog Number	Electrical Ratings	Conduit Size	Flash Rate	LED Replacement
Housing Less Mounting Module	116EXMLED*-Y6	120 - 240V 50/60 Hz, .215A 125-250V DC, .176A	N/A	ADJUSTABLE	N/A
Ceiling/Wall Mounting Module	116EX-C	N/A	3/4" NPT	N/A	N/A
Pendant Mounting Module	116EX-P	N/A	3/4" NPT	N/A	N/A
Stanchion Mounting Module	116EX-S	N/A	1 1/4" NPT	N/A	N/A
Wall Bracket Mounting Elbow	116EX-B	N/A	N/A	N/A	N/A

\*Letter in this position denotes color of the lens: A - amber, B - blue, W - clear, G - green, R - red

Table 2. Ratings

Ambient Temp.	Supply Wire Temp. Marking	Operating Temperature			
		Class I, Div. 2 Groups A, B	Class I, Div. 1 & 2 Groups C, D	Class II & III, Div. 1 Groups E, F, G	Class II & III, Div. 2 Group F, G
40°C	75°C	T4 (135°C)	T6 (85°C)	T4A (120°C)	T4A (120°C)
55°C	90°C	T3C (160°C)	T6 (85°C)	T4 (135°C)	T4 (135°C)
65°C	105°C	T3C (160°C)	T6 (85°C)	T4 (135°C)	T4 (135°C)

Table 3. Flash Mode Selection

S4	S3	S2	S1	DESCRIPTION	PATTERN
OFF	OFF	OFF	OFF	Steady	Steady On
OFF	OFF	OFF	ON	Multiburst 1	7 Bursts - Delay - Repeat
OFF	OFF	ON	OFF	Multiburst 2	5 Bursts - Delay - Repeat
OFF	OFF	ON	ON	Multiburst 3	10 Bursts - 3 Bursts - Repeat
OFF	ON	OFF	OFF	Multiburst 4	8 Bursts - delay w/ slight illumination - Repeat
OFF	ON	OFF	ON	Flash 1	65 FPM 10% Duty Cycle
OFF	ON	ON	OFF	Flash 2	65 FPM 25% Duty Cycle
OFF	ON	ON	ON	Flash 3	65 FPM 50% Duty Cycle
ON	OFF	OFF	OFF	Flash 4	65 FPM 75% Duty Cycle
ON	OFF	OFF	ON	Flash 5	80 FPM 10% Duty Cycle
ON	OFF	ON	OFF	Flash 6	80 FPM 25% Duty Cycle
ON	OFF	ON	ON	Flash 7	80 FPM 50% Duty Cycle
ON	ON	OFF	OFF	Flash 8	80 FPM 75% Duty Cycle
ON	ON	OFF	ON	Ramper	Ramps up and then ramps down

Contacting Edwards:

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P/N 3101456 OFFSET SPEC

INSTALLATION INSTRUCTIONS FOR CATALOG SERIES  
116EX ADAPTABEACONS FOR USE IN HAZARDOUS LOCA-  
TIONS

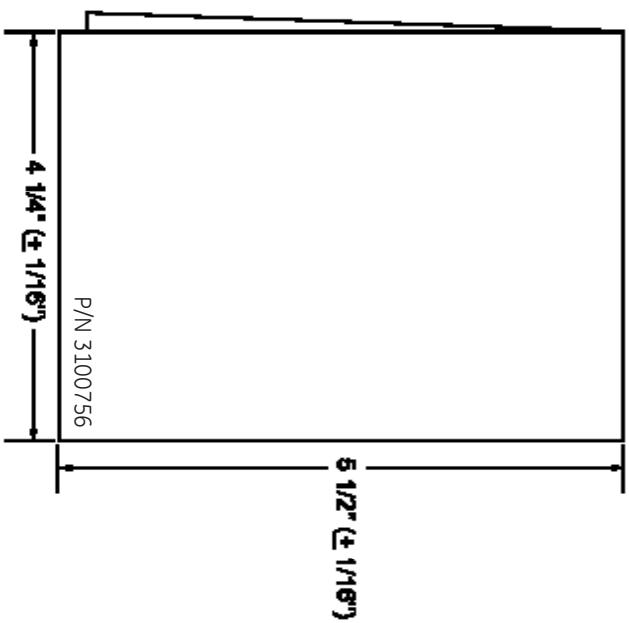
(1) 11" X 17" SHEET PRINTED BOTH SIDES. FOLD THREE  
TIMES TO DIMENSIONS SHOWN ON DETAIL WITH PART  
NUMBER ON THE OUTSIDE.

MATERIAL: STANDARD WHITE OFFSET STOCK

CHARACTERS: TO BE BLACK ON WHITE BACKGROUND

NOTE: MECHANICALS HAVE ALREADY BEEN REDUCED  
TO ACTUAL SIZE.

RETURN MECHANICALS TO:  
TECHNICAL WRITING  
EDWARDS SIGNALING  
& SECURITY SYSTEMS  
PLAINVILLE, CT 06062



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