

Figure 1. Dimensions

Description

Edwards AdaptaLight Series 101XBRM Stackable Beacon is a unique signaling appliance which can contain up to five modules, stacked onto a single AdaptaLight Base Unit (as illustrated above). The 101XBRM series can be combined or stacked with any of the models shown in Table 2 only if modules have same input voltage. The 101XBRM LED Series is supplied in steady-on mode but offers a field-selectable 65 fpm flash mode. Up to five modules can be used in any position in the AdaptaLight Stackable Beacon.

The AdaptaLight base unit (101BS) contains a mini pulsating horn rated 85 dB at 10 feet (3.05 m). This horn can operate as a sixth independent signal or with any one of the stacked modules shown in Table 2. The base unit has a screw-type terminal strip for positive hard wiring. Each module in the stack is electrically interconnected through solid copper busses and mating contacts to withstand vibration. Each is positively connected to the one below it by a solid through-bolt for mechanical integrity.

AdaptaLight is UL and cUL listed for direct surface or pipe mounting in non-hazardous dust and outdoor applications. The AdaptaLight may be mounted vertically with lenses facing up or with lenses facing down (on ceiling). The AdaptaLight is not suitable for outdoor installations when mounted with the lenses facing down. **The AdaptaLight must never be mounted horizontally.** Assemble and install in accordance with these instructions.

The AdaptaLight modules have double fresnel polycarbonate lenses available in a variety of colors, each providing a 360° non-shadowed light pattern.

Mechanical Specifications

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

PLC Compatibility

The electrical input load requirements for PLC compatible signaling devices are listed in Table 1. Signaling devices may be directly connected to output cards that meet these input load requirements. Unit is PLC compatible only when in steady mode.

Installation

WARNING

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

This equipment must be installed by a qualified electrician in accordance with the latest edition of the National Electrical Code and applicable local codes.

1. Mount the base vertically either facing up or down using one of the following procedures (Figures 2 and 3).

NOTE: For indoor applications, the base may be direct surface mounted, mounted on a 4" (102 mm) octagon box, or mounted on 1/2" NPT conduit. For outdoor (weatherproof) applications, the base must be conduit mounted vertically facing up.

- a. Loosen the screw in the clamp ring, remove ring and set aside.

NOTE: A permanently affixed gasket is supplied on the base. Use care when handling the base unit to prevent tearing of the gasket.

Table 1. PLC Compatibility

Cat. No.	Operating voltage*	Maximum off state leakage current (mA)	Continuous on current (mA)	Surge (inrush/duration)
101BS-G1	24V DC	1.2	20	2/1 A/millisecond
101BS-N5	120V AC	25	50	2/1 A/millisecond
101XB RM()24D	24V DC	5	215	34.5/52 A/microsecond
101XB RM()120A	120V AC	5	108	37.5/164 A/microsecond

*All AC volts at 50/60 Hz

b. Direct Surface Mounting (indoor installation only)

Remove the two knockouts from the bottom of the base.

Fasten the base to the surface using suitable hardware (not supplied).

c. 4" (102 mm) Octagon Box Mounting (indoor installation only)

Remove the two knockouts from the bottom of the base.

Fasten the base to the octagon box (not supplied) by installing the screws (supplied with the box) through the knockout holes in the base.

d. Conduit Mounting (indoor or outdoor installation)

Install a 1/2" NPT conduit (not supplied). Align the conduit entrance hole on the base with the conduit and rotate base until base is tightly secured.

2. Route incoming field wiring into the base through the conduit entrance hole.

Up to five 101XB RM LED modules or any other modules shown in Table 2 can be used in any position in the stack. The terminal block labels, 1 through 5, correspond to the stacked modules with 1 being the bottom module on the stack.

Connect field wiring to the terminal block as shown in Figure 4.

Ground the AC AdaptaLights to the grounding screw (Figure 3) in accordance with applicable codes. Place the connected wires inside of the base.

Assemble the base unit and place the base gasket on top as shown in Figure 2.

3. To stack the modules, align the notch on the bottom of the first module with the notch on the base and press into position. Secure by tightening the slotted panhead through-bolt located on the top of the module.

NOTE: Never try to remove the through-bolt from the module.

Install the #8-32 x 3/8" (9.5 mm) plastic panhead screw in the side of the module lens (Figure 5).

Place gasket supplied with module onto the top of the module.

Continue adding modules in this manner as required.

Place the cap supplied with the base unit onto the top module ensuring the gasket is in place. Secure with an o-ring and 3/8" (9.5 mm) cap screw (supplied).

4. Turn on power and verify that module(s) and horn are operating properly.

Maintenance/Flash Pattern Change

Refer to "Specifications" for replacement parts.



WARNING

To prevent electrical shock, disconnect all power before starting work on unit.

1. Remove the 3/8" (9.5 mm) cap screw, o-ring and cap from top of unit.
2. Remove the #8-32 x 3/8" (9.5 mm) plastic panhead screw from the side of the module lens.
3. Loosen the slotted panhead through-bolt (on top module). Do not remove the through-bolt from the module; turn the bolt approximately 30 turns.
4. Carefully remove the module and gasket.
5. Continue to disassemble until the internal dipswitch on the top circuit is reached or the component to be replaced is located. To change the flash pattern, set the dipswitch as illustrated in Figure 6. To replace the pulsating horn, follow instructions shown below.
6. Replace mini pulsating horn.
 - a. Remove the screw in the clamp ring, remove ring and set aside.
 - b. Remove three phillips head screws from top of base skirt and the base/horn assembly from the top portion of the base (Figure 2).
 - c. Remove the phillips head screw securing the horn to the mounting bracket (Figure 2).
 - d. Disconnect wires by cutting off the wire crimp connectors.
 - e. Secure the new horn on the mounting bracket with the screw removed in step 6.c.
 - f. Connect wires using wire nuts (not supplied).

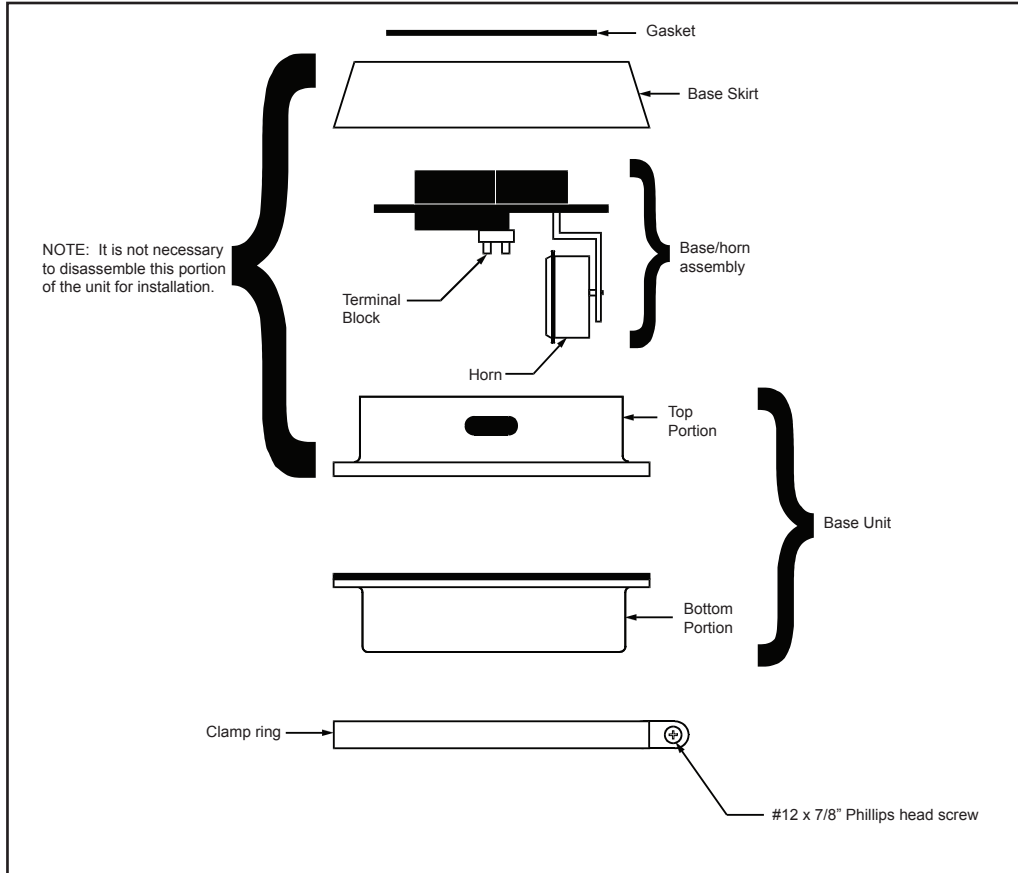


Figure 2. Catalog Series 101BS AdaptaLight Base Unit Assembly

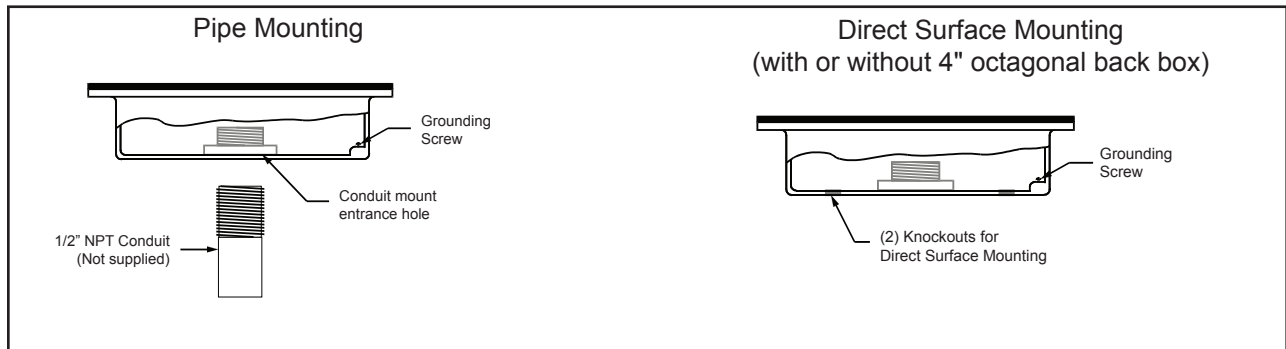


Figure 3. Mounting the Catalog Series 101BS AdaptaLight Base Unit

Cleaning

The AdaptaLight module lens surfaces should be periodically dusted and cleaned with a dry soft clean cloth to maintain optimum light visibility. If necessary, the outer lenses may be cleaned with water and a mild detergent on a well rung out soft clean cloth.

Steady-On Incandescent Light Unit*			
120V AC	12V DC	24V DC	Lens Color
101SINHR-N5	101SINR-E1	101SINHR-G1	Red
101SINHA-N5	101SINA-E1	101SINHA-G1	Amber
101SINHB-N5	101SINB-E1	101SINHB-G1	Blue
101SINHG-N5	101SING-E1	101SINHG-G1	Green
101SINHM-N5	101SINM-E1	101SINHM-G1	Magenta
101SINHC-N5	101SINC-E1	101SINHC-G1	Clear
101XBRM LED Units			
120V AC	12V DC	24V DC	Lens Color
101XBRMR120A	--	101XBRMR24D	Red
101XBRMA120A	--	101XBRMA24D	Amber
101XBRMB120A	--	101XBRMB24D	Blue
101XBRG120A	--	101XBRMG24D	Green
101XBRMW120A	--	101XBRMW24D	White
Flashing Incandescent Light Unit*			
120V AC	12V DC	24V DC	Lens Color
101FINHR-N5	101FINR-E1	101FINHR-G1	Red
101FINHA-N5	101FINA-E1	101FINHA-G1	Amber
101FINHB-N5	101FINB-E1	101FINHB-G1	Blue
101FINHG-N5	101FING-E1	101FINHG-G1	Green
101FINHM-N5	101FINM-E1	101FINHM-G1	Magenta
101FINHC-N5	101FINC-E1	101FINHC-G1	Clear
Flashing Strobe Light Unit			
120V AC	12V DC	24V DC	Lens Color
101STR-N5	101STR-E1	101STR-G1	Red
101STA-N5	101STA-E1	101STA-G1	Amber
101STB-N5	101STB-E1	101STB-G1	Blue
101STG-N5	101STG-E1	101STG-G1	Green
101STM-N5	101STM-E1	101STM-G1	Magenta
101STC-N5	101STC-E1	101STC-G1	Clear

*H in catalog number (e.g., 101SINHR-N5) signifies halogen module.

Table 2. Stackable Light Units Available

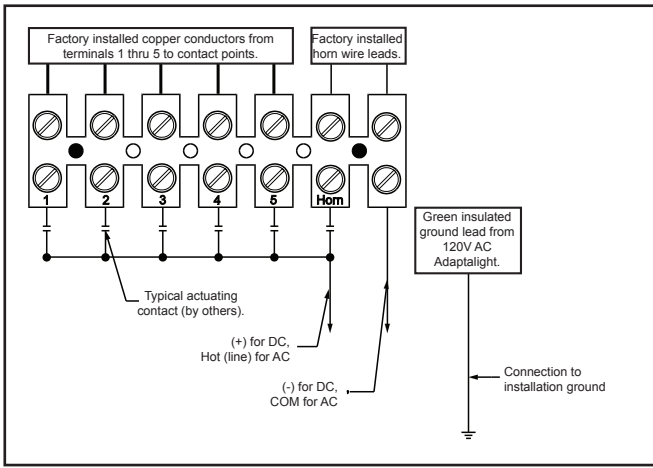


Figure 4. Wiring to the Terminal Block

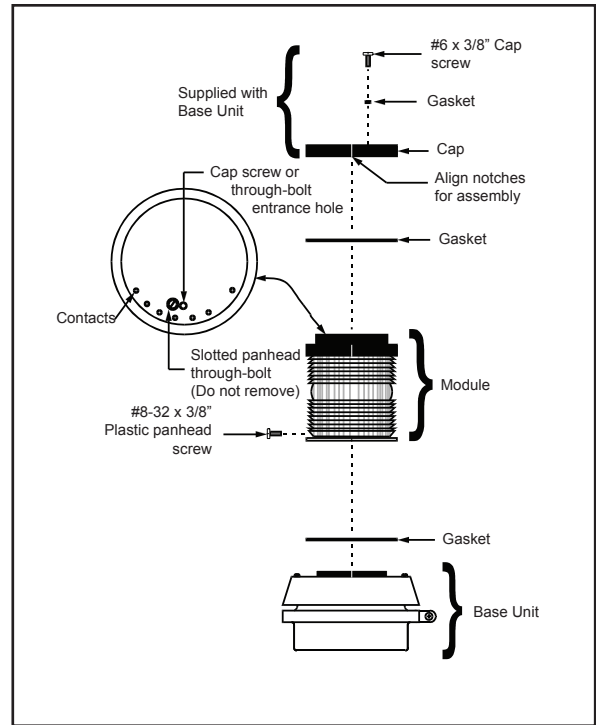


Figure 5. Stacking the Modules on Adapta-Light Base Unit

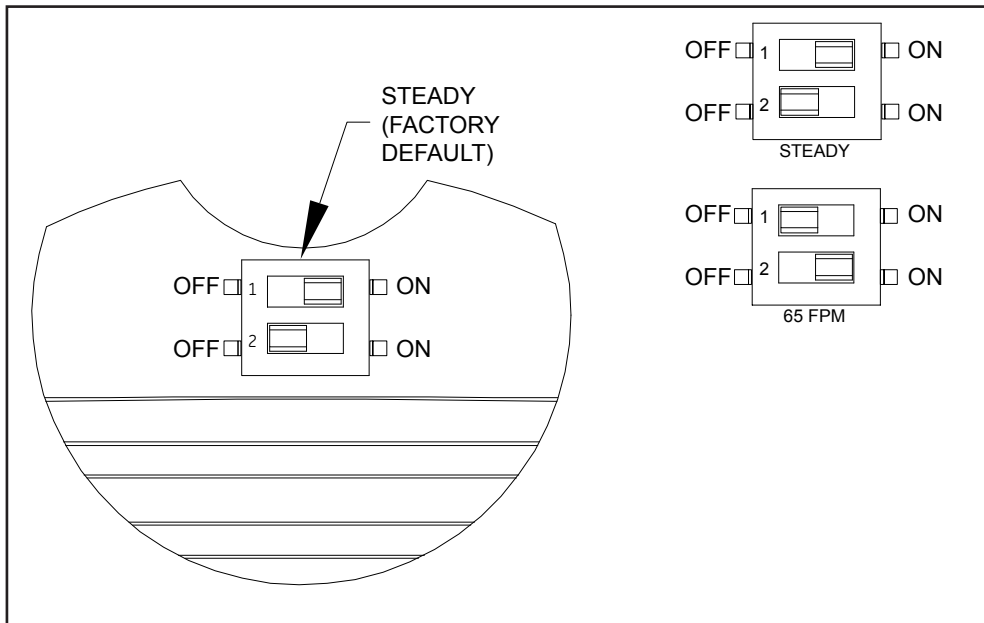


Figure 6. Dipswitch Settings

Table 3. Specifications

Catalog Number	Voltage	Current	Sound Output	Median LED Life (L70)	Light Output	Replacement Horn
101BS-N5	120V 50/60 Hz	0.05A	85 dB at 10 ft. (3.05 m)	--	—	123A-N5
101BS-G1	24V DC					need new number
101XBRM*120A	120V 50/60 Hz	0.108A	--	148,000 hr.†		
101XBRM*24D	24V DC	0.215A	--	148,000 hr.†		

*Letter in this position specifies lens and LED color: A - amber, B - blue, G - green, R - red or W - white (lens is clear with white LEDs).

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