

# Installation Instructions for Catalog Series 96B, 98B and 99B AdaptaBeacon® Signals

## Electrical Specifications

CATALOG NUMBER**	RATED VOLTAGE	CURRENT (Amps)
96B(*)-N5	120Vac 50/60 Hz	0.10 Amp
96B(*)-R5	240Vac 50/60 Hz	0.02 Amp
98B(*)-E1	12Vdc	0.50 Amp
98B(*)-G1	24Vdc	0.30 Amp
98B(*)-FY	36Vdc	0.30 Amp
99B(*)-E1	12Vdc	0.50 Amp

\*Specify color of lens by adding one of the following letters to the catalog number: A-amber, B-blue, C-clear, G-green, M-magenta, or R-red.

\*\*All units are UL Listed with the exception of the 99(\*)-E1.

## General Information

The Catalog Series 96B, 98B and 99B Adaptabeacon signals are small strobe lights suitable for indoor or outdoor (weatherproof) installation. Catalog Series 96B and 98B AdaptaBeacons are UL listed in NEMA 4X enclosures.

The 96B and 98B series signals are designed for mounting on 1/2" (13mm) NPT conduit. The 96B and 98B series signals can also be direct surface mounted. The 98B series signals are supplied with a hardware mounting kit for direct surface mounting. For outdoor (weatherproof) installation, the 96B and 98B series signals *must* be conduit mounted with their lens facing directly up. When installing indoors, these signals can be mounted in any position. The 96B series signals are AC powered; the 98B series are DC powered. Each series includes several models with different operating voltages.

The 99B series signals come with a magnetic mounting disk on their base and a 7 1/2 foot (2.29m) cord with cigarette lighter adapter plug. These signals can be attached to any steel surface and are ideal for temporary mounting on vehicle roofs, dashboards or rear decks. A steel circular disk-Velcro® assembly is supplied with the 99B series signals to provide a steel surface for vehicles with non-magnetic surfaces such as dashboards. A fabric hood is also included with these signals, which may be attached to the signal when it is mounted inside the vehicle to shield the vehicle occupant's eyes from the strobe light. The 99B series are 12V DC powered.

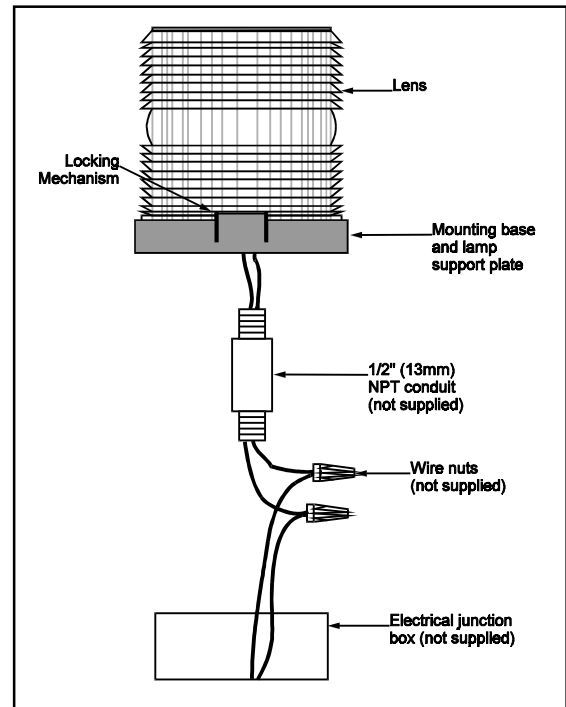


Figure 1. Conduit Mounting of the 96B and 98B Series Signals

## Installation

Install the signals using one of the following mounting procedures.

**⚠ WARNINGS**

**To prevent electrical shock, ensure that power is disconnected before installing the signal.**

**To prevent leakage and a potential shock hazard, when mounting outdoors the signal must be installed with the lens or dome facing directly up.**

### 96B and 98B Series Signals - Conduit Mounting

1. Refer to Figure 1. The signals require 1/2" (13 mm) NPT conduit (not supplied). Route the wire leads from the signal base through the conduit. Refer to the signal's label for the voltage rating. Thread the conduit into the signal mounting base.

## 96B and 98B Series Signal - Direct Surface Mounting

**NOTE:** When installing indoors, the 96B and 98B series signals may be mounted in any position.

The 96B series signals are not supplied with a direct mounting hardware kit but can be direct surface mounted using appropriate hardware.

1. Insert a small flat blade screwdriver between the locking mechanism and the lens. Gently push down and then pry up, unseating the lens. Pull the lens up and off of the signal mounting base, being careful not to damage the lamp.
2. Refer to Figure 2. Remove the two knockouts for the mounting screws from the signal base. Place the 3 3/4" (95mm) mounting gasket provided in the direct surface mounting hardware kit on the mounting surface and mark the center of the three holes in the gasket on the surface. Remove the mounting gasket and drill a 3/8" (10mm) hole at each of the marked positions.
3. Install the two rubber expansion plugs provided in the hardware kit into the two outer holes in the mounting surface as indicated in Figure 2.
4. Route the wire leads from the signal base through the center hole in the mounting gasket and mounting surface. Refer to the signal's label for voltage rating.

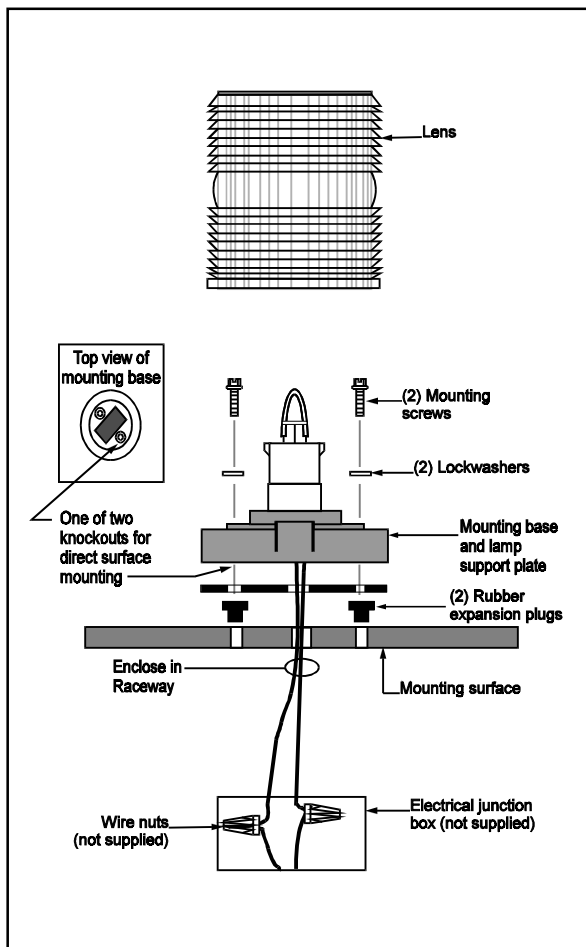


Figure 2. Direct Surface Mounting of the 98B Series Signals

5. Align the outer holes in the mounting gasket with the holes in the surface. Insert the two screws with lockwashers (provided in the hardware kit) through the two outer holes in the signal base and align the screws with the rubber expansion plugs as shown in Figure 2. Press the signal base firmly against the mounting surface and tighten the screws.

## 96B and 98B Series Signals - Wiring

1. Connect the field wiring to the signal wiring using one of the following applicable procedures:

**96B Series:** Using wire nuts (not supplied), connect the field wiring to the signal's wire leads as shown in Figure 1. Polarity is not important. Insert the wires into an appropriate electrical junction box (not supplied).

**98B Series:** Using wire nuts (not supplied), connect the signal's red positive (+) wire lead to the positive power source wire, and connect the signal's black negative (-) wire lead to the negative power source wire. Polarity must be observed. Insert the wires into an appropriate electrical junction box (not supplied).

## 99B Series Signals - Magnetic Mounting



**Steel (magnetic) surfaces:** To mount the 99B series signals on a steel surface, simply mount the signal where required and insert the adapter plug into the vehicle's cigarette lighter socket. To prevent possible scratching of the vehicle surface when installing or removing the signal, tip the signal slightly before making or breaking magnetic contact with the surface.

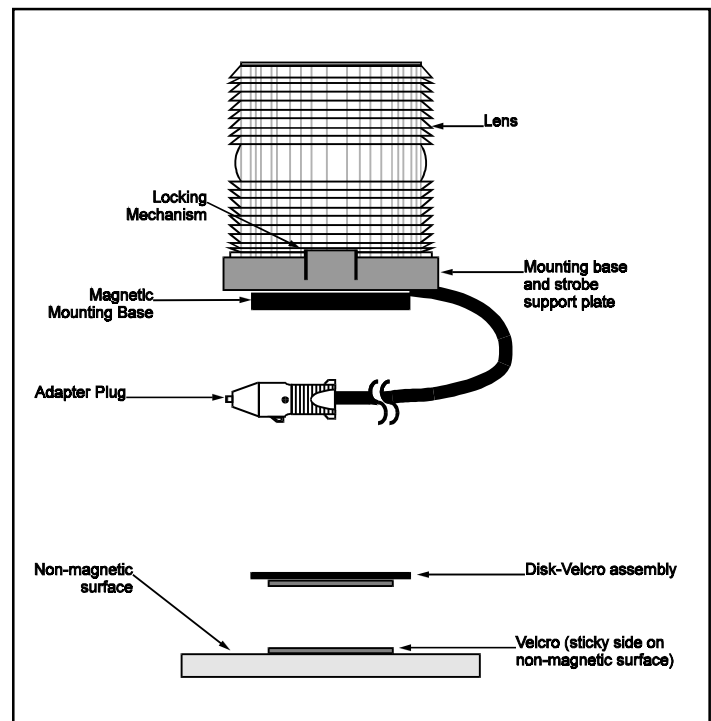


Figure 3. Mounting the 99B Series Signal on a Non-Magnetic Surface

**Non-magnetic surfaces:** Refer to Figure 3. A steel circular disk is supplied with the 99B series signals to provide for mounting this signal to non-magnetic horizontal surfaces as dashboards. The disk has a piece of Velcro permanently affixed to one side. A second piece of paper backed Velcro is attached to the disk-Velcro assembly. Remove the paper backed Velcro from the disk-Velcro assembly and remove its paper backing. Press the sticky side of the Velcro onto the dash or other suitable surface. Next, attach the disk-Velcro assembly to the Velcro on the dash.

Mount the 99B signal on the steel circular disk (of the disk-Velcro assembly) and insert the adapter plug into the vehicle's cigarette lighter socket.

To dismantle the signal, remove the adapter plug from the cigarette lighter. Next, to prevent removing the disk-Velcro assembly when removing the 99B signal, press down firmly on the edge of the disk assembly (the assembly is slightly larger than the magnetic mounting base) and tip the signal slightly before breaking magnetic contact with the disk.

## Troubleshooting

**96B and 98B Signals:** If the strobe light fails to operate, make sure there is power to the signal. If there is power and the strobe still fails to operate, replace the strobe tube as directed in the "Strobe Tube Replacement" section.

**99B Signals:** If the strobe light fails to operate:

- a. Verify that the adapter plug is firmly inserted into the cigarette lighter socket.
- b. Rotate the adapter plug a few times to remove possible ash accumulation from the contacts in the cigarette lighter socket. If the strobe still fails to operate, remove the fuse for the cigarette lighter and clean the socket and contact surfaces. Replace the fuse and check the signal again.

If the strobe still fails to operate, replace the strobe tube as directed in the "Strobe Tube Replacement" section.

## Maintenance



## WARNINGS

To prevent electrical shock, ensure that power is disconnected before installing the signal.

To prevent leakage and potential electrical shock, use care when disassembling the signal to prevent tearing of the permanently affixed gaskets provided for weatherproofing.

## Cleaning



## CAUTION

To prevent damage to the lens, do not use abrasive materials or cleaners.

Periodically clean the Adaptabeacon lens surface to maintain optimum light visibility. The lens may be cleaned with a soft cloth or sponge using water or a mild detergent solution. Ensure that the lens is completely dry before assembling the signal.

## Strobe Tube Replacement

Refer to the "Replacement Parts" section below for the required type of strobe tube. After disconnecting power, replace the strobe tube as follows:

### Refer to Figure 4

1. Insert a small flat blade screwdriver between the locking mechanism and the lens. Gently push down and then pry up, unseating the lens. Pull the lens up and off of the signal mounting base, being careful not to damage the lamp.



## CAUTION

To prevent damage to the strobe tube, handle the tube only by the base.

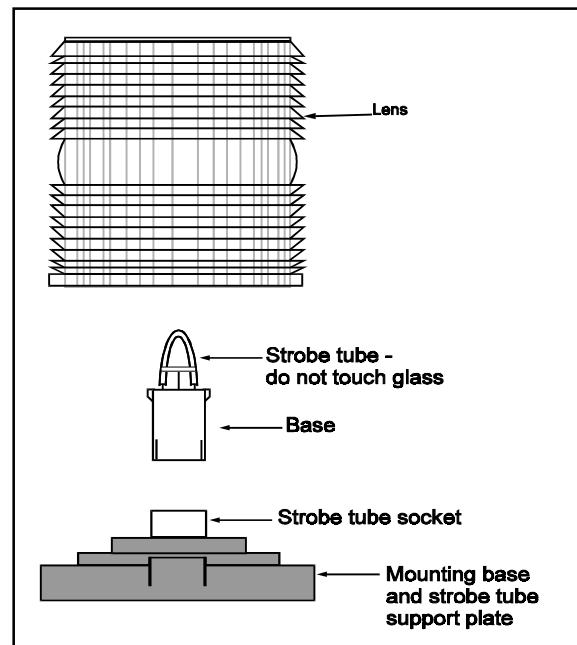


Figure 4. Strobe Tube Replacement  
(All Series Signals)

<b>REPLACEMENT PARTS</b>		
<b>Component</b>	<b>Used On</b>	<b>Catalog Number</b>
Lens (Amber, Blue, Clear, Green, Magenta or Red)	All Series	96-L(*)
Strobe Tube	All Series	91B-ST
<p>*Specify color of lens by adding one of the following letters to the catalog number:  A-amber, B-blue, C-clear, G-green, M-magenta, or R-red. Example: A red lens for the  96B series signal is 96-LR.</p>		