

Installation Instructions for Explosion-Proof Adaptahorn Catalog Series 878DEX and 879DEX

Description and Operation

Edwards explosion-proof Adaptahorn signals, catalog numbers 878DEX-N5 and 879DEX-G1, are heavy-duty vibrating horns intended for use where distinctive audible signals are required in a hazardous location having high ambient noise levels.

These horns include a series diode and are suitable for use in applications requiring electrical supervision of signaling circuit installation wiring.

The 878DEX-N5 is ac powered and the 879DEX-G1 is dc powered. Both Adaptahorn signals are listed for installation in the following hazardous locations: Class I, Division 1 and 2, Groups B, C, and D; and Class II, Division 1 and 2, Groups E, F, and G and Class III locations. The horns are in a outdoor type 4X rated enclosure (outdoor type 4X applies to general signaling use in non-fire alarm applications). The Adaptahorn may be mounted to any solid surface.

Electrical Specifications

Catalog Number	Rated Voltage	Alarm Current (A)	dBA Rating at 10 ft.
878DEX-N5	120VAC	0.165A	97
879DEX-G1	20-24VDC	0.16A	97

Ambient Temperature:

The UL Hazardous Locations Listing is "only for use under normal atmospheric conditions in an ambient temperature within the range of -25C (-13F) to +40C (+104F)"; and within these ambient temperatures, Edwards recommends +25F (-4C) and higher for its function as an audible signal appliance.

Installation

For power connections in a hazardous location, the following external parts will be required (not supplied):

- 3/4 inch conduit of sufficient length to contain power source wires within hazardous location

- One explosion-proof conduit outlet box suitable to the hazardous location
- One 3/4-14 National Pipe Taper (NPT) nipple connectors.
- Two fasteners up to 3/8" diameter and washers suitable for securing the horn to mounting surface.

The horn may be mounted to any solid surface. Install the unit as follows:

1. See Figure 1. Remove the cover from the conduit outlet box. Feed the two power supply wires from control panel or previous signal and the two wires to next signal or end-of-line device through conduit into the outlet box. Also, feed the horn's four wire leads through the nipple, which connects the horn to the outlet box, into the box. Secure the horn, nipple and conduit to the outlet box.

CAUTION

Do not apply power to the unit until installation is completed and cover is secured.

2. With horn placed against mounting surface, mark mounting hole positions for fasteners as per Figure 1. Install fasteners with washers through mounting brackets and secure unit to surface.
3. In the outlet box, connect the installation wiring to the horn's wire leads using wire nuts (Figure 2 or 3). Replace cover on outlet box.
4. Apply power to the system control panel. Initiate an alarm to activate the horn and verify that it sounds. Reset the panel to silence the horn and return system to the supervisory mode.

Maintenance and Test

Examine the unit periodically for accumulation of dirt. Clean if necessary.

The Adaptahorn should be tested monthly or at the intervals required by applicable fire regulations to ensure continuous service.

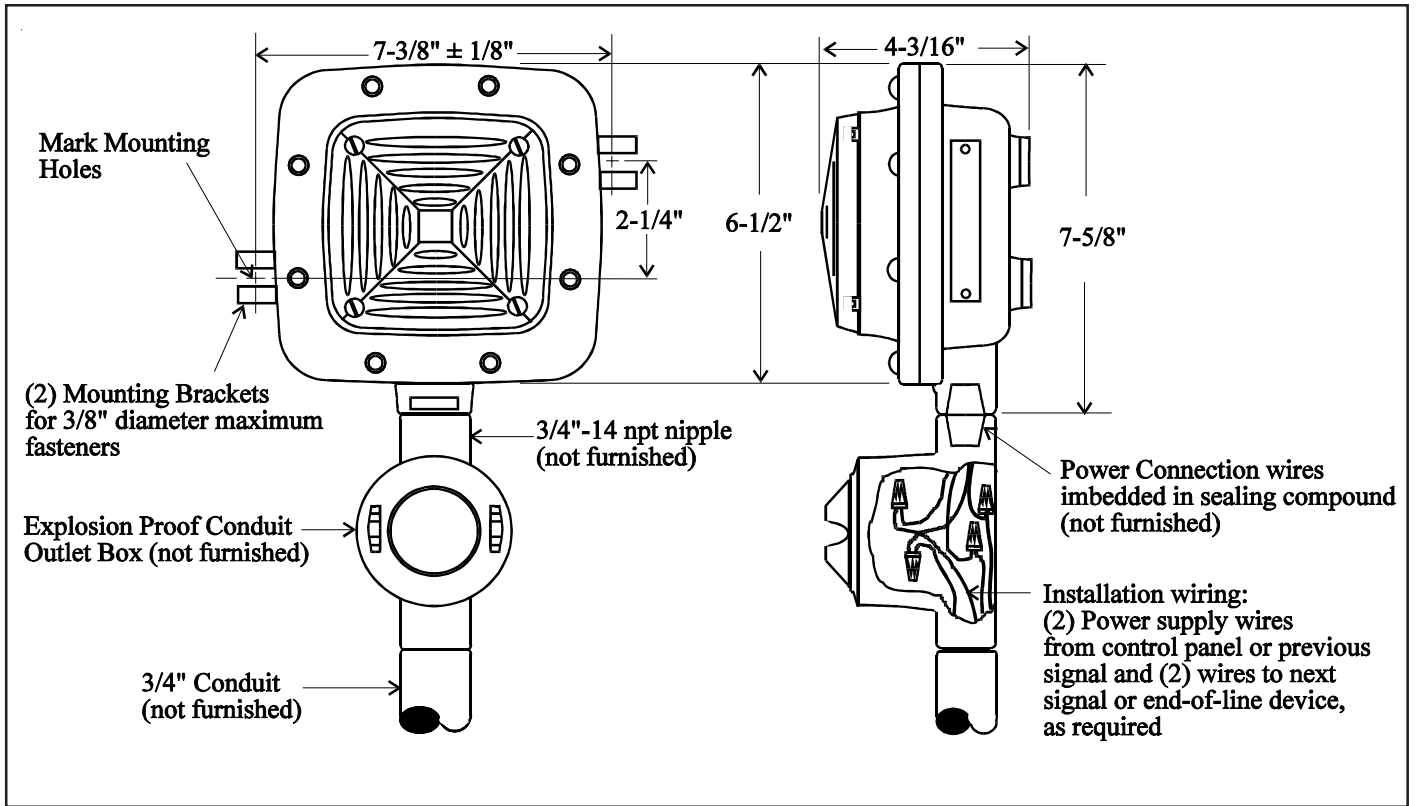


Figure 1. Signal Mounting Details

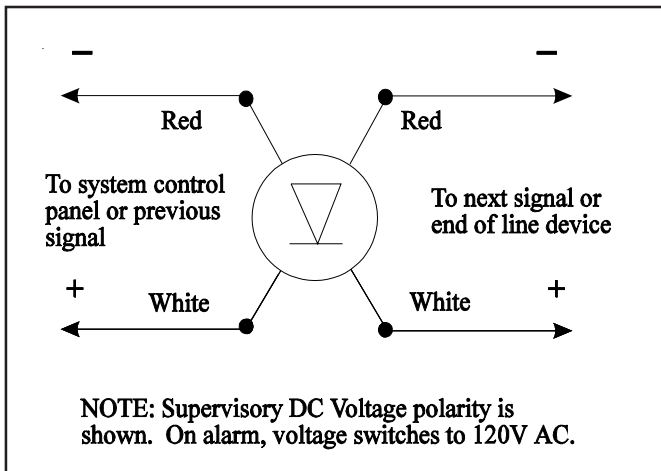


Figure 2. Wiring the 878DEX-N5 AC Horn

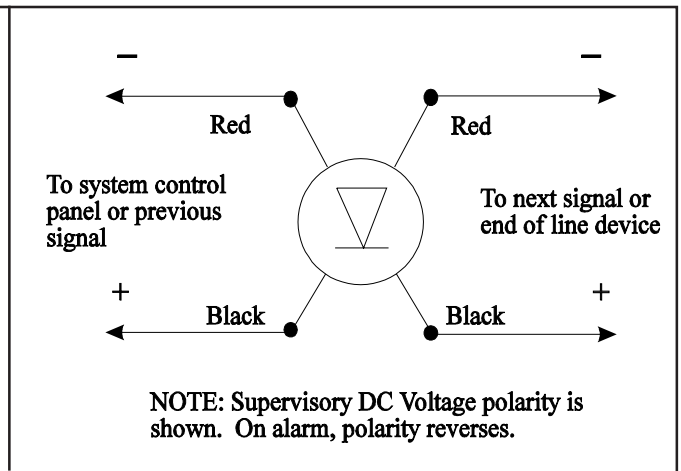


Figure 3. Wiring the 879DEX-G1 DC Horn