



Model AV1-N4X

Non-Hazardous NEMA 4X Alarm Station



Operator's Installation and Instruction Manual

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1.0 Description



Detcon Model AV1-N4X audiovisual alarm stations are designed for installation and use in light industrial environments. The alarm station consists of a strobe and siren. The strobe can consist of any dome color such as amber, blue, clear, green, magenta, or red. The siren is capable of producing coded blasts or sustained tones. Model AV1-N4X alarm assemblies are specifically designed for non-hazardous general-purpose locations or environments where a very bright visual and high decibel alarm signal is required. The high-intensity strobe light provides 60-80 flashes per minute. The siren produces a noise level of 99dbA @ 10 feet. The light is UL listed and CSA Certified and meets Type 4X watertight, dust-tight requirements. The siren is UL listed and CSA Certified. Alarm components are pre-assembled and packaged in a NEMA 4X rain tight enclosure.

The alarm station can be wired to control circuit alarm devices for the purpose of warning personnel of hazardous conditions. When used in conjunction with Detcon controllers, the alarm station is typically used to provide an alarm 1 (strobe) and an alarm 2 (siren) for predetermined hazardous environmental gas levels (toxic or flammable) as indicated by remote mount gas sensors. A terminal strip mounted on the base plate of the enclosure is provided for power input and discrete switched power to both the strobe and the siren.

2.0 Installation

Securely mount the alarm station enclosure in accordance with the drawing in figure #1. Connect wiring in accordance with the drawing in figure #2. To determine the proper voltage of the strobe and siren, refer to the specifications label inside the enclosure

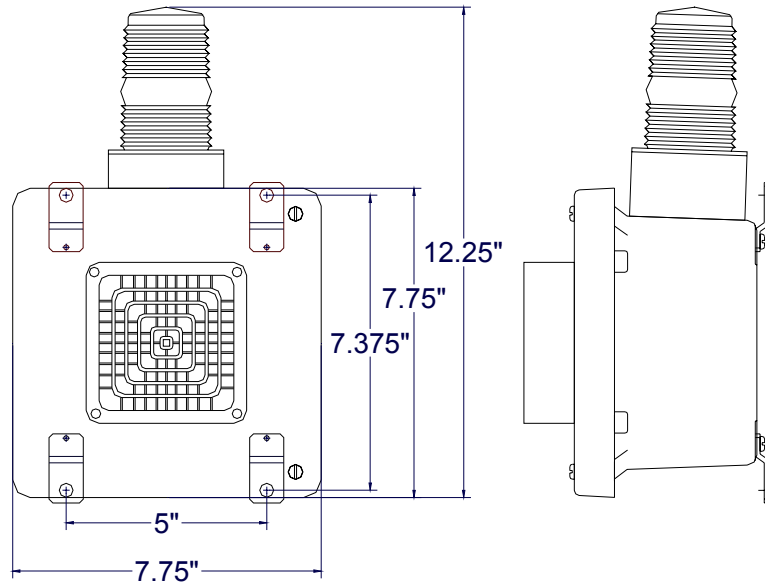


Figure 1 Alarm Station Dimensions

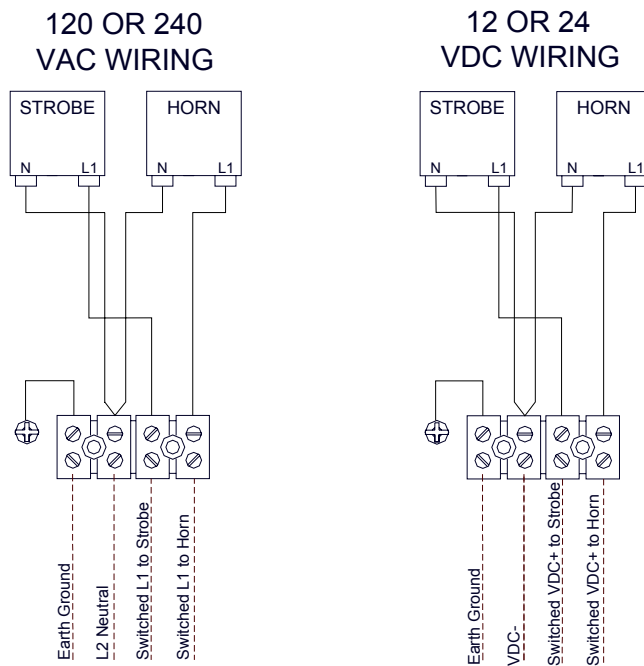
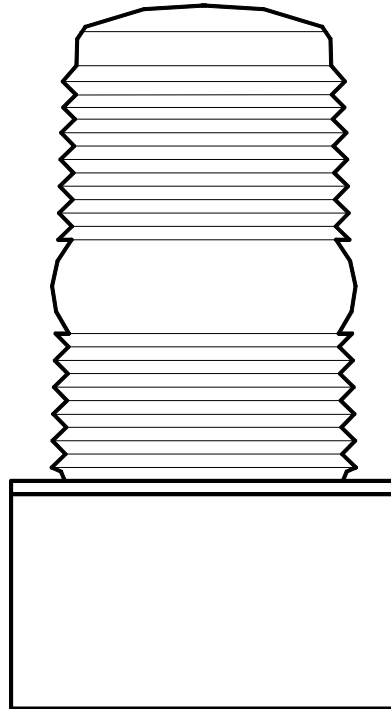


Figure 2 Wiring Diagram

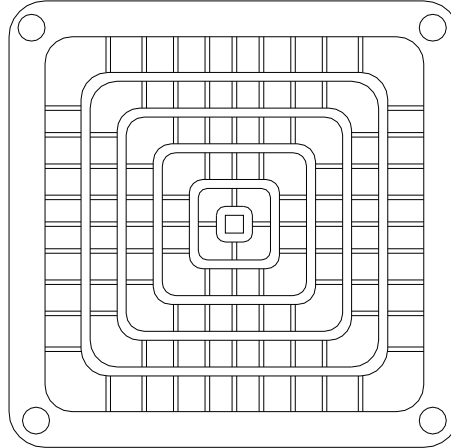
3.0 Specifications

3.1 Strobe

**Specifications:**

Voltage:	12VDC, 24VDC, 120VAC 240VAC	50/60HZ, 50/60HZ, 50/60HZ
	(See specifications label for voltage rating)	
Mount:	1/2" Pipe	
Operating Current:	0.44 Amps at 12VDC, 0.22 Amps at 24VDC, 0.10 Amps at 120VAC, 0.07 Amps at 240VAC	
Dome Colors:	Amber, Blue, Clear, Green, Red, and Magenta	
Operating Temperature:	-31°F to 150°F	
Light Source/Lamp Style:	Strobe Tube	
Lamp Life:	7,000 Hours	
Candle Power Peak:	175,000	
Flash Rate/Minute:	60-80	
Joules per Flash:	1.75	
Intensity Candela:	40 Amber, 20 Blue, 50 Clear, 20 Green, and 10 Red	
Enclosure Rating:	Type 4	
Approvals:	UL Listed, CSA Certified, and CE Pending	
Dimensions:	5"H x 3"Diameter	
Warranty:	1 Year	

3.2 Horn



Specifications:

Voltage:	12VDC, 24VDC, 120VAC 240VAC	50/60HZ, 50/60HZ, 50/60HZ, (See specifications label for voltage rating)
Mount:	Surface / Panel	
Operating Current:	0.50 Amps at 12VDC, 0.25 Amps at 24VDC, 0.18 Amps at 120VAC, 0.09 Amps at 240VAC	
Temperature Rating:	-65°F to +150°F	
Sound Output:	99db @ 10 feet, 109dB @ 1 meter	
Enclosure Rating:	Type 4	
Approvals:	UL Listed, CSA certified, FM Approved	
Height:	4 in.	
Width:	4 in.	
Depth:	2.5 in	
Warranty:	1 Year	

4.0 Troubleshooting

Tools Required Digital volt-ohm meter

Refer to Figure 2 **Wiring Diagram**.

Verify proper voltage is being applied to the strobe and siren by measuring with the digital voltmeter probes (see specifications label located inside the enclosure to determine correct voltage).

Strobe: measure voltage from the second terminal on the terminal strip to the third terminal.

Siren: measure voltage from the second terminal on the terminal strip to the fourth terminal.

If power is being provided and the corresponding strobe or siren does not activate, return the alarm station for repair or replacement as discussed in section 6.0 (Warranty) of this manual or replace damaged components as referred to in section 5.0 (Spare Parts List).

5.0 Spare Parts List

<u>Part #</u>	<u>Description</u>
3016	4 pin Terminal Block
027-002627-000	Strobe Gasket
027-24412-0	Horn Gasket

Strobe Light

354-4950	6-			
Color of strobe	Voltage			
2 – Red	124 – 12 to 80 VDC			
4 – Amber	120 – 120 VAC			
5 – Green	240 – 240 VAC			
6 – Blue				
7 – Magenta				
9 – Clear				

Horn

356-				000-			
Voltage Type	Voltage						
350 – VAC	012 – 12 VDC						
450 – VDC	024 – 24 VDC						
	120 – 120VAC						
	240 – 240VAC						

6.0 Warranty

Detcon Inc., as manufacturer, warrants under intended normal use each new Model AV1-N4X NEMA 4X alarm station to be free from defects in material and workmanship for a period of one year. The warranty period begins from the date of shipment to the original purchaser and ends one year thereafter. All warranties and service policies are FOB the Detcon Inc. facility located in The Woodlands, Texas.

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