

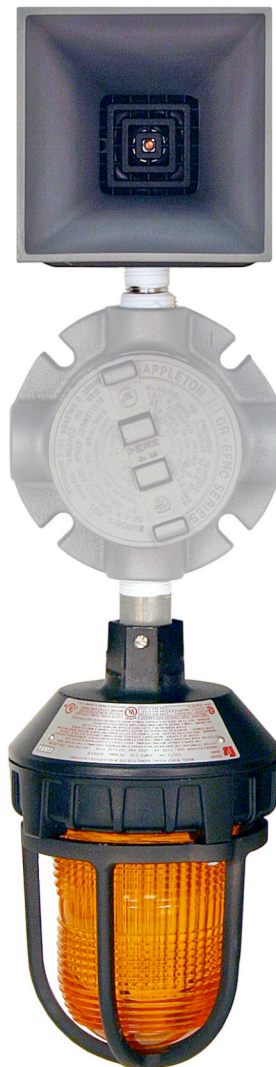


DETCON MODEL AV1-C1D2C

Hazardous Duty Class I, Div 2, Continuous Tone Alarm Station

Operator Instruction Manual

March 7, 2006, Document #3088, Rev 1.2

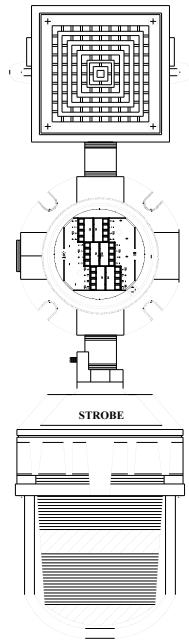


© Detcon Incorporated
3200 Research Forest Dr, The Woodlands, TX 77381
Phone 281.367.4100 • Fax 281.292.2860

TABLE OF CONTENTS

1.0	Description	3
1.1	Installation	6
1.2	Spare Parts List	8
1.3	Warranty	8

1.0 DESCRIPTION



Detcon Model AV1-C1D2C audio visual alarm stations are designed for installation and use in hazardous duty, corrosive work environments. The alarm station consists of a warning light and siren.

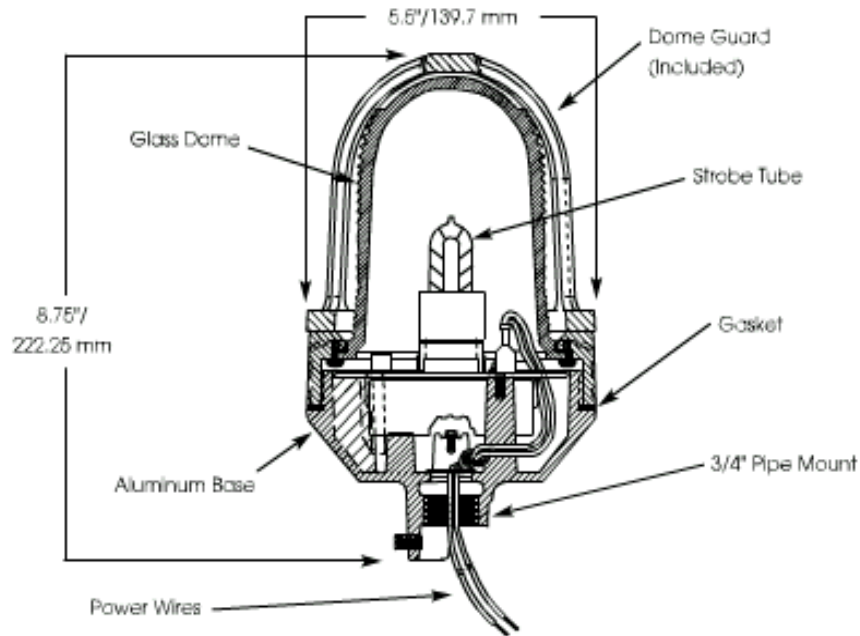
The alarm station can be wired to control circuit alarm devices for the purpose of warning personnel of hazardous conditions. When used in conjunction with Detcon controllers, the alarm station is typically used to provide an alarm 1 (strobe) and alarm 2 (horn) for pre-determined hazardous environmental gas levels (toxic or flammable) as indicated by remote mount sensors.

The alarm station warning light is configured with any combination of dome colors such as amber, blue, clear, green, magenta, or red. Dome guards are included. The rugged warning light is specifically designed for hazardous locations or corrosive environments where a very bright visual signal is required.

Hazardous location warning lights are available in voltage ratings of 120VAC or 240VAC.

The strobe light provides 80 high-intensity flashes per minute. UL listed and CSA certified for Class I, Division 2, Groups A, B, C and D; Class II, Division I, Groups E, F, and G; and Class III.

The light meets Type 4X watertight, dust-tight, and corrosion resistant requirements; constructed to IP66. It has an aluminum base coated for corrosion-resistance. The dome guard fits over the glass dome to protect it against accidental collision with moving equipment.



Specifications

<u>Voltage</u>	120VAC 50/60HZ, 240VAC 50/60HZ (see specifications label for voltage rating)
<u>Mount</u>	3/4" Pipe
<u>Operating Current</u>	0.32 Amps at 120VAC, 0.16 Amps at 240VAC
<u>Dome Colors</u>	Amber / Blue / Clear / Green / Magenta / Red
<u>Dome Guard</u>	Included
<u>Operating Temperature Minimum</u>	-31°F
<u>Operating Temperature Maximum</u>	150°F
<u>Light Source/Lamp Style</u>	Strobe Tube
<u>Lamp Life*</u>	10,000 Hours
<u>Flash Rate/Minute</u>	80
<u>Candle Power Peak**</u>	520,000
<u>Effective Candle Power***</u>	165
<u>Enclosure Rating</u>	Type 4X
<u>Ingress Protection</u>	IP66
<u>Height</u>	8.75in.
<u>Diameter</u>	5.5in.

* Optimal hours under ideal condition

** Peak candle power is the maximum light intensity generated by a flashing light during it's light pulse

*** ECP(Effective Candlepower) is the intensity that would appear to an observer if the light were burning steadily.

The alarm station Explosion Proof Power Alarm® siren is a rain-tight solid state audible alarm, that features 9 field selectable sounds plus remote control selection of 4 sounds with priority.

The siren is weather-proof constructed with a cast aluminum housing and fiberglass horn. It produces a noise level of a 97dbA @ 10 feet in a wide angle sound dispersion pattern.

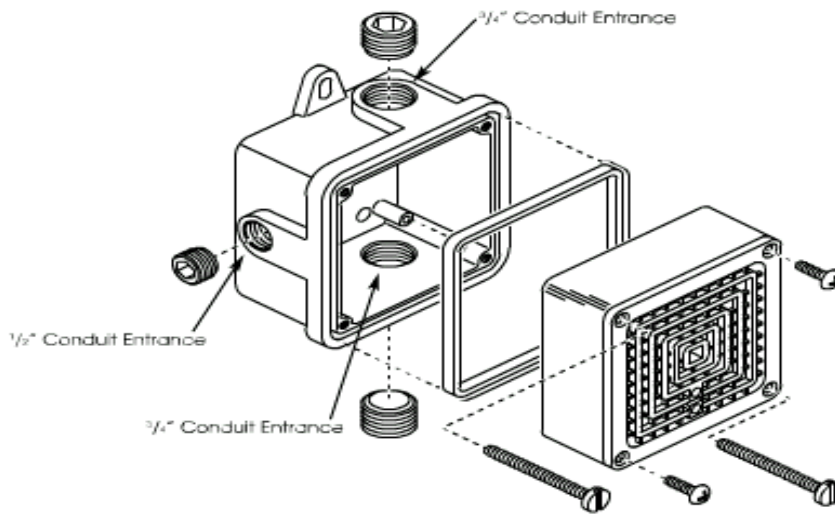
The alarm station vibratone® horn produces a noise level of a 100dB of sound by the electro-mechanical vibration of a stainless steel diaphragm. The horn mechanism with diaphragm is attached to the grill and has an effective broadcast range of 200 feet. The rugged water and dust tight backbox is ideal for indoor and outdoor use.

The horn is capable of producing coded blasts or sustained tones, and is excellent for general alarm, start/dismissal, coded paging and process control signaling in areas where their sound output exceeds ambient noise levels.

The hazardous location warning horn is available in voltage ratings of 120VAC or 240VAC-50/60Hz. and accommodates surface, flush or semi-flush mounting on walls, panels, or in cabinets.

UL listed and CSA certified for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F, and G; and Class III.

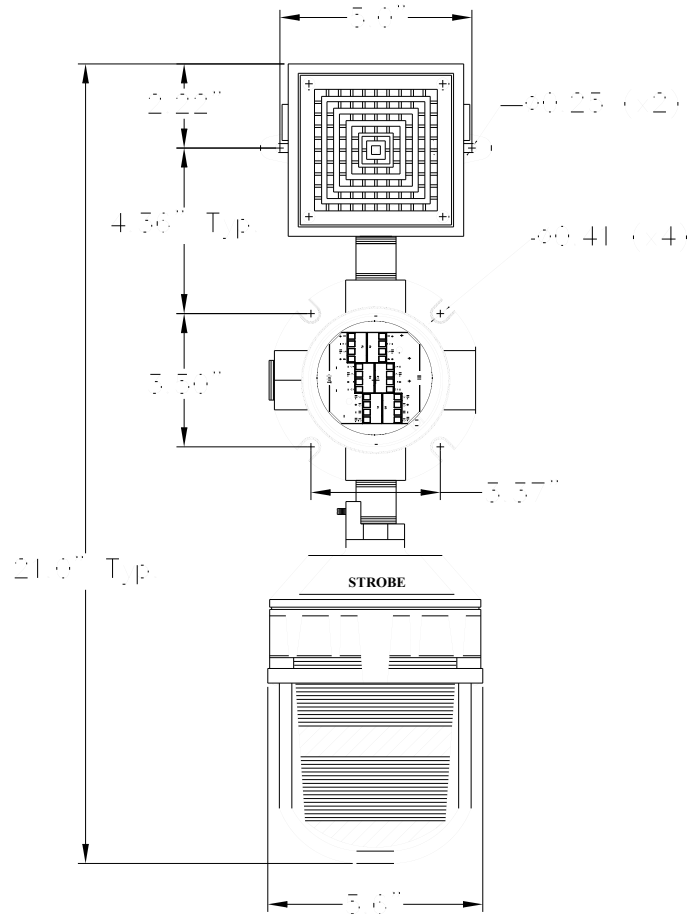
The horn uses a compact sized die-cast zinc housing with a corrosion resistant polyurethane finish. The rugged outer grill resists vandalism without reducing sound output.



Specifications

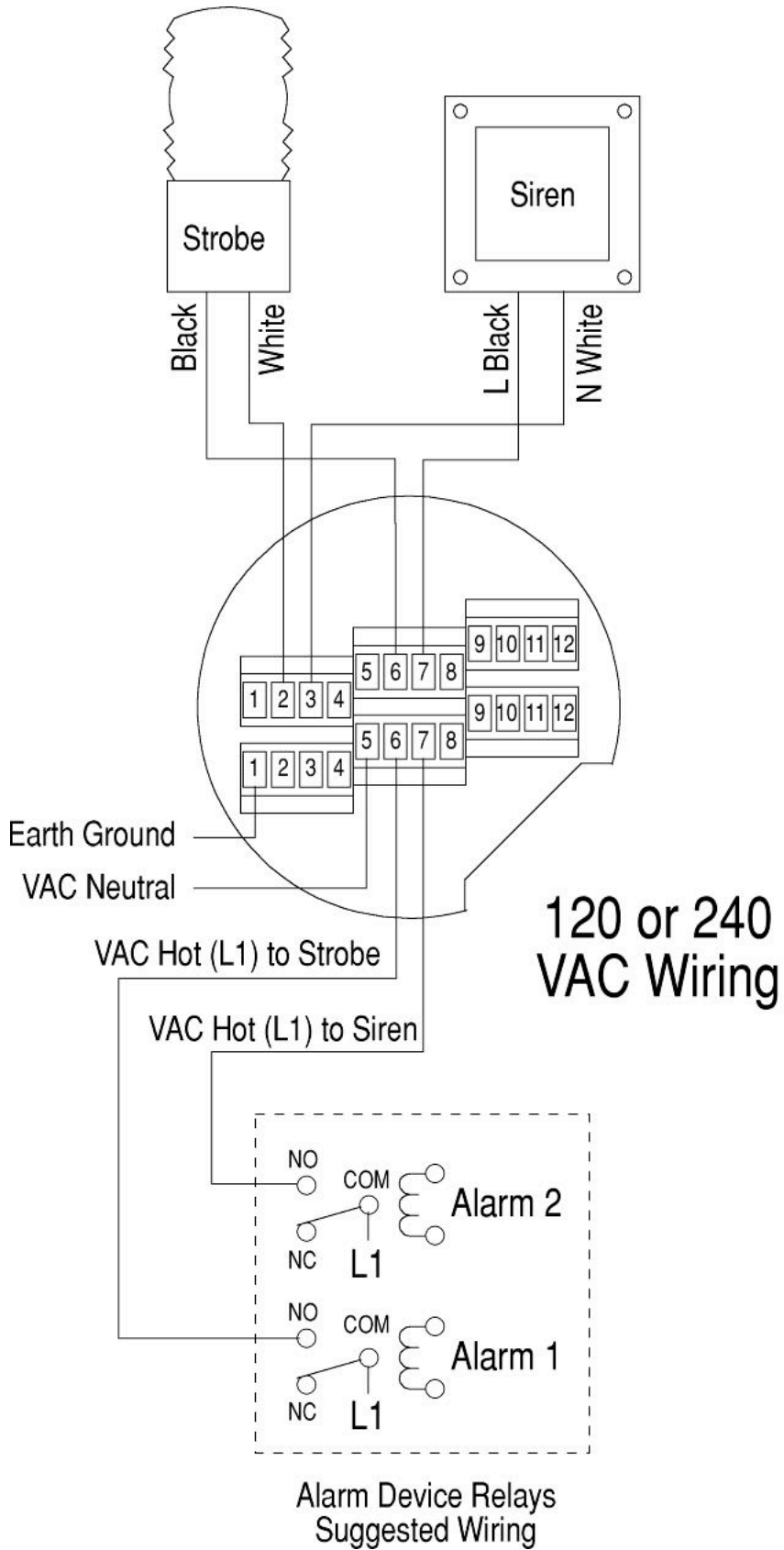
<u>Voltage</u>	120VAC 50/60HZ, 240VAC 50/60HZ (see specifications label for voltage rating)
<u>Mount</u>	Surface / Panel
<u>Operating Current</u>	0.18 Amps at 120VAC, 0.09 Amps at 240VAC
<u>Operating Temperature Minimum</u>	-65°F
<u>Operating Temperature Maximum</u>	150°F
<u>dB Output</u>	100dB @ 10feet , 110dB @ 1 meter
<u>Duty Cycle</u>	Not rated for continuous duty
<u>Enclosure Rating</u>	Type 4X
<u>Height</u>	5.3in
<u>Width</u>	5.3in
<u>Depth</u>	3.66in

1.1 INSTALLATION



1.1.0 The assembly can be mounted by using the two mounting holes located on the sides of the horn or the four mounting holes on the 4-way conduit located below the horn. Additional mounting concepts may consist of utilizing brackets, U-bolts, or a combination of the two.

1.1.1 Connect wiring in accordance with the drawing in the illustration that follows. To determine the proper voltage of the strobe and siren, refer to the specifications label on the alarm system enclosure.



1.2 PARTS LIST

<u>VEND#</u>	<u>DESCRIPTION</u>
500-011803-000	500-003198-000
356-35W006-120	120 VAC Hazardous location vibrating siren
356-35W006-240	240 VAC Hazardous location vibrating siren

Strobe Light

354-1516□6-□□□

Color of Strobe

- 2 - Red
- 4 - Amber
- 5 - Green
- 6 - Blue
- 9 - Clear

Voltage
120 - 120 VAC
240 - 240 VAC

1.3 WARRANTY

Detcon, Inc., as manufacturer, warrants under intended normal use each new Model AV2-C1D2C Alarm Station to be free from defects in material and workmanship for a period of one year from the date of shipment to the original purchaser. All warranties and service policies are FOB the Detcon facility located in The Woodlands,