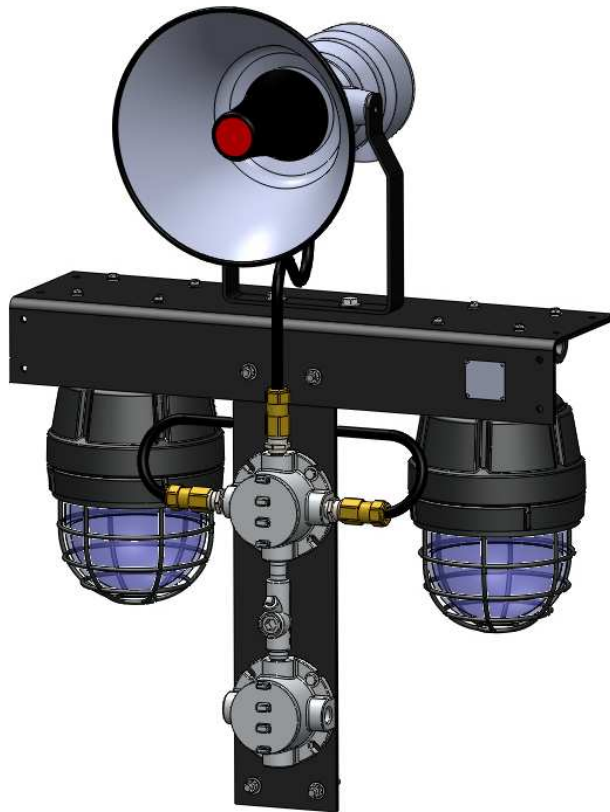




MODEL AV2-C1D1M

Hazardous Duty Class I. Div 1, Multitone Alarm Station



Operator's Installation and Instruction Manual

◆ DETCON, Inc.
3200 Research Forest Dr.,
The Woodlands, Texas 77387
Ph.281.367.4100 / Fax 281.298.2868
www.detcon.com

This page left intentionally blank

Table of Contents

1.0	Description.....	1
1.1	Strobe	1
1.2	Siren	2
2.0	Installation.....	3
3.0	Spare Parts List.....	7
4.0	4.0 Warranty	7
5.0	Appendix.....	8
5.1	Revision Log	8

Table of Figures

Figure 1	Strobe	1
Figure 2	SSTX-MV Siren.....	2
Figure 3	SSTX-MV printed circuit board	3
Figure 4	Unit Dimensional	4
Figure 5	120/240VAC Wiring diagram.....	5
Figure 6	24VDC Wiring Diagram.....	6

This page left intentionally blank

Shipping Address: 3200 A-1 Research Forest Dr., The Woodlands Texas 77381
Mailing Address: P.O. Box 8067, The Woodlands Texas 77387-8067
Phone: 888.367.4286, 281.367.4100 • Fax: 281.292.2860 • www.detcon.com • sales@detcon.com

1.0 Description

Detcon Model AV2-C1D1M audio-visual alarm stations are designed for installation and use in hazardous duty, corrosive work environments, UL listed for Class I, Division 1, Groups C and D. The alarm station consists of two strobe lights and a siren.

The 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 a low alarm (strobe) and high alarm (strobe/siren) for pre-determined hazardous environmental gas levels (toxic or flammable) as indicated by remotely mounted sensors.

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

1.1 Strobe



Figure 1 Strobe

Hazardous location strobe lights are available in voltage ratings of 24VDC, 120 VAC or 240 VAC.

The strobe light provides 85 high-intensity flashes per minute. The light meets Type 4X watertight, dust-tight, and corrosion resistant requirements. 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

Strobe Voltage	24VDC, 120 VAC 50/60 HZ, 240 VAC 50/60 HZ
Mount	Ceiling
Operating Current	1.9 Amps at 24 VDC, 1.14 Amps at 120VAC, 0.7 Amps at 240 VAC
Strobe Colors	Amber/Blue/Clear/Green/Magenta/Red
Dome Guard	Included
Operating Temperature Minimum	-55°C

Operating Temperature Maximum	65°C
Flash Rate/Minute	80
Effective Candle Power ² (ECP ²)	850 eff. (clear dome)
Weight	19.5Lbs
Height	15 in. (with Dome Guard)
Diameter	8.8 in.

1.2 Siren

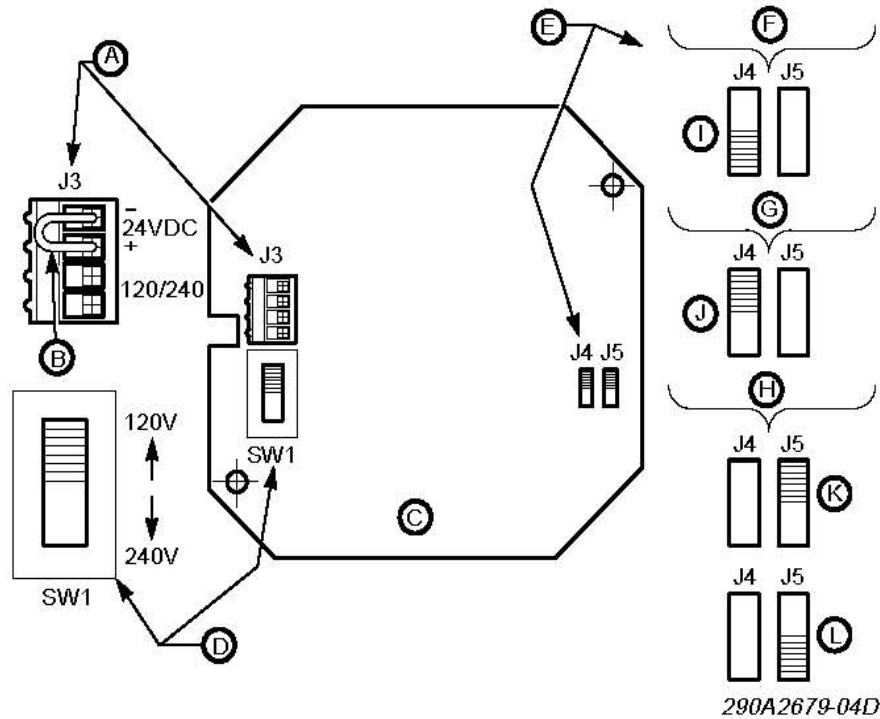


Figure 2 SSTX-MV Siren

The explosion proof power alarm siren is available in voltage ratings of 24VDC, 120VAC or 240VAC @ 50/60Hz. and mounts on an omni directional mounting bracket with conduit access

Specifications

Voltage	24VDC, 120 VAC 50/60 HZ, 240 VAC 50/60 HZ	
Mount	Omni Directional Mounting Bracket	
Operating Current	0.6Amps at 24 VDC	
	0.21Amps at 120 VAC	
	0.12Amps at 240 VAC	
Temperature Rating	-55°C to +66°C; -67°F to +151°F	
Sound Output	dB (A) @ 10' on Axis	UL Audibility Rating dB (A)
Wail	108	98db
Yelp	108	99
Horn	102	95
Temporal Slow Whoop	102	95
Enclosure Rating	Type 3R, IP44	
Weight	15.5Lbs	
Height	17in.	
Width	13.1in.	
Long	16.3in	
Sound Selectable Positions	Listed on Figure 3	



English

- A. Power connector plug, J2
- B. Jumper
- C. SSTX-MV Printed circuit board
- D. AC Voltage selector switch, SW1
- E. Tone selector jumpers, J4 & J5
- F. For yelp tone
- G. For wail tone
- H. For horn tone
- I. Yelp
- J. Wail
- K. Horn
- L. Temporal Slow Whoop

Figure 3 SSTX-MV printed circuit board

2.0 Installation

The assembly is a T-shaped aluminum bracket with holes pre-drilled to accommodate (2) U-bolt attachments up to 3" maximum diameter pipe. Overall dimensions are 41.6" H x 29.5" W x 16.625" D.

The tone for the siren is set using tone selector jumpers, J4 & J5. Each jumper consists of three pins and the selection of appropriate tone is made by placing a jumper on two of the three pins as shown in Figure 3.

The alarm comes pre-wired for the appropriate voltage as ordered from the factory. Customer wiring is installed through opening at bottom of lower junction box. Connect wiring in accordance with the wiring diagrams in Figure 5 or Figure 6. Use only 12 to 18 AWG wire for power connections. Strip no more than 0.25-inch of insulation from the ends of the power leads.

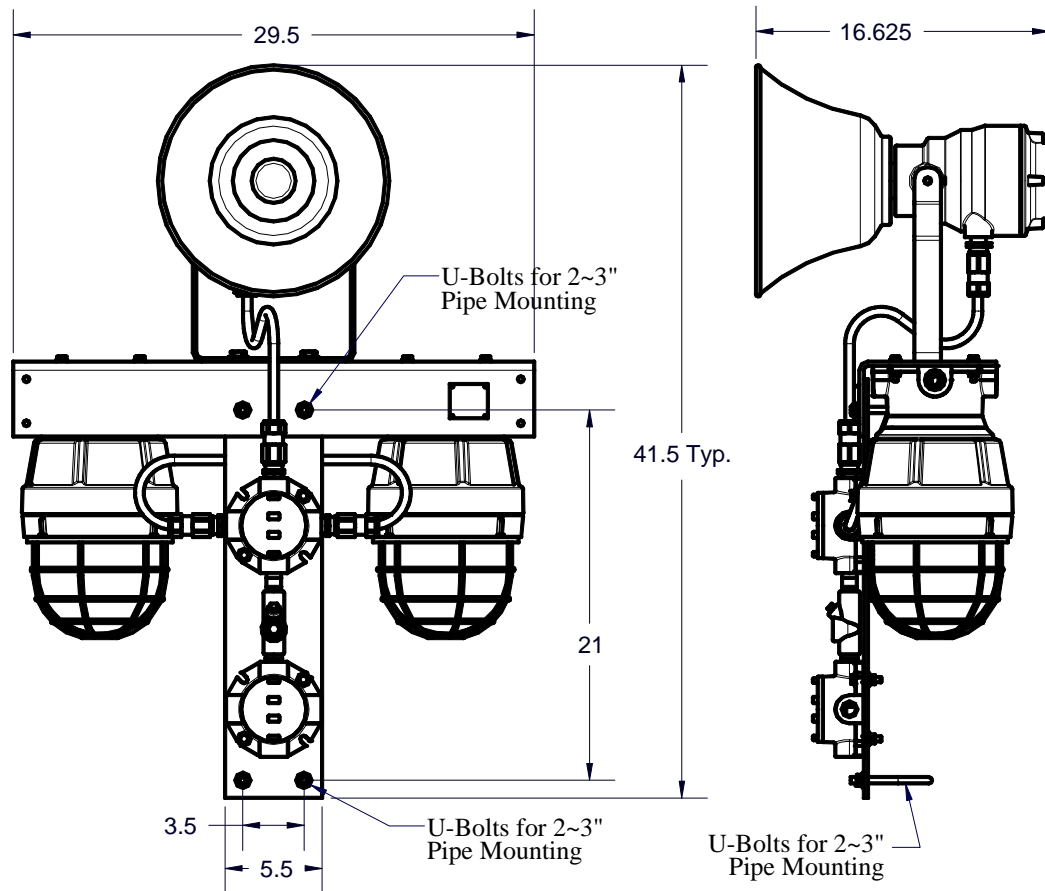
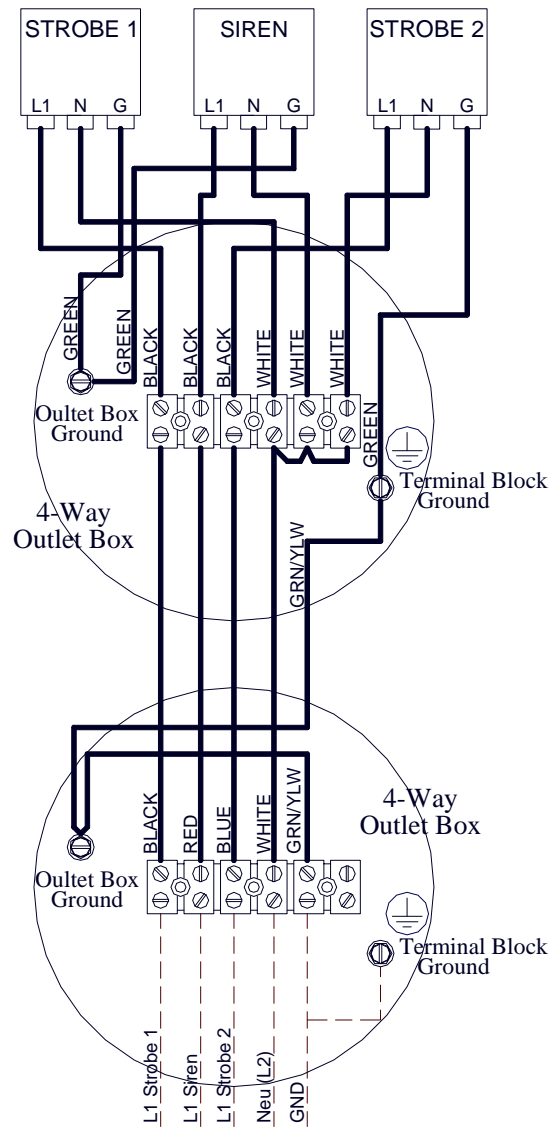
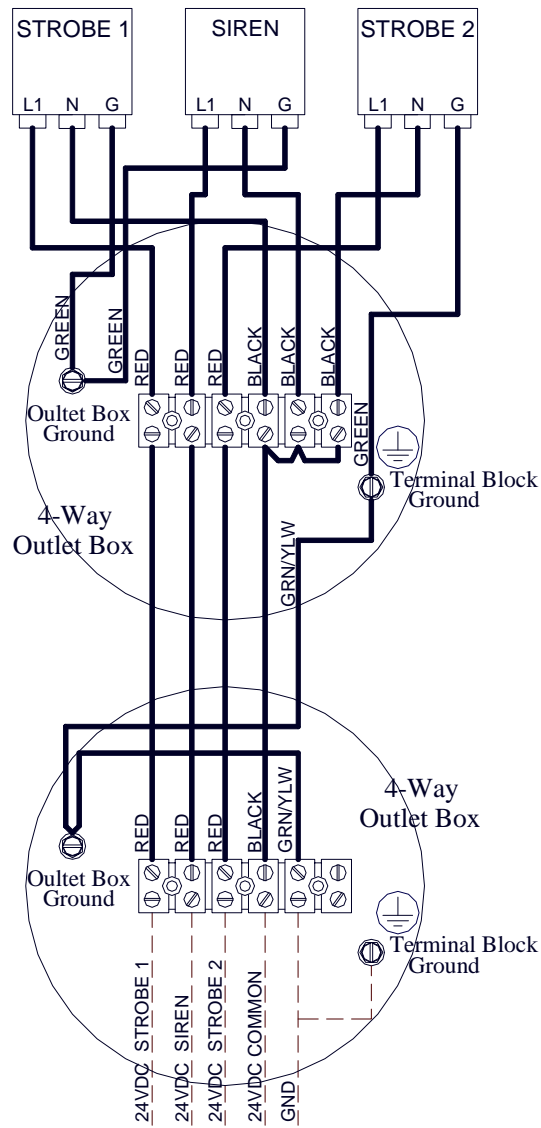


Figure 4 Unit Dimensional



Customer Input Wiring

Figure 5 120/240VAC Wiring diagram



Customer Input Wiring

Figure 6 24VDC Wiring Diagram

3.0 Spare Parts List

Detcon Part #	Description
300-679612-ABS	Six Pin ABS Terminal Block
356-889321-MV0	24 VDC / 120 VAC / 24 VAC Hazardous Location Siren
354-27X6x4-024	27XST Strobe 24VDC (x represents color of lamp)
354-27X6x4-120	27XST Strobe 120 VAC (x represents color of lamp)
354-27X6x4-240	276XST Strobe 240 VAC (x represents color of lamp)
	Strobe colors: Red (2), Amber (4), Green (5), Blue (6), Magenta (7), and Clear (9)

4.0 4.0 Warranty

Detcon Inc., as manufacturer, warrants under intended normal use each new Model AV2-C1D1M 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.

5.0 Appendix

5.1 Revision Log

Rev.	Date	Changes made	Approval
1.4	May 26, 2011	Revision Log added - Change wiring to Terminal Blocks	LU
1.5	Dec 05, 2013	Update to new strobes	LU