

Microphone with Enclosure

The Advanced CAV-MIC Microphone with Enclosure provides live voice communications capabilities to Advanced Axis AX “V” Series, Axis AX Command Centers and AV-VBM Audio Panels. The CAV-MIC provides a supervised microphone mounted to an enclosure that mounts to a single aperture location on Advanced audio products.

When utilized with Advanced switch/LED products, the CAV-MIC can provide uncomplicated live voice paging via “All Call Paging”, “Page Evacuation Areas”, “Page Alert Areas”, “Page Inactive Areas” and/or Selective Area Paging buttons.



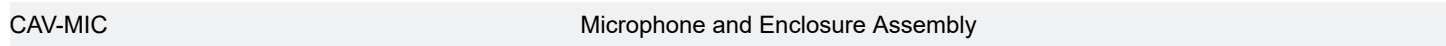
Features

- Completely Supervised by Advanced Amplifier
- Supervised for Open Mic Condition
- Easy to Install in Advanced Products
- Easy to Operate
- Easy Supervised Plug-in Cabling to Amplifier
- Pre-assembled Microphone Enclosure with Mounting Clip
- 16 Gauge Steel Construction

Listings and Approvals

- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001

Order Codes and Options



Microphone and Enclosure Assembly

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice.

Audio Converter

The Advanced CAV-V70 is a Universal Audio Converter that converts any ANSI/UL Listed, maximum 40 Watt, 25 Vrms speaker circuit to a 40 Watt 70 Vrms speaker circuit. It is ideally suited to interface with the Advanced 40 Watt, 25 Vrms output off the CAV-AMP-80 amplifier. The CAV-AMP-80 amplifier is integral to the Advanced Axis AX "V" Series panels, CAV-VBM Audio Panel, AV-VB Audio Booster and the Axis AX Series Command Centers.

The CAV-V70 includes a 40 Watt, 70 Vrms Speaker Circuit Interface Module, an Audio Converter Transformer and a LED Power/Trouble Indicator Card, all mounted in an attractive, lockable enclosure. Each CAV-V70 enclosure is capable of supporting two (2) 40 Watt, 70 Vrms Speaker Circuit Interface Cards and Audio Converter Transformers with the addition of a CAV-V70-KIT. The maximum total available wattage is 80Watts @70 Vrms and two (2) independent Class A or Class B speaker circuits.

The enclosure can be supplied in gray and can be located remotely from the 25 Vrms audio source. Remote mounting offers installation advantages, especially in retrofit applications.

All wiring between the CAV-AMP-80 amplifier and the CAV-V70 Audio Converter is fully supervised. In addition to getting wired to an existing speaker circuit, each 70 Vrms Speaker Circuit Interface Card requires power from either the "Host" fire alarm control panel or from an ANSI/UL Listed 24 VDC nominal power supply



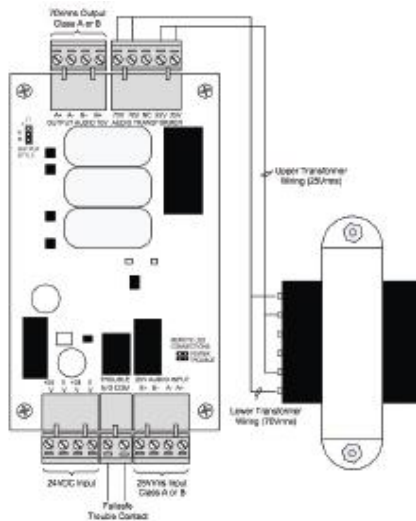
Features

- 25 Vrms to 70 Vrms Converter
- Fully Supervised - Allows Remote Mounting Options
- Single or Dual 40 Watt Speaker Circuits
- Class A or B Wiring
- Can Interface to any ANSI/UL Listed 25 Vrms Speaker Circuit (40 watt maximum)
- Attractive Lockable Enclosure
- Integral External Power & Trouble LEDs
- Numerous Internal Diagnostic LEDs
- Ideally Suited to Interface to CAV-AMP-80 Amplifier

Listings and Approvals

- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001

Wiring Diagram



Specification

Input Voltage (DC)	24 VDC (Wired from FACP or ANSI/UL listed power supply)
Operating Current	60mA
Trouble Contact	Failsafe, 1A @ 30VDC
Temperature	Indoor/dry Environment, 32-120°F (0-49°C)
Relative Humidity	93% Non Condensing (Max)
Dimension	12"H x 9"W x 3"D
Input Speaker Circuit	25 Vrms @ 40 Watt (max), Class A or B
Output Speaker Circuit	70 Vrms @ 40 Watt (max), Class A or B, End-of-line 100K

Order Codes and Options

CAV-V70*	70 Vrms Universal Audio Converter
CAV-V70-KIT	70 Vrms Speaker Circuit Interface Card and Audio Converter Transformer

Distributed Audio Booster

The CAV-VB, Distributed Audio Booster, is designed to be used in conjunction with an Axis AX “V” Series, Axis AX Command Center Intelligent Fire Alarm Control Panel or a CAV-VBM Audio Panel to provide increased digital audio signaling during an emergency situation (alarm, alerts, warnings, mass notification, etc.) to meet total system wattage requirements via true distributed audio methodology.

The CAV-VB, Distributed Audio Booster, consists of an audio amplifier (CAV-AMP-80) containing; two (2) dual 40 Watt amplifiers configured Class A or B, a 16 digital message/tone generator and supervision circuitry, a power supply/charger (CAX-PSU-6) and an enclosure. A green AC power LED and yellow trouble LED are provided on the front of the enclosure. Additional internal PCB LEDs are provided for detailed service diagnostics as well as amplifier status.

The sixteen (16) programmable, flash based, digital message/tone generator of the CAV-VB is completely field programmable for tailoring to meet specific installation requirements. Digital messages/tones are programmed in a simple/user-friendly Windows® based tool. The Windows® based programming tool allows users to select from a library of industry recognized messages/tones. Selection options include; leading and trailing tones, male or female voice messages, message category (such as; evacuation, alert, warnings, etc.) and message priorities. In addition, wave files may be downloaded and added to the library to allow complete customization of messages/tones. Used in conjunction with the Windows® based programming tool, the Axis AX Series PC-Net field configuration programming tool with its powerful control-by-event programming, greatly simplifies and drastically reduces the time it takes to program very large complex applications (see figure 1)

If controlled by one of the three (3) prioritized relay trigger inputs, two of the relay trigger inputs can be assigned to two separate/individual messages (such as; one input could generate an evacuate message/tone and the other input could generate an alert message/tone) input three is always allocated/assigned as booster mode activation for microphone input rebroadcasting.

In support of some local requirements, the CAV-VB may be set to a “backup mode” whereby as a precaution, should the primary amplifier fail, the secondary amplifier automatically will engage and override the primary amplifier, provided there are no short circuits in the field speaker circuit wiring.

Specifically designed for project flexibility, each CAVVB can be setup to produce its own messages or it can be operated in a unique “booster” mode. Booster mode allows the CAV-VB amplifier to simply re-amplify a signal generated from another amplifier/audio signal source [i.e. Axis AX “V” Series, Axis AX Command Center Intelligent Fire Alarm Control Panel and/or CAV-VBM Audio Panel] (see figure 2)



Features

- Interfaces with any AxisAX “V” Series and/or AxisAX Command Center Fire Alarm Control Panel
- Advanced Digital Audio Technology
- Dual 40 Watt @ 25 Vrms Amplifiers
- 16-Channel Digital Message/Tone Generator
- Unique Amplifier Booster/Cascading Option
- High Fidelity Sound Quality
- Two (2) Class A or B Speaker Circuits
- External AC Power and Trouble LEDs
- Internal Service Diagnostic and Status Indicators
- USB Port Interface for Message/Tone Programming
- Simple User-Friendly Message/Tone Programming
- Optional one-to-one Amplifier Backup Capability
- Three Prioritized Relay Trigger Inputs
- AxisAX “V” Series Controlled via PBUS or Relay Inputs
- AxisAX “V” Series Powerful CBE Logic Programming

Listings and Approvals

- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001

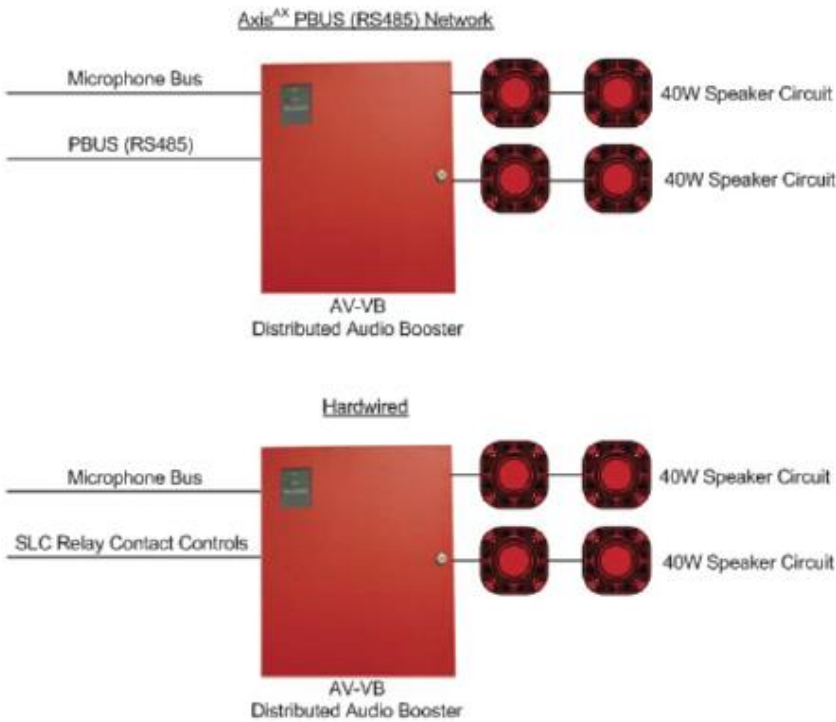
CAV-VB, Distributed Audio Booster, message/tone generation or booster operation can be controlled either via the Axis AX “V” Series or Axis AX Command Center Intelligent Fire Alarm Control Panel’s PBUS (RS-485 network) serial communications bus (contact Advanced regarding correct software version), or from the activation of one of three (3) prioritized relay trigger inputs. When controlled via the PBUS (RS-485 network) serial communications bus (contact Advanced regarding correct software version), one of sixteen messages/tones stored in the CAV-VB amplifier can be selected for broadcasting. If controlled by one of the three (3) prioritized relay trigger inputs, two of the relay trigger inputs can be assigned to two separate/individual messages (such as; one input could generate an evacuate message/ tone and the other input could generate an alert message/ tone) input three is always allocated/assigned as booster

mode activation (see figure 3). The functionality of selecting different prioritized messages, based on specific events, makes the CAV-VB ideal for numerous emergency signaling applications. Pre-programmed alarm, evacuation, alerts, warnings and other types of messages are extremely easy to implement. In booster mode operation, message/live audio from an Axis AX “V” Series, Axis AX Command Center or CAV-VBM Audio Panel is reamplified and the identical message is rebroadcast out each CAV-VB, resulting in a distributed audio system.

Specification

Operating Voltage	
Input	120 VAC
Output	24 VDC & 25 Vrms
Operating Current	
Quiescent	40 mA (Typical)
Alarm	200 mA (Plus total speaker circuit load)
Output Ratings	2x 40 watts @ 25 Vrms, class A or B
LED Indicators	AC power & system trouble
Operating Temperature	32°F -120°F (0°C to 48°C)
Humidity	10-95% (Non-condensing)
Enclosure Dimension	16" W x 19 1/8 " H x 5" D
Weight	19lb 5oz

Wiring Diagram



Order Codes and Options

CAV-VB	Distributed Audio Booster
Optional Modules:	
CAV-V70	Universal Audio Converter (converts 25 Vrms to 70 Vrms)

Audio Panel with Microphone

The Advanced CAV-VBM, Audio Panel, is designed to be used in conjunction with any Advanced Axis AX Series or ULC Listed fire alarm control panel to provide automatic (and manual) fire alarm audio signaling and live voice paging during an emergency situation. The CAV-VBM is fully compatible with the Advanced CAV-VB distributed audio booster. The combination of the CAV-VBM and CAV-VB provides the means to meet the total system wattage requirements of virtually any application due to superior true distributed audio technology.

The CAV-VBM, Audio Panel, consists of two (2) 40 Watt amplifiers that may be configured Class A or B, a dual digital (programmable) message/tone generator, a power supply/charger (CAX-PSU-6) and an integral microphone inside a compact, lockable enclosure.

Key status indicators viewable on the front panel display include a green AC power on LED, a yellow amplifier trouble LED and a yellow power supply trouble LED. Additional diagnostic LEDs that are mounted on the amplifier PCB include: amplifier 1 trouble (open or short), amplifier 1 failure, amplifier 2 trouble (open or short) and amplifier 2 failure, and heartbeat. On the CAX-PSU-6; LEDs include battery trouble, PSU trouble, AC on LED and heartbeat.

There are 3 toggle switches that provide for manual activation of either Message 1, Message 2 or to initiate an All Call system wide page from the CAV-VBM throughout all distributed CAV-VB audio boosters.

The built-in dual programmable, flash based, digital message/tone generator of the CAV-VBM, Audio Panel, comes standard with Message 1 programmed for Evacuation and Message 2 programmed for Alert message. Both messages are completely field programmable for tailoring to meet specific installation requirements. Digital messages/tones can be programmed with the Advanced simple, user-friendly Windows® based tool. The Windows® based programming tool allows users to select from a library of industry recognized messages/tones. Selection options include: leading and trailing tones and male or female voice messages. In addition, wave files may be downloaded and added to the library to allow complete customization of messages/tones (see figure 1).

In support of some local requirements, the CAV-VBM may be set to a "backup mode" whereby as a precaution, should the primary amplifier fail, the secondary amplifier automatically will engage and override the primary amplifier, provided there are no short circuits in the field speaker circuit wiring. Specifically designed for project flexibility, each CAV-VBM and CAV-VB can be setup to produce their own messages. This makes setting up a dual channel, three channel or floor above/floor below application simplistic.



Features

- Interfaces to Any Listed Fire Alarm Control Panel
- Advanced Digital Audio Technology
- Dual 40 Watt @ 25 Vrms Amplifiers
- 2-channel Digital Message/Tone Generator
- Unique Amplifier Booster Option
- High Fidelity Sound Quality
- Built-in Live Voice Paging Microphone
- Two (2) Class A or B Speaker Circuits
- AC Power On, Amplifier and PSU and Trouble LEDs
- Internal Service Diagnostic and Status Indicators
- USB Interface for Message/Tone Programming
- Optional one-to-one Amplifier Backup Capability
- Three Prioritized Relay Trigger Inputs
- Message 1 On/Off, Message 2 On/Off and All Call Toggle Switches

Listings and Approvals

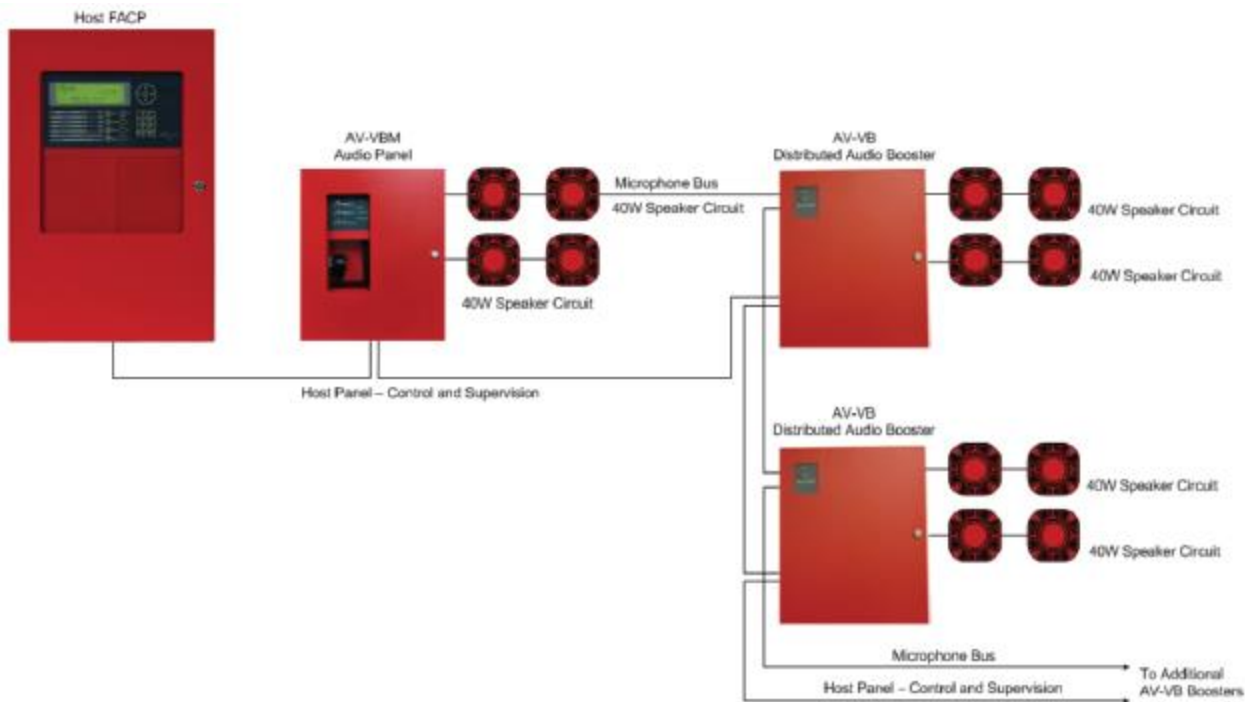
- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001

A unique feature of the CAV-VB Distributed Audio Booster effectively allows the amplifier to simply re-amplify a signal generated from another amplifier/audio signal source. This allows reduced system wiring, wiring to any listed audio panel/amplifier rated at 25 Vrms, and complete synchronization.

All distributed amplifiers CAV-VB units, can be configured to either output the actual audio signals from the CAV-VBM in real time, synchronized (as is typical in a standard dual or three channel application) or may each be programmed differently in a multi-channel application (see figures 3 and 4).

CAV-VBM, Audio Panel, message/tone generation is controlled via 3 N.O. relay contacts from the host fire alarm control panel, wired to the three prioritized trigger inputs. When activated, Trigger One will cause both amplifiers to play message 1 (factory programmed as Evacuation). When activated by Trigger Two, both amplifiers will play message 2 (factory programmed as Alert). When Trigger 3 is activated due to an All Call function, amplifiers will output the live audio from the microphone, overriding either message 1 or 2 (see figure 2).

Wiring Diagram



Specification

Operating Voltage	
Input	120 VAC
Output	24 VDC & 25 Vrms
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Quiescent	40 mA (Typical)
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Order Codes and Options

CAV-VBM	Audio Panel
Optional Modules:	
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