Advanced

Axis AX

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, Amplifi er and PSU and Trouble LEDs
- Internal Service Diagnostic and Status Indicators
- USB Interface for Message/Tone Programming
- Optional one-to-one Amplifi er Backup Capability
- Three Prioritized Relay Trigger Inputs
- Message 1 On/Off, Message 2 On/Off and All Call Toggle Switches

Listings and Approvals

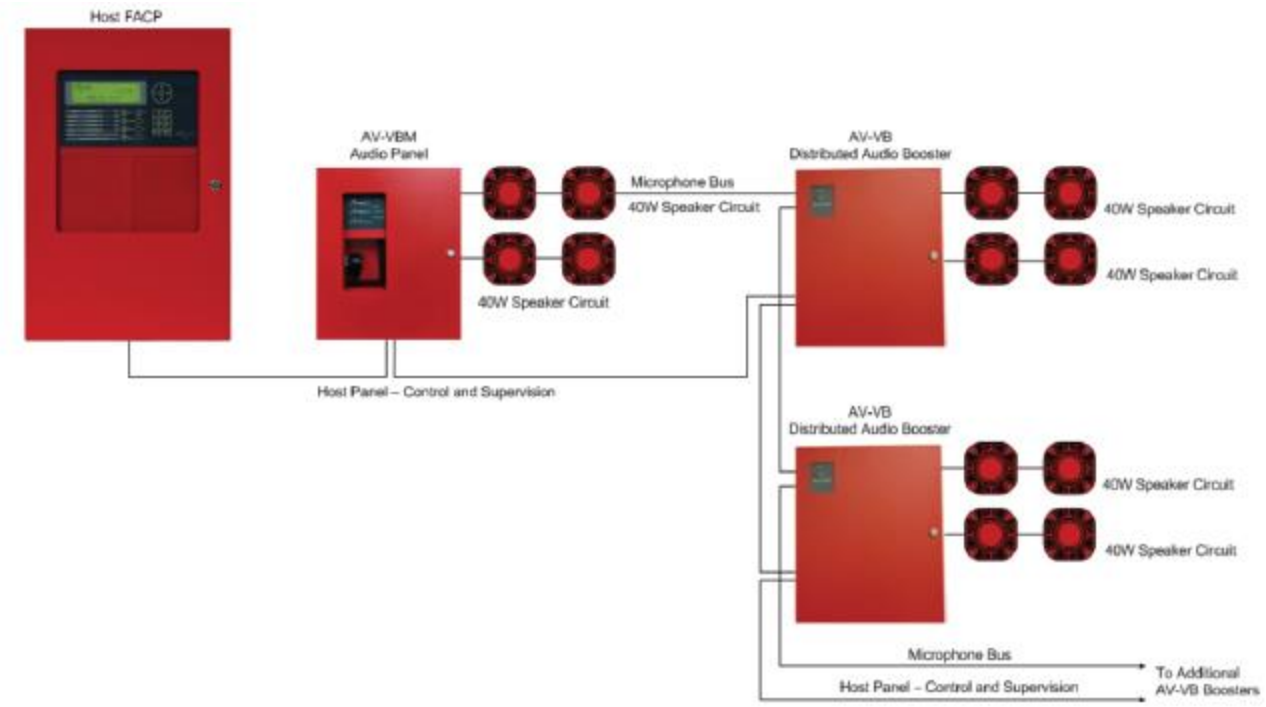
- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001

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.

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).

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).

Wiring Diagram



Specification

Operating Voltage Input Output	 120 VAC 24 VDC & 25 Vrms
Operating Current Quiescent Alarm	 40 mA (Typical) 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	32º -120ºF (0º to 48ºC)
Humidity	10-95% (Non-condensing)
Enclosure Dimensions	16” W x 19 1/8 ” H x 5” D
Weight	19lb 5oz

Order Codes and Options

CAV-VBM	Audio Panel
Optional Modules:	
CAV-V70	Universal Audio Converter (Converts 25 Vrms to 70 Vrms)

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