

Axis^{AX}

Audio Panel with Microphone

The Advanced AV-VBM audio panel with microphone is designed to be used in conjunction with any Advanced Axis AX Series or ANSI/UL864 Listed fire alarm control panel to provide automatic (and manual) fire alarm audio signaling and live voice paging during an emergency situation. The AV-VBM is fully compatible with the Advanced AV-VB distributed audio booster, allowing the AV-VBM and AV-VBs to provide a means to meet the total system wattage requirements via true distributed audio methodology.

The AV-VBM audio panel incorporates an audio amplifier (AV-AMP-80) containing; two dual 40 Watt amplifiers configured Class A or Class B, a digital (programmable) message/tone generator, a power supply/ charger (AX-PSU-6) and an integral microphone inside a compact, red, 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 are available on each internal module of the AV-VBM audio panel. In addition to the external LEDs, 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 AV-VBM throughout all distributed AV-VB audio boosters.

The built-in programmable, flash based, digital message/tone generator of the AV-VBM audio panel comes standard with message 1 programmed for alarm evacuation and message 2 programmed as an all clear message. Both messages are completely field programmable for tailoring to meet specific installation requirements. Digital messages/tones can be programmed with 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 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.

In support of installations requiring strict survivability, where a specification mandates that if a primary amplifier fails, a backup amplifier is required to take over so that critical life safety messages/tones can be delivered to personnel without interruption, the AV-VBM audio panel can be configured for one-to-one 40 Watt amplifier backup. In addition, when configured for such operation, the AV-VBM audio amplifier has a built in physical test feature to confirm proper backup amplifier operation.

Specifically designed for project flexibility, each AV-VBM and AV-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
- Message 1 On/Off, Message 2 On/Off and All Call Toggle Switches
- Optional AV-ZS and AV-ZS-CM Zone Splitter and Switch Module
- Built-in Live Voice Paging Microphone
- Two Class A or B Audio Notification Appliance 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 with Test
- Three Prioritized Relay Trigger Inputs

Listings and Approvals

- ETL ANSI/UL 864/1711/1481 Listed: 100027836NYM-001c
- CSFM Approved: 6912-1713:0117
- NYC FD COA #6105A2

All distributed amplifiers, AV-VB units, can be configured to either output the actual audio signals from the AV-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.

The diagram illustrates a distributed audio system architecture. It features a **Host FACP** (Fire Alarm Control Panel) connected to an **AV-VBM Audio Panel**. The **AV-VBM Audio Panel** is connected to a **Microphone Bus** and two **40W Speaker Circuits**. The **Microphone Bus** is also connected to two **AV-VB Distributed Audio Boosters**. Each **AV-VB Distributed Audio Booster** is connected to two **40W Speaker Circuits**. The **Host Panel - Control and Supervision** is connected to the **AV-VBM Audio Panel** and the **AV-VB Distributed Audio Boosters**. The **Microphone Bus** is also connected to the **Host Panel - Control and Supervision** and to **To Additional AV-VB Boosters**.

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 ° -120 ° F (0 ° to 48 ° C)
Humidity	10-95% (Non-condensing)
Enclosure Dimensions	16" W x 19 1/8 " H x 5" D
Weight	19lb 5oz

Order Codes and Options

AV-VBM	Audio Panel
Optional Modules:	
AV-ZS	Audio Zone Splitter Module
AV-ZS-CM	Audio Zone Splitter Switch Module
AV-V70	Universal Audio Converter (Converts 25 Vrms to 70 Vrms)