AUDIO PANEL WITH MICROPHONE

FEATURES

- Shield 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 NX10-ZS and NX10-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

- UL 864 10th edition.

PRODUCT INFORMATION

The Shield NX10-VBM audio panel with microphone is designed to be used in conjunction with any Shield NEO 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 NX10-VBM is fully compatible with the Shield NX10-VB distributed audio booster, allowing the NX10-VBM and NX10-VBs to provide a means to meet the total system wattage requirements via true distributed audio methodology.

The NX10-VBM audio panel incorporates an audio amplifier (NX10-AMP-80) containing; two dual 40 Watt amplifiers configured Class A or Class B, a digital (programmable) message/tone generator, a power supply/ charger (NX10-EM-PSU6) 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 NX10-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 NX10-VBM throughout all distributed NX10-VB audio boosters.

The built-in dual programmable, flash based, digital message/ tone generator of the NX10-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 NX10-VBM audio panel can be configured for one-to-one 40 Watt amplifier backup. In addition, when configured for such operation, the NX10-VBM audio amplifier has a built in physical test feature to confirm proper backup amplifier operation.
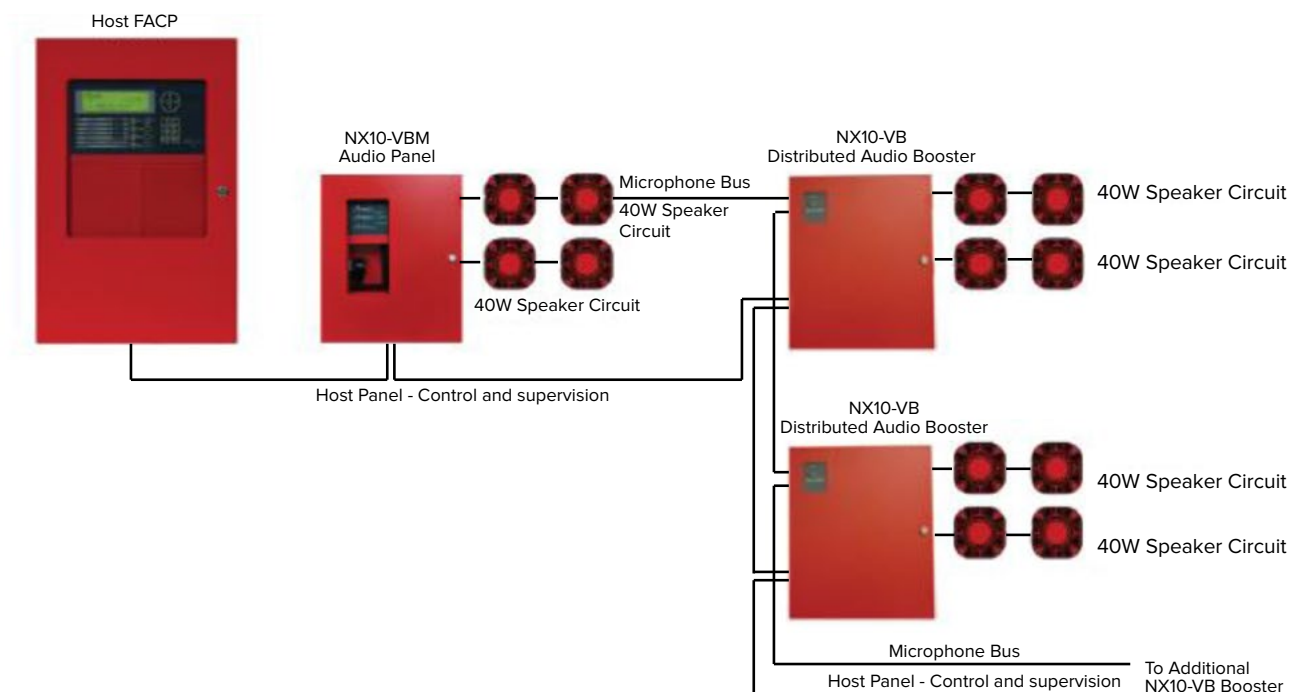
Specifically designed for project flexibility, each NX10-VBM and NX10-VB can be setup to produce their own messages. This makes setting up a dual channel, three channel or floor above/floor below application simplistic.

NX10-VBM audio panel message/tone generation is controlled via three 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 alarm evacuation). When activated by trigger two both amplifiers will play message 2 (factory programmed as an all clear message). When trigger three is activated due to an all call page function amplifiers will output the live audio from the microphone, overriding either message 1 or 2.

All distributed amplifiers, NX10-VB units, can be configured to either output the actual audio signals from the NX10-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.

WIRING DIAGRAM

Host FACP

NX10-VBM Audio Panel

Microphone Bus

40W Speaker Circuit

40W Speaker Circuit

Host Panel - Control and supervision

NX10-VB Distributed Audio Booster

40W Speaker Circuit

40W Speaker Circuit

NX10-VB Distributed Audio Booster

40W Speaker Circuit

40W Speaker Circuit

Microphone Bus

Host Panel - Control and supervision

To Additional NX10-VB Booster

Note: Specifications are subject to change without notice.

TECHNICAL DATA SHEET

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 Dimensions (W x H x D)	406.4 mm x 485.77 mm x 127 mm
Weight	19 lb 5 oz

ORDERING INFORMATION

NX10-VBM	Audio Panel
Optional Modules:	
NX10-ZS	Audio Zone Splitter Module
NX10-ZS-CM	Audio Zone Splitter Switch Module
NX10-V70	Universal Audio Converter (Converts 25 Vrms to 70 Vrms)

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