DISTRIBUTED AUDIO BOOSTER

FEATURES

- NEO Fire Alarm Panel Compatibility.
- Shield Digital Audio Technology.
- Dual 40 Watt @ 25 Vrms Amplifiers.
- 16-channel Digital Message/Tone Generator.
- Unique Amplifier Booster Option.
- High Fidelity Sound Quality.
- NEO Fire Alarm Panel Powerful CBE Logic Programming.

LISTINGS AND APPROVALS

- ETL ANSI/UL 864.

PRODUCT INFORMATION

The NX-VB distributed audio booster is designed to be a self-contained remote audio amplifier capable of providing message/tone generation and rebroadcasting of any 25 Vrms signal. Used in conjunction with an emergency communications system (NEO Series audio system or NX-VBM audio panel) the NX-VB provides 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 NX-VB distributed audio booster message/tone generation and booster operation can be controlled either via an NEO fire alarm control panel protocol or from the activation of one of three (3) prioritized relay trigger inputs.

When controlled via the NEO protocol, the NX-VB audio amplifier can store and broadcast up to sixteen prioritized individual messages/tones. In addition, the NEO fire alarm control panel can support a total of sixteen NX-VB distributed audio boosters. These sixteen NX-VB distributed audio boosters, each with their own sixteen audio amplifier messages/tones, can be perfectly synchronized via the NEO fire alarm control panel. This is also completely compatible with the Shield 200 node network, providing perfectly synchronized A/V devices across the entire network without the need for any special programming, additional wires or additional modules. In total, network wide, that equates to 800 horn/strobe notification appliance circuits and 3200 networked distributed audio amplifiers, each with their own individual message/tone generators, broadcasting throughout a facility in perfect synchronization.

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. The functionality of selecting different prioritized messages, based on specific events, makes the NX-VB distributed audio booster ideal for numerous emergency notification applications. Pre-programmed alarm, evacuation, alerts, warnings and other types of messages, including those required for Mass Notification are extremely easy to implement.
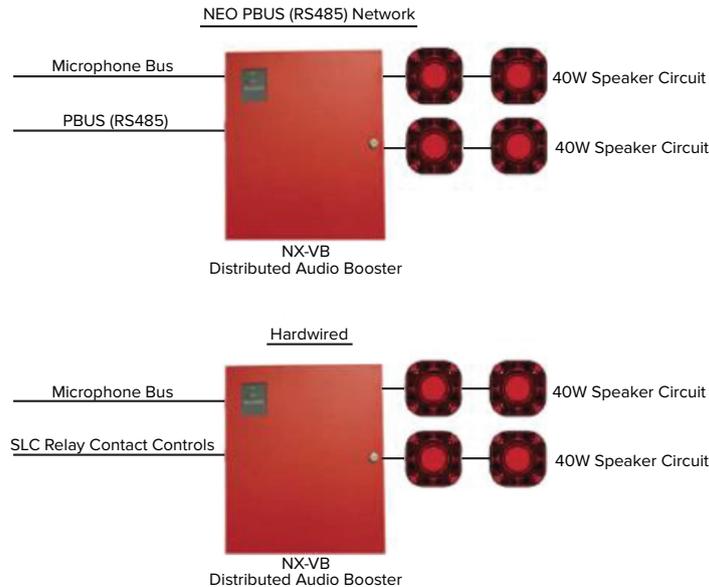
Each NX-VB distributed audio booster incorporates an audio amplifier (NX-AMP-80) containing; two dual 40 Watt amplifiers configured Class A or Class B, a 16 digital message/tone generator, supervision circuitry, a power supply/charger (NX-EM-PSU6) and an enclosure. A green AC power LED and yellow trouble 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 flash based, digital message/tone generator of the NX-VB provides for sixteen individual field programmable messages that can be tailored to meet any specific installation requirement. Digital messages/tones are programmed in a simple/user-friendly Windows based tool. The users can select from a library of industry recognized messages wiring tones. Selection options include; leading and trailing tones, male or female voice messages, message category (such as; evacuation, alert, warnings, etc.) and message priorities.

TECHNICAL DATA SHEET

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 NX-VB distributed audio booster can be configured for one-to-one 40 Watt amplifier backup. In addition, when configured for such operation, the NX-VB audio amplifier has a built in physical test feature to confirm proper backup amplifier operation.

WIRING DIAGRAM

NEO PBUS (RS485) Network

Microphone Bus
PBUS (RS485)
40W Speaker Circuit
40W Speaker Circuit
NX-VB
Distributed Audio Booster

Hardwired

Microphone Bus
SLC Relay Contact Controls
40W Speaker Circuit
40W Speaker Circuit
NX-VB
Distributed Audio Booster

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

ORDERING INFORMATION

NX-VB	Distributed Audio Booster
Optional Modules:	
NX-ZS	Audio Zone Splitter Module
NX-V70	Universal Audio Converter (converts 25 Vrms to 70 Vrms)