PVE-802
VOICE EVACUATION

Features

- 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 Amplifier Backup Capability
- Three Prioritized Relay Trigger Inputs
- Message 1 On/Off, Message 2 On/Off and All Call Switches
- 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/Cascading Option
- High Fidelity Sound Quality
- Listed to Meet NFPA Requirements for 520 hz Low Frequency Signaling When Used With Compatible Speakers

Description

The Potter PVE-802 Voice Evacuation Panel is designed to be used with any Potter Fire Alarm Control Panel or UL-864 Listed Fire Alarm Control Panel. The PVE-802 provides automatic and manual fire alarm audio signaling and live voice paging during an emergency situation. The PVE-802 is fully compatible with the Potter’s VAB-802 Audio Booster. The combination of the PVE-802 and VAB-802 meets the total system wattage requirements of virtually any application using the true distributed audio technology.

The PVE-802 Voice Evacuation Panel contains:

- Two (2) 40 Watt amplifiers that may be configured Class “A” or Class “B” (Style Z/Y)\
- A dual digital (programmable) message/tone generator
- A power supply/charger
- 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 that are mounted on the amplifier PCB and on the power supply.

There are 3 toggle switches that provide for manual activation of either Message 1, Message 2, or to initiate an system wide page from the PVE-802 throughout all distributed VAB-802 Audio Boosters.

The built-in, dual programmable, flash based, digital message/tone generator of the PVE-802 Voice Evacuation Panel comes standard with Message 1 programmed for Evacuation and Message 2 programmed for Alert messages. Both messages are field programmable for tailoring to meet specific installation requirements. Digital messages/tones are programmed in a user-friendly tool that users can select from various industry standard messages/tones, such as, leading and trailing tones and male or female voice messages. In addition, personalized wave files (.wav) can be downloaded and added to allow complete customization of messages/tones.

In support of some local requirements, the VAB-802 may be set to a “backup mode” where as a precaution, if primary amplifier fails, the secondary amplifier automatically engages and overrides the primary amplifier, provided there are no short circuits in the field speaker circuit wiring. For project flexibility, each PVE-802 and VAB-802 can be setup to produce their own messages to make setting up a dual channel, three channel, or floor above/floor below application easy.

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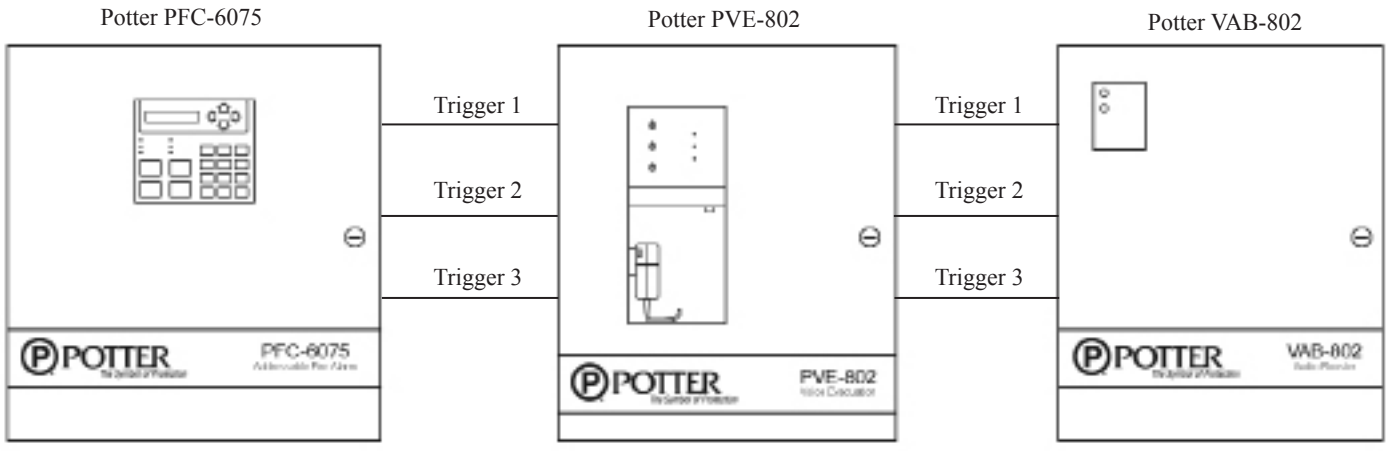
Both the PVE-802 and VAB-802 panels are listed to meet NFPA requirements to provide low frequency alarm signaling in cetain sleeping room applications. To meet the requirement, the panel is uploaded with a specific 520 hz square wave tone file and is paired with one of the compatible speakers listed in the chart below. The VAB-802 Audio Booster can be used in a stand alone configuration to provide pre-recorded tone and voice messaging when the capability to make live voice announcements via a paging microphone isn't required.

A unique feature of the VAB-802 allows the amplifier to re-amplify a signal generated from another amplifier/audio source. This allows reduced system wiring and connection to any listed Voice Evacuation Panel/amplifier rated at 25 Vrms.

PVE-802 Voice Evacuation Panel message/tone generation is controlled via 3 N.O. relay contacts from the host FACP 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.

All VAB-802 Audio Booster units, can be programmed to:

- Output the audio signals from the PVE-802 in real time
- Synchronize (as is typical in a standard dual or three channel application)
- Signal audio differently in a multi-channel application (refer to figures 3 and 4)

PVE-802 Voice Evacuation Panel Specifications	
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	32^0 -120^0 F (0 to 48^0 C)
Humidity	10-95% (non-condensing)
Enclosure Dimension	16"W x $19^1/_8$"H x 5"D
Weight	19lb 5oz

Compatible Speakers for 520 hz signaling	
Potter	FASPKR & SPKSTR Series Wall & Ceiling Mount
Gentex	SSPK Series Wall & Ceiling Mount
Eaton	LSP Series Wall & Ceiling Mount
System Sensor	SP Series Wall & Ceiling Mount