

Low Frequency Signaling Devices

In the 2010 edition of NFPA 72, a new requirement was introduced. The code stated that, effective January 1, 2014, alarm signals used in certain sleeping rooms shall produce a low frequency, 520 Hz square wave alarm signal. This new requirement was implemented because this specific low frequency tone was found to be very effective when used to awaken and alert adults with hearing loss. The NFPA 72 Handbook indicates that one way to accommodate the need for low frequency signals for sleeping rooms is using amplifiers and speakers that can also provide voice signaling capabilities. NFPA 72, 2013 explains that when non-voice (e.g., horns) notification appliances are used they should be listed as a "low frequency alarm" alarm appliance. Voice appliances and systems should be capable of producing the 520 Hz tone.



PVE-802 and VAB-802 Voice Evacuation Panels

The Potter PVE-802 voice evacuation panel includes a paging microphone and toggle switches which allow for manual activation of two different tones or messages. The VAB-802 is a voice evacuation booster panel that can be used to expand a voice system, or as a standalone amplifier. Both the PVE and the VAB can be programmed with two (2) custom tones or messages, and have been proven capable of producing the 520 Hz square wave tone based on the manufacturer's listings and documentation. Setting one of Potter's speakers to a ½ watt setting (80.5 dBA) allows over 150 speakers to be connected to a single panel. Additionally, Potter's speakers offer a substantial cost savings opportunity when compared to the price of the currently available, stand alone, low frequency signaling appliances. Pairing either of these voice panel options with one of Potter's addressable fire alarm control panels provides the solution when low frequency signals are required.

PVE-802 and VAB-802 Product Features

- Capable of Producing 520 Hz Low Frequency Tone.
- Two (2) Class "A" or Class "B" Speaker Circuits
- Dual 40 Watt @ 25 Vrms Amplifiers
- Each panel can power over 150 speakers @ ½ watt setting
- Advanced Digital Audio Technology
- USB Port Interface for Message/Tone Programming
- Messages/Tone activated by contact closure.
- Dual-Channel Digital Message/Tone Generator
- Unique Amplifier Booster/Cascading Option
- High Fidelity Sound Quality