



## Frequently Asked Questions

### **What is an ExitPoint™ directional sounder?**

Triggered by existing fire detection systems, ExitPoint™ directional sounders positioned at carefully chosen locations guide building occupants along escape routes and to perimeter building exits.

### **What makes this sound directional?**

The ExitPoint™ directional sounder uses broadband noise. To pinpoint a sound source quickly the only type of sound our brain can accurately locate is broadband noise. Broadband noise is the simultaneous presentation of multiple frequencies. Narrowband sounds are difficult to pinpoint their location. For example, many people report that when hearing an emergency siren they have no idea where it is coming from and must wait until they have seen it to be certain of the direction of approach.

### **Is there any risk of leading building occupants toward an exit that isn't safe?**

Emergency exit signs mark the pre-designated exits within a building. They make no attempt to indicate whether a route is safe or not. The evacuee has to make his own decision on which route to take. When used as a simple audible exit system, ExitPoint™ directional sounders are used as an aid to highlight where evacuation routes and exits are located, just like emergency exit signs.

### **If two or more ExitPoint™ sounders are heard at the same time, how do building occupants choose which to follow?**

If routes leading towards the ExitPoint™ speakers are apparently equally visible, research shows that passengers will choose the route where they perceive the speaker to be the loudest, since they feel this means it is nearest. However, if there are signs that one or more route is less viable due to smoke, heat or sounds of distress, they will choose a route that they believe is the best chance for survival.

### **Will the public know what this sound means?**

Research during trials showed that a briefing on the meaning of the sounds was not critical to their effectiveness. In some trials those who had no briefing actually did better than those with.

However, methods of educating the public on this sound are currently being investigated. A message on the voice evacuation system could state "Exits are marked by this sound schh, schh, schh." Advertising, public education, and other methods will also be used to inform the public on the meaning of the sound.

### **What if a building occupant is deaf?**

Many sources of deafness are frequency specific (like work related hearing loss) and therefore cannot hear sounds in a specific, narrowband frequency range. The majority of people registered as "deaf disabled" in the US are defined as such because they cannot hear sounds in the frequency band containing speech. The ability to localize a sound is dependent on the sound containing broad band frequency content. The majority of speech is contained in the range of 0.5-3 kHz and this narrow range of sound is predominantly unnecessary for sound localization.



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