MALLORY Sonalert
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the Buzz

A Technical Resource from Mallory Sonalert Products

www.mallory-sonalert.com

Mallory Sonalert Products, Inc. manufactures and distributes the Mallory Sonalert® brand of electronic audible signal products and supplies a full range of board level audible devices such as transducers, indicators and sirens to a variety of industrial, military, and consumer markets.

Welcome to the first issue of **The Buzz**, a technical newsletter from Mallory Sonalert Products, Inc. **The Buzz** will be published and e-mailed approximately 4-5 times per year, and will contain useful information regarding the application of Sonalert® audible signals and other board-level audible devices such as transducers, indicators and sirens.

Sonalert® audible signals are available in a variety of continuous and intermittant tones.

Future copies of **The Buzz** will address specific technical issues, answer technical questions, and will contain interesting case histories and applications for a variety of markets. In this introductory issue, we will address one of the most frequently asked questions received by the Mallory Sonalert Engineering Department: *What is the difference between the sounds you offer and which sound do I need for my application?*

*Go to **Listen to Sonalert® Sounds** on our web site to hear a more complete range of sounds.*

Chimes, Chirps, Sirens, Whoops and Warbles – What's the Difference?

When determining which sound is right for your application, you should first consider the following:

- In what type of product will the signal device be used?
- Who is the audience that will be impacted?
- Will the application be consumer, industrial, emergency, etc?
- Should the tone be continuous or intermittent? (Intermittent tones are generally more discernible than continuous tones.)
- What is the magnitude of sound required to perform the expected task? (Most devices are available in loud, medium, or soft sounds.) Care should be taken to make certain the device's tone doesn't melt into the background.
- Does the immediate environment present any constraints as far as the type of sound or sound level is concerned? Will the signal present an annoyance or impair the work of people or equipment in close proximity to the device?
- Will other signaling devices be operating in close proximity? Consideration should be given to ensure that the tone the device is generating doesn't get confused with other devices.

In addition to the above, factors such as actuation signal (i.e., AC or DC, low or high voltage, etc.), case style (i.e., panel-mount or PCB mount), and termination (i.e., push-on, screw-on, or wire leads or PCB pins) must be taken into consideration. After all these questions have been answered, you can choose a sound that makes sense for your application. Here are just a few of our most popular sounds, along with brief definitions:

Mallory also provides piezo indicators, transducers, sirens and backup alarms.

Chimes – A chime tone is a tone that goes from loud to soft. Chimes are generally used in non-emergency applications where a more pleasant tone is desired, such as passenger car interiors, elevators, and various office applications.

Sirens – A siren tone sweeps from low to high frequency and back again. Sirens are generally used in applications with high ambient noise environments, where the sweeping tone of the siren can be heard over the high ambient noise.

Warbles – A warble tone alternates between low and high frequency sounds. Like sirens, warble tones are suited to high ambient noise environments such as factories and other large, noisy installations.

Continuous Tones – A continuous tone emits a constant sound for as long as power is applied. The continuous tone is generally used as an alarm, alert, or trouble signal.

Beeps – A beep tone is a repeating series of on-and-off sound pulses with an approximate duty cycle of 50%. A beep tone is sharper and more discernable than a chime tone. Typical applications include the back-up alarms used in heavy-duty construction and agricultural equipment.

Note: Much of this information is excerpted from the article "Beeps, Bongs, Bangs, And Buzzers . . . Which Sound Device Is Right For Your Application?" To read the entire article, click here.