Customers are Finding Mallory's 60 mm Stacklight Unique Sound Options Extremely Useful

For decades, the only **audible** sound options offered on large **Stacklights** (AKA Tower Lights) were a continuous tone, and sometimes a pulsing tone. Maybe these two choices were adequate in the past, but now machines are more intelligent and more **automated**, so Stacklights also need to get **smarter** when alerting operators and others in the area when there is a machine issue that needs to be addressed (sometimes urgently).

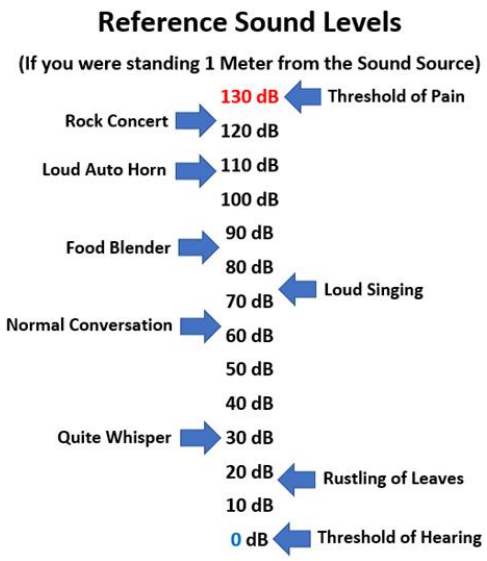
While Stacklights with sound are very popular, customers can choose Stacklight models with **lights only**. For those applications where the operator is glued to the machine and its control screen, a visual indication on top of the equipment may be all that is needed because someone is already present to immediately tackle problems as they occur. In these situations, the Stacklight is not there for the machine operator, but rather the Stacklight **helps** individuals in the general area to understand the current status of the machine. Typically, **Red** is stopped, **Yellow** paused, and **Green** running. Used less often, **Blue** or White are informational colors whose meaning is designated by the equipment designers. Examples where **information lights** are used include situations in which more feeder stock is needed, programming is in progress, tooling needs sharpening, etc.

However, even in situations where the operator is 100% attentive to the machine, an **audible sound** can still be incredibly **beneficial**. For example, it can be used to alert specific people that they are immediately needed such as set-up or inspection personnel.

Current industry trends towards greater automation leads to processes that no longer need to be minded full-time. This freedom increases production **efficiency** because people can be used for other duties while the semi-automated equipment is doing its own thing. With operators multi-tasking, if a machine needs attention, an **audible indication** can quickly draw the operator's awareness whereas a color change on the Stacklight may not be immediately noticed. In those rare instances where there is an urgent **crisis**, a proper warning sound can help fetch people quickly before things get out-of-control.

Mallory's **solution** to the need to work smarter with semi-automatic equipment and machines is to include four different sound types with each Stacklight (that is ordered with sound). Two of the sound types are standard- continuous and fast pulsing tones, but the other two sound types are distinct to Mallory.

The first unique sound is a slow repeating double-beep tone. This sound type imparts an **urgency** level that is less than a continuous tone and much less than a fast pulse tone. An added benefit of the double-beep tone is that it is not a common warning sound, so even though it conveys a less sense of urgency, it will still be easily noticed.



Mallory's second unique sound is a continuous tone for 5 seconds followed by a repeating short beep tone. This sound option is for those situations where it may take a while to reset or fix the machine. While someone is working to **solve** an equipment issue, the last thing needed is a loud noise constantly blaring in their ears. How this new Mallory sound works is that the 5 second continuous tone catches the operator's attention, and then the on-going short pulse tone signals that the machine condition still exists without distracting or annoying those nearby (including the operator). Another **advantage** of this sound option is that it helps **prevent** hearing damage to those in the area. These large Stacklights commonly emit very loud levels equal to **85 decibels** (dB) or louder @ 1 Meter. At these high intensities, a potential **safety** concern exists because OSHA does limit people's exposure to high noise levels such as those given off by large Stacklights.

If you need a large industrial Stacklight with lights only, Mallory has many models to choose from. Even better, if you need a Stacklight with sound, Mallory has models with sound options that no one else in the industry is able to offer which will make your semi-automatic machines and equipment more efficient and useful to your customers.

Mallory's industrial Stacklights are **manufactured** in Indianapolis, Indiana with **lead-times** of stock to 4 weeks. Certifications include CUL approval, NEMA 12, & IP-52. **Operating Voltages** are 24 Vac/dc (20 to 28 Volts) or 120 Vac (90 to 120 Volts)

A Primer for Using Mallory's 30mm Panel Alarms with Electronic Volume Control

For many years, customers have requested panel alarms that have **multiple** sound levels, and to be able to choose those sound levels via **electronic** means. It took a while for technology to catch up, but in late 2019 Mallory introduced a series of industrial panel alarms with electronic **volume control**. With 126 model numbers, this series covers a lot of different options.

In terms of sound levels and sound types, there are two choices. The **first** is 1 sound type with 3 different volume levels (soft, medium, or loud). For example, a constant tone with the ability for the circuitry or machine controller to choose either a soft, medium, or loud sound level.

The **second** choice is 2 sound types with the option of either a loud or extra loud sound level. For example, a constant tone where the circuitry or machine controller can choose either a loud or extra loud sound level, or a medium pulsing tone where the circuitry or machine controller can choose either a loud or an extra-loud sound level.

The reason the volume control in this model is considered electronic is that in order to select the needed sound type and volume level, two **electronic** actions are needed: 1) **Apply voltage** to the plus and minus power connections, and 2) **Ground** the blue & yellow control wires per the instructions on the data

sheet. If the data sheet does not mention what to do with a control wire, it should be left electrically open (i.e. not connected to anything). The current draw on these models is only 40 mA maximum, so high current relays are not needed to do the switching.

The other options available in this series that give rise to full 126 different model numbers are:

- Three Operating **Voltage** Levels- 12 Vdc, 24 Vdc, or 48 Vdc
- Two Sound **Frequencies**- 2,000 Hz or 3,000 Hz
- Three **Termination** Options- Screw Terminals, Flat Blades, or Terminal Block.

To find the model needed for an application, Mallory's webpage for this series will help guide you to right model number. Alternately, it's just as easy to build the part number needed using the Part Number Structure that is shown below and is also listed in the product literature.

Part Numbering System
30mm Alarms with Electronic Volume Control

Part Number Structure

SCE 016 X D 3 DB1 S

Series:

Maximum Voltage:
016 = 6-16 **028** = 16-28 **048** = 28-48

Sound Level:
For DB Type: **X** = Extra Loud (100 dB) or Loud (90 dB)
For VC Type: **L** = Loud (90 dB) or Medium (80 dB) or Soft (70 dB)

Voltage Type: **D** = DC Only

Frequency: **3** = 3000 Hz **2** = 2000 Hz

Function:
DB1 = Continuous and Fast Pulse (X-Loud or Loud)
DB2 = Continuous and Medium Pulse (X-Loud or Loud)
DB3 = Continuous and Slow Pulse (X-Loud or Loud)
VC1 = Continuous (Loud, Medium, or Soft)
VC2 = Fast Pulse (Loud, Medium, or Soft)
VC3 = Medium Pulse (Loud, Medium, or Soft)
VC4 = Slow Pulse (Loud, Medium, or Soft)

Termination:
S = Screw Terminal **B** = Terminal Block **F** = Flat Blade Terminal

MADE IN THE USA

Mallory's 30mm Industrial Panel Alarms with Electronic Volume Control are **manufactured** in Indianapolis, Indiana, and feature UL approved models with **lead-times** of stock to 4 weeks. For waterproof rating needs such as NEMA 4X, order with P/N ACC03.