



Introducing Mallory's MSW Series of IEC 60601-1-8 Medical Alarms which use the IEC Supplied Melody Sound Files



IEC 60601-1-8 AM2 (2020) is the latest IEC specification that covers the use of **audible** alarms in **medical** equipment. **Annex G** of IEC 60601-1-8 AM2 (2020) adds the ability to produce melody tones by using IEC supplied sound files.

Mallory's new **MSW series** uses these IEC sound files, and is approved by UL to meet IEC 60601-1-8 AM2 (2020) Annex G.

The [MSW series](#) uses the same PC pin layout, and electronic control of the current popular MSS series (23 x 13 mm). So, if a medical application is already using a 2 PC pin or 5 PC pin MSS model, the equivalent MSW model will **drop** right in. For example, model **MSS5C** (three cardiac priority tones) can directly be replaced by model **MSW5C** (three cardiac priority tones using IEC sound files).



Like the MSS Series, the MSW series offers **several** different medical **priority** tone options such as 1 priority tone, all 3 priority tones, and models with 1 or 2 priority tones and a **2500 Hz non-medical tone** which can be used for other audible indication needs.

Mallory **100% tests** every medical alarm to verify qualification to IEC 60601-1-8, checks the sound level & current values, records the sounds generated by the alarm, and ties all this saved data to the **serial number** listed on the alarm label.

Based on the popularity of current MSS models, Mallory expects the following MSW models to be popular also, and these models will soon be in distributor stock ready for prototyping:

3 Priority Tone Models:

MSW5C	Cardiac
MSW5D	Drug or Fluid Delivery
MSW5E	Equipment or Supply Failure
MSW5G	General
MSW5P	Artificial Perfusion
MSW5T	Temp or Energy
MSW5V	Ventilation

High Priority Tone Only:

MSW5CH	Cardiac
MSW5GH	General
MSW5PH	Artificial Perfusion
MSW5TH	Temp or Energy
MSW5VH	Ventilation

Medium Priority Tone Only:

MSW5GM	General
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Low Priority Tone Only:

MSW5GL	Used for Any Melody
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Popular MSW Models (Con't)

High Priority, 2500 Hz Continuous Tone, 2500 Hz Medium Pulse Tone)

[MSW5GHCMP](#) General

High Priority, Low Priority, & 2500 Hz Continuous Tone)

[MSW5CLHCT](#) Cardiac

[MSW5GLHCT](#) General

[MSW5PLHCT](#) Artificial Perfusion

[MSW5VLHCT](#) Ventilation

High Priority, Medium Priority, & 2500 Hz Continuous Tone)

[MSW5CMHCT](#) Cardiac

[MSW5GMHCT](#) General

[MSW5PMHCT](#) Artificial Perfusion

[MSW5VMHCT](#) Ventilation

Medium Priority, Low Priority, & 2500 Hz Continuous Tone)

[MSW5CLMCT](#) Cardiac

[MSW5GLMCT](#) General

[MSW5PLMCT](#) Artificial Perfusion

[MSW5VLMCT](#) Ventilation

If you don't see the one you need above, many more **MSW models** are available on our [medical alarm webpage](#).



Mallory's IEC 60601-1-8 Medical Alarms are **manufactured** in Indianapolis, Indiana with **lead-times** of stock to 4 weeks, they are [CUL Approved](#), and 100% Tested by Mallory to IEC 60601-1-8.

Implementing Mallory's 60mm and 30mm Stacklights

Mallory designed our Stacklights for **simple** installation & **ease** of use. Each light stack (and sound stack) can be **independently** activated with circuitry or a machine controller, so the equipment has total control of the visual and/or audible indications.

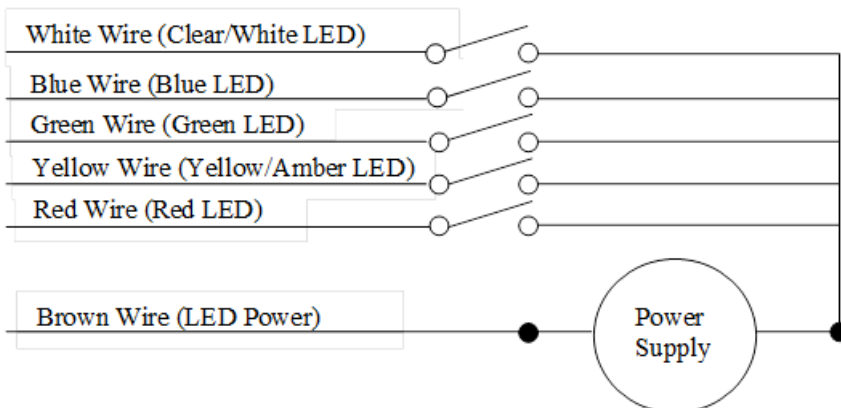


Mounting:

Mallory's [60mm Stacklights](#), whether direct or pole mount, are designed to be mounted vertically on top of the machine. Mallory's [30mm Stacklights](#) are light weight and small enough to be mounted directly on top of the **control box**, which **saves** considerable **installation cost**, or they can be mounted on top of the machine like the larger ones. The pole mount 30mm Stacklights should be mounted vertically, but the direct mount 30mm Stacklights can be mounted in **any** direction desired- even upside down.

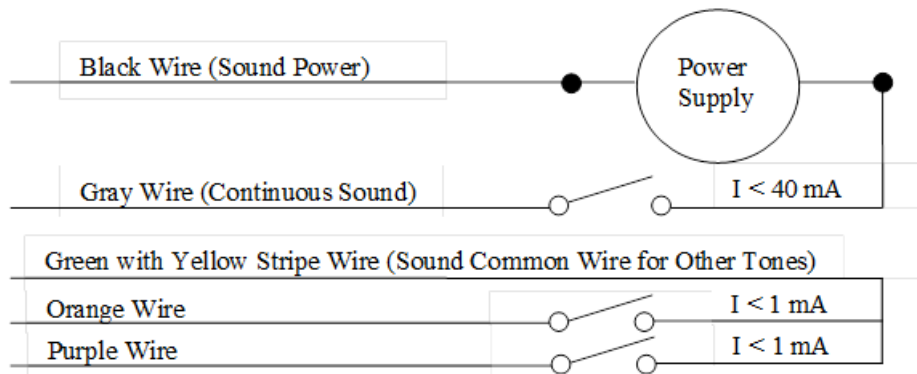
Electrical Connections- 60mm & 30mm Stacklights:

For the **light** electrical connections, the brown wire is connected to one side of the power supply, and the red, yellow, & green wires are connected to one side of a **NO switch**, and the other side of the switch connected to the other opposite side of the power supply. For the 60mm Stacklight, there can be **two** additional color wires- blue & white which are connected the same manner as the red, yellow, & green wires.



For the **sound** electrical connections, the 30mm Stacklight is straight forward because it has only **one sound** included. Connect the black wire to one side of the power supply, connect the orange wire to one side of a NO switch with the other side connected to the opposite side of the power supply. If you are using a 12 Vdc rated Stacklight, there is polarity to the connections, so the wiring diagram needs to be followed carefully.

The **sound** electrical connections for the 60mm Stacklight are a little more complicated because there are **4 sounds** with each unit. It is easier to understand the connections needed by looking at the wiring diagram which is copied below for the 60mm Stacklight with Sound.



Note that the Green with Yellow Stripe, orange, and purple wires are not connected to power because they are **control** wires used to select the different sounds.

Operation:

For both the 30mm and 60mm Stacklights, the machine can **decide** which color(s) and/or which sound to turn on or off at any time by **closing** the appropriate switch. For the **lights**, it is straight forward. For red, close the switch connected to the red wire, for green, close the switch connected to the green wire, etc.

To activate the **sound** for the 30mm Stacklight, there is only one switch to close which is the one connected to the gray wire.

To turn on a **sound** for the 60mm Stacklight, the appropriate switch or switches need to be closed, but which ones are closed to activate the needed sound is listed on the specification sheet and is **summarized** below:

Continuous Tone:

Close gray wire switch.

Medium Pulse Tone:

Close gray & orange wire switches.

Double Pulse Tone:

Close gray & purple wire switches.

15 Sec Continuous/Short Pulse Tone:

Close gray, orange, & purple wire switches.

This information and more is available in the application guides for the [30mm Stacklight](#) and [60mm Stacklight](#), but if there are any **questions** on assembly, electrical connection, or operation of Mallory's Stacklights, call (317-612-1000) or email Mallory (technical@mspindy.com) anytime.



Mallory's 30mm and 60mm Stacklights are **manufactured** in Indianapolis, Indiana with **lead-times** of stock to 4 weeks. Approvals include [CUL](#), NEMA 12, & IP-52.