

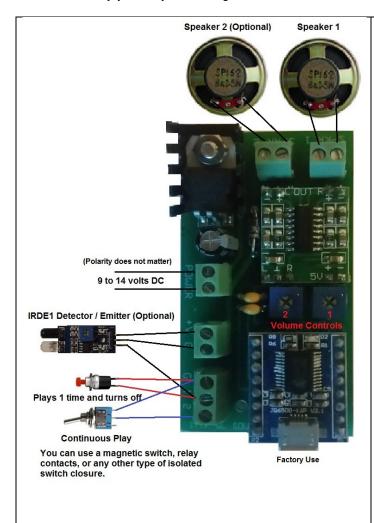
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## **GL Sound Module Instructions for single sound** version 2017

(Use with all scales trackside, in buildings, under layouts, or onboard trains)

**ESD means Electro Static Discharge.** This is what occurs when you walk across a carpet, touch a piece of metal and get a shock. Before touching the circuit board, you should touch something that is grounded to discharge any static electricity you may be storing.



The GL series sound module is easy to use, but you still need to follow the instructions so that you do not cause damage. Electronic circuits are not forgiving if connected incorrectly.

## **Specifications**

Input Voltage: 9 to 14 volts DC (Polarity does not matter)

Max Current: with 2 speakers full volume, 300ma

Amplifier Power: output max, 2 watts each
Input Requirements: Isolated switch closure.

Caution: Do not put any voltage in any switch input terminals

If using the module in continuous looping at max volume configuration, use with 1 speaker and use 9 to 12 volts DC max

Use any size 8 ohm speakers. (Speaker #2 Optional) and should be used only if necessary for noisy environments. Max sound scenario time – 2 minutes
Audio Output: 2 watts each amplifier output into 8 ohm

speaker.

## **Activating Sound Options**

You can momentarily activate sound to play 1 time and turn off by using a push button, magnetic switch, or isolated relay contacts.

If the input is continuously activated sound scenario will play continuous looping. At the end of the loop there is a slight delay before starting again.

**Some soldering** to switches and speaker will be required. We recommend using 22 to 24 gauge solid insulated wire if possible. If you have to use stranded wire, you should twist and tin the wire ends. A good inexpensive source of solid 22ga wire is at: www.jameco.com

For outdoor use, GL module should be protected from the elements and properly weather proofed. Avoid exposure to moisture. Do not use double back tape as it could cause static electricity or could affect board operation. If possible use the tiny mounting holes with tiny screws, or you can make a nonmetallic bracket. Each module requires its own 8 ohm speakers. You can use a common power source to power more than one module if it can supply enough current All other connections such as switches and speaker cannot be shared with any other modules.