

# Battery Backup for MyLocoSound Track Power

When using MyLocoSound (MLS) with track power, battery backup is required to maintain sounds when the loco stops and track power is zero volts. This is normally done with a 9V NiMh (Nickel Metal Hydride) rechargeable battery, which is charged by the MyLocoSound board while track voltage is 10V or greater. This may be a problem if you typically run your locos at slow prototypical speeds, hence low voltage; e.g. Shay logging locos. NiMh rechargeable batteries also have a rather high self-discharge rate. So if you don't run very often, you may have a dead battery, and it will take several hours of run time over 10V to get it charged again. The following is an explanation of the various options available for MyLocoSound battery backup.



### 9V Alkaline Battery

- Battery is NOT rechargeable, so periodic battery replacement is required.
- MLS Power Setting: 1 Beep (Battery Power)
- Requires Battery On/Off switch
- Allows much greater than 60 secs of sound with loco stopped (Until battery dies or is turned off)



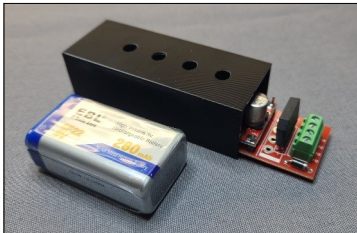
### 9V NiMh Rechargeable Battery

- Battery is recharged via MLS for Track V > 10V
- High Self-Discharge Rate
- MLS Power Setting: 2 Beeps (Track Power, 9V)
- MLS plays for 60 secs, then automatically shuts down to save battery charge.



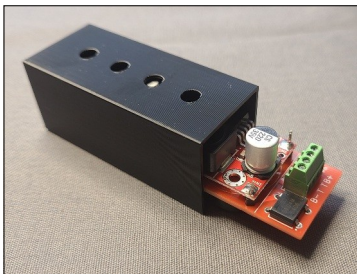
### 7.2V NiMh Rechargeable Battery

- Hard to find (Shown: Exell Battery EBC-AAA6-WIRE)
- Battery is recharged via MLS for Track V > 8.2V
- Allows slower speeds than the 9V battery.
- High Self-Discharge Rate
- MLS Power Setting: 3 Beeps (Track Power, 7.2V)
- MLS plays for 60 secs, then automatically shuts down to save battery charge.



### G-Scale Graphics Battery Booster

- 9V NiMh Battery is recharged directly from the track, 4V to 10V, from MLS for >10V
- High Self-Discharge Rate
- MLS Power Setting: 2 Beeps (Track Power, 9V)
- MLS plays for 60 secs, then automatically shuts down to save battery charge.
- 9V battery and Battery Booster take about three times the size of a 9V battery alone



### G-Scale Graphics Battery Replacement Module

- Uses Super Capacitors instead of a 9V Battery
- Capacitors are charged directly from the track for Track V >4V
- Fully charged after 2 mins of run time >4V
- MLS Power Setting: 1 Beep (Battery Power)
- MLS plays for about 60 secs until capacitors are depleted.
- MLS Power Setting: 1 Beep (Battery Power)
- Takes about twice the size of a 9V battery alone

