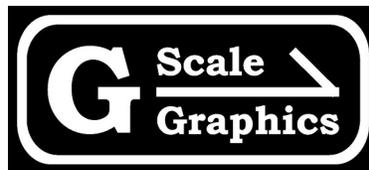
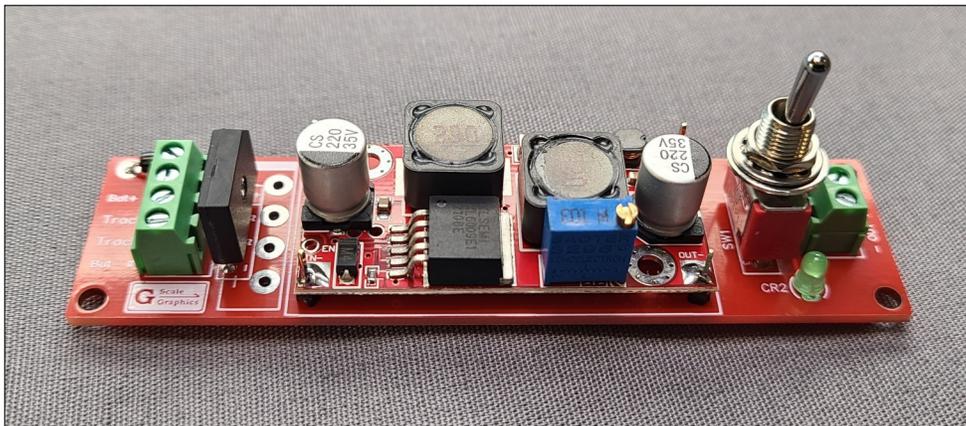


Track Accessory Power

Operation and Installation Manual

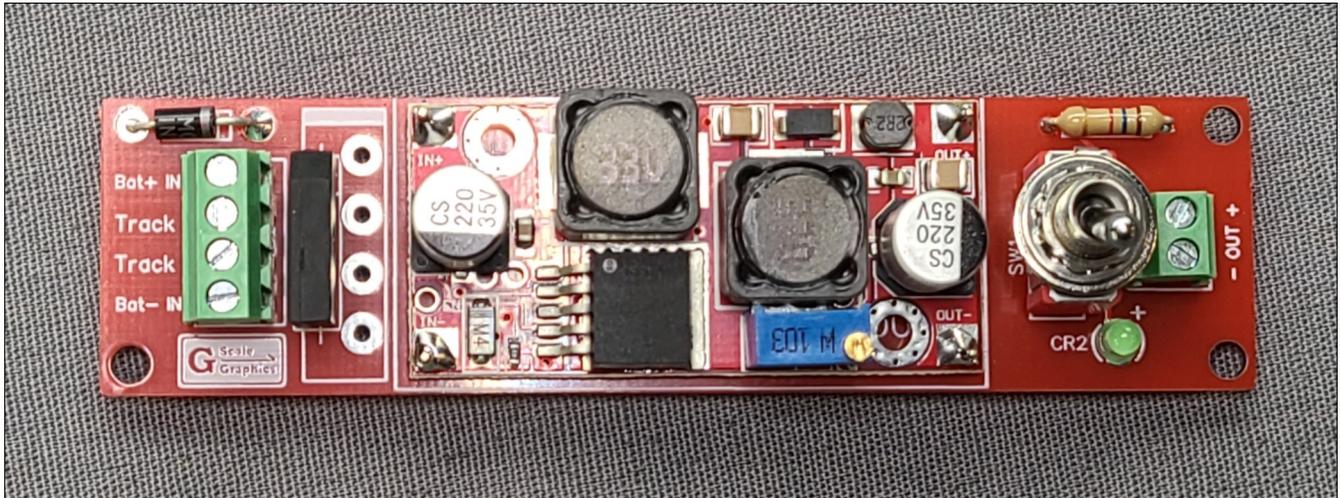


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Revision New: Updated 11/16/2022

Overview



The **Track Accessory Power board** can be used to power any DC operated device from track power. It will maintain a constant DC output voltage of your choosing, regardless of polarity or level of track voltage. When track voltage goes to zero, the backup battery (not supplied) takes over. Use it in rolling stock equipped with track pickups or direct connections to the track for track-side attractions.

The backup battery will eliminate all power interruptions due to dirty track, poor track pickups, etc. It can also be used for extended power to your device while the train is stopped.

Installation

Wiring

The Track Accessory Power board is powered via track power and a backup battery. Output is connected to the desired load (3-35V, 2/4A max).

Battery voltage can be anywhere from 5 to 32VDC. The capacity rating (maH) will depend on your application. If you intend to operate for long periods of time with no track voltage (train stopped), you will need a sizable battery. Assuming your device requires 200ma to operate, a 1000maH battery would last for approximately $1000\text{maH}/200\text{ma} = 5$ hours. If the battery is only used as backup for brief train stops, you could get by with a much smaller battery, for example a 9V, 200mah.

Track Accessory Power



Operation

Track Voltage	Output powered from
0-5V	Battery
5-35V	Track Voltage

Output is controlled via On/Off switch. LED indicates output is ON.

Adjustment

Output voltage is continuously adjustable from 2-35VDC, for any input voltage 5-32VDC, using the blue 22 turn potentiometer. Power it with any DC voltage source available; power pack, power supply, or battery. Any voltage 5-32V can be used. Monitor the output using a voltmeter.

Track Accessory Power Specifications

Mechanical

Physical Size: 3.9" X 1.0" X 1.3"H.

Mount using double sided foam tape, or screws in 3 corners or PCB.

Wiring: Screw terminals accept tinned 22 AWG wire.

Electrical

Terminals: Track, Track

Track Power Input (DC or PWM): 5 to 32 VDC

Accepts polarity reversals via internal full wave bridge rectifier

Terminals: Bat+, Bat-

Battery Input: 5-35VDC

Terminals: Out+, Out-

Switched output with LED power indicator

3-35VDC, via 22 turn trim potentiometer

Max current: 2 or 4 amp models

Buck/Boost Voltage Converter, i.e. output will remain constant for any input 5-32VDC.

Back flow protection