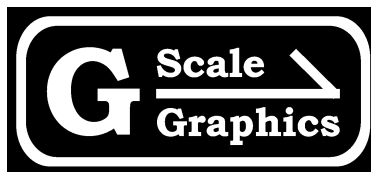
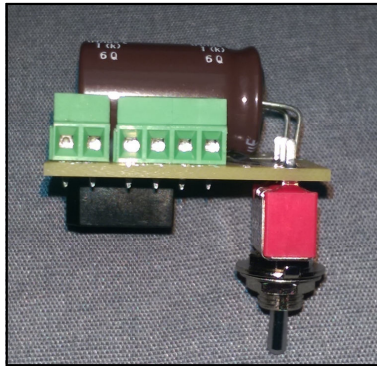


Track Power Adaptor Module

Operation and Installation Manual



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Overview

The Track Power Adaptor is intended to run on-board electronics, such as the RailBoss 4 radio control system, or others, from a constant DC power source applied to the rails.

The unit consists of a power on/off switch, bridge rectifier, filter capacitor, and power input and output screw terminals.

Mounting

The unit is intended for Floor Mounting; i.e. the power on/off switch extends through the floor of a tender or bulk-head for external access by the operator, while the circuit board and wiring terminals stay inside the car.

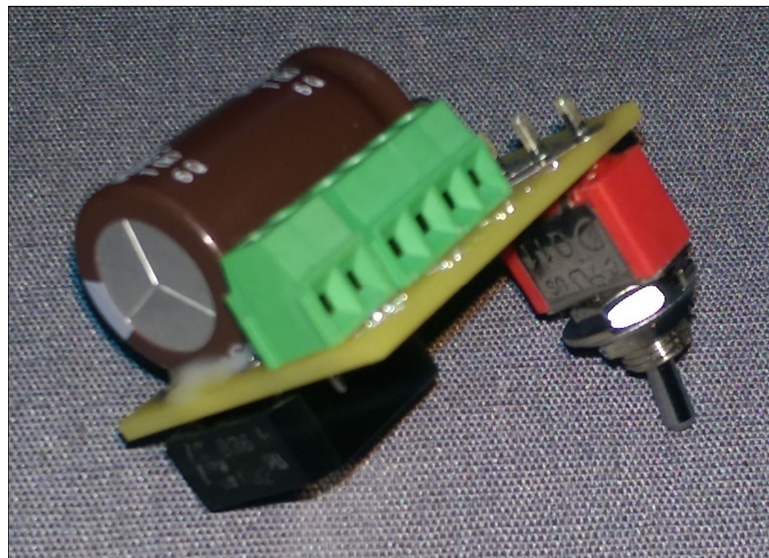
Applications

Regardless of the electronics you use on board your train, it all needs a constant source of DC voltage. Track power polarity reversals are handled by the bridge rectifier built into the Track Power Adaptor so the electronics always keep the proper polarity. The filter capacitor attempts to smooth out the intermittent power due to dirty track and poor electrical contacts.

The Track Power Adaptor is intended for use with control systems that would normally be battery powered, but it can be used for anything requiring constant DC voltage from the track.

With this unit, you will need to maintain a constant track voltage within the specifications of your control system. Any changes in track voltage, for example if you are running conventional track powered locomotives at the same time as this unit with on-board controls, will cause speed changes in your on-board control system.

You will often need to provide power to more than one thing: a control board, a sound board, and some lighting circuits. This usually requires a lot of point-to-point wiring, wire splicing, and soldering. The Track Power Adaptor eliminates some of that by providing up to four 22 ga. outputs from screw terminals (2 wires per terminal).



Track Power Adaptor Module Specifications

TPA Board Revision "New"

Mechanical

Physical Size: Floor Mount – 1.4" X 1.2" X 0.75" (Board sits 1.25" above floor)
Weight: 0.6oz.

User Connections: Screw clamp terminal strips accept individual wires, 22 to 18 AWG.
(22 or 20 AWG recommended)
Requires a 5/64" slotted screwdriver

Mounting holes: 1/4" for floor mount on/off switch

Electrical

Power Input: 5 amps max

Power Outputs (Terminals OUT 1 +/-, OUT 2 +/-)

Power is connected when switch is in the ON position.
One 20 ga. wire per terminal, or two 22 ga. wires per terminal.

Track Power Adaptor

Wiring Diagram

