

## DG83 4 Amp Digital Command Control Mobile Decoder

4.0 Amp (6.0 Amp Peak) Mobile DCC Decoder

Compatible with the baseline NMRA DCC Standard

Supports Both Short (127) & Long (10,000) Address Modes

User Programmable Address, Acceleration, Deceleration, Start-voltage & Mid-point voltage and more

Programmable from DCC compatible equipment without opening the loco

Smooth conversion to analog operation with functions operational

4 User Configurable, Independent Function Leads Rated at 200ma

Smooth locomotive speed control with user selectable 14, 28, or 128 forward & reverse speed step capabilities

User loadable speed tables for customized speed control with 128 speed step resolution

Supports Basic, Advanced & UniVersal Consisting

User configurable loco direction of travel, you decide which way is forward without rewiring the motor!

Heavy duty motor drive output. Active short circuit protection Automatic thermal overload shutdown

Complies with FCC Part 15, class B RFI requirements



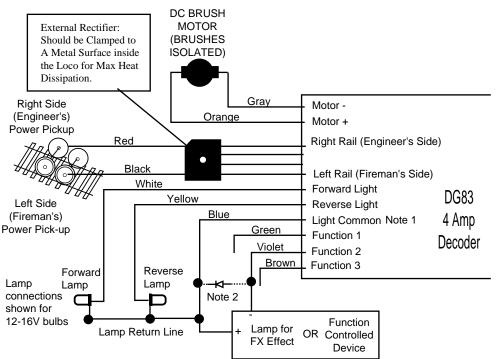
## Decoder Installation Wiring Diagram DG83 & DG83FX

See Digitrax Decoder Users Manual for complete decoder test procedures, installation instructions and technical information. This manual is available at no charge from your dealer. If your dealer is out of these manuals, call

Digitrax at (770) 441-7992 and we will gladly send you a copy.

## WARNING:

To prevent decoder damage, be sure the motor brushes are properly isolated before applying power!



## Notes:

- Light Common is the positive lead for "full wave" function power operation. Do not exceed the 200ma
  rating of the function outputs. If Light Common is not used, power the lamp or function from either track
  power pick-up for "half-wave" operation by connecting the Lamp Return Line to either track pickup.
- 2. If you use an inductive(coil) type load, you should place an inductive kick-back suppression diode across the coil with the cathode(banded) end connected to the Light Common side. A small signal diode such as IN4148 or rectifier such as IN4001 is ideal. Be careful because an incorrectly connected diode can damage the function output.
- 3. See the Decoder Users Manual for full details of wiring 12-16V lamps, 1.5V lamps, & LED's for full and half wave operation. Lamps that draw more than 80ma when running require a 22 ohm 1/4 watt resistor in series with the directional light function lead to protect the decoder.

Damaged decoders should be returned directly to Digitrax for repair. The standard repair charge is \$17.