



Digitrax Command Control

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DG580L

5Amp Digital Command Control Decoder

5.0 Amp (8 Amp Peak) Mobile DCC Decoder

Easy connect function wire harness

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

User Programmable Address, Acceleration, Deceleration,
Start-voltage, Mid-point voltage, Max-voltage & More

Programmable from DCC compatible equipment

Smooth conversion to analog operation with functions operational

Configurable for use with Lionel 3 wire AC motors
Smooth conversion to AC (Lionel) analog operation

8 User Configurable, Independent Function Leads:
5 function leads rated at 200ma, 3 function leads rated at 1 amp.
Use these as regular on/off function leads or
Use the DG380's 4 FX function generators
To generate special lighting effects like Mars, Gyalite,
Single or Double Strobe, Ditch Lights and more
(FX can be run on F0 Fwd, F0 Rev, F1, F2, F3 or F4)

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

Compatible with the DCC Standard

Complies with FCC Part 15, class B RFI requirements

Digitrax manuals & instructions are updated periodically.

Please visit www.digitrax.com for the latest version.

These instructions were updated 01/02.

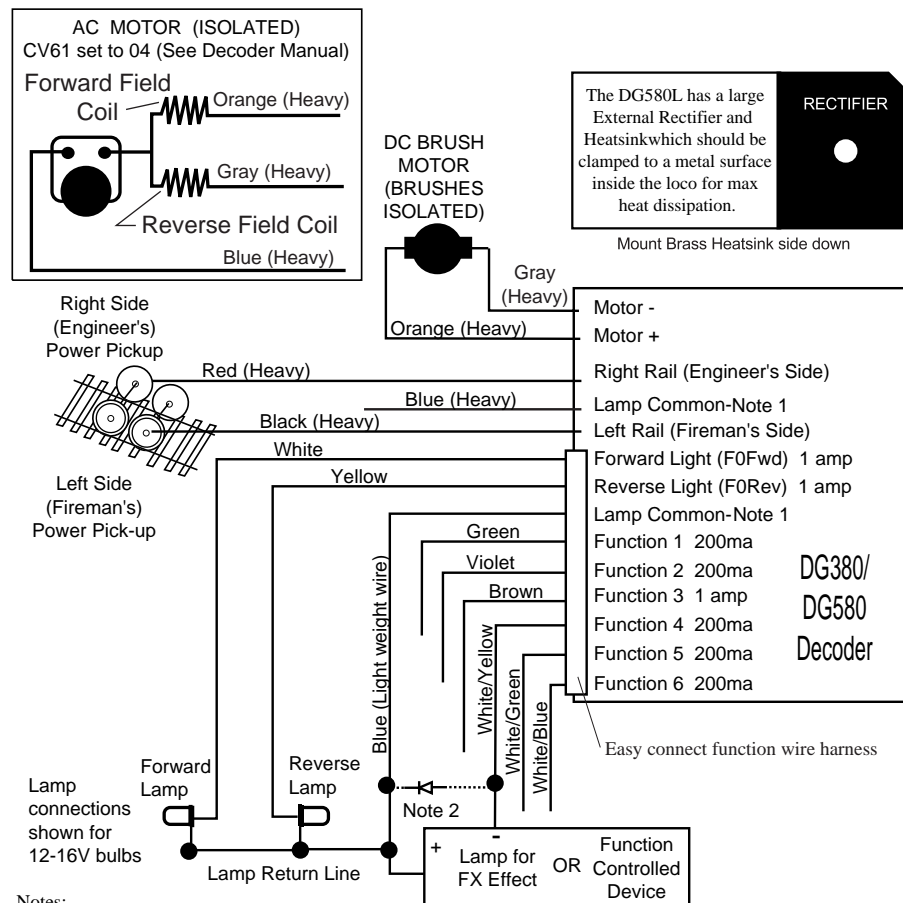
Made in USA



Decoder Installation Wiring Diagram DG580L

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:

1. Blue Lamp Common is the positive lead for "full wave" function power operation. Do not exceed the current rating of the function outputs. Use the light weight blue lead when total function current is less than 3/4 amp. Use the heavy weight blue lead when the total function current will exceed 3/4 amp. If Blue Lamp 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 Lamp 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. Lamps that draw over 80ma when running require a 22 ohm 1/4 watt resistor in series with the function lead to protect the decoder.
 4. When configuring for AC operation, decoder must be connected to AC motor, before changing CV61 to 04.
- WARNING** Once CV61 is set to 04 or higher value, decoder will not accept any programming commands unless connected to an AC motor.

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

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