

# Jacobsen Declaration Exhibit L

# Instructions for DH121 Series Decoder Installation DH121, DH121P, DH121PS, DH121AT



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Digitrax Command Control

## **DH121** **1.5 Amp Digital Command Control Decoder**

1.5 Amp (2.0 Amp Peak) Mobile DCC Decoder

Easy connect decoder wire harness

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

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

Programmable from DCC compatible equipment without opening the loco

Smooth conversion to analog operation with functions operational

2 User Configurable, Independent Function Leads Rated at 200ma  
Can be used as independent functions or directional headlights

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

User loadable speed tables for customized speed control

Supports Basic, Advanced & UniVersal Consisting

Compatible with the NMRA DCC Standard

Complies with FCC Part 15, class B RFI requirements

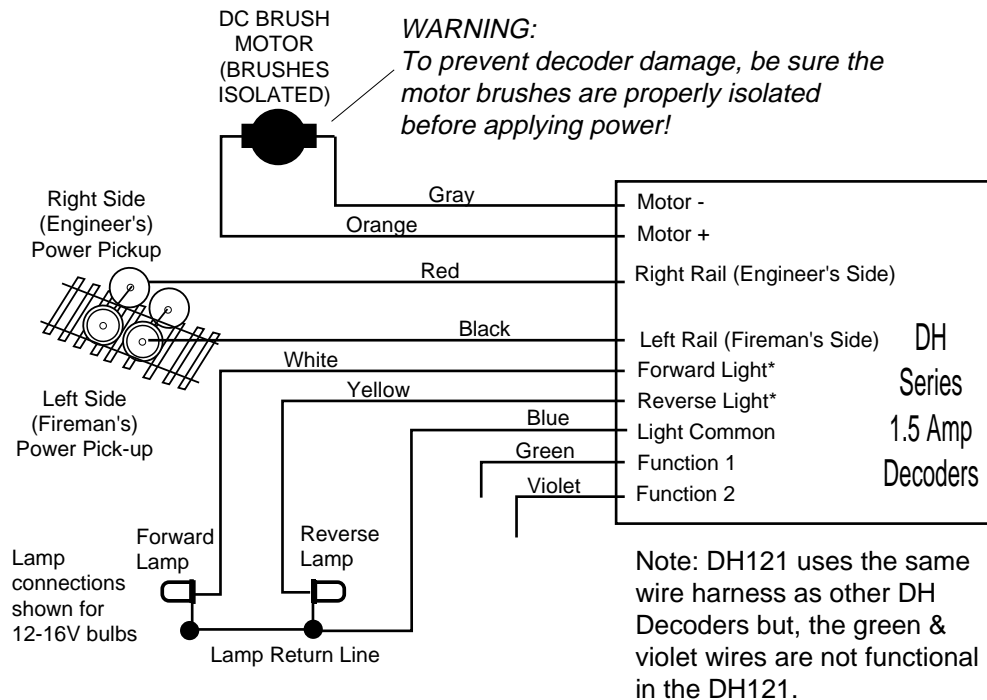
**Made in USA**





## Decoder Installation Wiring Diagram For DH121 Series Decoders

See Digitrax Decoder Users Manual for complete decoder test procedures, installation instructions & technical information. This manual is available at no charge from your dealer. If your dealer is out of these manuals, contact Digitrax (770) 441-7992, Fax (770) 441-0759, or e-mail sales@digitrax.com and we will gladly send you a copy.



\* On DH142 & DH121, forward and reverse lights can be run as independent functions on F0 & F4. See CV61 below and see Digitrax Decoder Manual for Complete Instructions.

| Commonly Used Configuration Variables |                        |  | Commonly Used Configuration Variables |                       |            |
|---------------------------------------|------------------------|--|---------------------------------------|-----------------------|------------|
| CV#                                   | Used For               | Default  | CV#                                   | Used For              | Value      |
| CV01                                  | 2-digit address        | 03   | CV61                                  | Directional Lights or | 0          |
| CV02                                  | Start Voltage          | 0  |                                       | White=F0 & Yellow=F4. | 1          |
| CV03                                  | Acceleration Rate      | 0  | CV49-54                               | FX Effect Set ups     | See Manual |
| CV04                                  | Deceleration Rate      | 0  | CV65-95                               | Loadable Speed        | See Manual |
| CV05                                  | Maximum Voltage        | 0  |                                       | Tables                |            |
| CV06                                  | Mid Point Voltage      | 0  |                                       |                       |            |
| CV29                                  | Configuration Register | 06=Advanced Mode, Analog Conversion On                     |                                       |                       |            |
|                                       | Examples:              | 04=Standard Mode (14 Speed Steps), Analog Conversion On    |                                       |                       |            |
|                                       |                        | 07=Reversed Direction, Advanced Mode, Analog Conversion On |                                       |                       |            |
|                                       |                        | 16=Enable Loadable Speed Table, Analog Conversion On       |                                       |                       |            |

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