



Decoder Installation Wiring Diagram DH140U

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, contact Digitrax: (770) 441-7992, FAX (770) 441-0759 or e-mail sales@digitrax.com & we will gladly send you a copy.

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Digitrax Command Control

DH140U 1.5 Amp Universal Digital Command Control Decoder

1.5 Amps (2.0 Amps Peak) Mobile Decoder

Engineered to fit most HO scale Locomotives.

Approximate size 0.67" x 1.05" x 0.25" (1.52cm x 3.0cm x 0.63cm)

Multi-format Decoder. Automatically detects and operates on the correct control format. Operates with DCC, Motorola Trinary AC Digital (Marklin), AC analog with automatic reverse on high voltage pulse and DC analog operation.

Two constant brightness directional light outputs (F0 forward & F0 reverse) rated at 200 ma (these can also be run as two independent function leads)

Two Standard Function Outputs rated at 200ma.

High Resolution 128 Speed Step Scalable Speed Stabilization or (Back EMF) for DCC and Trinary modes.

Supports Basic, Advanced and Universal consisting.

Supports paged mode and operations mode programming

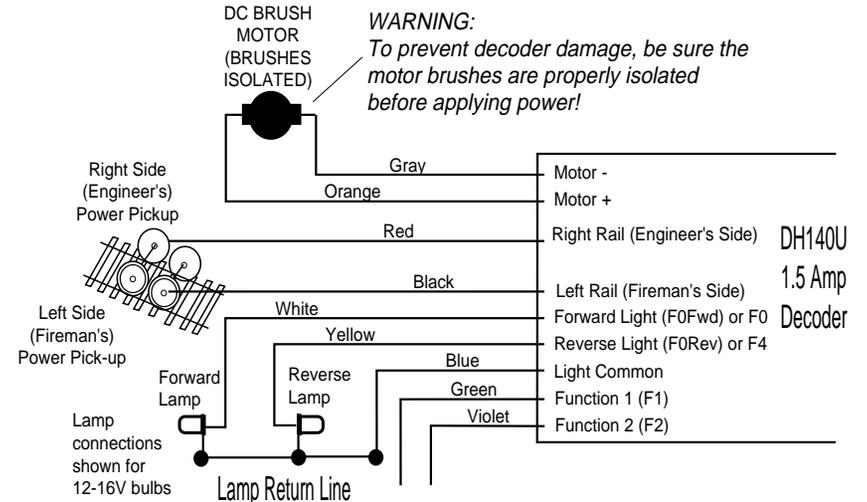
Improved motor fault protection give you time to correct a short inside the locomotive before you damage your decoder.

Digitrax Easy Connect Plug & Wire Harness lets you share decoders among multiple locomotives wired with harnesses.

Interoperable with other DCC Systems

Complies with FCC Part 15, class B RFI requirements

Made in USA



The DH140U comes from the factory with **BACK EMF SPEED STABILIZATION (BEMF)** turned off. To activate the **BEMF** feature, change CV57 to a value of 06. This will give good performance with most brands of locomotives. If the locomotive surges while using BEMF use a lower value for CV56. It may also be necessary to adjust CV's 55, 56, & 57 to get the motor performance desired for your particular locomotive.

Commonly Used Configuration Variables			Commonly Used Configuration Variables		
CV#	Used For	Default	CV#	Used For	Value
CV01	2-digit address	03	CV61	Directional Lights	x0
CV02	Start Voltage	00		White=F0 & Yellow=F4.	x1
CV03	Acceleration Rate	00		Disable BEMF w/F5 ON	1x
CV04	Deceleration Rate	00		Disable Vstart, Vmid, Vmax	2x
CV05	Maximum Voltage	00		in 128 step mode	
CV06	Mid Point Voltage	00			
CV55	BEMF Static Adj.	80	CV65-95	Loadable Speed Tables	See Manual
CV56	BEMF Dynamic Adj.	30			
CV57	BEMF Droop	00 (00-FF)			
	0x=Std				
	x0=Adv. Consist				

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

ALL VALUES ARE HEXADECIMAL AS USED WITH DIGITRAX THROTTLES

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

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