# DH127]

Fits many HO locomotives

### HO Scale

Mobile Decoder Digitrax 9-Pin Harness Socket 1.0 Amp/2 Amps Peak 2 FX7 Functions, 200ma Output

## Features:

- Digitrax Easy Connect 9-Pin Socket for track, motor and function control, allows decoder to be moved between different locomotive interfaces.
- Series 7 Enhanced Decoder Features.
- Firmware may be user updated using a Digitrax USB equipped Command Station with Sound Loader software in decoder IPL mode.
- 2 Digitrax  $\rm FX^7$  Functions-Control lights and functions for prototypical lighting effects and on/off control.
- Configurable FX<sup>7</sup> Pulse Function available on all function outputs.
- Digitrax LocoMotion® System Lets your trains run like the real thing!
- 2 Digit and 4 Digit Addressing.
- Basic, Advanced & UniVersal Consisting.
- SuperSonic motor drive for silent operation.
- Direct and Operations Mode programming.
- Program CVs using any Digitrax Compatible Control system without having to buy any extra equipment. Decoder Reset by CV8, with or without speed table reset.
- Transponder Equipped ready for transponding ID on your layout.
- Power-on Motor Isolation Protection, helps prevent damage to your decoder.
- DCC Compatible.
- FCC Part 15, Class B RFI compliant.
- Operates on DCC track voltage 9V minimum, to 22V maximum.

#### Parts List:

1 DH127D compact wired Mobile Decoder

1 Instruction Sheet

**Installation Instructions:** Visit www.digitrax.com for the latest information and technical updates. Refer to Figure 1 for the decoder layout.



Figure 1: DH127D Decoder showing Track/Motor, Function wires, PX112 2-pin connector.

To install, follow these steps:

- 1. Isolate the locomotive motor(s) wires from the track feed wires. *Motor connections must be isolated from the track feed or other voltages*. Refer to figure 2 for decoder connections.
- 2. Connect the 9-pin harness wires; RED to RH track power, BLACK to LH track power, ORANGE to the isolated motor + lead (was connected to RH track) and GRAY to isolated motor leads.
- 3. Connect the function wires that are to be used for e.g. lights. Insulate any unused wires so they cannot short to the locomotive frame or track power. Be sure to use current setting resistors with LED lamps. Refer to locomotive documentation for any lamp requirements.
- 4. The 2- pin auxiliary connector allows connection of e.g. a PX112 power extender.

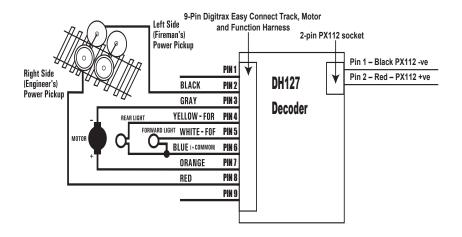
# **Customizing Your Decoder:**

This decoder will initially operate at factory default address 03. For customizing, the following CV table gives the common CVs used by this decoder. Reading CV8 on a programming track, or Digitrax Mainline Operations mode will return CV8 = 129, confirming the decoder is functional.

See the Digitrax web site for more information on programming CVs.

CV#	Control Usage	Range	Default
1	2 Digit Address	1-127	03
i <sup>2</sup>	Vstart	0-255	0
3	Acceleration Rate	0-32	0
4	Deceleration Rate	0-32	0
5	Vhigh	0-255	255
6	Vmid	0-255	128
7	Product ID- Series7 standard mobile decoder		204
8	Manufacturer ID- Digitrax		129
9	Motor Drive frequency in KHz	4-50	0->16
10	Motor feedback voltage trim	32-127	0->64
11	Packet timeout, in seconds. o= Off	0-60	6
17/18	4 Digit Address		0000
19	Consist 2 digit Address	1-127	О
29	Decoder Primary Configuration		6
33-46	Function to Output Lead mapping		
49	FX setting White/FoF lead	0-255	О
50	FX setting Yellow/FoR lead	0-255	О
65	Kick Start	0-255	О
66	Forward Trim	0-255	127
67-94	Speed Table	0-255	
95	Reverse Trim	0-255	127
120	Decoder type- HO 9-pin		33
253	IPL download version		>4

Figure 2: DH127D: connection diagram



# Warranty & Repair

Digitrax gives a one year *Warranty* against manufacturing defects for this product. Visit <u>www.digitrax.com</u> for instructions for tech support and returning items for repair.

Please return warranty items directly to Digitrax - DO NOT return items to place of purchase.

errors and omissions excepted.



Made in the USA

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Need Support? helpdesk.digitrax.com

