DN167n18

Fits Next₁₈ socket locomotives

N Scale

Mobile Decoder

Plug-in Next18 connector

Motor drive at connector capacity 6 FX³ Functions, 200mA capacity

Features:

- 18-Pin Plug for all track, motor and function connections, allows decoder to be moved between different locomotives.
- Series 7 Enhanced Decoder Features.
- Firmware may be user updated using a Digitrax USB equipped Command Station with Sound Loader in decoder IPL mode.
- Digitrax FX³ Functions-Control lights and functions for prototypical lighting effects and on/off control.
- Configurable FX³ 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 18V maximum.

Parts List:

- 1 DN167n18 Mobile Decoder with Next18 plug interface 1 Instruction Sheet
- 1 Histi uction Sheet

Visit <u>www.digitrax.com</u> for the latest Series7 decoder information, technical updates and additional locomotive-specific installation instructions.



Installation Example: Figure 1- DN167n18 in Atlas FA-1

To install in a locomotive with Next18 socket:

- Carefully disassemble the Locomotive to remove the Locomotive shell.
- 2. Gently remove the factory Next18 analog plug from the rear underside of lamp board. Do NOT remove factory lamp board from frame.
- 3. Under the rear lamp board, align the DN167n18 decoder plug upwards with locomotive socket.
- 4. When the Next18 plug and socket are aligned, press the DN167n18 gently with e.g. the flat face of a blade screwdriver until you feel it clip into place. Once the plug is engaged the decoder will stay firmly attached under the lamp board.
- 5. Place the locomotive on a program track and set the e.g. CV1 short 2-digit address, or CV17/18 for a 4-digit address, as needed. Using the program track allows the read back of any CV value, and if successful will confirm the decoder is functional.

Customizing Your Decoder:

The factory default for this decoder initially operates using address o3 for 2-digit short address in CV1, and CV29 with a value of 6.

The following table lists the most commonly used Series7 mobile decoder CV's, and the indicated factory default settings will work in most cases.

To restore the decoder to factory defaults, write CV8 to a value of 8 using the Service Mode programming track, or Mainline Operations Mode write.

See the Digitrax web site for more information on programming Series7 decoder CVs.

CV#	Control Usage	Range	Defaul
1	2 Digit Address	1-127	03
2	Vstart	0-255	О
3	Acceleration Rate	0-32	О
4	Deceleration Rate	0-32	О
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	0->6
17/18	4 Digit Address		0000
19	Consist 2 digit Address	1-127	0
29	Decoder Primary Configuration		6
33-46	Function to Output Lead mapping		
49	FX setting White/FoF lead	0-255	0
50	FX setting Yellow/FoR lead	0-255	0
51	FX setting Green/F1 lead	0-255	0
52	FX setting Violet/F2 lead	0-255	0
65	Kick Start	0-255	0
66	Forward Trim	0-255	127
67-94	Speed Table	0-255	Ī
95	Reverse Trim	0-255	127
113	FX setting F3 lead	0-255	0
114	FX setting F3 lead	0-255	О
120	Decoder type- Next18 interface		05
253	IPL download version		>4

Warranty & Repair

Digitrax gives a one year Warranty against manufacturing defects for this product. All decoders are 100% tested before shipping. Exercise caution during installation to avoid cost of a non-warranty return. Best practice is to bench-test a new decoder functionality as possible before installation. There are no user points to solder wires directly onto this decoder, and doing this will void warranty.

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



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