

Digitrax Decoder Index

DN163K1A



[DN163K1A Instructions](#) [Digitrax Decoder Manual](#)

Physical Size	Board Replacement For Kato N SD70MAC, SD40-2. Kato N C44-9W with shell modification 0.426" x 3.11" w/ LEDs x 0.195" 10.9mm x 79.0mm x 4.7mm	Current Rating	1.5/2.0 Amps	LEDs	2 White or 2 Golden White
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# Functions	6	Function Current Rating	500mA	Function Type	FX³
Prod Date	02/2003	Discontinued	Current	Replaced By	N/A

[FX³ Motor Isolation Protection Note](#)

CV#	Feature	Default	Range	Notes
2 Digit and 4 Digit Addressing				
01	2 Digit Decoder Address	003/x03	001-127	
17	4 Digit Address Hi Byte	000/x00	0128-9983	CV17 & 18 are used together
18	4 Digit Address Lo Byte	000/x00	0128-9983	
29	Configuration Register	006/x06	Table 29	
Configuration Register				
29	Configuration Register	006/x06	Table 29	
	Address Selection, 2 or 4 digit	2 Digit	2 or 4 Digit	
	Normal Direction of Travel (NDOT)	Fwd	Fwd/Rev	
	Speed Step Control	28/128	14 or 28/128	
	Speed Table On/Off	Off	Speed Table On or Off	
	Analog Mode Conversion On/Off	On	On or Off	
LocoMotion™				
Acceleration & Deceleration				
03	Acceleration Rate	000/x00	000/x00 to 031/x1F	128 Steps
04	Deceleration Rate	000/x00	000/x00 to 031/x1F	128 Steps
Three Step Speed Table & Start Voltage				
02	Start Voltage	000/x00	000/x00 to 255/xFF	128 Steps
05	Maximum Voltage	000/x00	000/x00 to 255/xFF	128 Steps 000/x00, 001/x01 & 255/xFF= max voltage at step 28
06	Mid Point Voltage	000/x00	000/x00 to 255/xFF	128 Steps 000/x00 & 001/x01= straight line curve
28 Step Speed Tables-256 step resolution				
65	Kick Start value	000/x00		128 Step Interpolated
66	Forward Trim	000/x00		128 Step Interpolated
67	First Speed Table Entry	000/x00		128 Step Interpolated
68-93	28 Step Speed Table Entries	000/x00		128 Step Interpolated

94	Maximum Speed Table Step	000/x00		128 Step Interpolated
95	Reverse Trim	000/x00		128 Step Interpolated
29	Configuration Register	006/x06	Table 29	Set to enable speed tables
Torque Compensation & Switching Speed				
53	Not Used in FX ³ Decoders			Not Available
54	Torque Compensation Switching Speed	000/x00	Table 54	
Functions				
13	DC Functions ON Not Used in FX ³	13	Automatic	Not Used FX ³
FX² Functions				
49	F0F, forward light effect white	000/x00	FX³ Effects Table	
50	F0R, reverse light effect yellow	000/x00	FX³ Effects Table	
51	F1, Function 1 green	000/x00	FX³ Effects Table	
52	F2, Function 2 violet	000/x00	FX³ Effects Table	
113	F3, Function 3 brown	000/x00	FX³ Effects Table	
114	F4, function 4 white/yellow	000/x00	FX³ Effects Table	
115	F5, Function F5 white/green	000/x00		Not Available
116	F6, Function F6 white/blue	000/x00		Not Available
62	FX Rate and Keep alive adjust	000/x00	000/x00 to 255/xFF	
63	Ditch Light Blink hold time	000/x00	000/x00 to 255/xFF	
Directional Headlights, Transponding, Split Field Motor				
61	Directional Headlight	Directional	Remap F0 Forward & Reverse	Not controlled by CV61 in FX ³ Decoders
	Transponding	Off	Off or On See Table 61	
	Split Field Motor	Off	Off or On See Table 61	
Scaleable Speed Stabilization				
55	Static Compensation	128/x80	000/x00 to 255/xFF	
56	Dynamic Compensation	048/x30	000/x00 to 255/xFF	
57	Speed Stabilizer-Droop	006/x06	000/x00 to 015/x0F	
SuperSonic				
09	Motor Frequency SuperSonic	000/x00	000/x00 to 255/xFF	Default is MAX
Advanced Consisting				
19	Advanced Consist Address	000/x000	000/x00 to 255/xFF	Default is OFF
21	Advanced Consist Function Control Override for F1-F8	000/x000	Table 21-22	
22	Advanced Consist Function Control Override for F0 & F9-F12	000/x000	Table 21-22	
Function Remapping				
33-46	Function Remapping CVs	000/x000	Function Remapping Table	
Decoder Factory Reset				
08	Reset Decoder to Factory Default CV Values	129/x81	Set to 008/x08 to reset all CV Values. Set to 009/x09 to reset all CV Values except 28 step speed table values.	
IDs				
105	User Private ID #1	000/x00		
106	User Private ID #2	000/x00		
07	Version ID	031/x1F	Read Only	
08	Manufacturer ID	129/x81	Not affected by CV reset	

Information provided here is correct to the best of our knowledge.

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