

Digitrax Decoder Index

DZ121



DZ121

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Tech Note [Easy DCC, MRC or Lenz compatibility on some DZ121s](#)

Physical Size	0.36" x 0.575" x 0.16" 9.1mm x 14.6mm x 4.06mm	Current Rating	1.0/1.5 Amps
Interface	Decoder End	Wires	End/Plug
W	Wired	6.9"	175mm Wires

# Functions	2	Function Current Rating	125mA	Function Type	CS
Prod Date	07-09-1999	Discontinued	07-01-2002	Replaced By	DZ143

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	
	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	
	Normal Direction of Travel (NDOT)	Fwd	Fwd/Rev	
	Address Selection, 2 or 4 digit	2 Digit	2 or 4 Digit	
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, Mid, Max 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				
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 Available			Not Available
54	Torque Compensation Switching Speed			Not Available
Functions				
13	DC Functions ON	000/x00	Table 13	
Configurable Strobes				
49	F0F, forward light effect	000/x00	Config Strobe Table	
50	F0R, reverse light effect	000/x00	Config Strobe Table	
61	Enable Configurable Strobe	000/x00	000/x00 off or 001/x01 on	
Standard, FX & FX ³ Functions				
49	F0F, forward light effect white			Not Available
50	F0R, reverse light effect yellow			Not Available
51	F1, Function 1 green			Not Available
52	F2, Function 2 violet			Not Available
53	F3, Function 3 brown			Not Available
54	F4, function 4 white/yellow			Not Available
115	F5, Function F5 white/green			Not Available
116	F6, Function F6 white/blue			Not Available
62	FX Rate and Keep alive adjust			Not Available
63	Ditch Light Blink hold time			Not Available
Directional Headlights, Transponding, Split Field Motor				
61	Directional Headlight	000/x00	Dir or Non-Dir	
	Transponding	Off	Off or On See Table 61	
	Split Field Motor			Not available
Scaleable Speed Stabilization				
55	Static Compensation	000/x00	000/x00 to 255/xFF	
56	Dynamic Compensation	000/x00	000/x00 to 255/xFF	
57	Speed Stabilizer-Droop	000/x00	000/x00 to 015/x0F	
SuperSonic				
09	Motor Frequency SuperSonic			Not available
Advanced Consisting				
19	Advanced Consist Address	000/x00	000/x00 to 255/xFF	Default is OFF
21	Advanced Consist Function Control Override for F1-F8			Not available
22	Advanced Consist Function Control Override for F0 & F9-F12			Not available
Function Remapping				
33-46	Function Remapping CVs			Not available
Decoder Factory Reset				
08	Reset Decoder to Factory Default CV Values			Not available
IDs				
105	User Private ID #1	000/x00	000/x00 to 255/xFF	
106	User Private ID #2	000/x00	000/x00 to 255/xFF	
07	Version ID	EF, AF, E0 or E1	EF, AF, E0, E1	Read Only
08	Manufacturer ID	129/X81	129/x81	

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

Please report any errors or omissions, to info@digitrax.com

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