

DCC Servo Function Decoder

HDM02B

CV	Range	Value	Discription
1	1..99	3	Primary Address
7		3	Manufacturer Version No.
8		13	Manufactured ID
13	0..255	0	Active functions F1 to F8 in analog
	Bit:	0	1
	0	0	F1=off F1=on
	1	0	F2=off F2=on
	2	0	F3=off F3=on
	3	0	F4=off F4=on
	4	0	F5=off F5=on
	5	0	F6=off F6=on
	6	0	F7=off F7=on
	7	0	F8=off F8=on
14	0..63	3	Active functions FL,FR,F9 to F12 in analog
	Bit:	0	1
	0	1	FL=off FL=on
	1	1	FR=off FR=on
	2	0	F9=off F9=on
	3	0	F10=off F10=on
	4	0	F11=off F11=on
	5	0	F12=off F12=on
17	192..231	192	Long address (high byte)
18	0..255	3	Long address (low byte)
29		2	Configuration byte
	Bit:	0	1
	0	0	Normal Direction Reverse Direction
	1	1	14 steps 28/128 steps
	2	0	DCC only DCC and Analog
	3	0	
	4	0	
	5	0	Short address Long address
	6	0	
	7	0	
50	56..98	78	Spacing in 256µs -> usually 20ms (78 * 256)
51	0..10	1	Speed Servo 1
52	100..200	100	Position A Servo 1 (in 10µs)
53	100..200	200	Position B Servo 1 (in 10µs)
54	100..200	125	Position C Servo 1 (in 10µs)
55	100..200	150	Position D Servo 1 (in 10µs)
56	0..10	1	Speed Servo 2
57	100..200	100	Position A Servo 2 (in 10µs)
58	100..200	200	Position B Servo 2 (in 10µs)
59	100..200	125	Position C Servo 2 (in 10µs)
60	100..200	150	Position D Servo 2 (in 10µs)

CV	Discription	Value	Bit:								
			7	6	5=CD2	4=AB2	3=CD1	2=AB1	1=FB	0=FA	
120	F0 (forward FL)	1	0	0	0	0	0	0	0	0	1
121	F0 (backward FR)	2	0	0	0	0	0	0	0	1	0
122	F1 (forward)	4	0	0	0	0	0	0	1	0	0
123	F1 (backward)	4	0	0	0	0	0	0	1	0	0
124	F2 (forward)	16	0	0	0	1	0	0	0	0	0
125	F2 (backward)	16	0	0	0	1	0	0	0	0	0
126	F3 (forward)	0	0	0	0	0	0	0	0	0	0
127	F3 (backward)	0	0	0	0	0	0	0	0	0	0
128	F4 (forward)	0	0	0	0	0	0	0	0	0	0
129	F4 (backward)	0	0	0	0	0	0	0	0	0	0
130	F5 (forward)	0	0	0	0	0	0	0	0	0	0
131	F5 (backward)	0	0	0	0	0	0	0	0	0	0
132	F6 (forward)	0	0	0	0	0	0	0	0	0	0
133	F6 (backward)	0	0	0	0	0	0	0	0	0	0
134	F7 (forward)	0	0	0	0	0	0	0	0	0	0
135	F7 (backward)	0	0	0	0	0	0	0	0	0	0
136	F8 (forward)	0	0	0	0	0	0	0	0	0	0
137	F8 (backward)	0	0	0	0	0	0	0	0	0	0
138	F9 (forward)	0	0	0	0	0	0	0	0	0	0
139	F9 (backward)	0	0	0	0	0	0	0	0	0	0
140	F10 (forward)	0	0	0	0	0	0	0	0	0	0
141	F10 (backward)	0	0	0	0	0	0	0	0	0	0
142	F11 (forward)	0	0	0	0	0	0	0	0	0	0
143	F11 (backward)	0	0	0	0	0	0	0	0	0	0
144	F12 (forward)	0	0	0	0	0	0	0	0	0	0
145	F12 (backward)	0	0	0	0	0	0	0	0	0	0
146	F13 (forward)	0	0	0	0	0	0	0	0	0	0
147	F13 (backward)	0	0	0	0	0	0	0	0	0	0
148	F14 (forward)	0	0	0	0	0	0	0	0	0	0
149	F14 (backward)	0	0	0	0	0	0	0	0	0	0
150	F15 (forward)	0	0	0	0	0	0	0	0	0	0
151	F15 (backward)	0	0	0	0	0	0	0	0	0	0
152	F16 (forward)	0	0	0	0	0	0	0	0	0	0
153	F16 (backward)	0	0	0	0	0	0	0	0	0	0
154	F17 (forward)	0	0	0	0	0	0	0	0	0	0
155	F17 (backward)	0	0	0	0	0	0	0	0	0	0
156	F18 (forward)	0	0	0	0	0	0	0	0	0	0
157	F18 (backward)	0	0	0	0	0	0	0	0	0	0
158	F19 (forward)	0	0	0	0	0	0	0	0	0	0
159	F19 (backward)	0	0	0	0	0	0	0	0	0	0
160	F20 (forward)	0	0	0	0	0	0	0	0	0	0
161	F20 (backward)	0	0	0	0	0	0	0	0	0	0
162	F21 (forward)	0	0	0	0	0	0	0	0	0	0
163	F21 (backward)	0	0	0	0	0	0	0	0	0	0
164	F22 (forward)	0	0	0	0	0	0	0	0	0	0
165	F22 (backward)	0	0	0	0	0	0	0	0	0	0
166	F23 (forward)	0	0	0	0	0	0	0	0	0	0
167	F23 (backward)	0	0	0	0	0	0	0	0	0	0
168	F24 (forward)	0	0	0	0	0	0	0	0	0	0
169	F24 (backward)	0	0	0	0	0	0	0	0	0	0
170	F25 (forward)	0	0	0	0	0	0	0	0	0	0
171	F25 (backward)	0	0	0	0	0	0	0	0	0	0
172	F26 (forward)	0	0	0	0	0	0	0	0	0	0
173	F26 (backward)	0	0	0	0	0	0	0	0	0	0
174	F27 (forward)	0	0	0	0	0	0	0	0	0	0
175	F27 (backward)	0	0	0	0	0	0	0	0	0	0
176	F28 (forward)	0	0	0	0	0	0	0	0	0	0
177	F28 (backward)	0	0	0	0	0	0	0	0	0	0
178	Stop (forward)	0	0	0	0	0	0	0	0	0	0
179	Stop (backward)	0	0	0	0	0	0	0	0	0	0
180	Moving (forward)	0	0	0	0	0	0	0	0	0	0
181	Moving (backward)	0	0	0	0	0	0	0	0	0	0

Locomotives up to address 9999.
Control of the exits selectable between F0 and F28.

Selection between 2 independent exits of function and 2 AnalogServo outputs.

2 ports can individual select as normal or blinking.
Blinking frequents selectable.
Selection of active functions in analogical way.

Max. 500mA for each port with total Max. of 800mA
PCB 14mm x 23mm

Connections:

- J or Black = Digital ground
- K or Red = Digital Power
- FA or White = Port 1
- FB or Yellow = Port 2
- V+ or Blue = common Port power for FA and FB
- FC = Servo 1
- FD = Servo 2



Fx	CV120-CV177		positions
	CDx	Abx	
Fx	0	1	2 positions
Fx	0	1	3 positions
Fy	1	1	
Fx	0	1	4 positions
Fy	1	0	

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18/12/2021

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English