

DCC Function Decoder

HDM01C - HDM01D

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	
33	0..7	0	Effect Selection, output FA 0: Incandescent light 1: Fluorescent 2: Fluorescent broken 3: Fluorescent broken (end of live) 4: Flash A 5: Flash A (other fase) 6: Flash B 7: Flash B (other fase)
34	0..7	0	Effect Selection, output FB See CV33
35	0..7	0	Effect Selection, output FC See CV33
36	0..7	0	Effect Selection, output FD See CV33
37	0..15	15	Maximum brightness output FA
38	0..15	15	Maximum brightness output FB
39	0..15	15	Maximum brightness output FC
40	0..15	15	Maximum brightness output FD
50	0..255	12	Flash A active period (in 8ms)
51	0..255	12	Flash A inactive period (in 8ms)
52	0..255	12	Flash B active period (in 8ms)
53	0..255	12	Flash B inactive period (in 8ms)

CV	Discription	Value	Bit:	7	6	5	4	3=FD	2=FC	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	1	0	0	0
123	F1 (backward)	4	0	0	0	0	0	1	0	0	0
124	F2 (forward)	8	0	0	0	0	1	0	0	0	0
125	F2 (backward)	8	0	0	0	0	1	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
182	DCC A	0	0	0	0	0	0	0	0	0	0
183	DCC B	0	0	0	0	0	0	0	0	0	0

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

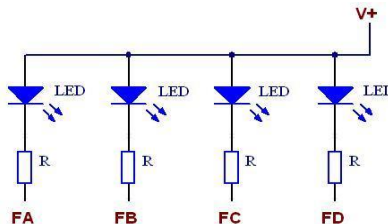
Selection between 4 independent exits of function or inner illumination with fluorescent light effect.

The 4 ports can be selected individually.
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
- FC or Green = Port 3
- FD or Violet = Port 4
- V+ or Blue = common Port power



HDM01C has 4 outputs FA, FB, FC, FD
HDM01D has 3 outputs FA, FB, FC

Hans Deloof
info@locohdl.be
www.locohdl.be

Liability disclaimer:

Use all items that can be bought and installation instructions that can be found on this site at your own risk. They have been developed for personal use, and I find them very useful. That is why I wish to share them with other model railroad hobbyists. All items and procedures have been tested and used on my own model railroad systems without causing any damage, but this does not necessarily imply that all modifications and procedures will work in any and all environments or systems. I cannot take any responsibility when items or procedures are used under different circumstances. Always use your own judgment and common sense!