

Bachmann Spectrum HO EM-1 2-8-8-4

Whistle Selections:

C&S 801	0
B&O 3 Chime	1
USRA 6 Chime	2

Exhaust Chuff:

Heavy Steam Articulated

Air Compressor:

Dual Cross Compound



Please note the CVs listed in bold are only active if the Tsunami Sound module is plugged into the DCC decoder. For more information on the plug in sound module please refer to Bachmann Trains

Configuration Variable Defaults

CV #	Description	Default value	CV #	Description	Default value
1	Primary address Control	03	116	Chuff Rate	165
2	V Start	00	119	Effect Processor Select	00
3	Baseline Acceleration Rate	00	128	Master Volume Control	225
4	Baseline Braking Rate	00	129	Horn Volume Control	255
5	V max	00	130	Bell Volume Control	70
6	V mid	00	131	Exhaust Volume Control	125
7	Manufacturer Version ID	Read Only	132	Air Compressor Volume	48
8	Manufacturer ID	141	133	Dynamo Volume Control	32
10	BEMF Cutout	00	134	Blower Volume	16
11	Packet time Out Value	00	135	Rod Clank	132
12	Alternate Power Source	01	136	Steam Hiss	128
13	Analog Mode Functions	00	137	Coupler Volume Control	64
14	Analog Function enable 1	03	138	Reserved	
15	CV Unlock Code	00	139	Brake Squeal Volume	128
16	CV Lock Code	00	140	Brake Release Volume	64
17	Extended Address	192	141	Snifter Valve Volume	64
18	Extended Address	03	142	Power Reverse	64
19	Consist Address	00	143	Pop off Valve	128
21	Consist Function Group	00	144	Reserved	00
22	Consist Function Group 2	00	145	Blower Draft	128
23	Consist Acceleration Rate	00	153	7 Band Equalizer	00
24	Consist Braking Rate	00	154	62 Hz Cut/ Boost	128
25	Speed Table Register	00	155	125 Hz Cut/ Boost	128
29	Configuration Register 1	06	156	200 Hz Cut/Boost	128
30	Error information		157	500 HZ Cut/Boost	128
	Alternate mode selection	04	158	1K Hz Cut/Boost	128
33	FL (F) Output Location	01	159	2K Hz Cut/Boost	128
34	FL (R) Output Location	03	160	4KHz Cut/ Boost	128
35	F1 Output Location	08	161	Reverb	00
36	F2 Output Location	04	162	Reverb Output Level	128
37	F3 Output Location	16	163	Reverb Delay	255
38	F4 Output Location	32	164	Reverb Gain	64
39	F5 Output Location	00	169	Whistle Reverb	00
40	F6 Output Location	00	170	Bell Reverb	00
41	F7 Output Location	00	171	Steam Exhaust Reverb	00
42	F8 Output Location	00	172	Air Compressor Reverb	00
43	F9 Output Location	01	173	Reserved	
44	F10 Output Location	04	174	Reserved	
45	F11 Output Location	128	175	Reserved	
46	F12 Output Location	16	176	Reserved	
47	Analog Whistle Control	00	193	Bell On voltage	24
49	Hyperlight F0 F	142	194	Bell Off Voltage	35
50	Hyperlight F0 R	129	195	Crossing Whistle Sensitivity	04
51	Hyperlight F5	00	196	Brake Squeal Sensitivity	03
52	Hyperlight F6	00	197	Analog Auto Sound	00
59	Flash Rate	03	198	DCC Auto Sound	00
60	Crossing Hold Time	04	201	Probability Fireman Fred Shovel	64
61	F11 Braking Rate	00	202	Probability Fred's Wrench	32
62	Transponding Control	00	203	Probability Fred's Grease Gun	16
63	Analog Mode Motor Start Volt.	20	204	Probability Fred's Oil Can	32
64	Analog Mode Max Volt.	180	205	Probability Fred's Injector	64
66	Forward Trim	128	206	Probability Fred's Blower	64
67-94	Speed Table	Varies	207	Probability Loco Pop Off	64
95	Reverse Trim	128	209	Motor KP Coefficient	25
105	User Identifier #1	---	210	Motor KI Coefficient	20
106	User Identifier #2	---	212	BEMF Feedback Intensity	255
112	Sound Configuration	00	213	BEMF Sample Period	15
113	Quiet Mode Timeout Period	00	214	BEMF Window Size	15
114	Bell Ring Rate	06	216	BEMF Reference Voltage	140
115	Whistle Selection	00			