Athearn RTR SD38 HO Scale (2025 Releases)

Factory Equipped with Econami™

Default Values



P.N.	Description	P.N.	Description
ATH-1438	HO EMD SD38, MR #36	**ATH-1440**	HO EMD SD38, MR #38
ATH-1439	HO EMD SD38, MR #37		

Horn Selections	CV120 Value	Horn Selections	CV 120 Value
Nathan K3LA	0	Nathan P5A	8
Nathan K3L	1	Leslie A125	9
Nathan K5LA (1)	2	Leslie RS3L	10
Nathan K5LA)	3	Leslie S2M	11
Nathan M3	4	Leslie S3L	12
Nathan M5	5	Leslie S5T	13
Nathan P3	6	Wabco E2	14
Nathan P5 Early	7	Hancock 4700 Air Whistle	15

Bell Selections	CV 122 Value	Bell Selections	CV 122 Value
EMD #1	**0**-3	EMD #4	12-15
EMD #2	4-7	Canadian Brass Bell	16-19
EMD #3	8-11	Western-Cullen Hayes Gong Bell	20-23

Prime Mover Selections	CV 123 Value	Prime Mover Selections	CV 123 Value
EMD 645 Non-Turbo	0	EMD 645 2nd Generation Turbo	2
EMD 645 12 Cylinder Turbo	1	EMD 645 16 Cylinder 2nd Generation Turbo EFI	3

Air Compressor Selections	CV 124 Value	Air Compressor Selections	CV 124 Value
Engine Driven	0	EMD Shaft Driven	1

Default Function Assignments					
F0	Headlight/Backup Light	F5	FX3: Single-Flash Strobe 1	F13	Couple/Uncouple
F1	Bell	F6	FX4: Single-Flash Strobe 2, Phase B	F14	Half-Speed & Momentum Override
F2	Horn	F7	Dimmer	F23	“All Aboard!”/Coach Doors
F3	Short Horn	F8	Mute	F26	RPM+
F4	Dynamic Brakes	F11	Brake Set/Release	F27	RPM-

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Configuration Variable Default Values

CV	Description	Value	CV	Description	Value	CV	Description	Value
13	Analog Mode Functions 1	48	57	Forward Directional Control	13	226	62Hz Cut/Boost	0
21	Consist Function Active	136	58	Reverse Directional Control	14	227	125Hz Cut/Boost	0
22	Consist FL Cuntion Active	60	59	Lighting Flash Rate	5	228	250Hz Cut/Boost	150
25	Speed Table Select	16	106	User Identifier 2	6	229	500Hz Cut/Boost	175
29	Configuration Data 1	6	114	Engine Exhaust Control	103	230	1kHz Cut/Boost	100
*37	F3 Output Location	16	195	Coach Door Counter	0	231	2kHz Cut/Boost	150
49	Headlight Diesel-light	143	197	Analog Auto Sound Enable	4	232	4kHz Cut/Boost	150
50	Backup Diesel-light	143	200	Poppet Valve Rate	90	1.261	Physical Effect 5	255
51	FX3: Single-Flash Strobe 1	133	218	Analog Motor Start Offset	25	1.262	Physical Effect 6	255
52	FX4: Single-Flash Strobe 2, B	185	225	EQ Control Register	7	1.278	Grade Crossing Logical Effect 5	3

Note: *CV 37: The short horn function can be changed to a grade crossing horn sequence by changing CV 37 to 0. If you would like to re-map the short horn function to another key using SoundTraxx' Flex-Map™ function mapping, CV 37 must also be set to 0 to prevent the short horn function from being activated with function key 3.

Speed Table Default Values

CV	Value	CV	Value	CV	Value	CV	Value	CV	Value	CV	Value
*67	11	72	60	77	109	82	154	87	182	92	210
68	21	73	70	78	120	83	159	88	187	93	215
69	30	74	80	79	130	84	166	89	192	94	220
70	40	75	89	80	140	85	171	90	198		
71	50	76	98	81	152	86	177	91	205		

Default Volume, Alternate Mixer, and Reverb Mixer Settings

CV	Sound Effect	Standard Volume	CV	Sound Effect	Standard Volume
128	Master Volume	150	137	Coupler	128
129	Horn	75	139	Brake Squeal	100
130	Bell	40	140	Brake Release	70
131	Prime Mover	135	143	Poppet Valve	16
132	Air Compressor	30	148	Emergency Stop	70
133	Dynamic Brakes	125	149	Glad Hand	150
134	Fan	75	150	“All Aboard!”/Doors	192

If a CV or a sound selection is not listed within this documentation, the default value or selection choices match those of aftermarket SoundTraxx products. For more information about unlisted items, please refer to the Tsunami2 product documentation found on our website.