

CV#	Name	Description	Usual Values	Default Value
CV1	Primary Address	DCC Address	1-127	3
CV2	V Start	Motor voltage at step 1	0-255	1
CV3	Acceleration Delay	Simulates heavy train	0-255	5
CV4	Deceleration delay	Simulates heavy train	0-255	5
CV5	V Max	Motor Voltage at top speed Step	0-255	240
CV6	V Mid	Motor voltage at middle speed step	0-255	50
CV7	Manufacturer Version	Read only software version		Varies
CV8	NMRA manufacturers ID Number	Setting CV8 to 8 resets everything to factory settings.	38	38
CV10	Back EMF Cutout	Set to 0 to turn off back EMF speed control. Set to 1 to turn on.	0,1	1
CV15	Unlock ID Code	Unlocked when CV15=CV16	0,1,2,3	0
CV16	Lock ID Number	Lock	0,1,2,3	0
CV17	Extended Address MSB	Valid when CV29 bit 5 =1 see tech manual	0-10239	Engine 128
CV18	Extended Address LSB	Valid when CV29 bit 5 =1 see tech manual	0-10239	Engine 128
CV19	Consist Address	See Page 22		0
CV21	Consist Functions Type 0	see tech manual		255
CV22	Consist Functions Type 1	see tech manual		255
CV29	Configuration Bits	see tech manual		6
CV33-61	Function Key Assignment	selects which function is activated by keys F0-F28		See Pgs. 18-20
CV67-94	Speed Table Entries	See Diesel Tech. Ref. Manual Online		
CV133	Sound Unit Master Volume	Sets The Overall Volume of the Locomotive	0-255	128
CV135	Whistle Volume	higher number is louder.	0-255	128
CV136	Bell Volume	higher number is louder.	0-255	128
CV137	Turbine Volume	higher number is louder.	0-255	128
CV138	Whistle2 Volume	higher number is louder.	0-255	128
CV139	Coupler Slack Volume	higher number is louder.	0-255	128
CV140	Coupler Volume	higher number is louder.	0-255	128
CV141	Uncouple Volume	higher number is louder.	0-255	128
CV142	Wheel Flange Volume	higher number is louder.	0-255	128
CV143	Air Pump Volume	higher number is louder.	0-255	128
CV144	Coal Auger Volume	higher number is louder.	0-255	128
CV145	Additional Turbine Sound FX Volume	higher number is louder.	0-255	128
CV146	Brake Set Volume	higher number is louder.	0-255	128
CV147	Brake Release Volume	higher number is louder.	0-255	128
CV148	Steam Filling Air Lines Volume	higher number is louder.	0-255	128
CV150	Steam Blow Down Volume	higher number is louder.	0-255	128
CV151	Brake Squeal Volume	higher number is louder.	0-255	128
CV152	Water Fill Volume	higher number is louder.	0-255	128
CV153	Passenger/Freight Volume	higher number is louder.	0-255	128
CV155	Maintenance/Chatter Volume	higher number is louder.	0-255	128
CV156	City Chatter/Agricultural Chatter/Industrial/Lumber Volume	higher number is louder.	0-255	128
CV180	Bell Ring Interval	Increasing increases the time between bell rings	Varies	128
CV185	DCC Brake Control	Increasing decreases brake sensitivity	0-255	20
CV208	Cab Light Throttle Stop	The decoder's Cab Light is turned off at this value. A throttle stop below this value will turn on the Cab Light. Setting this value to 255 turns off the Cab Light and setting this value to zero turns on the Cab Light	0-255	3

CV209	DCC Brake Set Throttle Stop	Brake is set below this throttle level.	0-128	0
CV210	DCC Brake Release Throttle Stop	Brake is released when speed exceeds this throttle Level.	0-128	1
CV214	Rolling Thunder Sub-Woofer Volume	higher number is louder.	0-255	128
CV223	Bell Select	Selects one of 2 bells.	0,1	0
CV224	Whistle Select	Selects one of 3 Whistles	0,1,2	0
CV225	Control One	see diesel tech manual		127
CV226	Control Two	see diesel tech manual		0
CV227	Control Three	Controls FWD/REV Warning, Brake Squeal, Brake Set/Release	Set to 0 for automatic warning toots disabled 4 for enabled	0
CV229	DCC Extended Lighting Consist	see diesel tech ref manual		255
CV230	Easy Consist	Set consist position as front, middle or rear locomotive. Rear locomotive is facing rear. 0=single locomotive 1=front locomotive 2=middle eng. 3=rear locomotive	0-3	0
CV231	Light Dimmer	Decrease to dim headlight and rear light.	4-100	96
CV238	Macro Recorder Control	Set to 64 plus the number of repeats, up to 14. 65= 1 repeat, 66=2 repeat, etc. Set to 79 to repeat Indefinitely.	65-79	79
CV239	Macro Playback Loop Adjust	Increasing by 1 shortens the playback loop by 0.1 second.	0-255	0
CV240	Random Sound Generator Timer Low	Increasing This Value Decreases How Often Random Sounds Occur (must be smaller than CV241)	1-255	15
CV241	Random Sound Generator Timer High	Decreasing This Value Increases How Often Random Sounds Occur (must be larger than CV240)	1-255	35
CV245	General System Controls One	Enable/Disable Alternate Whistle Ending and Motor Startup Delay	16= Both Startup Delay and Whistle Alt. Ending Disabled 17= Alt. horn ending Enabled 18=Start Delay Enabled 19=Both Enabled	17
CV246	General System Controls Two	Motor Loading Enabled/Disabled, Smoke Unit On/Off by Default (see diesel tech. Ref. Manual)	0-255	130
CV248	Motor Startup Delay	Delays motor start to let engine start up sounds finish before moving. Each number is 0.1 seconds.	0-255	60