Athearn Genesis SD90MAC-H / SD89MAC

Sound Decoder Function Assignments — 2025 Production Run

Function Key	Default Effect	Function Key	Default Effect
F0	Headlight	F15	Hand Brake
F1	Bell	F16	HEP Mode On/Off
F2	Horn	F17	Fuel Loading Sequence
F3	Short Horn [1]	F18	General Service Sequence
F4	Dynamic Brakes [2] or Straight to Idle [3]	F19	Straight to Idle
F5	Ditch lights (if equiped) [4]	F20	Steam Generator or Aux. HEP Generator On/Off
F6	Number Boards	F21	(Not Used)
F7	Dimmer / Cab Chatter	F22	(Not Used)
F8	Mute	F23	"All Aboard" /Coach Doors (if equipped)
F9	Alternate Mixer (Half Volume)	F24	Aux Lighting Effect (if equipped)
F10	Straight-to-8 & Sander Valve	F25	Aux Lighting Effect (if equipped)
F11	Brake Set/Release [5]	F26	Engine RPM Notch Up
F12	Brake Select	F27	Engine RPM Notch Down
F13	Couple/Uncouple	F28	(Not Used)
F14	Half Speed & Momentum Override	Emergency Stop	Red Emergency Mars Light (if equipped)

1 - 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's 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.

2 - On locomotives with Dynamic Brakes.

3 - On locomotives without Dynamic Brakes.

4 - If your locomotive's prototype is equipped with flashing ditch lights, they will flash when the horn button (F2) is depressed.

5 - Functional braking is not enabled by default; to enable, see "Enabling Tsunami2 Braking Rates on your Locomotive" in the manual that came with your model.