Athearn SD40-2

Sound Decoder Function Assignments 2025 Production Run

Function Key	Default Effect	Function Key	Default Effect
F0	Headlight/backup Light	F15	(Not Used)
F1	Bell	F16	(Not Used)
F2	Horn	F17	(Not Used)
F3	Short Horn [1]	F18	(Not Used)
F4	Dynamic Brakes [2] or Straight to Idle [3]	F19	(Not Used)
F5	Lighting Effect 1 [4]	F20	(Not Used)
F6	Lighting Effect 2 [4]	F21	(Not Used)
F7	Dimmer	F22	(Not Used)
F8	Mute	F23	"All Aboard" /Coach Doors (if equipped)
F9	(Not Used)	F24	(Not Used)
F10	(Not Used)	F25	(Not Used)
F11	Brake Set/Release [3]	F26	Engine RPM Notch Up
F12	(Not Used)	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 equiped with flashing ditch lights, they will flash when the horn button (F2) is depressed.

5 - Functional braking is not enabled by default