



1302 Jordan Ave. P.O. Box 322 Montoursville PA 17754 1-570-368-2379

WWW.BOWSER-TRAINS.COM

Bowser Executive Line All Electric PCC Streetcar (ESU# 93467)

Quick Start Guide

Please go to www.LokSound.com for a complete user manual

Operation/Sound Explanations

The Bowser All Electric PCC Street Car Sound Decoder is set up differently than most locomotives you may have used. This decoder has been made to have the model sound and operate just like the real car under normal operating conditions.

DCC Function Summary For Bowser All-Electric PCC

Your Bowser ESU-Sound-Equipped model PCC car is equipped with the following sounds and effects, most of which are self-explanatory.

Functions 0, 3, 4 and 5 are "latching" functions. This means that one button depression turns the effect on and the next button depression turns the effect off.

Function 2 is a momentary function in some command systems. Depress the button for as long as you wish to hear the resilient wheel groan. In other command systems, it is also a latching function similar to the lights above.

Function 6 is the motor-generator (MG) set, which on the prototype car must be running or the car will not operate. When shutting down the car and the MG set sound is running, depress the function 6 button and the MG set will go into a shutdown mode. When starting up the car, depress the function 6 button and the MG set will go into a start-up mode. Of course, modelers may decide to leave the sound on at all times.

Functions 7 and 9 are automatic start-stop sequences controlled by "latching" functions. In both cases when the appropriate button is depressed, the car will decelerate to a stop and the brake lights will illuminate. When the appropriate button is depressed, the brake lights will go out and the car will begin acceleration to the original speed. When Button 7, Passenger Stop, is activated, first sound heard is the Passenger Stop Request signal; the car decelerates to a stop and then there is the sound of the doors opening. When the button is depressed again, the brake lights go out; the sound of the doors closing is heard; there are the mandatory two gongs and the car resumes acceleration. Function 9, Normal Vehicle Stop, has no sounds at all connected with it. Function 8 When first put on the track the Sound is off. Turning on F8 will allow ALL Sound functions to play. The individual sounds of doors opening and closing are available at Function 10 and the Passenger Stop Request Signal is available at Function 11. They are both "latching" functions.

Analog DC Operation

To get the full benefits of the ESU LokSound digital sound decoder installed in the car we recommend that you use DCC. But, we understand that DCC is not for everyone. For those wishing to use the Bowser PCC Streetcar on DC layouts there is no problem. You will still hear the car accelerate and move across your layout. Please keep in mind that the starting voltage is higher on a DC layout for items containing a DCC sound decoder than those items designed for DC operation.

Recommended DCC only decoder 21MTC Decoder

Technical data LokSound Select Decoder

Operational modes:

NMRA/DCC with 14, 28, 128 speed steps
2-digit (short) or 4-digit (long) addresses
Analog DC (Dual mode, de-selectable)
Automatic recognition of operational mode
Supports ALL NMRA programming modes

Power:

Runs all DC and coreless motors
Silent, safe 31,25 kHz pulse width frequency BEMF
Motor output overload protected

Function outputs:

6 outputs
250 mA load per output
Outputs short-circuit protected

Sound:

Audio amplifier: 2W @40ohms load
Speaker impedance 4-8 Ohms
Memory Capacity 32MBit
8 Sound Channels, All playable at once!
Over 20 different sounds!

Dimensions:

1.02 x 0.62 x 0.18 inch (25.5 x 15.5 x 4.5 mm)

Default Function Assignments

Function key	Effect
F0	Headlights/Taillights
F1	Gong Bell
F2	Playable Curve Squeal
F3	Subway Light
F4	Emergency Beacon
F5	Interior Lights
F6	Turn off MG Set
F7	Passenger Stop
F8	Sound On/Off (MUTE)
F9	Normal Stop
F10	Doors
F11	Stop Request

Decoder-Reset

Write value 08 into CV 08.

From time to time you may have the need to reset the decoder in your new Locomotive. Setting CV08 to a value of 08 will accomplish this. Be aware though that all user settings will be set back to factory defaults with this process. Your address will now become 03.

Diesel sound Volume Control table

Function (Diesel)	CV	Range	Default
Master volume control	63	0 - 192	180
Drive Sound(MG Set) Volume Control	259	0 - 128	32
Bell Volume Control	283	0 - 128	128
Curve Squeal Volume Control	291	0 - 128	128
Passenger Stop Volume Control	299	0 - 128	128
Doors Sound Volume Control	307	0 - 128	128
Stop Request Volume Control	315	0 - 128	128

A full PDF Manual can be found at www.LokSound.com refer to the LokSound Select Manual. As a Reference NO BOOSTER is needed for programming.