Bowser Executive Line Sound Equipped DS4-4-1000
Quick Start Guide
Please go to *www.LokSound.com* for a complete user manual

You have just purchased a Top of the Line Locomotive with one of the most State of Art Digital Sound Decoders on the Market. With nothing more than your Digital Command Station you have the option of 16 separate horns, 2 bells, and 2 brakesqueals. All changeable by one CV. No booster is needed! Each individual sound has a separate volume control, and up to 8 sounds can be played at one time! Not only that, but as new sounds become available and firmware gets updated, you can at anytime, hook up to our famous LokProgrammer and update your decoder! Along with outstanding sound, ALL LokSound decoders give you the benefit of the Industry Leading ESU Motor control. You'll see the difference instantly as the engine smoothly accelerates across your pike! Don't forget you also have the option to use one of our MANY lighting effects on any one of your 6(!) function outputs!

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 @4Ohms load
Speaker impendance 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	Directional Headlights
F1	Bell
F2	Playable Airhorn
F3	Coupler Clank
F4	Warm Start (Cold Start if F4 is off)
F5	Short Air Let Off
F6	Spitter Valve
F7	Switching Mode
F8	Prime Mover Sound On/Off (MUTE)
F9	Manual Notching Up
F10	Manual Notching Down
F11	Brake Set/Release
F12	Dimmer (Headlights)
F13	Compressor
F14	Sanding Valve

Diesel Prime Movers

Prime Mover name	CV 48 value
There is only one Baldwin DS4-4-1000 Prime Mover sound on this decoder. Please use a Value of 0 for this part of the CV48 calculation.	

Diesel Decoders Airhorns — 16 to choose from!

Airhorn name	CV 48 value	
Airhorn Nathan K5LA	0	
Airhorn Nathan K3L	1	
Airhorn Nathan M5	2	
Airhorn Nathan P3	3	
Airhorn Nathan P5A	4	
Airhorn Baldwin Single Chime	5	5	Default
Airhorn Leslie A200	6	
Airhorn Leslie S3L	7	
Airhorn Leslie S5T	8	
Airhorn Leslie M3	9	
Airhorn Wabco A2	10	
Airhorn Wabco E2	11	
Airhorn Holden S3LR	12	
Airhorn Nathan Holden M3H	13	
Airhorn Fairbanks Morse Trainmaster	14	
Airhorn Nathan single Chime	15	

Diesel Decoders Bell Types — 2 to choose from!

Bell Type	CV 48 value	
Slow Bell	0	0	Default
Fast Bell	64	

Diesel Decoders Brake Squeals — 2 to choose from!

Brake Squeal Version	CV 48 value	
Brake Squeal Version #1	0	0	Default
Brake Squeal Version #2	128	

Extended Addressing

Most Command Stations will give you the option to enter a 4 Digit Extended Address. Please refer to your Command Station's Manual for guidance as to how to do this. If your command Station does not have this feature a full list of values and instructions are available on line at www.loksound.com

Start Delay

While pulling a train a Prototype Locomotive will not move until the Prime mover has worked up enough power to provide the proper amount of electricity to the traction motors. For this reason when the LokSound Select sound is idling and you turn up the throttle, the locomotives begins to move only after the Diesel engine has reached notch1. Although this behavior is very prototypical, one might not like it because it causes some delay. You can disable this startup delay by simply Changing CV124 to a value of 0. This will cause the LokSound Select decoder to immediately start moving when the throttle is turned up. However, the start up sound will not be prototypically synced with the motion anymore.

Sound on/Sound Off (F8 Operation)

You will notice quickly that F8 button will work differently than what you may be used to. This is done for two reasons. First so that you can hear both the start and Shut down sequences without any CV changes. Also so that upon power up the drain on your command station is not as great. Sound decoders draw quite a bit of power upon start up. Having the sound off initially when the layout is powered up is a much more efficient way on doing things. This can save your command station from an early demise! You may be used to other manufacturers who do this backwards. If you prefer you can easily reverse this feature. Simply Change CV32 to 2, then CV403 to 32. Please note also that F8 only controls the prime mover sounds. On a real engine, as long as there is air, the bell and the horn will work when the prime mover is off!

Diesel sound Volume Control table

Function (Diesel)	CV	Range	Default
Master volume control	63	0 - 192	192
Diesel Volume Control	259	0 - 128	128
Horn Volume Control	275	0 - 128	128
Bell Volume Control	283	0 - 128	99
Coupler Sound Volume Control	291	0 - 128	128
Turbo Volume Control	419	0 - 128	128
Air Compressor Volume Control	307	0 - 128	77
Brake Set / Brake Release	347	0 - 128	128
Sanding valve Volume Control	355	0 - 128	128
Short Air Let Off Volume Control	363	0 - 128	128
Spitter Valve Volume Control	371	0 - 128	128
Random sounds	451	0 - 128	128
BE SURE CV 32 IS SET TO 1 BEFORE CHANGING CVs 257-511			

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 with accomplish this. Be aware though that all user settings will be set back to factory defaults with this process.

Sound Choices

This Factory equipped LokSound Digital Sound Decoder was built specifically to be correct for the Prototype of the model. You may find however that you would like different Sounds. All sounds can be changed with CV48 and your Command Station. CV 48 is calculated by adding the Prime mover, the horn, the Bell, and the brake squeal selection you would like in your model. By adding your choices from the charts above you will arrive at the value to put in CV 48.

Default Example:
Prime Mover = 0
Airhorn = 5
Bell = 0
Brake Squel = 0

Total = 5
CV48 Value = 5

A full PDF Manual can be found at www.LokSound.com
Please refer to the LokSound Select Manual.

As a Reference NO BOOSTER is needed for programming.