



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

WWW.BOWSER-TRAINS.COM

## Bowser Sound Equipped F-Units Quick Start Guide

Please go to [www.LokSound.com](http://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 over 20 sound effects, 16 separate horns, 2 bells, 2 brake squeals, and 2 prime movers! 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 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	Directional Headlights
F1	Bell
F2	Playable Airhorn
F3	Coupler Clank
F4	Dynamic Brake
F5	AUX3 output (Preset to Mars Light)
F6	AUX1+AUX2
F7	Switching Mode
F8	Prime Mover Sound On/Off (MUTE)
F9	Manual Notching Up
F10	Manual Notching Down
F11	Radiator (Fan)
F12	Dimmer (Headlights)
F13	AUX4 Function Output
F14	Detector Sounds
F15	Cab Radio Communication
F16	Rail Clank (only active when F8 is "on")
F17	Brake Set/Release
F18	Sanding Valve
F19	Short Air let off
F20	Compressor
F21	Pop Valve

### Diesel sound Volume Control table

Function (Diesel)	CV	Range	Default
Master volume control	63	0 - 192	180
Diesel Volume Control	259	0 - 128	99
Horn Volume Control	275	0 - 128	128
Bell Volume Control	283	0 - 128	128
Coupler Sound Volume Control	291	0 - 128	128
Dynamic brake Volume Control	299	0 - 128	128
Air Compressor Volume Control	307	0 - 128	128
Radiator Fan Volume Control	315	0 - 128	128
Detector Sound Volume Control	323	0 - 128	128
Crossing Comm Sound Volume Control	331	0 - 128	128
Railclank Volume Control	339	0 - 128	64
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
Short Airhorn 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.

### 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. **NO BOOSTER IS NEEDED**

### Quick Start Guide CV Reference

Most Command Stations will give you the option to enter a 4 Digit Extend 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](http://www.loksound.com)

CV	Name	Description	Range	Default
1	Short address	Short (2-digit) Address of engine	1 - 127	3
2	Start Voltage	Sets the minimum speed of the engine	1 - 255	3
3	Acceleration Rate	This value multiplied by 0.25 is the time in seconds from stop to maximum speed.	0 - 255	16
4	Braking Rate	This value multiplied by 0.25 is the time in seconds from maximum speed to stop.	0 - 255	32
5	Maximum Speed	Maximum Speed of the engine	1 - 64	64
6	Medium Speed	Medium Speed of the engine	1 - 64	64
17	Extended Address			
18				
29	Configuration Register	Add the desired values for each function to get the needed value of CV29	0 - 255	6
		Function	Value	
		Reverse the direction of travel (Forward becomes Reverse)	1	
		Speed steps 0=14; speed steps 2=28/128 speed steps	2	
		Analog Mode Enabled 0=disable; 4=enable	4	
		Address Select: 0=1-127 Primary address; 32=128-9999 Extended address	32	
32	Index Register	Index Register for access of CVs 257-511, CV32 should be 0 for changing CVs 1-256	0,1,2,3	0
48	Master Sound Select	Selects the Prime Mover Sound 0,16,32,64 - Horn Sound 0-15 - Bell Sound 0, 64 - Brake Squeal Sound 0,128 - Add the relative numbers from each sound to get total value for CV 48	0 - 255	3
63	Master Volume Control	Master Volume Control	0 - 192	180
124	Start-Up Delay	Prototype engines start moving when the prime movers reaches "notch one" many times this is difficult for model trains because of non-sound decoders or other brands of sound decoders without this realistic feature. This delay can be adjusted or turned off using CV 124, Bit 3.		4
		Function	Value	
		Bit 0 = Reserved	0	
		Bit 2 = Enable decoder lock	2	
		Bit 3 = Start-up delay	4	

See full manual online at [www.loksound.com](http://www.loksound.com)

### Diesel Decoders Airhorns 16 to choose from!

Airhorn name	CV 48 value
Airhorn Nathan KSLA	0
Airhorn Nathan K3	1
Airhorn Nathan M5	2
Airhorn Nathan P3	3
Airhorn Nathan P5A	4
Airhorn Leslie S-2B	5
Airhorn Leslie A200	6
Airhorn Leslie S3	7
Airhorn Leslie S5	8
Airhorn Leslie M3	9
Airhorn Wabco A2	10
Airhorn Wabco E2	11
Airhorn Holden KSH	12
Airhorn Nathan Holden M3H	13
Airhorn Fairbanks Morse Trainmaster	14
Airhorn Baldwin switcher 3-chime	15

### Diesel Decoders Bell Types 2 to choose from!

Bell Type	CV 48 value
Slow Bell	0
Fast Bell	64

### Diesel Decoders Brake Squeals 2 to choose from!

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

Add Totals from above for total Value in CV 48 3+0+0=3 Default