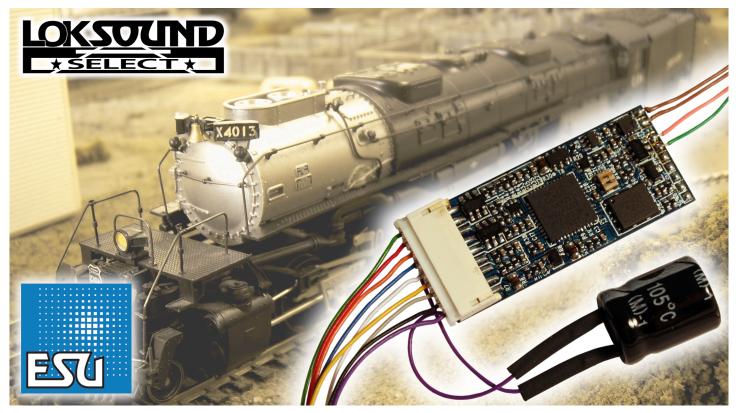
LokSound Select - Make it sound!





We are proud to present you the brand-new LokSound Select decoder. The LokSound Select decoder was designed with all our past experience, while considering many suggestions of ESU users.

The LokSound Select is a versatile DCC & DC "Dual Mode" decoder integrating a full-featured, 8 channel sound system, six lighting outputs and a 1.1A motor controller. While the LokSound Select only measures 1.41" x 0.61" (36mm x 15.5mm), due to its unique thermal design, it does (like all genuine LokSound decoders) not need any heat sinks.

We ship the LokSound Select with a removable, 9 pin standard harness with 7.5" of length. This allows flexible installation in older brass and pre DCC-ready models. An optional 8 pin NMRA connector can be alternatively wired to the decoder's JST connector to make it a "plug & play" decoder. For LokSound Select, we offer a comprehensive range of new high-power speakers, rated 4 Ohms.

Operational modes

The LokSound Select can be used on conventional "analog" layouts and controlled with a DC power pack, but to benefit from all its features, we highly recommend DCC operation.

The LokSound Select follows all NMRA DCC standards and recommended practices. It can be used with 14, 28 or 128 speed steps, supports two digit (7 bit addresses) as well as "4-digit" addressing. Up to 29 function keys are supported. The LokSound Select can change between DC and DCC operation at any time "on the fly".

Of course, the LokSound Select supports all DCC-programming modes including Programming on the Main Track ("POM"). Because of its unique low-power design, the LokSound Select can be programmed on the programming track of all popular DCC systems. No programming track boosters or other circuitry will be needed.

By the use of our LokSound Programmer, programming can be even more comfortable by using your computer to adjust the many CVs and settings.

Sound

The LokSound Select comes with a 32 MBit memory chip. The sounds stored therein are our own recordings which were made by using the latest recording equipment and have been digitally re-mastered for the best audio possible. The sounds are transferred to a class "D" audio amplifier via eight polyphonic sound channels. LokSound Select decoders offer the following unique features:

- Multiple whistle and horns: Each LokSound Select offers many whistle & horns. By just changing one CV, you can select your favourite one. This allows an easier adjustment to your model.
- Playable whistle: The LokSound Select supports a very fast responding whistle function. By just pressing your throttle's button, you can really blow the whistle like the real engineer.
- 8 channel sound: The LokSound Select can playback up to 8 sounds at the same time. This will result in the most realistic experience available today.
- Synchronized brake squeal: The LokSound Select will synchronize the brake squeal sound with the real movement of the locomotive. No longer will stopped trains have the brake sound still on!
- Manual notching: The diesel speed steps can be either manually controlled by function keys or automatically based on the speed.
- Individual volume control: The volume of all sound effects can be adjusted individually.

Steam decoders can produce over 20 sound effects, including the bell, air pump, exhaust chuff, coupler, steam release, cylinder cocks, brake release, side rod clank, blower, injector, Fireman Fred and many more. Synchronizing the steam chuff rate by using two CVs only virtually eliminates the need for a cam, but can of course be connected.

Diesel decoders can produce over 20 sound effects, including the engine start-up and shutdown, prime mover sounds through all eight notches, bell, air horn, air compressor, dynamic brakes, fans, brake squeals, coupling and uncoupling, detector sounds, rail clank and many more.

Customize your sounds

Unlike all other manufacturers, LokSound Select offers you two options to customize your engine. The most simple is by using one (!) CV. You can select the prime mover sound, the desired whistle or horn and the bell. Each LokSound Select offers various options on that (see table below).

However, if you are still unsatisfied with the result, you may at any time use the famous LokSound Programmer to download new sounds into the LokSound Select. We offer numerous "ready-made" sound packages for easy downloading.



Superior motor control

ESU offers load compensation (using B-EMF) since 1999. While other manufacturers seem only to focus on the sound options, the LokSound Select offers the 5th generation of motor control resulting in a smooth and precise locomotive operation. We at ESU believe that good motor control is mandatory for model trains: Even the best sound is worthless if the locomotive running is not smooth!

Regardless if you are using coreless or conventional DC motors, the Lok-Sound Select's unique auto-detection function can measure the characteristics and adjust the internal settings. There is no need to fiddle around with many CVs to adjust to the engine. Due to Dynamic Drive Control (DDC) you can limit the influence of the load control and operate really smoothly around the depot and over turnouts, while on the main, when going uphill the engine prototypically slows down.

Shining lighting effects

Each LokSound Select include 6 (!) outputs with 0.25A current each that can be allocated individually to a light effect, which simulates the light patterns of many popular warning beacons. Besides D312 Rotary beacon, strobe and alternate flashing, there is a firebox flicker, smart flicker, Mars light, Gyralight, Ditch lights (two types), Oscillating Headlights, Stratolight and many more.

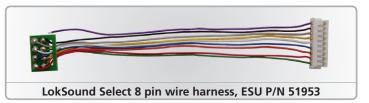
The Rule 17 dimmable headlight can be either controlled automatically or by function button. A LED brightness correction feature now also allows using LEDs for lighting effects. This is an important feature since LEDs do behave different than bulbs.

Safeguard

All function outputs and the motor connection are protected against overload and short-circuit. We want you to enjoy your LokSound decoder as long as possible.

Built-in future

LokSound Select decoders are firmware-updatable. This means, the internal decoder software can be replaced by new versions, if necessary. For this, you only need an ESU LokSound Programmer and a PC.



Decoder comparsion chart

	LokSound Select	LokSound V3.5	OSI® Quantum Pavalution® "II"	Soundtraxx Tsunami® TSU®-1000
			, ,	
Operation modes	DCC & DC	DCC, Motorola®, DC, AC	DCC & DC	DCC & DC
Sound in conventional mode	Yes	Yes, DC & AC	Yes	Yes
Speaker impedance	4 - 8 Ohms	100 Ohms	8 Ohms	8 Ohms
Included speaker size	none	23mm (0.9")	none	none
Sound memory size	32 Mbit	16 Mbit	8 Mbit	16 Mbit
Number of sound channels	8 simultanously	4 simultanously	8 simultanously	no information
Prime mover sound selectable by CV	Yes	No	No	No
Horn / whistle sound selectable by CV	Yes	No	No	Yes
Bell sound selectable by CV	Yes	No	No	No
Playable whistle	Yes, superfast response	Yes, slow response	No	Yes, slow response
User downloadable sound packages	Yes	Yes	Yes	No
User can create new / modify existing sound projects	No	Yes	No	No
Auto-adjustable BEMF control	Yes, adjusts to any motor	No	No	No
High frequency motor control	40 kHz	32 kHz	20 kHz	20 kHz
Ultra slow running behaviour with Dynamic Drive Control	Yes, 5th generation of BEMF control	Yes, 4th generation of BEMF control	Limited	Limited
Number of function outputs	6	4	6	4
LED compensation mode	Yes	No	Limited	Yes
Function key assignment	Very flexible	Flexible	NMRA standard only	NMRA standard only
Steady state motor current	1.1A	1.1A	1.0A	1.0A
Function output current	0.25A	0.25A	0.1A	0.1A
Decoder size	1.41" x 0.61" x 0.25"	1.18" x 0.61" x 0.21"	2.13" x 0.69"	1.7" x 0.67" x 0.28"
List price (MSRP)	\$99.95	\$167.00	\$119.95	\$119.00

Ordering information							
			Description	Prime Mover Sound#1	Prime Mover Sound#2	Prime Mover Sound#3	Prime Mover Sound#4
73401	2009	Q3/09	LokSound Select - Alco 244 sounds	Alco 244 V12 cylinder	Alco 244 V16 cylinder		
73402	2009	Q3/09	LokSound Select - Alco 251 sound	Alco 251 V12 cylinder	Alco 251 V16 cylinder	Alco 251 6T	
73403	2009	Q3/09	LokSound Select - GE FDL sound	GE FDL 16	GE FDL 12		
73404	2009	Q3/09	LokSound Select - GE 7FDL Sounds	GE 7FDL-12	GE 7FDL-16	GE 7FDL-16A	
73405	2009	Q3/09	LokSound Select - Baldwin switcher sounds	Baldwin VO 6 cylinders	Baldwin 606/606NA	Baldwin 606SC/606A	
73406	2009	Q3/09	LokSound Select - EMD 567 Sound	EMD 567 16	EMD 567 16T	EMD 567 12	EMD 567 12T
73407	2009	Q3/09	LokSound Select - EMD 645E Sounds	EMD 8-645E	EMD 12-645E		
73408	2009	Q3/09	LokSound Select - EMD 645E/F Sounds	EMD 16-645E	EMD 16-645F	EMD 20-645E	
73409	2009	Q3/09	LokSound Select - EMD 645 turbocharged Sounds	EMD 12-645 Turbo	EMD 16-645 Turbo	EMD 20-645 Turbo	
73410	2009	Q3/09	LokSound Select - EMD 710GB Sounds	EMD 12-710GB	EMD 16-710GB	EMD 20-710GB	
73411	2009	Q3/09	LokSound Select - diverse switchers	ALCO 539 6 cylinders	GE Cat. 44	Fairbanks Morse H24-66 Trainmaster	
73412	2009	Q3/09	LokSound Select - Diesel specials	Gallopping Goose	EMD JT42CWR (Class66)		
73413	2009	Q3/09	LokSound Select - Steam locomotives 3 driven axles	Mogul	0-6-0	4-6-0	2-6-0
73414	2009	Q3/09	LokSound Select - Steam locomotives 4 driven axles	Mikado	2-8-0 Consolidation	2-8-2	4-8-2
73415	2009	Q3/09	LokSound Select - Steam locomotives geared locomotives	Shay	Heissler	Climax	
73416	2009	Q3/09	LokSound Select - Articulated Steam locomotives	Big Boy	4-6-6-4 Challenger	2-8-8-2	2-6-6-2
73417	2009	Q3/09	LokSound Select - Steam locomotives collection 4-8-4 Class J 2-10-0 4-4-0 American 2-6-2 Tank		2-6-2 Tank		
50334	2009	Q3/09	loudspeaker 20mmx40mm, square, 4 ohms, with sound chamber				
50333	2009	Q3/09	loudspeaker 28mm, round, 4 ohms, with sound chamber				
50332	2009	Q3/09	loudspeaker 23mm, round, 4 ohms, with sound chamber				
50331	2009	Q3/09	loudspeaker 20mm, round, 4 ohms, with sound chamber				
50330	2009	Q3/09	loudspeaker 16mmx25mm, square, 4 ohms, with sound chamber				
50329	2009	Q3/09	loudspeaker 18mmx10mm, oval, 8 ohms, without sound chamber				
51953	2009	Q3/09	wire harness, 88mm length, 8 pin NMRA plug to 9 pin JST connector				

Available Airhorns for Diesel sounds	
Airhorn Nathan K5LA	Airhorn Leslie S5
Airhorn Nathan K3	Airhorn Twin Combo (high & low Leslie 1 Chime)
Airhorn Nathan M5	Airhorn Wabco A2
Airhorn Nathan P3	Airhorn Wabco E2
Airhorn Nathan P5A	Airhorn Holden K5H
Airhorn Leslie S-2B	Airhorn Hancock Air Whistle
Airhorn Leslie A200	Fairbanks Morse Trainmaster Airhorn
Airhorn Leslie S3	Baldwin switcher 3-chime airhorn

All LokSound Select decoders are shipped without speakers. You may use any high-power speaker rated 4 ohms or 8 ohms, but we highly recommend to use the ESU speaker range. Each LokSound select decoder offers at least two prime mover sounds and a wide range of horns or whistles to select from.

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