



## KOBO CUSTOM QUICK REFERENCE GUIDE

Your new sound-equipped KATO General Electric P42 locomotive comes equipped with a ESU-LokSound Select 6 Aux 93413 sound decoder and is designed to operate in DCC mode, but will function in DC mode with limited capabilities.

In DCC mode, the address programmed by Kato USA on assembly is [REDACTED]. To change settings on a DCC system, please consult [www.loksound.com](http://www.loksound.com) for the most current revision of the downloadable PDF decoder manual for the ESU-LokSound Select 6-Aux 93413 GE P42 decoder.

When on the DC system, the sound will function for the engine motor sounds only. No other function will perform. However, certain devices such as the MRC Tech 6 sound controller or Black Box are able to operate additional sounds in DC mode.

As with our other DC operated locomotives, the head and rear lights will illuminate when the voltage is high enough. It should be noted that the initial start voltage in this sound equipped unit in DC mode is higher than a standard non sound equipped locomotive. In DC operation, the headlights are dependant upon the direction of the locomotive. You will need to use a DCC system to modify the headlight configuration if changes are desired from this preprogrammed setup.

Please note that the switch on top of the model to control lighting effects in analog (DC) mode has been disabled and should not be rotated. All lighting functions are now controlled via the decoder.

### Troubleshooting:

1. Dirt on rails and wheels can cause a make/break in the electrical connection to your locomotive. As with any locomotive, it is important to periodically clean locomotive wheels and track to ensure optimal electrical pickup.
2. If the locomotive and decoder becomes unresponsive or operation becomes erratic, reset the decoder to default settings.

In the event of a failure of the locomotive or circuit board, please return the model to:

KATO USA, INC.  
Attn: REPAIR  
100 REMINGTON ROAD  
SCHAUMBURG, IL 60173

Please do not return circuit boards or locomotives to ESU-LokSound for repair.



WWW.KATOUSA.COM

# Kato Kobo Sound Equipped GE P42 "Genesis" 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 Kato GE P42 Locomotive installed with one of the most State of the Art Digital Sound Decoders on the Market. The GE P42 is a little different from standard freight engines... If the engine is by itself with no cars it will go through the notches like normal. But unlike most freight engines the P42 has a shaft driven HEP (Head End Power unit). This HEP supplies power to the passenger cars when running. In order to run at a high enough RPM for the HEP to work properly the P42 prime mover needs to be running at 900RPMs all the time when moving. When F5 is pressed on the throttle with this decoder the HEP will kick in and the PM will instantly run up to 900RPM. When in a station in order conserve fuel (and the ears) the engineer has the option to drop into Stand-By mode (F13). This drops the RPM of the PM. This will only work while sitting still. New random Radiator sounds have been added along with low idle that goes up and down with the random "Whoop" air compressor sounds. The P42 also includes a Brand New K5LA horn(F2), and both air and electronic bells. This is truly "Sound...Super-Detailed!"

Technical data LokSound Select Decoder	
<b>Operational modes:</b>	
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	
<b>Power:</b>	
Runs all DC and coreless motors	
Silent, safe 31,25 kHz pulse width frequency BEMF	
Motor output overload protected	
<b>Function outputs:</b>	
6 outputs	
250 mA load per output	
Outputs short-circuit protected	
<b>Sound:</b>	
Audio amplifier: 2W @40ohms load	
2 40ohm Speakers!	
Memory Capacity 32Mbit	
8 Sound Channels, All playable at once!	
Over 20 different sounds!	
<b>Dimensions:</b>	
1.02 x 0.62 x 0.18 inch (25.5 x 15.5 x 4.5 mm)	

Default Function Assignments		
Function key	Effect	All function can be reassigned!
F0	Directional Headlights Including Red Lights	
F1	Bell	
F2	Playable Airhorn W/ Auto Bell	
F3	Coupler Clank	
F4	Dynamic Brake	
F5	HEP Mode -HEP on and Prime Mover goes to 900 RPM	
F6	AUX3+AUX4 (ditchlights) Needs to be wired	
F7	Auto Crossing Sequence Horn/Bell/Ditchlights	
F8	Prime Mover Sound On/Off (MUTE)	
F9	Manual Notching (up)	
F10	Manual Notching (down)	
F11	Radiator (Fan)	
F12	Dimmer (Headlights)	
F13	Stand-By Mode - Use in stations to drop the PM	
F14	Aux1 power off (Front Redlights)	
F15	Aux2 power off (Rear Redlights)	
F16	Air Dryer	
F17	Brake Set/Release	
F18	Sanding Valve	
F19	Short Air let off	
F20	Compressor	
F21	Spitter Valve	

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](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 0,48 - Brake Squeal Sound 0,128 - Add the relative numbers from each sound to get total value for CV 48	0 - 255	0
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	

Diesel sound Volume Control table			
Function (Diesel)	CV	Range	Default
Master volume control	63	0 - 192	180
Diesel Volume Control	259	0 - 128	128
Horn Volume Control	275	0 - 128	128
Bell Volume Control	283	0 - 128	75
Coupler Sound Volume Control	291	0 - 128	128
Dynamic brake Volume Control	299	0 - 128	80
Whoop Air Compressor Volume Control	307	0 - 128	100
Radiator Fan Volume Control	315	0 - 128	100
Auto Bell Volume Control	323	0 - 128	75
Air Dryer Volume Control	331	0 - 128	128
Crossing Sequence Volume Control	339	0 - 128	128
Brake Set / Brake Release	347	0 - 128	40
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.

**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**

Diesel Prime Mover	1 to choose from	
Prime Mover name	CV 48 value	
GE 7FDL-16 With HEP	0	0 Default
N/A in this sound set		16
N/A in this sound set		32

Diesel Decoders Airhorns	16 to choose from!	
Airhorn name	CV 48 value	
Airhorn Nathan K5LA	0	0 Default
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 K5H		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!	
Airhorn name	CV 48 value	
Electric Bell	0	0 Default
Air 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

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