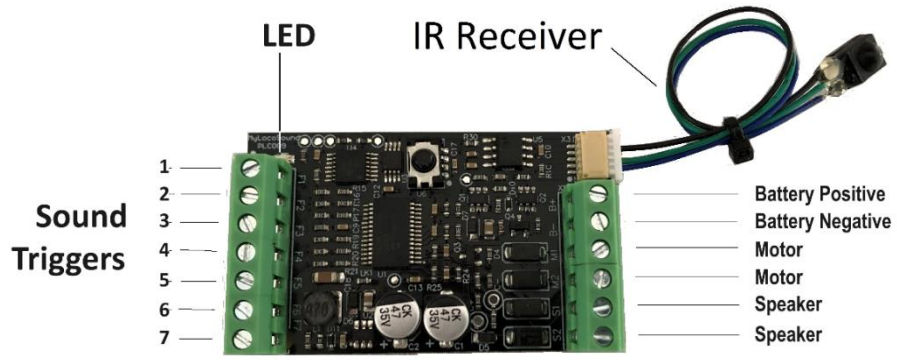
MYLOCOSOUND PREMIUM SOUND FOR LARGE SCALE, NORTH AMERICAN DIESEL LOCOMOTIVES & RAILCARS

1.OVERVIEW

- Provides five selectable engine sounds which adjust to match the loco speed and load.
- Start up sequence for each engine and three transmission options.
- Seven selectable horns.
- Full remote control of the horn, bell, airbrake, “All aboard” and optional turbocharger.
- Optional brake squeal.

2. CONTENTS



The soundcard generates recorded sounds which are relevant to most diesel locos and railcars. The terminal connections on the right are necessary for the soundcard to generate diesel sounds which vary with the loco speed and load. The terminal connections on the left trigger the various sounds where the locomotive controller has the appropriate outputs available. The trigger terminals are labelled F1 to F7 and are referred to by these labels in these instructions. For example, “Triggering F1” means to close a contact between the F1 terminal and the Battery negative terminal.

Where your controller has function buttons then you can trigger terminals F1 to F6 above as follows:

- Trigger 1. Sounds the main horn. On track power the horn will sound for one second so that it can be triggered by track magnets. On battery power the horn sounds for as long as the function is triggered.
- Trigger 2. Operates the bell or the two tone horn 7.
- Trigger 3. Sounds “All aboard”.
- Trigger 4. Sounds the airbrake release.
- Trigger 6. Starts and stops the engine.

Sounds can also be triggered by a Sony infra-red TV remote control which can be purchased locally. Low cost, universal, TV remote controls are available from most consumer electronics stores and need to be set to Sony coding to work with the soundcard. Although it can be used when running in the garden, the remote control is intended mainly for the adjustment and testing of sounds.

The remote control communicates with the soundcard via two infra-red receivers. One is located on the soundcard and the other is on a flying lead which allows it to be fixed to any external surface of the loco. Adjustments to the sounds can then be made without taking the loco apart to access the soundcard.

When the loco is running, the engine sounds should operate automatically, getting louder when accelerating and softer when slowing down or idle.

3. CONFIGURING THE SOUNDCARD

The soundcard has three modes:

1. **Sound setting** mode in which you can select the sounds you want by pressing the **MUTE** button.
2. **Operating setting** in which you can choose the way the sounds are triggered by pressing a button which is labelled **ENTER, INFO or MENU** on different TV remotes.
3. **Run mode** in which the soundcard does its job on your railway.

All sound settings are done using the TV remote control and we will cover that first. To place the soundcard into Sound Setting mode point the remote control at the soundcard or the receiver on the end of the flying lead and press the **Mute** button. The LED on the soundcard will blink slowly and all sounds will cease. Next press one of the keys on the remote control and the number of beeps will indicate the current sound setting as listed below. Press the key again and the setting will move to the next sound listed below. At any time, you can press the **Mute** button to hear the sound you have selected or to return to run mode.

All operating settings are also done using the TV remote control. To place the soundcard into Operating Setting mode point the remote control at the soundcard or the receiver on the end of the flying lead and press the **ENTER, INFO or MENU** button, depending on which your TV remote has. The LED on the soundcard will blink fast and all sounds will cease. Next press one of the keys on the remote control to indicate the current operating mode and again to move through the options listed below. At any time, you can press the **Enter** button to return to run mode.

Note: If your TV remote does not have an **ENTER, INFO or MENU** button or they have an **one of these** buttons and the soundcard is unable to respond to it then you can get into Operating Settings by doing the following:

- Press **Mute** to get into Sound Setting. The LED will blink slowly.
- Press the Zero button.
- You will now be in Operating Setting. The LED will blink fast.
- When you are done, press **Mute** to return to Sound Setting.
- Press **Mute** again to return to run mode.

The volume of all sounds can be varied by using the volume up/down buttons on the TV remote while that sound is playing.

All settings are listed in a quick reference table on the last page of these instructions.

4. SOUND SETTING OPTIONS (MUTE BUTTON)

Power Button – Not used in sound setting.

Button 0 – Not used in sound setting.

Button 1 – Horn. This is used to select the style of horn which suits your locomotive. Every one of these horns has an adjustable pitch and volume. Each time you press the 1 button the number of beeps will increase to indicate that the horn listed below has been selected. If you wish to hear that horn, press the Mute button on the remote control and then button 1 to start the

horn and then again to stop it. While the horn is sounding, you can use the volume buttons to vary the volume. The pre-selected horns available are:

Beeps	Horn
1	Amtrak K5LA **(Default)**
2	Leslie A200 Tyfon
3	Nathan K3LA
4	Wabco E2
5	Nathan M5
6	Leslie S-3L

Button 2 – Bell. This is used to select the type of bell from the list below.

1 **beep** – Bronze bell **(Default)**

2 **beeps** – Steel bell

3 **beeps** – Electronic bell

Button 3 – Guard. This is used to select the guard's sounds from the list below.

1 beep – Sounds "All aboard". (**Default)**

Button 4 – Not used in sound setting.

Button 5 – Turbo sound. If a turbocharger has been selected then this button can be used to select the pitch.

1 beep – Low

2 beeps – Mid **(Default)**

3 beeps – High

See section 7 to change the turbo volume and pitch.

Button 8 – Engine Sound. You can choose from the following:

1 beep – EMD 16-567B for EMD F7, F3 and E8 locomotives

2 beeps – EMD 16-645 for EMD SD-40 and GP-40 locomotives (**Default)**

3 beeps – EMD 16-710 for the SD-70 locomotive

4 beeps – ALCO 244 for Alco PA, FA-1, RS-2 and RS-3 locomotives

5 beeps – GE 7FDL 16 for GE P42 Genesis, Dash 9 and U25-B locomotives

See section 6 to change the engine rev range.

5. OPERATING SETTING OPTIONS (ENTER, INFO OR MENU BUTTON)

Power Button – Battery or Track Power. The soundcard can be used with battery power, with or without a locomotive, or with locomotives which are powered from the track. Press this button to switch:

1 beep – Battery power. **(Default)**

2 beeps – Track power with a 9v support battery. The soundcard will automatically turn itself off when the locomotive has not moved for thirty seconds. Turning the power up a little will turn the soundcard back on. The support battery will automatically recharge when the track voltage exceeds 10v.

3 beeps – Track power with a 7.2v support battery. The soundcard will automatically turn itself off when the locomotive has not moved for thirty seconds. Turning the power up a little will turn the soundcard back on. The support battery will automatically recharge when the track voltage exceeds 8v.

Button 0 – Not used

Button 1 – Whistle operation options. There are three whistle operating modes available:

1 beep – Indicates manual operation. In this mode all sounds are triggered by manual press of the TV remote button or by Function 1. With battery radio control, the whistle will sound for as long as function 1 is closed. With track power the whistle will sound for one second when function 1 is triggered by track magnets. **(Default)**

2 beeps – Indicate simple automatic mode. This is designed for controllers which have no function buttons, as is often the case with track power, or at exhibitions, etc. where you don't want to operate manually. The whistle will sound once automatically when the loco moves off and then once more three times a minute when the loco is on motion. A reed switch can be placed under the loco and be connected to the F1 terminal to make the whistle sound when the loco passes over a magnet. Another reed switch, connected to the F2 terminal, can be used to trigger the bell. If the bell is set to one beep then it will ring continuously until the loco passes over another magnet. If the bell is set to two beeps then it will ring for the set time.

3 beeps – Indicate American automatic mode. Again this is designed for controllers which have no function buttons, as is often the case with track power, or at exhibitions, etc. where you don't want to operate manually. However, it follows American rules. The whistle will sound two long toots when the loco moves off forwards or three short when backing up. If these occur the wrong way around then reverse the leads at the M1/M2 terminals. When the loco stops, a single short toot will indicate brakes on. A reed switch can be placed under the loco and be connected to the F1 terminal to make the whistle sound the grade crossing sequence when the loco passes over a magnet. Another reed switch, connected to the F2 terminal, can be used to trigger the bell. If the bell is set to one beep then it will ring until the loco passes over another magnet. If the bell is set to two beeps then it will ring for the set time.

Button 2 – Bell operations. This is used to select the bell operation from the list below.

1 beep – Manual bell. Starts ringing repeatedly when the button is pressed until the button is pressed again.

2 beeps – Timed bell. When F2 is triggered, rings repeatedly for a predetermined time. To set that time, press the Mute button to exit setting mode and then press Button 2 to ring the bell. When the bell has rung for as long as you want, press Button 2 again to stop the ringing. The time is then set and the bell will ring for that time when F2 is triggered while running.

3 beeps – Automatic bell. Rings repeatedly when the motor voltage is less than 4 volts. (**Default)**

4 beeps – Automatic bell. Rings repeatedly when the motor voltage is less than 8 volts.

5 beeps – Automatic bell. Rings repeatedly when the motor voltage is less than 12 volts.

6 beeps – Manual bell. Rings once only each time the button is pressed.

Button 3 – Conductor/Guard. "All aboard" sounds each time the TV remote button 3 or function 3 is triggered.

Button 4 – Brakes. This gives you three braking options:

1 beep – No braking sounds required. **(Default)**

2 beeps – Automatic brake squeal whenever the locomotive comes to a halt.

3 beeps – Automatic airbrake release when moving off.

4 beeps – Automatic brake squeal whenever the locomotive comes to a halt plus automatic airbrake release when moving off.

Button 5 – Turbocharger and Exhaust. These can be switched on or off by:

1 beep – Turbocharger and exhaust reverberation not required. **(Default)**

2 beeps – Turbocharger sounds automatically according to the locomotive motion.

3 beeps – Exhaust reverberation when accelerating.

Button 6 – Engine starting and stopping

1 beep – Manual. Pressing the button 6 or F6 is triggered will shut down and start up the engine using the starter motor **(Default)**

2 beeps – Automatic. The engine will shut down after one minute of no movement and will start up again, using the starter motor, when the throttle is given a slight nudge up then back. Once the engine has started you can then throttle up and move off. This option gives you the ability to start the engine when no transmitter function button is available.

3 beeps – Manual. At power up the engine will not start automatically but an airbrake release will be heard to confirm that the soundcard is working. Pressing the button 6 will then start up and shut down the engine using the starter motor

Button 7 – Engine Sensitivity. The soundcard is programmed to make the engine loud when accelerating and softer when coasting and slowing down. Button seven changes the level of sensitivity as indicated by the number of beeps when pressed. One beep indicates maximum sensitivity. Five beeps sets minimum sensitivity ie. the engine will be loud all the time. The **default** sensitivity is two but change it to one if you want more sensitivity or three or more if the chuff sounds erratic. We recommend one beep for pushbutton throttles.

Button 8 – Engine Type. This will operate in three ways:

1 beep – Manual notch up with no gear change. Revs increase proportionally to the speed. (**Default)**

2 beeps –Automatically revs up to notch 5 to move off with engine revs twice tickover.

3 beeps – Automatically revs up to notch 8 to move off with revs three times tickover.

It is important to tell the soundcard when your loco starts moving and hence when to start revving up**.** Do this by slowly increasing the throttle until the loco is just about to start to move. Then press the power button on the remote control. This tells the soundcard the voltage at move off.

6. SETTING THE ENGINE REVS

This is a once only exercise although you can repeat it later if you want to make a change. First press Mute to stop the sound and go into programming mode. Then use buttons 5, 6 and 8 to set your chosen engine as described in the previous section. The last step then is to set the rev rates when static and when in motion. Press Mute to come out of programming mode so that you can hear the sounds. Then do the following:

1. Use the channel up/down buttons to adjust the tickover revs to the desired rate.
2. Turn up the locomotive throttle until you get to the point where you want the revs to increase. Then press the Power button on the remote control. Most people press the Power button at a very small amount of throttle movement so that the engine revs increase well before the locomotive starts moving.
3. If the engine type (Button 8 above) is set to 2 or 3 beeps then you need to do no more. The locomotive is ready to run.
4. If the engine type (Button 8 above) is set to 1 beep then the revs will increase as the locomotive speed increases. With the engine in motion, you can increase or decrease the rate at which the revs change by using the channel up/down buttons.

7. SETTING THE TURBOCHARGER

This is also a once only exercise although you can repeat it later if you want to make a change. First select the turbocharger by setting mode button 5 to 2 beeps. You can change both its pitch and the volume. With the engine running on idle, press the F5 button on the TV remote. The engine sound will disappear leaving just the turbo. You can then use the channel up/down buttons to vary the pitch and the volume up/down buttons to vary the volume. Press the F5 button again to restart the engine sound again so that you can hear them together. In sound settings, button 5 will make large changes to the pitch.

8. RESETTING THE SOUNDCARD TO THE FACTORY DEFAULTS

Being able to vary so many settings, you may get into a tangle where the sounds you are hearing don't make sense or you get no sound at all. In that case, go into run mode (so that the sounds are not muted) and holding down the 0 button on the remote control until you hear five beeps. This will cause the soundcard to reset itself back to its factory defaults. It will not change the country setting.

For more information, please visit the web site at www.mylocosound.com or e-mail sales@mylocosound.com.

TV Remote Control	Beeps	Mute Pressed - Sound Setting	Enter Pressed - Operating Setting
Power Button	1		**Locomotive is battery powered**
	2		Locomotive is track powered with 9v batter
	3		Locomotive is track powered with 7.2v batt
Button 1 - Horn	1	**Amtrak K5LA**	**Manual horn control**
	2	Leslie A200 Tyfon	Automatic horn every 20 secs
	3	Nathan K3LA	US horn rules with grade crossing
	4	Wabco E2	
	5	Nathan M5	
	6	Leslie S-3L	
Button 2 - Bell	1	**Bronze bell**	Manual on/off
	2	Steel bell	Automatic timed ring when F2 is triggered.
	3	Electronic bell	**Rings when motor below 4 volts**
	4		Rings when motor below 8 volts
	5		Rings when motor below 12 volts
	6		Rings once each time button is pressed
	7		Bell replaced with European two tone horn
Button 3 - Guard	1	**"All aboard"**	**Manual**
Button 4 – Brakes	1		**No brake sounds required**
	2		Automatic brake squeal as the loco stops
	3		Automatic airbrake release when starting
	4		Both brake sounds
Button 5 – Turbo	1	Low turbo pitch	No turbo or exhaust reverberation
	2	**Medium turbo pitch**	**Automatic turbo**
	3	High turbo pitch	Automatic exhaust reverberation
Button 6 – Engine start/stop	1		**Automatic start then manual start/stop**
	2		Start/stop using throttle
	3		Manual start/stop
Button 7 – Engine Sensitivity	1		Maximum sensitivity to throttle changes
	to		v v v
	5		Minimum sensitivity to throttle changes
Button 8 – Engine Type	1	EMD 16-567B	**Revs increase with speed**
	2	**EMD 16-645**	Move off on notch 5
	3	EMD 16-710	Move off on notch 8
	4	ALCO 244	
	5	GE 7FDL 16	