

MYLOCOSOUND

PREMIUM SOUND FOR LARGE SCALE, BRITISH DIESEL LOCOS & RAILCARS

1. OVERVIEW

- Provides six selectable engine sounds which adjust to match the loco speed and load.
- Start up sequence for each engine and three transmission options.
- Five selectable horns including two tone.
- Full remote control of the horn, airbrake, "All aboard", guard's whistle and turbocharger.
- Optional brake squeal.

2. CONTENTS

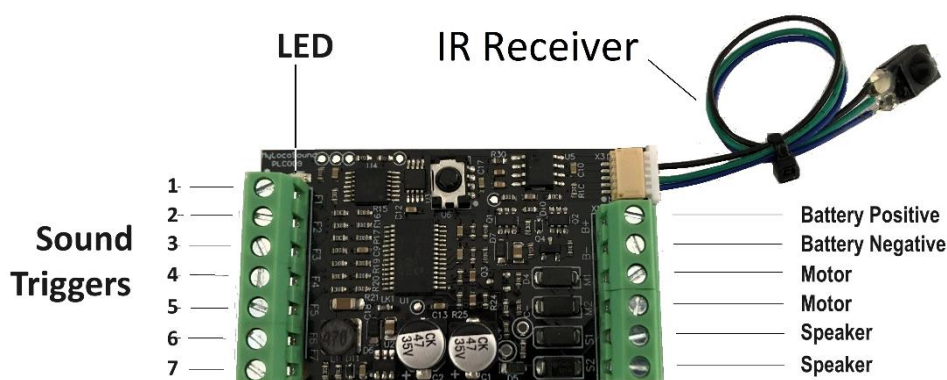
The soundcard generates synthesised sound which is adjustable to reproduce the sounds of most diesel locos and railcars. The terminal connections on the right are necessary for the soundcard to generate diesel sounds which vary with the loco speed and load. The terminal connections on the left trigger 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 use them to trigger terminals F1 to F6 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" and/or the guard's whistle.
- Trigger 4. Sounds the airbrake release.
- Trigger 6. Starts and stops the engine.

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

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.

3. CONFIGURING THE SOUND CARD

The soundcard has three modes:

1. **Sound setting** mode in which you can select the sounds you want. (Mute Button)
2. **Operating setting** in which you can choose the way the sounds are triggered. (Menu Button)
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 them 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 **Menu** button. 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 **Menu** button to return to run mode.

Note: Some TV remotes have a **Menu** button which the soundcard is unable to understand. If you hit this problem 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. The first button press will indicate the current setting and then 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 | Class 08 |
| 2 | Two Tone Horn - HST |
| 3 | Two Tone Horn – Class 66 |
| 4 | Two Tone Horn – Class 45 |
| 5 | Synthesised Two Tone Horn with Adjustable Pitch |

Note that the two tone horns can be played in different ways

While horn 5 is sounding, you can use the channel up/down buttons to vary the pitch.

Button 2 – Not used in sound setting.

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

1 beep – Sounds a guard’s Acme Thunderer whistle. **(Default)**

2 beeps – Sounds “All aboard”.

3 beeps – Sounds “All aboard” and then the guard’s whistle.

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 710 (Class 59, 66, etc.)

2 beeps – Small Sulzer (Class 24, 25, 26, etc.)

3 beeps – Large Sulzer (Class 44, 45, 47, etc.)

4 beeps – English Electric Whistler (Class 20, 40, etc.)

5 beeps – English Electric Growler (Class 37, etc.)

6 beeps – Diesel Multiple Unit

5. OPERATING SETTING OPTIONS (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 in operating setting.

Button 1 – Horn operation options. There are three horn operating modes available:

1 beep – Indicates full manual control. In this mode a manual press of the TV remote button 1 or by Function 1 will sound the low tone and button 2 or Function 2 will sound the high tone. You can therefore play tunes. **(Default)**

2 beeps – Designed for controllers with only one function button. In this mode a manual press of the TV remote button 1 or by Function 1 will sound the high tone followed by a short low tone when the button is released.

3 beeps – Designed for controllers with only one function button. In this mode a manual press of the TV remote button 1 or by Function 1 will sound the low tone followed by a short high tone when the button is released.

4 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 horn will sound a high then a low tone 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.

5 beeps – Indicate simple automatic mode. This is the same as 4 beeps except that the horn sounds a low tone followed by a high.

With battery radio control, the horn will sound for as long as function 1 is on. With track power the horn will sound for one second when function 1 is triggered by track magnets.

Button 2 – Horn operations. Function 2 and TV remote button 2 are used to trigger the second horn tone as described above. Button 2 on the TV remote is not used in operation setting.

Button 3 – Guard/Conductor. Sounds each time the TV remote button 3 or function 3 is triggered.

Button 3 on the TV remote is not used in operation setting.

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.
- 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 7 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 SOUND CARD 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. 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.

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

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| TV Remote Control | Beeps | Mute Pressed - Sound Setting | Menu Pressed - Operating Setting |
|--------------------------------------|-------|--|---|
| Power Button | 1 | | Locomotive is battery powered |
| | 2 | | Locomotive is track powered with 9v battery |
| | 3 | | Locomotive is track powered with 7.2v battery |
| Button 0 - Country | 1 | | Britain |
| Button 1 - Horn | 1 | Class 08 single tone | Manual, two button horn control |
| | 2 | HST two tone | Manual, single button high-low |
| | 3 | Class 66 two tone | Manual, single button low-high |
| | 4 | Class 40 two tone | Automatic high-low horn every 20 secs |
| | 5 | Two Tone (with adjustable tone) | Automatic low-high horn every 20 secs |
| Button 2 – Not Used | 1 | | |
| Button 3 - Guard | 1 | Guard's whistle | Manual |
| | 2 | "All aboard" | |
| | 3 | "All aboard" followed by guard's whistle | |
| 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 |
| | 4 | | Automatic turbo + 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 710 (Class 59, 66) | Revs increase with speed |
| | 2 | Small Sulzer (Class 24, 25,26) | Move off on notch 5 |
| | 3 | Large Sulzer (Class 44, 45, 47) | Move off on notch 8 |
| | 4 | English Electric Whistler (Class 20, 40) | |
| | 5 | English Electric Growler (Class 37) | |
| | 6 | Diesel Multiple Unit (DMU) | |