MYLOCOSOUND

PREMIUM SOUND FOR LARGE SCALE GAS RAILBUSES

1.OVERVIEW

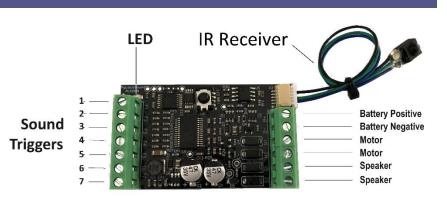




- Provides six selectable engine sounds which adjust to match the vehicle speed and load.
- Selectable engine start up and gear change.
- Seven horns including four Goose horns and a Klaxon.
- Full remote control of the horn, bell and guard's whistle.

2. CONTENTS

The soundcard generates synthesised sound which is adjustable to reproduce the sounds of most rail buses. The terminal connections on the right are necessary for the soundcard to generate engine sounds which vary with the vehicle speed and load. The terminal connections on the left trigger the various sounds where



the vehicle 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.

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 vehicle. Adjustments to the sounds can then be made without taking the vehicle apart to access the soundcard.

3. CONFIGURING THE SOUNDCARD

The soundcard has two modes:

- 1. Setting mode in which you can select the sounds you want and can make adjustments to them.
- 2. **Run mode** in which the soundcard does its job on your railway.

All settings are done using the remote control and we will cover that first. So place the soundcard into Setting mode by pointing 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 to change the sounds listed below. When you press a button, the LED will start blinking faster. At any time, you can press the **Mute** button and then the button you are changing to hear the sound you have selected and then press **Mute** again to turn it off. The options are:

- **Power Button Battery or Track Power.** The soundcard can be used with battery powered, radio controlled vehicles or with vehicles which are powered from the track (but not DCC). Press this button to change from one to the other:
 - 1 beep Battery powered radio control.
 - 2 beeps Track power. In this case, the soundcard will automatically turn itself off when the vehicle has not moved for sixty seconds. Turning the track power up a little will turn the soundcard back on.

Button 0 - Not used

Button 1 – Horn. This is used to select the style of horn which suits your vehicle. Every one of these horns has an adjustable 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 channel up/down buttons to vary the pitch and also the volume buttons. The pre-selected horns available are:

Beeps	Horn	
1 beeps	Goose #7	(Default)
2 beeps	Goose #2	
3 beeps	Goose #5	
4 beeps	Goose #6	
5 beeps	Gulflander	
6 beeps	Brill	
7 beeps	Klaxon	

The pitch of horns 1 to 5 can be adjusted by using the channel up/down buttons.

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

- 1 beep Manual bell. Starts ringing repeatedly when the button is pressed until the button is pressed again. (**Default**)
- 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 under 4 volts.
- 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.
- 7 beeps Bell not required. Buttons 2 sounds a brief horn.

Button 3 - Guard. Sounds "All aboard".

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

- 1 beep No braking sound required. (Default)
- 2 beeps Automatic brake squeal whenever the vehicle comes to a halt.

Button 5 - Not used

Button 6 - Engine starting and stopping

- 1 beep Manual. Pressing the button 6 or when 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 a bell 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 Type. This will operate in three ways:

- 1 beep Manual notch up with gear changes when F7 is triggered.
- 2 beeps Manual notch up with early automatic gear changes as the vehicle accelerates. (Default)
- 3 beeps Manual notch up with later automatic gear changes
- 4 beeps Manual notch up with much later automatic gear changes

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

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1 beep - Goose #7 (Default)
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2 beeps - Goose #5

3 beeps - Goose #6

4 beeps - AEC

5 beeps - Simplex

6 beeps - Brill

Button 9 – The Operating Mode. There are three operating modes available:

- 1 beep Indicates manual mode. In this mode all sounds are triggered according to the above settings. With battery radio control, the horn will sound for as long as the function 1 button is pressed. With track power the horn will sound for one second when triggered by track magnets.
- 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 horn will sound once automatically when the vehicle moves off and then once more three times a minute when the vehicle is on motion. A reed switch can be placed under the vehicle and be connected to the F1 terminal to make the horn sound when the vehicle passes over a magnet. Another reed switch, connected to the F2 terminal, can be used to trigger the bell which will turn on when crossing a magnet and then off at the next magnet.
- 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 horn will sound two long toots when the vehicle 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 vehicle stops, a single short toot will indicate brakes on. A reed switch can be placed under the vehicle and be connected to the F1 terminal to make the horn sound the grade crossing sequence when the vehicle passes over a magnet.
- Channel up/down buttons—Load Sensitivity. The soundcard is programmed to make the engine loud when accelerating and softer when coasting and slowing down. The channel up/down buttons change 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 and change to one if you want more sensitivity or three or more if the chuff sounds erratic. We recommend one beep for the Crest Revolution controller.

You can change these settings whenever you wish and those changes will be effective immediately.

4. 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 earing 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.

5. OPERATING THE SOUNDCARD

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

Where your controller has function buttons then you can use them to trigger terminals F1 to F7 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 short horn.
- Trigger 3. Sounds "All aboard".
- Trigger 4. For future use.
- Trigger 5. For future use.
- Trigger 6. Starts and stops the engine.
- Trigger 7. Manual gear change.

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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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Remote Control	Radio Control			
Power		Set Start Voltage for Rev	Up	
VOL up/down		Change Volume of active sound		
CH up/down		Change Sound		Horn Tone when horn sounding
				Engine tickover rate when static
				Engine rev rate when moving
Mute		Sound on/off		
Button 1	F1	Horn		Seven to select from
Button 2	F2	Bell	1 beep	Automatic timed ring when F2 is triggered.
			2 beeps	Rings when motor below 4 volts
			3 beeps	Rings when motor below 8 volts
			4 beeps	Rings when motor below 12 volts
			5 beeps	Single Ring
			7 beeps	Short horn
Button 3	F3	The Conductor		"All aboard"
Button 4	F4	Brake squeal	1 beep	Not required
			2 beeps	Automatic brake squeal
Button 5	F5			
Button 6	F6	Engine start/stop	1 beep	Manual
			2 beeps	Automatic
			3 beeps	Manual delayed start
Button 7	F7	Engine Type	1 beep	Engine revs up steadily with throttle
			2 beeps	Early mechanical gear changes
			3 beeps	Later mechanical gear changes
			4 beeps	Much later mechanical gear changes
Button 8		Engine Sound	1 beep	Goose A
			2 beeps	Goose B
			3 beeps	AEC
			4 beeps	Simplex
		Combined Mondille	5 beeps	Brill
Button 9		Control Mode	1 beep	Manual
			2 beeps	Auto horn every 20 secs
Hold darrie			3 beeps	American horn practice
Hold down button 0			5 beeps	Re-sets sounds to factory defaults