MYLOCOSOUND

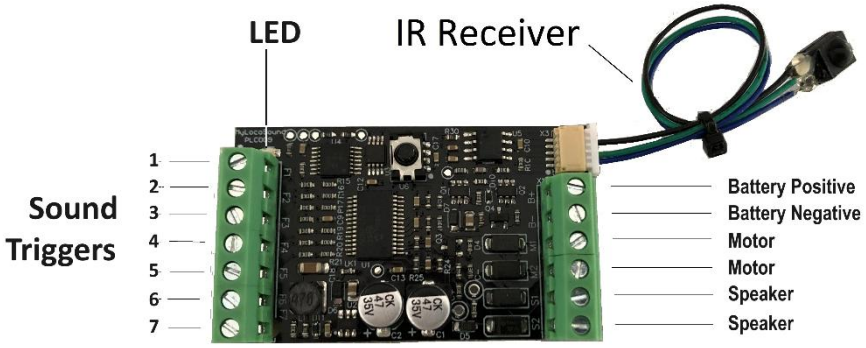
PREMIUM RECORDED SOUND FOR INDUSTRIAL AND LIGHT LOCOMOTIVES POWERED BY DIESEL AND GAS/PETROL

1.OVERVIEW

- Uses recorded engine sounds for starting, tickover, in motion and shut down.
- Six vibrant horns including two tone horn and a Klaxon.
- American bell.
- Full remote control of the horns, airbrake, guard's whistle and "All aboard".
- Optional airbrake release and brake squeal.

2. CONTENTS

The soundcard generates synthesised sound which is adjustable to reproduce the sounds of most light diesel locos. 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.



When the loco 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 as follows to trigger the above terminals F1-F7:

- Function F1. Sounds the main horn.
- Function F2. Sounds the bell or short horn.
- Function F3. Sounds "All aboard" and/ or the guard's whistle.
- Function F4. Sounds the airbrake release.
- Function F6. Starts and stops the engine.
- Function F7. Changes gear.

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 over short distances 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 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 buttons on the remote control to change the sounds listed below. When you press the button, the beeps will indicate the current option selected. Press the button again to move to the next option. At any time, you can press the **Mute** button and then the button you are changing to hear the sound you have selected. 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 locomotives or with locomotives 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 with a 9 volt rechargeable battery to maintain sound at low track voltage. In this case, the soundcard will automatically turn itself off when the locomotive has not moved for sixty seconds. Turning the track power up a little will turn the soundcard back on. The soundcard will automatically recharge the battery when the track voltage exceeds 10v.

3 beeps **–** Track power with a 7.2 volt rechargeable battery. As above except that the battery will recharge when the track voltage exceeds 8.2v and therefore at a lower speed.

Button 0 – Reserved for future use.

Button 1 – Horn 1. This is used to select the style of horn which suits your locomotive. Each of these horns has an adjustable volume. Each time you press the 1 button the number of beeps will change to indicate that the horn has been switched between the five available which are:

1 beep – Baguley Drewry horn

2 beeps – Whitcomb horn

3 beeps – Klaxon

4 beeps – GE Air Horn **(Default)**

5 beeps – GE Electric Horn

6 beeps – Brill Air Horn

7 beeps – European Two Tone

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 and volume buttons to change the pitch and volume respectively. However the klaxon horn pitch is fixed.

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.

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 when the motor voltage is less than 4 volts.

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

5 beeps – Automatic bell. Rings 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. Button sounds a short whistle toot. (**Default)**

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.

2 beeps – Sounds "All aboard".

3 beeps – Sounds "All aboard" and then the guard's whistle. **(Default)**

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. If you are using a pushbutton controller, which drops the voltage in steps, then you will need to set the motion sensitivity (see next page) to one to hear the brake squeal.

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 – Not used

B**utton 6 – Engine starting and stopping**

1 beep – Manual. The engine will start automatically at power up. Pressing the button 6 will then 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 – Throttle Type. This will operate in three ways:

1 beep – Manual notch up. 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.

4 beeps - Revs increase proportionally to the speed with short gear changes.

5 beeps – Revs increase proportionally to the speed with long gear changes.

It is important to tell the soundcard when your loco starts moving**.** 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.

When the loco is static, the channel up/down buttons change the tickover rate. When the loco is running, the channel up/down buttons change the running rev rate.

Button 8 – Engine Type. There are two types of engine to choose between:

1 beep – Perkins industrial diesel. (**Default)**

2 beeps – Ruston & Hornsby four cylinder industrial diesel

3 beeps – Baguley Drewry diesel

4 beeps – Petrol and Gas Mechanical for Small Simplex, “Tin Turtle”, Davenport, etc.

5 beeps – Large Simplex

6 beeps – Whitcomb narrow gauge switcher

7 beeps – GE 25 tonner

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

1 beep – Indicates manual mode. In this mode all sounds are triggered according to the above settings. The whistle will sound for as long as its button is pressed. (**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 in 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 second horn which will turn on when crossing a magnet and then off at the next magnet.

3 beeps – Indicate trigger mode. Again this is designed for controllers which have no function buttons but this mode has no automatic horns. A reed switch can be placed under the loco and be connected to the F1 terminal to make the horn sound when the loco passes over a magnet.

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

Holding down the 0 button until you hear five beeps will cause the soundcard to reset itself back to its factory defaults.

Channel Up/Down – Motion Sensitivity. When the loco is in motion, the soundcard changes the sounds according to whether the loco is accelerating, coasting or slowing down. If you find that the sounds are changing too frequently then press Mute and then the Channel Up button. You will hear one to five beeps. The higher the number of beeps, the less sensitive the soundcard is to changes of motion. Use the Channel Down button to reduce the number of beeps and make it more sensitive to changes in motion. If you are using a pushbutton controller, which drops the voltage in steps, then a one beep setting should be used.

Volume Up/Down – Changing Volume. To change the volume of any sound press the TV remote function button listed below and then use the volume up/down button to suit your taste.

- Horn. Press function 1 to sound the selected horn.
- Bell. Select bell option 1 and the press function 2 to ring the bell continuously.
- Guard. Press function 3 to sound the current selection.
- Brake squeal. Select brake option 2 and the press function 4 to sound the squeal.
- Brake release. Select brake option 3 and the press function 4 to sound the release.
- Engine at tickover. No function needed. Just press the volume up/down with the engine ticking over.
- Engine in motion. No function needed. Just press get the loco moving and use the volume up/down.

4. 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, 7 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 7 above) is set to 3 or 4 beeps then you need to do no more. The locomotive is ready to run.
4. If the engine type (Button 7 above) is set to anything else 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.

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

Remote Control	Radio Control		
Power		Set Start Voltage for Rev Up	
VOL up/down		Change Volume of active sound	
CH up/down		Change Sound	Engine tickover rate when static
			Engine rev rate when moving
Mute		Sound on/off	
Button 1	**F1**	**Horn Type**	
		1 beep	Baguley Drewery
		2 beeps	Whitcomb
		3 beeps	Klaxon
		4 beeps	GE Air Horn
		5 beeps	GE Electric Horn
		6 beeps	Brill Air Horn
		7 beeps	Two Tone Horn
Button 2	**F2**	**Bell Modes and Short Horn**	
		1 to 6 beeps	Bell Modes
		7 beeps	Short Horn
Button 3	**F3**	**Guard/Conductor**	
		1 beep	Guard's Whistle
		2 beeps	All Aboard
		3 beeps	All Aboard and Guard's Whistle
Button 4	**F4**	**Brake release and/or squeal**	
		1 beep	No Brake sounds
		2 beeps	Brake Squeal
		3 beeps	Airbrake Release
		4 beeps	Brake Squeal and Airbrake Release
Button 6	**F6**	**Engine start/stop**	
Button 7		**Throttle Type**	
		1 beep	Engine revs up steadily with throttle
		2 beeps	Revs up to notch 5
		3 beeps	Revs up to notch 8
		4 beeps	Short mechanical gear changes
		5 beeps	Long mechanical gear changes
Button 8		**Engine Type**	
		1 beep	Perkins Industrial diesel
		2 beeps	Ruston & Hornsby diesel
		3 beeps	Baguley Drewry diesel
		4 beeps	Petrol and Gas mechanical
		5 beeps	Large Simplex diesel
		6 beeps	Whitcomb diesel
		7 beeps	GE 25 tonner diesel
Button 9		**Control Mode**	
		1 beep	Manual
		2 beeps	Auto horn every 20 secs
		3 beeps	Triggered horn
Power		**Power Mode**	
		1 beep	Battery radio control
		2 beeps	Track power with 9v battery
		3 beeps	Track power with 7.2v battery
Button 0 Held		Reset above settings to	