



Western Pullman 6 Car Unit

Sound Fitted Information

Important: Please read this sheet before running your locomotive.

Many thanks for purchasing one of our **Bachmann Branchline** Western Pullman Sound Fitted 6 Car Units. Please take the time to read through this sheet carefully before running your DMU to ensure you get the most out of your model.

Decoder Info.

Decoder & Speaker Spec.

Decoder type: Zimo MX644C (x2)
CV1 Address: 03
Speed Steps: 28/128
Speaker: 8 Ohms

For full details of the decoder please refer to information sheets on **Zimo MX644C** available from www.bachmann.co.uk

For Best Results...

Please make sure your DCC system is set to run on 128 speed steps to obtain the very best results from this decoder.

Keeping the track, wheels and pick-ups clean are essential to ensure good electrical contact and will also contribute to the decoder working to it's best ability.

Loco Decoder Address.

This model is set with a default decoder address of 3.

Please note: This model should be removed from the track if you are changing the address of another model with an E-Z Command Control Centre.

Running on DC.

Your model will operate on DC powered track producing basic prime mover sounds only that will vary according to it's use, directional lights and passenger compartment lights. If sufficient voltage is available the leading cab lights will illuminate when stationary.

Please note: If this model is to be controlled with an analogue (DC) output controller Bachmann Europe PLC recommend the use of a controller with a smoothed output. If you intend to use a feedback type controller, or one with PWM (pulse width modulation) please consult the controller manufacturer before using it with this model.

Operation Notes

Important: leaving approximately 1 second between function button presses will ensure a more reliable operation.

Here are short, simplified, explanations of the real life sound variations and how to manually alter the model's sounds to recreate them.

When F key 1 is engaged, the diesel engine in the leading car will start first, followed by the engine in the trailing car. This will automatically change between car A and F depending upon the direction of travel.

Throttle Control, the sounds will respond to the throttle control in the following ways:

- Speed steps 1 – 20 (of 128). The brakes will release, the PM will increase power to get the loco moving. As soon as the selected speed is reached, the engine will spool down.
- Selecting speed steps 21- 40 will cause the power to ramp up and remain at full power. The sounds will spool down at similar points on deceleration.
- Open the throttle gently and the engine note will rise and fall appropriately and the acceleration will simulate that of a heavy train.
- Open the throttle more widely and the engine will ramp up to full power and the rate of acceleration will be increased accordingly.
- With the throttle fully opened, (then reduced if required) the loco will accelerate 3 times more quickly than normal.

Coasting - No matter what speed your model is travelling at, or which engine note range is playing, reducing the throttle by 10 speed steps (of 128) will spool down the engine sounds to 'Coasting' as the loco continues travelling with a gradually reducing speed.

The coasting sound will continue until you accelerate; at which point the sounds will change to those relevant to the current speed.

Notch Down - During any driving sound, at any speed, it is possible to reduce the engine power sounds to the level immediately below. This is easily achieved by reducing the speed by one step only E.g., if engines are playing full power sounds, reducing by one speed step will cause the sound to immediately reduce to 2/3 power, if in 1/3 power, it will spool down to idle.

Acceleration of one speed step or more will immediately ramp the sound back up to the higher power. So you can now, at any road speed, vary the engine note by reducing or adding a single speed step.

Direction Dependent Sounds - Some sounds would only be appropriate from one end of the train or the other. E.g. horns would only

sound at the leading end whilst the guard's dispatch whistle would normally emanate from the rear.

In these cases, the sounds will only play at the appropriate end of the train and will automatically switch when the direction of travel is changed.

Auxiliary Sounds - In addition to the two Prime Movers, each Pullman set was equipped with Rolls-Royce horizontally mounted engines below the floors of the Kitchen Cars. These powered generating sets to run the lighting, other ancillaries and the then new Air Conditioning independently from the main engines. The air conditioning also had its own cooling fans.

Your model is equipped with the sounds of these auxiliary engines and fans on F keys 12 and 17 respectively. In service, both sounds would have run continuously, but in the model you have the option of using one sound or the other, both together or neither.

Function Instructions

Important; leaving approximately 1 second between function button presses will ensure a more reliable operation.

Trigger or latch? The characteristics of this Locomotives functions will depend on whether your DCC controller has the corresponding Function (F) button set to **Trigger** or **Latch**.

In the instructions that follow we have suggested the best setting for each F button in *(italic)* next to each title. Please consult your DCC controller instruction for how to change this.

F0. Lights (Latch)

F0 - Will turn on both the Directional and Passenger Compartment Lights throughout.

If your controller has one, please use its specific Light function button.

F1. Sound On/Off (Latch)

Please note: Without activating F1 your model will not make any of the automated sound effects.

F1 On - the diesel engine in the leading unit will start first, followed by the engine in the trailing unit. This will automatically switch between Car A and Car F depending upon the direction of travel selected.

F1 Off - Will turn off all automated functions.

F2. Loco Brake (Trigger)

F2, short press - will reduce the speed by a small amount.

F2, longer press - will reduce the speed by a greater amount relative to how long you hold the button down for.

F3. Single Horn 1 (Trigger)

F3 - Plays a single horn from the leading car.

F4. Double Horn 1 (Trigger)

F4 - Plays a double horn from the leading car.

F5. Single Horn 2 (Trigger)

F5 - Plays a single horn from the leading car.

F6. Engine Idle / Coasting (Latch)

F6 On - Causes the sound of the engine revs to fall and the Unit to appear to be coasting whilst not affecting the speed. The speed can still be adjusted if required without affecting the sound of the engine. This will continue until F6 is turned Off.

If used whilst the Unit is stationary it will allow you to move the Unit without revving the engines, this is useful for short low-speed movements.

F7. Drive Hold (Latch)

Note: Locomotive will not stop until F7 is turned off

F7 On - Locks the speed at the point the F key is pressed (not necessarily the throttle value). This allows the throttle to be opened & closed in order to play the drive sounds more prototypically whilst maintaining a constant speed.

Turning **F7 Off** whilst moving will allow speed & sound to return to current throttle value.

F8. Table Lamps (Latch)

F8 - Turns on all the passenger table lamps.

F9. Flange Squeal (Latch)

F9 On recreates the sound caused by friction between the flanges on the wheels and the track on sharper curves.

Please note; this function is speed dependent and will not action whilst the loco is stationary or above speed step 40/128.

F10. Single Horn 3 (Trigger)

F10 - Plays a single horn from the leading car.

F11. Cab Light (Latch)

F11 - Turns the cab light on in the leading car. This will turn off automatically off when moving.

F12. Auxiliary Engines (Latch)

F12 On - Will activate the sounds of the auxiliary engines positioned under the Kitchen Cars. These powered the generators providing the extra power the Kitchen Cars required.

F13. Rapid Spirax valve (Latch)

On/Off as required - These valves (which produce a 'popping' sound) are fitted to automatically drain moisture from the compressed air tanks. The higher the pressure the more rapid the popping.

F14. Spirax valve (Latch)

On/Off as required - As F13 but with a less frequent popping.

F15. Single Horn 4 (Trigger)

F15 - Plays a single horn from the leading car.

F16. Double Horn 2 (Trigger)

F16 - Plays a double horn from the leading car.

F17. Air-Con Fans (Latch)

F17 - Plays the sound of the air conditioning cooling fans.

F18. Guards Whistle (Trigger)

F18 will play the typical sound of a Guard's whistle at the station, signalling the imminent departure of a Train.

Please note; this sound will only function whilst the loco is stationary.

F19. Driver's Door (Latch)

On - Drivers door open sound effect plays
Off - Drivers door closed sound effect plays

F20. Fade all Sounds (Latch)

F20 Fades out all sounds until turned off.

F21. Compressor (Latch)

F21 replicates the sound of the Compressor, this is used to maintain the air pressure for the braking system.

F22. Guard's Buzzer - Single (Latch)

On - Guard's single buzzer plays
Off - Plays the Drivers response.

F23. Guard's Buzzer - Twin (Latch)

On - Guard's twin buzzer plays
Off - Plays the Drivers response.

F24. Station Ambience (Latch)

F24 - Plays station sounds of variable length.

F25. Detonators (Latch)

F25 Plays the sound of a Detonator being set off.

F26. No user access.

F26 is used to support other functions features and should not be used for remapping.

F27. Volume Up (Trigger)**F28. Volume Down (Trigger)****Function List - Western Pullman (Ex-Midland)**

No.	Function/Sound	F Button <i>Suggested Setting</i>	Sound Type
0	Lights (inc. Light Switch Sound)	Latch	Single Play
1	Sound - On / Off	Latch	-
2	Brake (Non-Latching)	Trigger	Continuous Play
3	Single Horn (1)	Trigger	Single Play
4	Two-Tone Horn	Trigger	Single Play
5	Single Horn (2)	Trigger	Single Play
6	Engine Idle / Coasting	Latch	Continuous Play
7	Drive Hold (see text)	Latch	-
8	Table Lamps	Latch	-
9	Flange Squeal	Latch	Continuous Play
10	Single Horn (3)	Trigger	Single Play
11	Cab Light (Leading end)	Latch	-
12	Auxiliary Engines	Latch	Continuous Play
13	Rapid Spirax Valves	Latch	Continuous Play
14	Spirax Valves	Latch	Continuous Play
15	Single Horn (4)	Trigger	Single Play
16	Two-Tone Horn (2)	Trigger	Single Play
17	Fan	Latch	Continuous Play
18	Guard's Whistle	Trigger	Single Play
19	Door Open / Door Slam (On/Off)	Latch	Single Play
20	Fade All Sounds	Latch	-
21	Compressor	Latch	Continuous Play
22	Guard's Buzzer (On)	Latch	Single Play
	Driver's Response (Off)	Latch	Single Play
23	Guard's Twin Buzzer (On)	Latch	Single Play
	Driver's Response (Off)	Latch	Single Play
24	Station Ambience (Variable Length)	Latch	Continuous Play
25	Detonators	Trigger	Single Play
26	No User Access, Not for Re-mapping.	-	-
27	Volume Down	Trigger	-
28	Volume Up	Trigger	-



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