

Important: Please read this sheet before running your locomotive.

Many thanks for purchasing one of our **Bachmann Branchline** Class 90 Sound Fitted Electric Locomotives. Please take the time to read through this sheet carefully before running your locomotive to ensure you get the most out of your model.

Decoder Info.

Decoder & Speaker Spec.

Decoder type: Loksound V5 DCC

CV1 Address: 03 Speed Steps: 28/128 Speaker(s): 8 Ohms

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.

Running on DC.

Your model will operate on DC powered track with directional lights, locomotive movement and any automated drive sounds.

Light Functions.

To enable full DCC control of all lighting functions, please ensure that the three switches located beneath the roof-mounted air-vent detail box (closest to the pantograph) are all in the '**On**' position.

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.

Sounds and Movement

Sounds: Your locomotive will not produce any Automated or Function controlled sounds without **F1** being turned on first.

Movement: With F1 'ON', then either F6 or F12 also needs to be 'ON' for the locomotive to move.

F12 Pantograph Sounds (Without Movement)

F12 enables the sound effects of the pantograph but without the pantograph up and down movement, this is useful if your layout has low bridges or tunnels etc. that would damage an extended pantograph.

Start Up & Shut Down

For the full range of spirax valve sound effects to be experienced we suggest the following startup procedure.

Start up.

F11 On - slow spirax valve tick rate.

F1 On - spirax valve tick rate increase the longer the aux compressor runs.

F6/F12 On

Shut Down.

F6/F12 Off

F1 Off - spirax valve tick rate will gradually slow down.

F11 Off - spirax valve tick will stop.

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.

No.	Function/Sound	F Button Suggested Setting	Sound Type
0	Directional Lights	Latch	Light Switch Sound
1	Sound (On / Off)		
	& Battery Switch and Compressor	Latch	Continuous Play
2	Brake (Non-Latching)	Trigger	Brake Sounds
3	Low Horn (Playable)	Trigger	Continuous Play
4	Two-Tone Horn	Trigger	Single Play
5	Parking Brake On, Loco Won't Move	Latch	Single Play
	Parking Brake Off	Latch	Single Play
6	On - Pantograph Up	Latch	Pantograph Sounds
	Off - Pantograph Down	Latch	Pantograph Sounds
7	Flange Squeal (Speed dependant)	Latch	Flange Squeal
8	Windscreen Wipers	Latch	Continuous Play
9	Air Dump	Trigger	Single Play
10	On - Guard's Whistle	Latch	Single Play
	Off - Driver's Response	Latch	Single Play
11	Spirax Valve	Latch	Continuous Play
12	On - Pantograph Up (Sounds Only)	Latch	Pantograph Sounds
	Off - Pantograph Down (Sounds Only)	Latch	Pantograph Sounds
13	AWS	Latch	Single Play
14	Directional Lights (Day/Night Modes)	Latch	Light Switch Sound
	On - Day / Off - Night		
15	Cab Lights - On / Off	Latch	Light Switch Sound
	(Direction Dependent)		
16	Coupling Up	Latch	Single Play
17	Uncoupling	Latch	Single Play
18	On - Cab Door Open	Latch	Single Play
	Off - Cab Door Shut	Latch	Single Play
19	Uncoupling Movement Cycle	Latch	-
20	Directional Lights Off (Non-Panto End)	Latch	Light Switch Sound
21	Directional Lights Off (Panto End)	Latch	Light Switch Sound
22	Fire Alarm Test	Latch	Continuous Play
23	Volume Control (6 Levels)	Trigger	_



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