

Important: Please read this sheet before running your locomotive.

Many thanks for purchasing one of our **Graham Farish** BR Class 108 SOUND FITTED Diesel Multiple Units. 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.

Decoders: **ZIMO MX649N** (Power Car)
& **ZIMO MX671N** (Trailer Car)
CV1 Address: 03
Speed Steps: 28/128
Speaker: 10 x 15mm (0.7/1 Watt / 8 Ohm)

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.

Do not use with Electronic Track Cleaners.

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.

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.

Loco Decoder Address.

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

Running on DC.

Your model is equipped with both a **ZIMO MX649N DCC Sound Decoder** (Power Car) & **ZIMO MX671N DCC Function Decoder** (Trailer Car) but will operate on DC powered track producing movement & normal load running sounds and any other automatic and randomised sounds when power is applied.

Function List - BR Class 108 DMU

No.	Function/Sound	F Button <i>Suggested Setting</i>	Sound Type
0	Lights On/Off	Latch	-
1	Engine Start-up / Shut-down	Latch	Continuous Play
2	Brake (Non-Latching)	Trigger	Brake Sounds
3	Two-Tone Horns (Speed Related)	Latch	Speed Related
4	Single Horn (Speed Related)	Latch	Speed Related
5	Light Load	Latch	-
6	Engine Cruise	Latch	Continuous Play
7	Flange Squeal (Speed Related)	Latch	Continuous Play
8*	Cold Start (Before F1)	Latch	Fixed Length
9	Air Tank Drain Down	Latch	Fixed Length
10	Guard's Whistle	Latch	Fixed Length
11	On - Guard's Buzzer	Latch	Fixed Length
	Off - Driver's Responce	-	-
12	On - Guard's Double Buzzer	Latch	Fixed Length
	Off - Driver's Responce	-	-
13	On - Driver's Window Opening	Latch	Fixed Length
	Off - Driver's Window Closing	-	-
14	On - Driver's Door Opening	Latch	Fixed Length
	Off - Driver's Door Closing	-	-
15	Passengers Door Slamming	Latch	Fixed Length
16	On - Passengers Window & Door Opens	Latch	Fixed Length
	Off - Passengers Window & Door Closes	-	-
17	Windscreen Wipers	Latch	Continuous Play
18	Fade All Sounds	Latch	-
19	Hand Brake	Latch	-
20	Power Car Directional Lights Off	Latch	-
21	Trailer Car Directional Lights Off	Latch	-
22	Rail Clack Sound Off	Latch	-
23	Compressor Speed-Up	Latch	Continuous Play
24	Reserved	-	-
25	Reserved	-	-
26	Reserved	-	-
27	Volume Down	Trigger	-
28	Volume Up	Trigger	-
8*	Cold Start, F8 on Before F1. Wait for all four engines to be started, disengage F8. DMU won't move until sequence has finished and F8 is Off.		



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