NSWGR 442 class for ZIMO MS decoders

The 442 class are a class of diesel locomotives built by AE Goodwin and Comeng, Auburn for the New South Wales Department of Railways between 1970 and 1973.

The 442 class were ordered and operated by the New South Wales Government Railways. They were the second generation of Alco units to be built, and were used on both main freight and passenger service in New South Wales. Since entering private ownership they have operated across Australia. They were nicknamed Jumbos, due to their 1971 delivery coinciding with that of Qantas' first Boeing 747s.

Source: Wikipedia. Prototype image used with permission.

Project settings and information:

Project no.: ALCO 12-251C NSWGR 442 class MS

This project was released by DCCSound for use in ZIMO MS decoders featuring 16 bit technology.

- The decoder must have the latest software version loaded prior to sound project loading
- The decoder can be controlled via address 3
- To ensure the functionality of the project, CV values should only be changed very carefully.
- A decoder reset can be completed using CV #8 = 8.

Key	Function	Description	Sound
F0	Headlight on/off	Front headlight (FA0v) or Rear headlight (FA0r) depending on direction set	In-cab headlight switch
F1	Drive sound on/off		PM start-up & shutdown
F2			Playable horn
F3			Coupler crash & release
F4			Dynamic brake
F5	Speed lock	Adjust notch position vs speed	
F6	Brake	Ignores momentum settings	In-cab brake valve
F7	Shunting mode	Half motor speed, no momentum	
F8			Handbrake
F9			Short horn
F10			Curve squeal (running)
F11	FA1	Aux 1 lighting reserved	
F12	FA2	Aux 2 lighting reserved	
F13	FA3	Aux 3 lighting reserved	
F14	FA4	Aux 4 lighting reserved	
F15	Dimmer (headlight)		
F16			Sanding valve
F17			Condensate valve
F18			Cab door open & close
F19	Mute sound		
F20	Volume +		
F21	Volume -		
F22-F28	Not used		

Random sounds:

Z1: Compressor (standing and drive)

Z2: Compressor (standing)

Modified CVs:

CV	Value	Description
1	3	Loco address
3	64	Acceleration rate
4	128	Deceleration rate
9	58	Motor control frequency
12	53	n.a.
13	1	Analog functions F1-F8
17	0	Extended Address High
18	0	Extended Address Low
29	14	DCC configuration (binary)
35	0	Function mapp. F1
36	0	Function mapp. F2

37	0	Function mapp. F3
38	0	Function mapp. F4
39	0	Function mapp. F5
40	0	Function mapp. F6
41	0	Function mapp. F7
42	0	Function mapp. F8
43	0	Function mapp. F9
44	0	Function mapp. F10
45	0	Function mapp. F11
46	0	Function mapp. F12
56	0	Motor regulation: PID
105	145	User Data 1
106	18	User Data 2
114	60	Dim Mask FO0-FO6
147	100	Motor regulation: minimum timeout
149	100	Motor regulation: fixed P-Value
154	16	ZIMO configuration bits 2 (binary)
158	76	Several sound bits + RailCom variants
254	1	Project-ID
256	1	Project version number
287	12	Threshold for brake squeal
308	10	cornering squeal key
309	6	Brake button (FO 1-28)
310	1	Sound on/off button for road- and random noise
311	0	General on/off button for functional noise
312	0	Drainage button
313	119	Mute button
315	40	Random Z1 min interval
316	60	Random Z1 max interval
317	10	Random generator Z1 playback time
318	40	Random Z2 min interval
319	60	Random Z2 max interval
320	10	Random generator Z2 playback time
324	40	Random Z4 min interval
327	40	Random Z5 min interval
330	40	Random Z6 min interval
333	40	Random Z7 min interval
336	40	Random Z8 min interval
339	7	Raising-keys 1st key
340	7	raising-keys (number-1)*16+step
341	5	Switching input 1 Playback time
342	5	Switching input 2 Playback time
343	5	Switching input 3 Playback time
349	24	braking key deceleration rate (like CV4)

356	5	Speed Lock Key
374	4	Raising key
392	5	Reed4 play time [s]
395	64	maximal volume
396	21	Volume decrease key
397	20	Volume increase key
430	15	ZIMO Mapping 1 F-key
431	29	ZIMO Mapping 1 M-key
432	46	ZIMO Mapping 1 A1 forw.
434	47	ZIMO Mapping 1 A1 rev.
436	11	ZIMO Mapping 2 F-key
438	33	ZIMO Mapping 2 A1 forw.
440	33	ZIMO Mapping 2 A1 rev.
442	12	ZIMO Mapping 3 F-key
444	34	ZIMO Mapping 3 A1 forw.
446	34	ZIMO Mapping 3 A1 rev.
448	13	ZIMO Mapping 4 F-key
450	35	ZIMO Mapping 4 A1 forw.
452	35	ZIMO Mapping 4 A1 rev.
454	14	ZIMO Mapping 5 F-key
456	36	ZIMO Mapping 5 A1 forw.
458	36	ZIMO Mapping 5 A1 rev.
508	120	ZIMO Mapping dimming value 1-key
516	39	F2 soundnumber
518	72	F2 information on loop
519	33	F3 soundnumber
520	181	F3 volume
521	8	F3 information on loop
522	34	F4 soundnumber
523	181	F4 volume
524	8	F4 information on loop
528	28	F6 soundnumber
529	128	F6 volume
530	8	F6 information on loop
534	36	F8 soundnumber
535	128	F8 volume - Handbrake
536	8	F8 information on loop
537	40	F9 soundnumber
558	38	F16 soundnumber
559	128	F16 volume
560	8	F16 information on loop
561	32	F17 soundnumber
562	181	F17 volume
563	8	F17 information on loop

564	35	F18 soundnumber
566	8	F18 information on loop
570	37	F0 soundnumber
571	128	F0 volume
572	8	F0 information on loop
575	29	soundnumber change of direction
577	30	soundnumber squeal
603	41	cornering squeal sound number
604	128	cornering squeal volume
744	31	Soundnumber Z1
745	91	Volume Z1
746	72	Information on loop Z1
747	31	Soundnumber Z2
748	91	Volume Z2
749	8	Information on loop Z2
751	128	Volume Z3
752	8	Information on loop Z3
754	128	Volume Z4
755	8	Information on loop Z4
757	128	Volume Z5
758	8	Information on loop Z5
760	128	Volume Z6
761	8	Information on loop Z6
763	128	Volume Z7
764	8	Information on loop Z7
766	128	Volume Z8
767	8	Information on loop Z8

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