



Bild: Wikipedia

The MÁV M63 series was a six-axle diesel locomotive developed in 1970 and delivered in ten units to Magyar Államvasutak (MÁV) by 1975, which was intended for heavy express and passenger train services. The M63 series is to be regarded as a national in-house development by Ganz-MÁVAG, contrary to the guidelines of the Council for Mutual Economic Assistance. The locomotives were equipped with electric train heating. They were powered by an eighteen-cylinder four-stroke diesel engine with an output of 2,700 hp, which Ganz produced under licence from SEMT Pielstick. The engine was operated with an exhaust gas turbocharger and started with compressed air. The power transmission was diesel-electric in mixed-current technology. It was decommissioned on 13 December 1990 and was stationed in Budapest-Ferencváros and later in Szombathely

Quelle Wikipedia

Project settings and information:

Projekt no.: Axx

The project was realised in the new 16-bit technology for ZIMO MS decoders and is customized for the H0-scale model of ACME.

- The decoder must have at least software version 4.254.
- The decoder can be controlled at address 3
- To ensure the functionality of the project, CV values should only be changed very carefully.
- A reset can be carried out using CV #8 = 8.



Key	Function	Function output	Sound
F0	Light on/off	White lights (FO0fwd) on front end in forward direction, white lights on rear end (FO0bwd) in backward direction	
F1	Red tail lights	FO1bwd / FO2fwd	
F2			Small horn
F3			Horn high tone
F4			Horn low tone
F5			Conductor's whistle
F6	Half-speed and shunting key + lights	FO0fwd + FO0bwd	
F7			Curve squeal (when running)
F8			Sund on / off
F9			Mute (when on)
F10			Speed Lock
F11			Fan
F12			Coupling / uncoupling
F13			Cab door open / close
F14	Cab light	FO5fwd / FO6bwd	
F15	3 rd upper light	FO3	
F16	High beam	FO0fwd / FO0bwd	
F17			Engine comp. door
F18			Compressor
F19			Handbrake
F20			Brake test
F21			Auxiliary diesel
F22			Emergency braking
F23			E-heating
F24			Station announcement
F25			Refuel
F26			Sanding
F27			Volume +
F28			Volume -

Sound on/off on F8 corresponds to the ZIMO standard:

If the sound is to be switched on/off with F1, the following CVs must be programmed:

- CV 401 = 8
- CV 408 = 1



Random generators:

Z1: Compressor

Modified CVs:

CV# 1 = 3	Loco address	CV# 448 = 16	ZIMO Mapping 4 F-key
CV# 3 = 20	Acceleration rate	CV# 449 = 255	ZIMO Mapping 4 M-key
CV# 4 = 15	Deceleration rate	CV# 450 = 14	ZIMO Mapping 4 A1 forw.
CV# 5 = 220	Top speed	CV# 451 = 3	ZIMO Mapping 4 A2 forw.
CV# 6 = 75	Medium speed	CV# 452 = 15	ZIMO Mapping 4 A1 rev.
CV# 9 = 58	Motor control frequency	CV# 453 = 3	ZIMO Mapping 4 A2 rev.
CV# 13 = 129	analog functions	CV# 454 = 1	ZIMO Mapping 5 F-key
CV# 28 = 3	RailCom Configuration	CV# 456 = 34	ZIMO Mapping 5 A1 forw.
CV# 29 = 14	DCC configuration (binary)	CV# 458 = 33	ZIMO Mapping 5 A1 rev.
CV# 33 = 0	Function mapp. F0f	CV# 460 = 15	ZIMO Mapping 6 F-key
CV# 34 = 0	Function mapp. F0r	CV# 462 = 35	ZIMO Mapping 6 A1 forw.
CV# 57 = 115	Motor regulation: voltage reference	CV# 464 = 35	ZIMO Mapping 6 A1 rev.
CV# 60 = 100	Dimming general	CV# 516 = 43	F2 soundnumber
CV# 105 = 145	User Data 1	CV# 517 = 91	F2 volume
CV# 111 = 13	Emergency stop deceleration rate	CV# 519 = 44	F3 soundnumber
CV# 112 = 64	ZIMO configuration bits (binary)	CV# 522 = 46	F4 soundnumber
CV# 114 = 32	Dim Mask F00-F06	CV# 525 = 50	F5 soundnumber
CV# 125 = 88	Effects F0 front	CV# 526 = 46	F5 volume
CV# 126 = 88	Effects F0 rear	CV# 543 = 49	F11 soundnumber
CV# 127 = 88	Effects F1	CV# 544 = 64	F11 volume
CV# 128 = 88	Effects F2	CV# 545 = 72	F11 information on loop
CV# 147 = 160	Motor regulation: minimum timeout	CV# 546 = 36	F12 soundnumber
CV# 148 = 100	Motor regulation: D-Value	CV# 547 = 64	F12 volume
CV# 149 = 150	Motor regulation: fixed P-Value	CV# 548 = 8	F12 information on loop
CV# 154 = 16	ZIMO configuration bits 2 (binary)	CV# 549 = 38	F13 soundnumber
CV# 155 = 6	Half-speed key	CV# 550 = 128	F13 volume
CV# 156 = 6	Shunting key accel./decel.	CV# 551 = 8	F13 information on loop
CV# 190 = 40	Up-dimming time for FO	CV# 561 = 39	F17 soundnumber
CV# 191 = 20	Down-dimming time for FO	CV# 562 = 64	F17 volume
CV# 254 = 253	Project-ID	CV# 564 = 32	F18 soundnumber
CV# 256 = 1	n.a.	CV# 565 = 181	F18 volume
CV# 265 = 101	Selection of the locomotive type	CV# 566 = 72	F18 information on loop
CV# 273 = 20	Starting delay	CV# 567 = 37	F19 soundnumber
CV# 282 = 30	Duration of the acceleration noise [0.1s]	CV# 568 = 91	F19 volume
CV# 284 = 15	Threshold for noise reduction in delay	CV# 569 = 8	F19 information on loop
CV# 285 = 20	Duration of the noise reduction with delay	CV# 577 = 21	soundnumber squeal
CV# 287 = 120	Threshold for brake squeal	CV# 578 = 128	volume squeal
CV# 288 = 75	Brake squeal time spent driving	CV# 581 = 20	soundnumber starting whistle



CV# 296 = 150 Electromotor largest volume	CV# 582 = 91 volume starting whistle
CV# 297 = 20 Electromotor: begin of audible noise	CV# 585 = 19 Soundnumber electromotor
CV# 307 = 128 cornering squeal inputs	CV# 673 = 31 F20 soundnumber
CV# 313 = 109 Mute button	CV# 674 = 91 F20 volume
CV# 314 = 45 Mute fade time	CV# 675 = 8 F20 information on loop
CV# 315 = 25 Random Z1 min interval	CV# 676 = 51 F21 soundnumber
CV# 316 = 25 Random Z1 max interval	CV# 677 = 91 F21 volume
CV# 317 = 8 Random generator Z1 playback time	CV# 678 = 72 F21 information on loop
CV# 356 = 10 Speed Lock Key	CV# 685 = 52 F24 soundnumber
CV# 395 = 85 maximal volume	CV# 688 = 40 F25 soundnumber
CV# 396 = 28 Volume decrease key	CV# 689 = 91 F25 volume
CV# 397 = 27 Volume increase key	CV# 690 = 72 F25 information on loop
CV# 430 = 29 ZIMO Mapping 1 F-key	CV# 691 = 35 F26 soundnumber
CV# 432 = 46 ZIMO Mapping 1 A1 forw.	CV# 692 = 91 F26 volume
CV# 434 = 47 ZIMO Mapping 1 A1 rev.	CV# 693 = 72 F26 information on loop
CV# 436 = 6 ZIMO Mapping 2 F-key	CV# 744 = 32 Soundnumber Z1
CV# 437 = 1 ZIMO Mapping 2 M-key	CV# 745 = 181 Volume Z1
CV# 438 = 46 ZIMO Mapping 2 A1 forw.	CV# 746 = 8 Information on loop Z1
CV# 439 = 47 ZIMO Mapping 2 A2 forw.	CV# 980 = 181 Script 1 volume sound 1
CV# 440 = 46 ZIMO Mapping 2 A1 rev.	CV# 981 = 128 Script 1 volume sound 2
CV# 441 = 47 ZIMO Mapping 2 A2 rev.	CV# 982 = 128 Script 5 volume sound
CV# 442 = 14 ZIMO Mapping 3 F-key	CV# 983 = 181 Script 4 volume sound
CV# 444 = 165 ZIMO Mapping 3 A1 forw.	CV# 984 = 10 Script 2 timer
CV# 446 = 166 ZIMO Mapping 3 A1 rev.	CV# 990 = 35 Script 6 timer

Sound Samples:

19 E-Motor_low_fade.wav	41 Schienenknarren.wav
20 Bremse_lösen_kurz.wav	42 Kurvenquietschen.wav
21 Bremse.wav	43 Hupe.wav
31 Bremse_an-lösen_kurz.wav	44 Klaxon_hoch.wav
32 Compresseur.wav	45 Klaxon_hoch-tief-hoch.wav
33 Luft_ablassen.wav	46 Klaxon_tief.wav
34 Notbremsventil.wav	47 Klaxon_tief-hoch.wav
35 Sanden.wav	48 SiFa.wav
36 An-Abkuppeln.wav	49 Lüfter.wav
37 Handbremse_an-lösen.wav	50 Schaffnerpiff_MAV.wav
38 Tür_auf-zu.wav	51 Hilsdiesel_M63.wav
39 Maschinenraumtür_innen_zu.wav	52 Ansage_Györ.wav
40 Tanken.wav	



Scripts:

Script 1: Curve squeal depending on speed.

Script 2: Fan.

Script 3: E-Heating.

Script 4: Emergency brake

Script 5: Deadman's control beep.

Script 6: Timer for cab lights

fits
mfx The project is equipped with mfx function symbols and prepared for the use of locomotive pictures: the mfx product number 64768 applies to the MAV M63.

The new decoder generation from ZIMO:

...is called MS decoder. These are multi-protocol decoders (for the DCC, MM or mfx format), which are also capable of analogue operation (DC, AC). An audio section with 16-bit resolution, 22 kHz sample rate and 128 Mbit sound memory means an even more powerful and sonically dynamic ZIMO decoder than before. ZIMO is thus taking a further step in the direction of model fidelity. Of course, all the valued features and familiar options of the MX decoders are retained.

For technical data, see: <https://www.zimo.at/web2010/products/ms-sound-decoder.htm> (small decoders) and <https://www.zimo.at/web2010/products/ms-sound-decoder-grossbahn.htm> (large scale decoders).

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