



Bulletin: EURO 4000

Decoder type LokSound 5 nano DCC
Address 3
Manufacturer ESU
Project number 11995
Project version V2-R1



For spanish Comsa Rail and various private european railway companies, Alstom (later Vossloh Spain, today Stadler Rail) developed the six-axle EURO4000 main line diesel locomotive in close cooperation with the US manufacturer EMD from 2005 onwards. The 16-cylinder two-stroke diesel engine EMD 16-710 G3C-U2, which supplies the six electric traction motors with energy, has an output of 3178 kW at 950 RPM and, depending on the transmission, enables a top speed of up to 160 km/h. There are currently 48 of the very reliable EURO4000 rolling in Europe, but with a few exceptions these are geared for freight duty with a maximum speed of 120 km/h. locos had been sold to private owners and came e.g. to Germany. The locos are driven by a 16 cyl. 2 stroke diesel engine and reach a maximum speed of 135 km/h.

For SudExpress, using New Mainboard with SMT transistors. NOT suitable for the initial Mainboard 001ML2PH2578A with THD Transistor

Different starting processes can be selected with F1: 1x press button = warm start / press button 2x = false start / press button 3x = cold start

F5 enables the heavy load mode: The diesel notch is always one up compared with normal operation. If you want to jump two notches, simply set CV 104 to 170 (instead of 150).

F27 turns on the manual notching. Once F28 is on, you can use F28 to notch up and F29 to notch down. F27, F28, and F29 must be turned off to return to normal mode. If F27 is off and you press F28, the prime mover will run to full speed.

F17 will bring the locomotive to full stop.

The language of the station announcements are selectable via CV 169: Portuguese = 0, Spanish = 1, French = 2, German = 3.

Key	Function	Sound slots	Volume CVs	Volume values
F0	front light			
F1	sound on/off	1, 22, 29	259, 427, 483	150, 32, 80
F2	air horn (high)	3	275	230
F3	air horn (low)	4	283	230
F4	dynamic brake (brake fan)	28	475	60
F5	heavy load			

F6	acceleration/brake time, shunting mode/shunting speed			
F7	Turn off Red Head lights (directional)			
F8	Turn off Third head light (directional)			
F9	coasting			
F10	compressed air let off	9	323	80
F11	coupler clank	8	315	128
F12	Radiator fan	5	291	164
F13	apply train brake/train brake release (automaticly)	31	499	120
F14	brake function 1	25	451	100
F15	compressor	6	299	25
F16	battery switch	30	491	50
F17	curve squeal	15	371	120
F18	rail clank	17	387	80
F19	switch flange	19	403	180
F20	apply/release hand brake	18	395	150
F21	conductor's signal	10	331	100
F22	Country-specific Station announcement #1 (CV169 / PT= Value 0 / ES= Value 1 / FR= Value 2 / DE= Value 3)	7	307	120
F23	Country-specific Station announcement #2 (CV169 / PT= Value 0 / ES= Value 1 / FR= Value 2 / DE= Value 3)	14	363	120
F24	cab bell	32	507	120
F25	sanding valve	11	339	100
F26	sound fader			
F27	manual notching logic on/off	27	467	0
F28	manual notching up			
F29	manual notching down			
F30	disable brake squeal sound			
F31	Not in use			