



## Bulletin: Stadler Euro Dual / BR159

**Decoder type** LokSound 5  
**Address** 3  
**Manufacturer** Sudexpress  
**Project number** 13447  
**Project version** V3-R4



Instead of equipping electric locomotives with just a diesel power pack (last mile package), which enables them to be used independently of the driving current, for example on sidings, Stadler developed the EuroDual, which carries a full-fledged diesel engine. The EuroDual, run as the 159 series, runs purely electrically under the 15 kV-16 2/3 Hz system as well as in the AC and DC networks commonly used in France. Depending on the operating mode, traction power between 6150 kW and 7000 kW is available under catenary, the 16-cylinder Caterpillar CAT C175-16 diesel engine has an output of 2800 kW and generates the energy for the six electric traction motors. Depending on the reduction selected by the customer, the locomotive can reach 120 to 160 km/h. In Germany, the HVLE and the leasing company European Loc Pool each procure ten, ITL / Captrain four EuroDual.

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.

Key	Function	Sound slots	Volume CVs	Volume values
F0	front light			
F1	Driving noise on/off (diesel mode), fan motor on as required with F7	1, 2, 28	259, 267, 475	255, 255, 140
F2	air horn (high)	3	275	255
F3	air horn (low)	4	283	255

F4	sound on/off (electric locomotive mode) please press F9 or F 10 first	23, 28	435, 475	100, 140
F5	heavy load	32	507	110
F6	acceleration/brake time, shunting mode/shunting speed			
F7	Diesel engine fan /delayed switch-off - not in e-mode			
F8	High beam (depending on direction of travel)			
F9	Panto front	20, 23, 28	411, 435, 475	100, 100, 140
F10	Panto rear	21, 23, 28	419, 435, 475	100, 100, 140
F11	Activate driver's cab (during commissioning or when changing)	30	491	30
F12	coupler clank	8	315	90
F13	Cab light (directional)			
F14	apply locomotive brake/locomotive brake release (automaticly)	13	355	100
F15	Radio communication #1	26	459	200
F16	curve squeal	15	371	115
F17	brake function 1 (Train is slowly braked to a standstill.)	25	451	125
F18	horn high/ low	3, 4	275, 283	255, 255
F19	Drive Hold - here, driving noise (engine speed) and speed are decoupled from each other.			
F20	Turn off Red Head lights (directional)			
F21	Rail clank	17	387	95
F22	sanding	11	339	65
F23	release/set train brake	16	379	108
F24	compressor	6	299	80
F25	compressed air let off	18	395	65
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	Driver's cab door open/closed	12	347	85