

## Denver & Rio Grande Western C-19



### Prototype informations

Built by Baldwin Locomotive Works 1881 as class 70 later C-19

All sound records are taken from the prototype 346

Originally D&RG Class 70 #406

Leased to C&S NG 1935-1937

Wrecked on Kenosha Pass on 25 Jul 1936

Rebuilt and returned to D&RGW Apr 1937

Sold Montezuma Lumber 19-May-1947

Purchased by RW Richardson Sep-1950

Preserved today at Colo RR Museum

Wikipedia

### Sound project informations

The sound operates booth, the thundering highball and the light coasting on flat areas. Check F15 to switch between booth modes.

The sound project is based on Zimo Advanced Standard.

Der Decoder must have SW Version 33.14 or higher.

The sound project is dedicated for the new Zimo MX 697 sound decoder fitting the NMRA G-scale plug and play connector. All another Zimo sound decoders works well too, except the old MX 690 series is for complex sounds with coasting no more dedicated..

FA 7 and servo1 can operate several electric couplers. The Kadee electric coupler can simply plug in on servo connector 1

CVs 3, 4, 5 and 57 are important values for the sound project. Please change values very carefully!

The sound project is available in 4 different settings

- Bachmann spectrum using the onboard chuffcam, with museum multichime whistle
- Bachmann spectrum using the onboard chuffcam, with heritage singlechime whistle
- Accucraft Modell detecting the motor as chuffcam, with museum multichime whistle
- Accucraft Modell detecting the motor as chuffcam, with heritage singlechime whistle

Function number is default the same as function key. With the Zimo function key mapping, the complete function are easy changeable to another key.

Function	Installation	Function output	Sound effect
F0	Light on	FA 0v+0r	Lichtmaschine
F1	Bell		Bell
F2	Whistle l-l-s-l		App Highway crossing
F3	Whistle long		Playable as long as you push
F4	Whistle short		Short whistle
F5	Cabligh	FA 5	
F6	Smokegenerator on heater load controlled Also replaceable with Zimo blowing smoker	FA 6 heater 15 min timer against burnout Ventilatorout for cam operated blower	
F7	Cylinder valve		Blow down
F8	Sound ein/aus		Light engine
F9	Curve noise		Sound of close curves
F10	coal shovel	FA 8 flickers automatic	Door shovel door
F11	blower	smokeventilator is on	Steam blowing
F12	coupler open engine twist back and for	FA7 and servo1 opens electric coupler	Uncoupling sound
F13	coupling		Push coupler together
F14	Pop valve (safety valve)		Loud steamblast
F15	Fullpower/coasting		Switch between 2 sound modes
F16	Tunnelfader (muting)		Fade in or out in 2,5 sec
F17	conductor		All aboard
F18	injector		Feeding water in the boiler
F19	Dual Westinghouse airpump fast		2 airpumps with different speed
F20	Water fill in the tender		Water swallow
F21	Steamblast		Loud steamblast
F22	Marker lights	FA 3	

Randomeffect	Noise	Function
Z1	Dual airpump fast	Everytime after train stops
Z2	Dual airpump slow	Hold of airpressure
Z3	Coal shovel	FA8 flickering
Z4	Blower	Ventilator blows smoke out of stack
Z5	Injector	Steaminjects water into the bolier
Z6	Some ashdoor noise	
Z7	Steam noise	
Z8	Safety valve	Loud popping valve

Input	Sound
1	bell
2	whistle
3	Cam chufftrigger

### **Changing CVs values used by the reset**

CV# 3 = 22	CV# 287 = 85
CV# 4 = 32	CV# 311 = 0
CV# 13 = 180	CV# 312 = 7
CV# 14 = 67	CV# 313 = 116
CV# 35 = 0	CV# 314 = 25
CV# 36 = 0	CV# 345 = 15
CV# 37 = 0	CV# 346 = 2
CV# 38 = 0	CV# 351 = 28
CV# 41 = 0	CV# 352 = 255
CV# 42 = 0	CV# 353 = 62
CV# 43 = 0	CV# 354 = 38
CV# 44 = 0	CV# 376 = 181
CV# 45 = 0	CV# 430 = 22
CV# 46 = 4	CV# 432 = 3
CV# 57 = 140	CV# 434 = 3
CV# 60 = 104	
CV# 65 = 6	
CV# 112 = 1	
CV# 114 = 255	
CV# 115 = 55	
CV# 116 = 155	
CV# 133 = 20	
CV# 137 = 153	
CV# 138 = 204	
CV# 139 = 255	
CV# 152 = 63	
CV# 154 = 18	
CV# 158 = 8	
CV# 159 = 48	
CV# 160 = 4	
CV# 163 = 255	
CV# 167 = 255	
CV# 181 = 12	
CV# 182 = 12	
CV# 250 = 224	
CV# 253 = 234	
CV# 260 = 0	
CV# 265 = 1	
CV# 267 = 108	
CV# 268 = 0	
CV# 269 = 0	
CV# 275 = 181	
CV# 276 = 181	
CV# 281 = 5	
CV# 282 = 40	
CV# 283 = 255	
CV# 284 = 5	
CV# 285 = 40	
CV# 286 = 40	