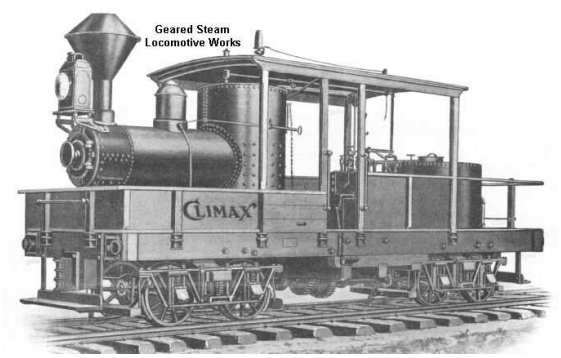
Climax A-Class Geared Locomotive



The Prototype

The Climax locomotives emerged from the Dunkirk locomotives. After hard patent law arguments both Dunkirk and Climax decided not to proceed with the construction of the A-Class.
The Climax A-Class is basically a boiler fitted to a flatcar. A stand-up boiler was used, consisting of a T-shaped boiler and firebox, common in steam boats of the time. On the other half of the flatcar, a two-cylinder marine steam engine was installed, with an attached 2 speed gearbox. Power was transmitted via a drive shaft and bevel gears to the driving wheels, mounted in trucks. A round water tank was fitted in the rear. The locomotives usually had a roof, and sometimes where partially or completely enclosed.

At that time airbrakes where not widely used. These locomotives had hand operated brakes. All in all, from today's perspective a bizarre testimony to American ingenuity.

More Information: http://www.gearedsteam.com/climax/climax.htm

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Sound Project Information

You hear the unique sound of this special locomotive. The sound operates both the thundering highball and the very significant noise of the cast iron bevel cogwheels during light coasting on flat areas. Use the F15 function key to switch between modes.

At present the sound project does not support the two speed gearbox. ZIMO software updates will be necessary.

The sound project is based on Zimo Advanced Standard.

The decoder must have a software version 33.14 or higher.

The sound project is designed for the new Zimo MX 697 sound decoder that fits the NMRA G-scale plug and play connector. All another Zimo sound decoders works well too, except the old MX 690 series, which cannot handle complex sounds with coasting.

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, 57, 154 and 158 are important values for the sound project. Please change values very carefully!

By default the function number is the same as function key. All the functions can easily be assigned to other keys, using the Zimo function key mapping.
Program the desired key number as your value in the CV 400+Fu number and the whole function is mapped to another key. Please take care, as it is possible to map multiple functions to the same key! Please read the instruction sheet http://sound-design.white-stone.ch/Information.html

Function	Installation	Function output	Sound effect
F0	Light on	FA 0v+0r	Electric generator
F1	Bell		Bell
F2	Whistle l-l-s-l		Highway crossing signal
F3	Whistle l		Playable as long as the key is pressed
F4	Whistle s		Short
F5	Cab light	FA 5	
F6	Smoke generator on heater load controlled Also replaceable with Zimo blowing smoker	FA 6 heater, on 15 min timer to prevent burnout Fan output for cam operated blower	
F7	Cylinder valve		Blow down
F8	Sound on / off		
F9	Wheels screeching on curves		Sound of Wheels screeching on curves
F10	Fire box door	FA 8 flickers automatically	Door closes
F11	Blower	Smoke fan is on	Steam blowing
F12	Servo coupler opens and loco moved back and forth	FA7 and servo1 opens electric coupler	Uncoupling sound
F13	Coupling		Coupling sound
F14	Pop valve (safety valve)		Loud steam blast
F15	Full power / coasting		Switch between 2 sound modes
F16	Tunnel fader (muting)		Sound fades in or out in 2,5 sec
F17	Conductor		„All aboard!“
F18	Injector		Feeding water in the boiler
F19			
F20	Filling water into tender		Water splashing

Random effect	sound	
Z1		
Z2		
Z3	Blower	Fan blows smoke out of stack
Z4	Injector	Steam injects water into the boiler
Z5	Steam blow	Steam blow
Z6		
Z7	Safety valve	Loud popping of valve
Z8	Fire box door	

Input	Sound	
1	Bell	
2	Whistle	
3	Cam chuff trigger	If desired

Changing CVs values used by the reset

CV# 3 = 19
CV# 4 = 19
CV# 5 = 252
CV# 13 = 176
CV# 14 = 67
CV# 35 = 0
CV# 36 = 0
CV# 37 = 0
CV# 38 = 0
CV# 41 = 0
CV# 42 = 0
CV# 43 = 0
CV# 44 = 0
CV# 45 = 0
CV# 46 = 4
CV# 57 = 77
CV# 60 = 255
CV# 112 = 1
CV# 115 = 55
CV# 116 = 55
CV# 132 = 72
CV# 133 = 20
CV# 137 = 153
CV# 138 = 206
CV# 139 = 255
CV# 154 = 18
CV# 158 = 8
CV# 159 = 48
CV# 160 = 8
CV# 181 = 12
CV# 182 = 12
CV# 266 = 65
CV# 267 = 72
CV# 286 = 64
CV# 312 = 7
CV# 313 = 116
CV# 314 = 25
CV# 345 = 15
CV# 346 = 2
CV# 351 = 23
CV# 353 = 48
CV# 354 = 1
CV# 376 = 255