

# SoundTraxx Clinic: “Braking, Switching & Running”

## Econami Digital Sound Decoder CV Values

The following tables list the CV values and default function assignments for Econami ECO-100 Digital Sound Decoders that were used in the clinic, “Braking, Switching & Running: Railroading with SoundTraxx Technology.” Try them out and experiment with the values to suit your personal taste and running characteristics of your model.

### Econami for Steam Locomotives

<b>Steam Locomotive CV Values</b>		
<b>CV Name</b>	<b>CV</b>	<b>Value</b>
Baseline Acceleration Rate	CV 3	25
Baseline Deceleration Rate	CV 4	75
F11 Braking Rate	CV 117	178
DDE Control Register: Throttle Gain	CV 1.511	200
Master Volume	CV 128	200

<b>Steam Locomotive Function Output Assignments</b>	
<b>Function Output</b>	<b>Assignment</b>
F0	Headlight/Backup Light/Dynamo
F1	Bell
F2	Long Whistle
F3	Short Whistle
F4	Cylinder Cocks
F5	Drift Enable
F6	Drift Disable
F7	Dimmer
F8	Mute
F9	Grade-Crossing Signal
F10	Blowdown Valve
F11	Brake Squeal/Release
F13	Coupler Clank/Glad hand release
F 14	Switching Mode/Momentum Override
F 16	Water Stop
F24	FX3 Output
F 25	FX4 Output
E-Stop	Emergency Brake Application
Direction Button	Johnson Bar

## Econami for Diesel Locomotives

<b>Diesel Locomotive CV Values</b>		
<b>CV Name</b>	<b>CV</b>	<b>Value</b>
Baseline Acceleration Rate	CV 3	25
Baseline Deceleration Rate	CV 4	75
F11 Braking Rate	CV 117	178
Engine Exhaust Control	CV 114	103
Master Volume	CV 128	200

<b>Diesel Locomotive Function Output Assignments</b>	
<b>Function Output</b>	<b>Assignment</b>
F0	Headlight/Backup Light
F1	Bell
F2	Horn
F3	Short Horn
F4	Dynamic Brake
F5	Start Up/Notch +
F6	Shut Down/Notch -
F7	Dimmer
F8	Mute
F9	Grade-Crossing Logic
F11	Brake Squeal/Release
F13	Coupler Clank/Glad hand release
F14	Switching Mode/Momentum Override
F24	FX3 Output
F25	FX4 Output
E-Stop	Emergency Brake Application

## Tsunami SoundCar

<b>SoundCar CV Values</b>		
<b>CV Name</b>	<b>CV</b>	<b>Value</b>
Baseline Acceleration Rate	CV 3	25
Baseline Deceleration Rate	CV 4	75
F11 Braking Rate	CV 61	178
Rolling Stock Type Select	CV 117	244 246 (with generator) +1 for flat spot

<b>SoundCar Function Output Assignments</b>	
<b>Function Output</b>	<b>Assignment</b>
F0	Headlight
F1	Bell
F2	Horn/Whistle
F3	Short Horn/Whistle
F4	Unassigned
F5	FX5 Output
F6	FX6 Output
F7	Dimmer
F8	Mute (4x Intelligent Consisting Enable)
F9	Generator
F10	Uncouple/Glad Hand Release
F11	Apply/Release Brakes
F12	Coupler Clank
E-Stop	Emergency Brake Valve ("Big Hole")

## Locomotive Consist

<b>Locomotive Consist CV Values</b>		
<b>CV Name</b>	<b>CV</b>	<b>Value</b>
Consist Address	CV 19	1-127 +128 (reverse-facing locomotive)
Consist Function Group 1	CV 21	223 (lead locomotive) 136 (middle locomotive) 136 (trailing locomotive)
Consist Function Group 2	CV 22	17 (lead locomotive) 16 (middle locomotive) 50 (trailing locomotive)

## SoundCar Intelligent Consist

SoundCar Intelligent Consist CV Values		
CV Name	CV	Value
Consist Function Group 1	CV 21	128 (default)
Consist Function Group 2	CV 22	16 (default)

## GCOR Whistle Signals

o = Short Blast    — = Long Blast

o	Brakes applied.
— —	Release brakes. Proceed forward.
— o	Warning signal (use when: approaching areas with obstructed views; approaching passenger or freight trains; and passing freight trains)
— — o —	Approaching public grade crossing (hold final blast until crossing is occupied).
o o o	When stopped, back up. When moving, stop.
o o	Acknowledgment of any signal not otherwise provided for.
o o o o	Request for signal.
— o o o	Flagman protect rear of train.
o o o —	Flagman protect front of train.
— — — —	Flagman return from west or south.
— — — — —	Flagman return from east or north.
o —	Inspect brake system for leaks or sticking brakes.