Quick Start Guide

For the Bachmann® DCC Sound-Equipped GE 44-Ton Switcher

Featuring SoundTraxx® Tsunami2™ DCC Sound Technology

Overview
Congratulations on the purchase of your Bachmann locomotive with digital sound installed. This state-of-the-art digital sound decoder incorporates SoundTraxx Tsunami2 Digital Sound Technology and will provide high-quality, digital onboard sounds with the benefits of today's DCC (Digital Command Control) technology.

This **Quick Start Guide** assumes that you have some understanding of, or experience with, other SoundTraxx Digital Sound Decoders. It covers the differences you may need to know between these decoders and any you may have previously used.

If you are new to SoundTraxx Tsunami2 Digital Sound Decoders, you should start with the **Tsunami2 Diesel User's Guide** which will walk you through the various aspects of programming your sound decoder, troubleshooting tips, and a list of all the CVs available for use with your sound decoder. This document is available in PDF format at www.soundtraxx.com. Please note that you may need to install Adobe® Acrobat Reader on your computer to open and print this file. This is available as a free download from www.adobe.com.

Features
SoundTraxx Tsunami2 Digital Sound Decoders have a great number of features designed to enhance your operating experience. The decoder installed in your locomotive has been pre-programmed for a great ready-to-run experience. However, there are many features available that you may wish to experiment with or adjust to suit your personal preferences.

Sound Features

For users of other SoundTraxx decoder models, you will be pleased to find the same high-fidelity sound that you are accustomed to. In addition to accurate prime-mover sounds, Tsunami2 also provides 43 selectable air horns, 14 bells, 4 air compressors, and 3 coupler variations to allow more versatility in creating your ideal model railroading experience. Each of these can be configured using CVs. Sounds appropriate to your model come pre-configured for out-of-the-box operation.

This model arrives factory-configured for DCC/DC dual-mode operation. For those operating in DC (analog) mode, automatic sound sets including bell and brake sounds will activate in accordance with the speed input provided by the operator, allowing you to get the most out of the features on your SoundTraxx Tsunami2-equipped locomotive whether you run DCC or DC.

Throttle Features

The Digital Sound Decoder that comes with your Bachmann model has many advanced throttle features as part of SoundTraxx's Hyperdrive2™ system, including Back-EMF (also known as "Cruise Control"), prototypical dynamic braking, Head End Power (HEP) mode, and independent and train brake functions. With the addition of these features, you will be able to better control your locomotive under varying conditions.

Decoder Specifications

- supports extended address mode for assigning any locomotive number up to 9,999
- supports advanced consist addressing
- supports Operation Mode Programming, allowing CVs to be changed on the mainline without using a programming track

Throttle Specifications

- supports 14, 28, and 128 speed step modes
- programmable acceleration, deceleration, and starting voltage for prototypical starting and stopping
- use of standard and alternate speed tables

Lighting Specifications

- supports Rule 17 operation or automatic direction control (if applicable)
- supports up to 4 additional user-installed lighting inputs

General Sound Specifications

- adjustable volume controls
- 1-Watt audio amplifier

Note: Some of the above specifications may not be configurable when operating on Bachmann E-Z Command® *systems.*

Let's Get Started!

Your Tsunami2 Digital Sound Decoder has been installed with all CVs pre-programmed so you can begin using your locomotive immediately without having to worry about what adjustments to make. Appropriate motor response has already been calculated and optimized for the locomotive while additional prototypically correct sounds have also been pre-programmed. The decoder is set to operate immediately using either a 12-volt DC power pack or an NMRA-compatible DCC command station.

Operating with DCC

Your locomotive will respond initially to address 3 as it would if you had just installed any DCC decoder. The table on the following page shows the function assignments of the decoder.

For now, simply set your controller to Locomotive Address 3, place the locomotive on the main track, and away you go! To activate a function, simply press the appropriate key on your controller.

F0	Directional Front & Rear Headlight (F10 on *E-Z Command*®)
F1	Bell
F2	Horn
F3	Short Horn
F4	Dynamic Brakes
F5	Engine RPM+
F6	Engine RPM-
F7	Rule 17 Headlight Dimming
F8	Mute All Sounds
F9	Grade Crossing Sequence
F10	Straight-to-Notch 8 (Headlight on *E-Z Command*®)
F11	Brake Squeal & Release
F12	Brake Select
F13	Coupling/Uncoupling
F14	Half-speed & Momentum Override
F15	Handbrake Set
F16	Head End Power Mode
F17	Fuel Loading
F18	General Service
F19	Straight-to-Idle
F20	Steam Generator or Auxiliary HEP Generator
F21	Sander Valve
F22	Cab Chatter
F23	All Aboard/Coach Doors
F24	Not Used
F25	Not Used
F26	Not Used
F27	Not Used
F28	Not Used

Operating with Bachmann *E-Z Command®* and *E-Z Command® Plus*

When operating with *E-Z Command®*, control of functions 1-9 is available using the 1-9 buttons. Button 10 will toggle the headlight control. For *E-Z Command® Plus* users, all 23 functions can be toggled by cycling through the three function pages accessed via the Function button. One press of the Function button will give access to functions 0-9 using the 0-9 buttons, a second press of the Function button will give access to functions 10-19, and a third press of the Function button will allow access to functions 20-23. See your *E-Z Command®* or *E-Z Command® Plus* instruction manual for full details on operating your locomotive with your system.

Important Information for Operating on DC (analog) Systems

As previously stated, your Tsunami2-equipped locomotive is factory-configured for dual-mode operation. This means that you can enjoy key sound features in DC (analog) operation, as well as when using DCC. Prime mover, bell, and brake sounds will respond automatically on your DC (analog) railroad in response to the amount of input from the controller. Your sound decoder will work best in analog mode when using a high-quality, electronically regulated power pack, preferably one that supplies smooth, filtered DC power. Older rheostat-style power packs and pulse power packs will result in erratic and unreliable operation and should not be used with this sound decoder. If your power pack provides a Pulse power switch, leave it in the 'Off' position.

Depending on the quality of the power pack's track voltage, some automatic sound functions may require a higher sensitivity setting than needed for DCC operation to avoid continual triggering of the sound effect.

Resetting Your Locomotive
All SoundTraxx decoders can be reset by entering a value of 8 into CV 8. After programming CV8 = 8, cycle power to the decoder (i.e. turn the power off and then on again).

COMPATIBLE WITH THE NMRA STANDARDS AND RECOMMENDED PRACTICES

In the event you have a defective or damaged product, do not return the locomotive to the store where it was purchased. After checking all procedures listed in this guide and the warranty included, contact us at:

Bachmann Industries, Inc.
1400 East Erie Avenue
Philadelphia, PA 19124 USA
service@bachmanntrains.com

Should you need service or repairs, please include a detailed description of your concern and complete contact information. For some service issues regarding DCC sound decoders, the Bachmann Service Department may forward your locomotive to Soundtraxx for resolution.

www.bachmanntrains.com
Printed in China