

# Quick Start Guide

For the Bachmann®  
DCC Sound-Equipped  
ACS-64



Featuring WOWSound®  
DCC Sound Technology  
by TCS

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**For More Information Visit:**

[www.TCSDCC.com](http://www.TCSDCC.com)

**For WOWSound Video Tutorials Visit:**

[www.youtube.com/TCSDCC](http://www.youtube.com/TCSDCC)

## **Overview**

Congratulations on the purchase of your Bachmann locomotive with digital sound installed. This state-of-the-art Digital Sound Decoder incorporates WOWSound Digital Sound Technology and will provide true CD-Quality audio, realistic operational performance, and the benefits of DCC (Digital Command Control) technology.

This Quick Start Guide assumes that you have some understanding of, or experience with, other “prototype” trains and TCS’ 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 WOWSound you should start by visiting the TCS website at [www.tcsdcc.com](http://www.tcsdcc.com) to review the WOWSound comprehensive guide as well as watching the video tutorials provided.

For most DCC operations of the locomotive (selecting new sounds, adjusting volumes, remapping or changing lighting effects, etc.), it’s easiest to use Audio Assist<sup>®</sup> (accessed by pressing function button 8 four times in quick succession while you are operating your locomotive in DCC mode). From there the decoder will take over, talk to you, and explain how to perform the various configuration actions available.

## **Features**

With WOWSound decoders you know you are getting the real sounds of locomotives carefully recorded, preserved, and played back without distortion or manipulation. WOWSound’s signature CD-Quality audio provides modelers with the closest experience to standing track side.

In addition to excellent audio performance WOWSound decoders also feature Keep-Alive® UPS (Uninterruptable Power Supply) for uninterrupted operation, even over dirty track, and the exclusive Audio Assist® for easy configuration without programming CVs.

## **WOWSound Decoder Features:**

### **Operational Features:**

- Button actuated braking
- Extended momentum for realistic acceleration and deceleration
- Back EMF for slow speed operation
- Automatic sounds when operating on DC track
- Supports 14/28/128 speed step modes
- Both simple and advanced consisting for MU (Multiple Unit) operation
- Supports User Loadable Speed Tables for completely custom speed curves

### **Light Features:**

- Full Rule 17 Dimming features
- Fully remappable light functions (control any light with any button)
- 20 different lighting effects
- 6+ light functions for realistic lighting
- Light Mode/Sound Mode function mapping that allows each button to perform two actions independently

### **Sound Features:**

- 1W+ amplifier for powerful sound in a small package
- Load-Based motive power sounds that adjust automatically to the load, speed, and track conditions on your layout
- Variable length horn/whistle sound for custom signalling
- True CD-Quality Audio - WOWSound is the ONLY decoder with 16bit 44,100Hz audio files for unparalleled fidelity
- A large number of sound variations to make MUs more enjoyable
- Page mapping that allows you to control all functions with just buttons 0-9

## **Programming Your Locomotive:**

### **Address Programming:**

The default address of all DCC decoders is 3, so you can start by placing the locomotive on the rails and selecting address 3 on your command station.

To change the address to another number less than 126 (99 for some Command Stations), place the locomotive on the programming track and following your command station instructions for programming CV 1 to your chosen address below 126.

For addresses higher than 126, use your command station's instructions for "long address" programming.

### **Bachmann E-Z Command®:**

*For Bachmann's E-Z Command® system, simply follow your command station instructions for programming the address (programming track not required).*

### **Configuring with Audio Assist:**

With your locomotive addressed and responding on the DCC mainline, press function button 8 four times rapidly to enter Audio Assist. Audio Assist will then guide you through configuring a wide array of features.

### **Resetting Your Locomotive:**

*To reset your locomotive to factory default settings you can program CV8=2 or (while operating on DCC) through Audio Assist.*

*From the Audio Assist Main Menu the button presses, in order, for a full factory reset are:*

*Button 4 → Button 3 → Button 2*

### **Running Your New Train:**

Your new locomotive is pre-configured with all of the settings best suited to replicate the prototype. This means you can place your engine on the track and immediately start running with either a DCC command station or a 12v DC power pack.

### **DC Operation:**

Using a standard DC power pack supporting up to 24v, your WOWSound-equipped locomotive will come to life as soon as you place it on the track and ramp up the power to 7.5v and above. In DC operation the sound and light operations will automatically operate based on the direction of travel and the amount of power applied at the throttle.

### **DCC Operation:**

With your locomotive address selected, you can begin moving the locomotive with the throttle control, and controlling the light and sound functions with the function buttons.

Button mappings for triggering light, sound, and motor responses will operate a little differently depending on whether the locomotive prototype is Diesel, Steam, or Electric.

## WOWElectric Locomotive Function Mappings

Press function button 8 twice rapidly to switch from page 1 sound to page 1 light mode. Every double press of function button 8 after will rotate to the next function mapping page.

### Page 1:

	Sound Mode	Light Mode
F0	Headlights On/Off Directional	
F1	Bell and Blink Ditch Lights	
F2	Horn - Long Toot and Blink Ditch Lights	
F3	Horn - Short Toot	On/Off Ditch Lights
F4	*WHOOSH* Sound	
F5	Blink Ditch Lights	
F6	Startup/Shut-down Sound	On/Off Marker Lights
F7	Dims Headlight (Rule 17)	
F8	1x Press Mute/Unmute 2x Press rotate light/sound mode or page 4x Press enter Audio Assist®	

<b>Page 2:</b>	
F0	Cooling Fan/Power Inverter
F1	Pantograph Raise/Lower
F2	Coupler Close
F3	Coupler Release
F4	Brake Release
F5	Apply Brakes
F6	Momentum
F7	Crew Alert
F8	1x Press Mute/Unmute 2x Press rotate light/sound mode or page 4x Press enter Audio Assist®

<b>Page 3:</b>	
F0	Grade Crossing Quill
F1	Forward Quill
F2	Reverse Quill
F3	Stop Horn
F4	Rotate Horn/Bell
F5	Windshield Wipers
F6	Station Announcements - Departing
F7	Station Announcements - Arriving
F8	1x Press Mute/Unmute 2x Press rotate light/sound mode or page 4x Press enter Audio Assist®

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COMPATIBLE  
WITH THE NMRA  
STANDARDS AND  
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PRACTICES

For service/repair, contact the Bachmann Service Department by visiting [www.bachmanntrains.com/home-usa/service.php](http://www.bachmanntrains.com/home-usa/service.php), calling 1-800-356-3910 (toll-free within the U.S. and Canada), or emailing [service@bachmanntrains.com](mailto:service@bachmanntrains.com).

Bachmann's Service Department is available Monday thru Friday, 8:30 AM to 4:30 PM ET.

*Please note your call will be answered as soon as a service technician is available. We thank you in advance for your patience.*

**You can also send your locomotive to:**

Bachmann Trains  
Service Department  
1400 East Erie Avenue  
Philadelphia, PA 19124

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 TCS for resolution.



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