



A Series of How-To Articles For DCS Operators

# TIPS & TECHNIQUES

## ARTICLE 3

### Tuning Engine Sounds

The following series of DCS tips & techniques has been created in the hopes that it will add to your enjoyment of the M.T.H. Digital Command System.

In these brief articles we'll try to point out and clarify DCS features that will make your Proto-Sound 2.0 (and TMCC) locomotives more fun, more realistic, and more interesting to operate. If you haven't yet tried DCS, we hope these articles will entice you to visit a DCS Demo Center, pickup up a handheld controller, and see what you're missing!

# DCS

*Simply The Best  
Way To Run A  
Railroad*





# ARTICLE 3

## Tuning Engine Sounds

Much like an audio mixer, the DCS handheld allows you to adjust the relative volumes of various engine sounds. If an operating session gets too noisy, for example, you might want to lower the steam chuff or diesel roar but keep your bells, whistles, and horns at full volume. Or perhaps you like the crew conversation in a particular engine and would like to make it more prominent. All this is possible on an individual basis for each PS2 engine you're running.

In addition, various auxiliary sounds such as squealing brakes and clickety-clack can be turned on or off, and you can change the chuff rate on steam engines. No other model engines offer nearly as many different sounds and the ability to customize them to your preference as PS2 locomotives under DCS control.

A partial list of sounds available in **all** PS2 engines includes: whistle or horn, bell, squealing brakes, coupler slack, coupler open, variable chuff rate, engine sounds (steam chuff, diesel prime mover, or electric engine cooling fans), cab chatter, clickety-clack, freight yard or passenger station sounds, and a variety of other accent sounds. All of these sounds can be activated or deactivated at will in any PS2 engine, from the least expensive RailKing or Rugged Rails model to top-of-the-line Premier locomotives. Both the overall volume for all engine sounds and the relative levels of many individual sounds can be adjusted remotely from the DCS handheld, without ever touching an engine.

As you read further, remember that to make any of these sound adjustments, you must have your engine powered up in DCS mode and selected on the screen of the DCS handheld.

# Article 3: Turning Engine Sounds

## HOW TO DO IT

### A. Adjusting sound levels

#### Overall volume

- The **ENG SND (4)** button turns engine sounds on and off. The first press turns sounds on and a second press turns them off.
- The **VOL+ (2)** and **VOL (5)** buttons raise and lower all engine sounds at the same time. Each button press raises or lowers the sounds one step until you reach full volume or no volume.

#### Individual volume controls

Through the DCS Sound Menu, you can change the relative sound level of four groups of engine sounds. These are the bell, horn or whistle, engine sounds (chuff, diesel motor, or electric cooling fans), and accent sounds. Accent sounds include coupler opening, coupler slack, idle sounds, cab chatter, and others. Accessing individual volume controls is simple:

**Menu key:** press the Menu key.

**Scroll and select SOUND:** scroll the thumbwheel to **SOUND** and press on the thumbwheel to select the Sound menu.

**Scroll and select a sound level to change:** Scroll to **BELL VOLUME**, **HORN VOLUME**, **ENG SOUNDS VOL** (engine sounds), or **ACCENT VOL** and press the thumbwheel to select the sound level to modify.



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**Scroll and select a sound level:** By rotating the thumbwheel up and down, you can select a sound level from 0 to 100% for the selected sound. While you rotate the thumbwheel, you'll hear the bell, horn or whistle, or engine sounds become louder or softer. Press the thumbwheel to lock in the selected sound level and return to the Sound menu.

**Repeat the above:** Repeat these steps for any of the other sounds you want to adjust.

**Press the MENU key twice when you're done:** This returns you to the Engine screen so you can continue running trains. Your locomotive is now customized to your preference.

### B. Customizing sounds

Within the DCS Sound menu there are several engine-related sounds that are adjustable. Each is accessed in the manner described above by pressing the MENU key, scrolling to the SOUND menu and selecting one of the following items:

#### Chuff Rate

While MTH steam engines are factory-set at a prototypical rate of four chuffs per driver revolution, you may want to adjust the rate so it sounds better to your ear. Suppose, for example, that you typically run your engines at high speeds where the chuffs tend to blur together. In that case, you might want to set a chuff rate lower than four per revolution to get more distinctive chuff sounds at higher speeds.

**Scroll and select CHUFF RATE:** With your steam engine run CHUFF RATE and press the thumbwheel to select it.

**Use the soft keys (S1 through S5, just under the screen) to select a soft key to highlight your choice, from 1 chuff per driver revolution advances the chuff rate menu to additional choices.**



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**Press the thumbwheel to lock in your choice.** This returns you to the Sound menu. You'll hear the engine instantly change to the new chuff rate.

**Press the MENU key twice when you're done:** This returns you to the Engine screen so you can continue running trains.

### PROTO CHUFF

Proto Chuff is a sound effect that makes an engine sound like it's laboring harder as it accelerates up to higher speed, and working easier when it's coasting down to a lower speed. When the engine reaches a steady speed, the sounds return to normal. When Proto Chuff is on, diesels shift into higher revs and steam engines into labored steam chuffing, with increased smoke output, when you increase engine speed; when you decrease speed, diesel revs drop and steam engines shift into an easier "drift chuff" with lowered smoke output.

**Scroll and select PROTO CHUFF:** In the Sound menu, scroll to PROTO CHUFF and press the thumbwheel to select it. This returns you to the Engine screen so you can continue running trains.

**Use soft key S1 or S2 to turn Proto Chuff on or off:** Press S2 (AUTO) to turn on the feature or S1 for OFF.

**Press the thumbwheel to lock in your choice.** This returns you to the Sound menu.

**Press the MENU key twice to go back to running trains.**

**NOTE** that the LABOR REV UP/DRIFT REV DN rocker switch on the DCS handheld *overrides this Sound menu setting. If you use the rocker switch for a particular engine, the Proto Chuff setting on that engine will automatically be set to OFF.*

### CAB CHATTER

When Cab Chatter is on, you'll hear various bits of crew conversation when your engine is idling. The procedure for turning Cab Chatter on and off is similar to that for Proto Chuff.

**Scroll and select CAB CHATTER:** In the Sound menu, scroll to CAB CHATTER and press the thumbwheel to select it.



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**Use soft key S1 or S2 to turn Cab Chatter on or off:**

Press S2 (AUTO) to turn on the feature or S1 for OFF.

**Press the thumbwheel to lock in your choice.** This returns you to the Sound menu.

**Press the MENU key twice to go back to running trains.**



### SQUEALING BRAKES

When the Brakes feature is on, slowing your engine rapidly will trigger the sound of squealing brakes. The procedure for turning Brakes on and off is similar to that for Proto Chuff.

**Scroll and select BRAKES:** In the Sound menu, scroll to BRAKES and press the thumbwheel to select it.

**Use soft key S1 or S2 to turn BRAKES on or off:**

Press S2 (AUTO) to turn on the feature or S1 for OFF.

**Press the thumbwheel to lock in your choice.** This returns you

**Press the MENU key twice to go back to running trains.**



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### CLICKTY CLACK

When this feature is turned on, an engine will enter “Clickety-Clack” mode when it has been running at a steady speed of at least 30 scale miles per hour for 30 seconds. Normal engine sounds will be suppressed and replaced with the “clickety-clack” sound of a train running over joints in the rails. Some engines will also play additional random sounds in Clickety-Clack mode. Changing the engine's speed will cause normal engine sounds to resume. The procedure for turning Clickety-Clack on and off is similar to that for Proto Chuff.

**Scroll and select CLICKTY CLACK:** In the Sound menu, scroll to CLIKITY CLACK and press the thumbwheel to select it.

**Use soft key S1 or S2 to turn clickety-clack sounds on or off:**  
Press S2 (AUTO) to turn on the feature or S1 for OFF.

**Press the thumbwheel to lock in your choice.** This returns you to the Sound menu.

**Press the MENU key twice to go back to running trains.**



## B. Accessing Additional Sounds

We're not done yet there are more sounds you can play with! To access these sounds from the Engine screen, do the following:

**Enter the soft key list:** Press the rightmost soft key, S5, repeatedly until “more” is displayed above soft key S4. Then press S4 to enter the soft key list.

**Scroll for sounds:** The soft key list is different for each PS2 engine. However, all soft key lists contain a number of sound effects. These may include sounds such as Track Signal, Coupler Close, Coupler Slack, Forward Signal, Reverse Signal, Train Wreck (a real crowd pleaser!), Extended Start Up, Extended Shut Down, a variety of sounds the engine will make while running, and a variety of sounds the engine will make while idling. To activate any sound, simply scroll to it and press the thumbwheel. The sound will play and you will be returned to the soft key list. When you're done playing sounds, press the ENG key to return to the Engine screen.



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**Customize the soft key list:** You can put your favorite soft key sounds or features at the top of the list for easy access remember that the first four items in the soft key list are accessible directly from the engine screen after you power up, by pressing keys S1 through S4. Pressing S5 will take you quickly to other low-numbered features. To move a soft key item:

**Go into the soft key list** as described above

**Scroll to the item you want to move** but do *not* select it

**Press S2 (“MOVE”)**

**Scroll to the desired new location** in the list

**Press the thumbwheel** to place the item in its new location

**TIP:** Try the **extended start-up (SSU)** and **extended shut-down (SSD)** sounds in the soft key list. They're more fun than the sounds generated by the start-up and shut-down buttons on the DCS handheld particularly when used in Record/Playback scenarios. If you use these sounds often, you may want to move them to the top of the soft key list.



We encourage you to experiment with the variety of sounds in each PS2 engine, and we hope this and every edition of DCS Tips & Techniques will add to the fun of running your layout. In our next edition, we'll talk about extending DCS control to switches and accessories.