TIPS & TECHNIQUES

ARTICLE 5
Creating Routes

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 5
Creating Routes

While the DCS handheld allows you to be an engineer, it also lets you act as a switch tower operator. Have you ever wanted to throw several switch tracks at once? Maybe you needed to set a route out of a freight yard, or traverse several switches to move a passenger train from one mainline to another. Or perhaps you needed to throw two or more switches to route a train through a reversing loop. The Routes feature allows you to set up routes on your layout that you use frequently, and program multiple switches to change with a single command. Each route can contain up to 250 turnouts, and each DCS handheld can store up to 15 routes.

In order to use Routes, you must first have your switches wired into an AIU (Accessory Interface Unit) connected to your TIU (Track Interface Unit). This allows individual control of each switch from your handheld. Wiring and setup instructions for switches are contained in the AIU manual, which can be found online at www.protosound2.com in the DCS Service section.
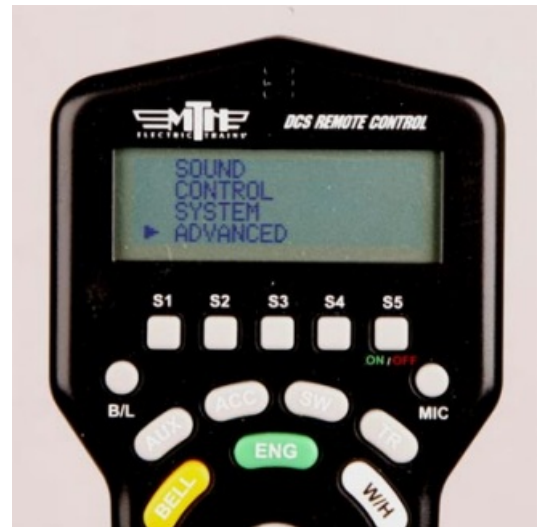
HOW TO DO IT

A. Setting up a Route

Setting up a Route is easy. First, make sure that all of the switches that will compose the Route are already wired to the AIU and are programmed into the DCS Remote. Now would be a good time to test that each switch is wired and programmed correctly. (See the AIU instruction manual.)

Once you're comfortable that all the switches work properly from the DCS Remote, take note of which switches are to be part of the Route and what will be each switch's orientation: curved or straight.

Now, you're ready to build the Route as follows:

- **Menu key:** Press the MENU key on the DCS Remote to enter the Menus.

- **Scroll and select ADVANCED:** Scroll the thumbwheel to ADVANCED and press on the thumbwheel to select the Advanced menu.

- **Scroll and select ROUTE SETUP:** Scroll to ROUTE SETUP and press the thumbwheel to select the Routes function.

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- **Scroll and select CREATE ROUTE:**   Scroll to CREATE ROUTE and press the thumbwheel to select the CREATE ROUTE function.

- **Name the Route:**   Using the thumbwheel, scroll to each letter in the Route's name and press the thumbwheel to add that letter, number, or symbol to the Route name. Use the "<" character to remove an erroneous character and, when the name is complete, use the "D" character at the right end of line 3 to end the name. A Route Name may be up to 16 characters long.

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- **Select the switches in the Route:**   You'll now see a list of all the switches that are programmed and wired into the AIU in order of their switch number and name. At the bottom of the screen will two arrows. The soft key S1 arrow is pointing straight up and the soft key S2 arrow is curved to the right. These represent the orientation of the switch: straight or curved. Using the thumbwheel, scroll to the first switch in the list that is part of the Route. Next, press the soft key corresponding to the orientation of the switch when it's used by the route. Repeat this for all of the other switches in the Route. If you mistakenly add a switch to the route, scroll back to it and press soft key S3, "REM", to remove the switch from the route.

- **End the Route:**   When you've added all the switches to the route, press soft key S4, "DONE", to end building the Route. Press MENU twice to exit the DCS Menu system.

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Test the Route

To make sure that you correctly entered all of the switches for the Route, test it as follows:

- **SW key:** press the SW key to enter the Switch List. The Route you just created will be the last entry in the list and may be quickly accessed by scrolling the thumbwheel backwards one click.

- **Run the Route:** press the "ACT" soft key to run the Route. Each switch in the Route should activate and switch to the orientation dictated by its setting in the Route.

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Edit the Route

If any of the Route switches are oriented incorrectly, you can edit the Route to correct them:

- **Menu key:**   press the MENU key on the DCS Remote to enter the Menus.

- **Scroll and select ADVANCED:**   scroll the thumbwheel to ADVANCED and press on the thumbwheel to select the Advanced menu.

- **Scroll and select ROUTE SETUP:**

- **Scroll and select EDIT ROUTE:**

- **Scroll and select EDIT SWITCHES:**

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- **Scroll and select Route to edit:**   scroll to the Route in the Route List and press the thumbwheel to edit that Route. The list of all the switches in all AIUs will be displayed.

- **Scroll and select Edit a Switch:**   scroll to a switch that needs to be changed. Switches already in the Route will show only the orientation that was not selected above a soft key. Switches not in the Route will show both orientation arrows. Also displayed will be soft keys for "REM" and "DONE". To change the orientation of a switch that's already in the Route, or to add another switch to the Route, press the soft key below the desired orientation arrow. To remove a switch from the Route, press the soft key below "REM". Repeat this for any other switches you wish to edit and then press the soft key under "DONE" to return to the Switch List. Press the Menu key twice to exit the DCS Menu system.

  You can also change the name of a Route:

- **Press Menu key:**   press the MENU key on the DCS Remote to enter the Menus.

- **Scroll and select ADVANCED:**

- **Scroll and select ROUTE SETUP:**

- **Scroll and select EDIT ROUTE:**

- **Scroll and select EDIT NAME:**

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- **Select Route name to change:**   Scroll and select the Route name to change and press the thumbwheel to select it.

- **Rename the Route:**   Using the thumbwheel, scroll to each letter in the Route's name and press the thumbwheel to add that letter, number, or symbol to the Route name. Use the "<" key to remove an erroneous character and, when the name is complete, use the "D" character at the right end of line 3 to end the name. A Route Name may be up to 16 characters long. Press the Menu key three times to exit the DCS Menu system.

   Finally, you can delete an entire Route:

- **Press Menu key:**   press the MENU key on the DCS Remote to enter the Menus.

- **Scroll and select ADVANCED:**

- **Scroll and select ROUTE SETUP:**

- **Scroll and select DELETE ROUTE:**

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- **Scroll and select the Route to delete:** Scroll to the Route in the Switch List and press the thumbwheel to delete that Route. Press the thumbwheel a second time to confirm that the Route is to be deleted. Press the Menu key twice to exit the DCS Menu system.

Tech notes

- **Up to 15 different Routes may be stored in each DCS Remote**

- **There can be up to 250 switch tracks in each Route**

- **A Route name can be up to 15 characters long**

- **Instead of scrolling in most numbered lists, enter the 1 or 2 digit Route number to go directly to the Route without scrolling**