



Technical Bulletin #1.1

Performing factory decoder reset using Digitrax Zephyr (DCS50)

Overview:

To reset locomotive electronics to factory defaults the user must set CV08 to a value of 08. It is recommended that this procedure be performed on the dedicated service mode programming track using direct mode programming.

* Note: This is the only programming procedure that we recommend using the programming track for. All other programming should be performed on the main track using Operations mode programming.

Procedure:

1. Place the Tower 55 locomotive on a dedicated service-mode programming track.
 - * Note: The rails of this track should be connected to the **PROG A** & **PROG B** outputs on the DCS50 throttle.
2. Press the **PROG MODE** key on the DCS50 throttle until "**dir**" appears in the LED display.
 - * Note: This is the setting for direct mode programming.
3. Press the **STEPS CV** key on the DCS50 throttle.
(The LED display should read "**t####**" with the # symbols replaced by actual digits)
4. Enter "**08**" using the numeric keypad on the DCS50 throttle.
(The LED display will read "**t008**")
5. Press the **STEPS CV** key on the DCS50 throttle.
(The LED display will read "**d####**" with the # symbols replaced by actual digits)
6. Enter "**08**" using the numeric keypad on the DCS50 throttle.
(The LED display will read "**d008**")
7. Press the **CV WR** key on the DCS throttle.
(The LED display will blink "**d008**" and then return to solid displaying "**d008**")
8. Repeat Step 7 two more times to ensure that the command has been received by the electronics.
9. Press the **EXIT** key on the DCS50 throttle.
10. The reset of the electronics to factory default is now complete.



Testing:

1. Place the Tower 55 locomotive that was reset in the preceding procedure on the main track.

* Note: The rails of this track should be connected to the **RAIL A** & **RAIL B** outputs on the DCS50 throttle.
2. Press the **LOCO** key on the DCS50.
(The LED display should begin flashing)
3. Enter **"03"** using the numeric keypad.
(The LED display should be flashing **"03"**)
4. Press the **LOCO** key on the DCS50.
(The LED display should display **"03"** solid and the locomotive sounds should start up)
5. Select **FORWARD** with the direction knob on the DCS50.
(The front end head, number board & ditch lights should turn on. If not, see step 6. Otherwise go to step 7)
6. To turn on the lights press the **"0"** key on the DCS50.
(The front end head, number board & ditch lights should turn on)
7. Increase the throttle setting on the DCS50 by turning the throttle knob clockwise.
(Confirm that the locomotive moves in the forward direction)
8. Press the **"2"** key on the DCS50.
(Confirm that the horn sounds and that the ditch lights alternate flashing for a few seconds before returning to solid)
9. Decrease the throttle setting to zero on the DCS50 by turning the throttle knob counterclockwise until it stops.
10. Select **REVERSE** with the direction knob on the DCS50.
(The rear end headlight should turn on and the front lights, except for the number boards should turn off)
11. Increase the throttle setting on the DCS50 by turning the throttle knob clockwise.
(Confirm that the locomotive moves in the reverse direction)
12. Decrease the throttle setting to zero on the DCS50 by turning the throttle knob counterclockwise until it stops.
13. The operation test is now complete.