

Procedure for Programming 4-digit Addresses on the MainLine When Using a DigitraxZephyr or Zephyr Xtra DCC System

1. Put your locomotive on the main track and run it on DCC using address 3, or whatever other address you have programmed into the locomotive. If you can't determine the address, reset the locomotive with the magnetic wand on a DC-POWERED track. Then run the locomotive on the main track with DCC using address 3.
2. If your locomotive has a QSI sound decoder, keep the locomotive on the main line and use Operations Mode programming to set CV62 = 0. This step maximizes the probability that CV29 will be set to its 4-digit address value of CV29 = 38 in Step 8 below. This step is not always needed, but it is impossible to tell if the step is necessary without going through the entire programming sequence.
3. Turn Option Switch 7 "on" so that you can use Digitrax's Blast Mode programming feature:
 - a. Press the **PROG** key on your Zephyr Xtra DCC system.
 - b. Press the **SWITCH** key.
 - c. Use the keyboard to enter 07, which is the number of the Option Switch that you need to turn on
 - d. Press the **c/-** key to turn Option Switch 07 "on."
 - e. Press the **EXIT** key when you are finished setting Option Switch 7.
4. If you took the locomotive to be programmed off the main track, put it back on the track. If DCC track power is off, turn it back on using the **POWER** key on the Zephyr Xtra. Make sure that the locomotive to be programmed still runs on DCC using address 3 (or whatever other address you have programmed into it).
5. Keep pressing the **PROG** key until you see PAGE on the Zephyr's display.
6. Keep pressing the **LOCO** key until you see AD4 on the Zephyr's display
7. Use the keyboard to enter the 4-digit address that you wish to program (e.g., 1234 or any other address between 128 and 9983)
8. When you have finished entering the 4-digit address, write this new address into your locomotive by pressing the **CV-WR** key. Do not be surprised if the locomotive leaps forward one foot or more when the programming takes place. This movement doesn't always happen, but it can.
9. To exit Blast Mode programming on the main line, press the **EXIT** key on your Zephyr Xtra.
10. To run the locomotive whose address you entered in Step 7, press the **LOCO** key; re-enter the address you entered in Step 7 by using the Zephyr Xtra keyboard; and press the **LOCO** key again.
11. Verify that the locomotive runs using its new address.
12. If the locomotive did not run in Step 11 when you used its new address,
 - a. Turn off DCC track power and move the locomotive that you are trying to program from the main line to the program track.
 - b. Using Direct Mode programming (or whatever other type of programming your decoder requires) to read the values of CV29 and AD4. For 4-digit addresses, the value of CV29 should be 38 and AD4 should be the address that you entered in Step 7.
 - c. If either or both of these values are not correct, change it (them). You may make any necessary changes in Direct Mode while the locomotive is on the program track.
13. Turn off Blast Mode programming by changing the setting of Option Switch 07 to "off."
 - a. Press the **PROG** key.
 - b. Press the **SWITCH** key.
 - c. Use the keyboard to enter 07, which is the number of the Option Switch that you need to turn off.
 - d. Press the **t/+** key to turn Option Switch 07 "off."
 - e. Press the **EXIT** key when you are finished setting Option Switch 7.
14. If your locomotive has a QSI sound decoder and you set CV62 = 0 in Step 2, put the locomotive back on the main line, run it briefly at its new 4-digit address, and configure the Zephyr or Zephyr Xtra for Operations Mode programming. Now change CV62 back to its default value of CV62 = 1.