Direct Mode Programming with the Atlas Master Commander (Ver. 3.2)

When you enter the Program Menu on the Commander, the Commander will default to Register Mode for programming. If your DCC decoder supports Direct Mode programming, the Commander will allow you to access any of the Configuration Variables supported by your decoder. To access Direct Mode, you must first read any of the basic eight registers in your decoder. When you read any of these registers, the Commander performs a test to determine if your decoder supports Direct Mode. If your decoder supports Direct Mode, you may access all of its CV's by following the steps given below:

1. Place the locomotive on the Program Track.

2. Press both the Forward and Reverse buttons on the Commander at the same time to access the Menu system.

3. Press the “+” or “-” button to select the Program Menu, PRO.

4. Press Enter to enter the Program Menu.

5. Use the “+” or “-” button to select a register (to select register 1, you need do nothing), and then press Enter. (It is assumed in what follows that you intend to read register 1.)

6. Press the Enter button again to read the current value of this register.

7. Once the Commander reads the current value of register 1, press the Exit button to return to the register selection menu.

8. Press the “+” button repeatedly until register 8 appears on the display.

9. Press the “+” button once more.

10. If the display changes to “c09”, you are now in Direct Mode and are accessing CV9. However, if the display returns to r1, your decoder does not support Direct Mode. Once the Commander is in Direct Mode, you may access any of the CV’s supported by your decoder (see your decoder manual for further information on these CVs). In the case where your decoder does NOT support Direct Mode programming, you may use another decoder that DOES support Direct Mode to pass the above Direct Mode test, and then switch back to the decoder that you would like to program. While you may not be able to read the CV’s of a DCC decoder that does not support Direct Mode, you MAY (or may not) still be able to set a new value for a CV.

11. Assuming that your display does read “c09”, hold down the “+” button to select a different CV (for example, CV122). Note that when you reach any CV above CV99, the Commander display will show the three digits of the CV number, but (unlike the displays for CV1 to CV99) there will be no “c.” For example, the display for CV122 is “122.”

12. To read the current value of the selected CV, press Enter twice. If this CV is read successfully, its value will be displayed. If there is a problem reading the current value of a CV (or setting a new value), an error message will be displayed on the Commander. (See page 26 in the Commander Instruction Manual for error definitions).

13. To change the current value of a CV, use the “+” or “-” button to select your desired new value for that CV. The maximum possible range of allowable CV values is 1 to 255. (Consult your decoder manual for the acceptable settings for each particular CV.)
14. Once you have selected the new CV value, press **Enter** to write this new value into the CV. If the new value is accepted, the new setting is displayed. (In the case of an error message, see page 26 for error message definitions.

15. Press **Exit** to return to the CV selection menu. You may then select another CV (in which you intend to write a new value) using the “+” or “-” button, or else press **Exit** to return to the System Menu.

Please note that if you cannot go past Register 8, then you either have an earlier version (3.0 or 3.1) of Atlas Master Commander software or else your DCC decoder does not support Direct Mode programming on the program track.