



Addressing M.T.H. HO Locomotives Using the MRC Prodigy Advance System

Short Address Changes

To change an M.T.H. HO locomotive's address on the Prodigy Advance system you'll need to use Programming on the Main or PoM mode. Programming tracks won't work with M.T.H. engines. So, if you want to change the short address that's very simply done by:

1. Apply power to the Prodigy Advance.
2. Select the engine's current address (default is addr 3) by hitting LOCO then entering the number "3" on the keypad, then hit ENTER.
3. Hit the number 3 button and the engine should start up.
4. Hit the PROG button twice so PROG MAIN is displayed on the right-hand side of the LCD.
5. Hit Enter.
6. It will ask for the address of the engine you want to alter, it should be at the address you were at in step 2. If not, enter the CURRENT address of the engine, hit ENTER.
7. Enter the NEW 2-digit address you want for the engine using the keypad, hit ENTER.
8. Hit ENTER until you are back at the main screen displaying the address (hitting ENTER 5 times should get you there).
9. Hit LOCO and select the new address you just entered in step 7 then hit ENTER.
10. Press the number 2 button on the keypad and the whistle should blow.

Long Address Changes

Now, for changing the extended address it's a bit more involved but still doable. You should know that the default extended address is the cab number of your engine, so if you're happy with that then you needn't go any further. But should you want to change it here is how:

1. Make sure there's power on the track.
2. Ensure you are communicating with the engine at its short address (whatever it is you programmed or at its default short address is 3) by pressing keypad button 2. The whistle should sound.

NOTE - If you only want to change to the default extended (4-digit) address of the engine (the engine's cab number or in the case of no cab number - 3333) then follow the steps below, otherwise skip to step 11.

3. Hit the PROG button twice so PROG MAIN is displayed on the right-hand side of the LCD.
4. Hit ENTER.
5. It will ask for the address of the engine you want to alter, it should be at the address you were at in step 2. If not, enter the CURRENT address of the engine, hit ENTER.
6. Enter the NEW 4-digit address you want for the engine using the keypad, hit ENTER.
7. The engine should give you a "toot-toot" sound (it will actually give you a stuttering "toot-toot" sound).
8. Hit ENTER until you are back at the main screen displaying the address (hitting ENTER 5 times should get you there).
9. Hit LOCO and select the new address you just entered in step 7 then hit ENTER.

10. Hit the keypad button number 2 and the whistle should blow. You've ready to go.
11. If you are interested in changing the engine's address from 2-digit to 4-digit and you DO NOT want to use the default 4-digit address you will need to alter CV29 then CV17 and 18. To do this continue on.
12. Ensure you are communicating with the engine at its short address (whatever it is you programmed or at its default short address is 3) by pressing keypad button 2. The whistle should sound.
13. Hit the PROG button twice so PROG MAIN is displayed on the right-hand side of the LCD.
14. Hit ENTER.
15. It will ask for the address of the engine you want to alter, it should be at the address you were at in step 2. If not, enter the CURRENT address of the engine, hit ENTER.
16. Hit ENTER to skip by the ADDR screen (remember you'll only use that screen if you want to use the engine's default address). Hit ENTER until CV# is displayed.
17. Enter 29 on the keypad and hit ENTER.
18. It will now ask you for CV DATA. Enter 38 on the keypad and hit ENTER.
19. The engine should give you a "toot-toot" sound. You now have the engine in Extended Addressing. The next steps require the CV17/18 conversion spreadsheet located at the bottom of this document. To use the spreadsheet simply enter the extended address you'd like to set the engine to and it will generate the CV 17 and CV 18 values for you to enter.
20. Once you have the two values for CV17 and 18 you can enter them using the same procedure you used in previous steps. 21. Hit the PROG button twice so PROG MAIN is displayed on the right-hand side of the LCD.
22. Hit ENTER.
23. It will ask for the address of the engine you want to alter, it should be at the address you were at in step 2. If not, enter the CURRENT address of the engine, hit ENTER.
24. Hit ENTER to skip by the ADDR screen (remember you'll only use that screen if you want to use the engine's default address). Hit ENTER until CV# is displayed.
25. Enter 17 on the keypad and hit ENTER.
26. It will now ask you for CV DATA. Enter the value generated from the spreadsheet and hit ENTER.
27. The engine should give you a "toot-toot". Now for CV 18.
28. Hit the PROG button twice so PROG MAIN is displayed on the right-hand side of the LCD.
29. Hit ENTER.
30. It will ask for the address of the engine you want to alter, it should be at the address you were at in step 2. If not, enter the CURRENT address of the engine, hit ENTER.
31. Hit ENTER to skip by the ADDR screen (remember you'll only use that screen if you want to use the engine's default address). Hit ENTER until CV# is displayed.
32. Enter 18 on the keypad and hit ENTER.
33. It will now ask you for CV DATA. Enter the value generated from the spreadsheet and hit ENTER.
34. The engine should give you a "toot-toot".
35. Hit ENTER until you are back at the main control screen. Hit LOCO and enter the new extended address and hit ENTER.
36. You should now have control of the engine at its new extended address. Hit keypad button number 2 to verify that the whistle blows.

Switching Back To Short Addresses

To switch back to a 2-digit address all you'll need to do is edit CV 29 to a value of 6, then you can hit LOCO and select the 2-digit address either programmed previously or, if not programmed, its default address of 3. After you enter the new CV29 value of 6 you will get a "toot-toot".

See below for the CV17 and CV18 Conversion Spreadsheet

To use the spreadsheet double-click on it and then enter in the extended address you desire in the first cell. The spreadsheet will calculate the appropriate CV17/18 values for you. Write them down so you can enter them later.