



Addressing M.T.H. HO Locomotives Using the NCE System (Pro Cab, Power Cab and Master Series)

Short Address Changes

To change the K-4's address on the NCE system you'll need to use Programming on the Main mode. Programming tracks won't work with MTH engines. So, if you want to change the short address that's very simply done by:

1. Apply power to the track
2. Select the engine's current address (default is addr 3)
3. Hit the number 3 button and the engine should start up
4. Hit the PROG button until Programming on Main is displayed
5. Hit ENTER
6. Hit keypad button number 1 to select Address (ADR as it's displayed)
7. Hit keypad button number 2 to select the Short Address
8. Hit ENTER
9. Enter the short address you want for the engine using the keypad and hit ENTER
10. The engine will give you a toot-toot indicating it's received the information and changed the address for you
11. Hit SELECT LOCO and enter the new address you just entered and press ENTER
12. Hit keypad button 2 to activate the whistle. This verifies you have control over the engine at its new short address

Short 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. First you'll need to tell the engine to start looking at its extended address. This is CV29
2. Make sure there's power on the track
3. Hit the number 3 button on the keypad and the engine should start up (This assumes you are still at the short address from above, whatever that is you programmed)
4. Hit the PROG button until Programming on Main is displayed
5. Hit keypad button number 2 (2=CV as it's displayed)
6. Hit ENTER
7. Using the keypad enter 29 and hit ENTER

8. On your Power Cab system it may give you a menu to select the different variables used in CV29. If this is the case hit ENTER until you see ADDRESS ENTER=S 1=LONG. Hit keypad button 1 to enable Long Addresses.
9. If your Cab doesn't give you the menu for CV29 then after you enter 29 on the keypad and hit ENTER it will ask you for a value. Using the keypad enter 38 and hit ENTER
10. From either Step 8 or Step 9 the engine should give you a toot-toot indication telling you it's in extended addressing
11. Enter the cab number of the engine. If you don't have a cab number use 3333. Again, the cab number is the default extended address that has already been programmed at the factory. Since we are in Programming on the Main mode we have to enter a valid address to communicate with the engine
12. Hit the keypad button number 2 and the whistle should blow
13. You now have control over your engine using its extended address. You can stop right here if you are happy with that address. Otherwise, if you want to change that extended address to something else continue on. NOTE If your engine has no cab number the default extended address is 3333
14. To alter the extended address on your MTH HO engine you need to write values to CV's 17 and 18. There is a spreadsheet attached to help you in determining those values to be written based on the desired extended address you wish to use
15. Enter the extended address you want in the "Desired Extended Engine Address" cell. The spreadsheet figures the rest out for you
16. Now you have the two values for CV17 and 18 (your extended address)
17. Hit the PROG button until Programming on Main is displayed
18. Hit ENTER
19. Hit keypad button number 2 (2=CV as it's displayed)
20. Hit ENTER
21. Using the keypad enter 17 and hit ENTER
22. Enter the value you got from the spreadsheet for CV17 using the keypad and hit ENTER
23. You should get a toot-toot from the engine
24. Hit the PROG button
25. Hit the PROG button until Programming on Main is displayed
26. Hit ENTER
27. Hit keypad button number 2 (2=CV as it's displayed)
28. Hit ENTER
29. Using the keypad enter 18 and hit ENTER
30. Enter the value you got from the spreadsheet for CV18 using the keypad and hit ENTER
31. You should get a toot-toot from the engine
32. Hit the PROG button to exit
33. Hit SELECT LOCO and enter the new extended address and hit ENTER
34. 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 the short address from the extended perform the following steps:

1. Ensure you have power on the track
2. Select the address of the engine you want to change back to 2-digit addressing by hitting SELECT LOCO then selecting the extended address using the keypad and hit ENTER
3. Now that you have control of the engine at its extended address you need to alter CV29
4. Hit the PROG button until Programming on Main is displayed
5. Hit keypad button number 2 (2=CV as it's displayed)

6. Using the keypad enter 29 and hit ENTER
7. On your Power Cab system it may give you a menu to select the different variables used in CV29. If this is the case hit ENTER until you see ADDRESS ENTER=S 1=LONG. Hit ENTER to enable Short Addresses.
8. If your Cab doesn't give you the menu for CV29 then after you enter 29 on the keypad and hit ENTER it will ask you for a value. Using the keypad enter 6 and hit ENTER
9. From either Step 7 or Step 8 the engine should give you a toot-toot indication telling you it's in short addressing
10. Hit SELECT LOCO and using the keypad enter the short address of the engine and press ENTER

NOTE - If you want to switch back and forth between extended and short addressing you only need to change CV29 to enable either short or long addressing. The engine stores both address, short and long, in memory. CV29 just tells the engine which one to access

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.