Addressing MTH Locomotives using the Roco MultiMAUS system

These instructions were developed using the MultiMAUS handheld controller and the 10764 Digital Amplifier

IMPORTANT NOTE – Since the Roco MultiMAUS system has limited Programming on Main (POM) functions you are only able to program CV's 29 (toggle between Short and Long Addressing), 49 (Short Address) and 50/51 (Long Address). MTH Locomotives will not work on your Programming Track. Also, when you change your engine's address it does NOT get updated in your MultiMAUS engine library. You will have to create a new entry for the "new" engine since it will have a new address. This applies to either short or long addressing.

Changing the Short Address:

1. Apply power to your MultiMAUS system
2. Select the engine whose address you wish to change
3. Hit #3 on the keypad to start the engine up. You are doing this so that you can hear the engine's two honk response to your commands to change CV's
4. Hold the MENU button down for 5 seconds. The MultiMAUS controller will now display its LOCO menu
5. Arrow over until you get to the PROGRAM menu, hit OK
6. Arrow over until you get to the MODE, hit OK
7. Arrow over until you get to POM, hit OK. You have now put the MultiMAUS controller into POM (Programming on the Main) mode
8. Arrow over until you get back to the CV MODIFICATION menu. You are going to be editing CV49 because the MultiMAUS system will NOT program CV1 (the normal location for short addresses in DCC) while in POM mode
9. Hit OK and the screen will ask you to enter a CV number. Using the keypad enter 49 and hit OK
10. Now the screen will ask you for a value to enter for CV49. Enter the value for the engine's new short address
11. You will get a two honk response from the engine indicating that it understood what you sent it
12. Hit STOP until you get back to the engine control screen
13. Follow the instructions in your MultiMAUS manual for entering a new engine (you'll need to remember the address you just programmed into the engine). Because you changed your engine's address the library entry in your MultiMAUS system will not be valid for that engine any

longer. Alternatively, you can use the arrow keys to select the new engine's address if your MultiMAUS is in address display mode

14. Ensure CV29 is set correctly to take advantage of the short address. See the "Editing CV29" section in these instructions to learn how to change it

Changing the Long Address:

NOTE – You will need the CV17/18 Converter spreadsheet (.xls format) available at www.mthtrains.com. ALL MTH PS3 engines have a default long address of 3333.

1. Apply power to your MultiMAUS system
2. Select the engine whose address you wish to change
3. Hit #3 on the keypad to start the engine up. You are doing this so that you can hear the engine's two honk response to your commands to change CV's
4. Hold the MENU button down for 5 seconds. The MultiMAUS controller will now display its LOCO menu
5. Arrow over until you get to the PROGRAM menu, hit OK
6. Arrow over until you get to the MODE, hit OK
7. Arrow over until you get to POM, hit OK. You have now put the MultiMAUS controller into POM (Programming on the Main) mode
8. Arrow over until you get back to the CV MODIFICATION menu. You are going to be editing CV's 50 and 51 because the MultiMAUS system will NOT program CV's 17/18 (the normal location for long addresses in DCC) while in POM mode
9. Open the CV 17/18 Conversion spreadsheet and enter the desired long address you would like for the engine. ***Note – The spreadsheet will give you values for CV17 and CV18. You will apply the value for CV17 to CV50 and the value for CV18 to CV51.***
10. Hit OK and the screen will ask you to enter a CV number. Using the keypad enter 50 and hit OK
11. Now the screen will ask you for a value to enter for CV50. Enter the value shown in the CV17 cell on the spreadsheet
12. You will get a two honk response from the engine indicating that understood what you sent it
13. Hit OK and the screen will ask to enter another CV. Enter 51, hit OK
14. Now the screen will ask you for a value to enter for CV51. Enter the value shown in the CV18 cell on the spreadsheet

15. You will get a two honk response from the engine indicating that it understood what you sent it

16. Hit STOP until you get back to the engine control screen

17. Follow the instructions in your MultiMAUS manual for entering a new engine (you'll need to remember the address you just programmed into the engine). Because you changed your engine's address the library entry in your MultiMAUS system will not be valid for that engine any longer. Alternatively, you can use the arrow keys to select the new engine's address if your MultiMAUS is in address display mode

18. You will also need to set CV 29 depending upon whether you want to use long or short addressing. See below for instructions on how to edit CV29

Editing CV29:

CV29, bit 5 controls whether you are in long or short addressing. The default value for CV29 in short addressing is 6. For long addressing it's 38. In order to operate a DCC-equipped engine you must have CV29 set correctly for long or short addressing. To change CV29 follow the instructions below:

1. Apply power to your MultiMAUS system
2. Select the engine whose address you wish to change
3. Hit #3 on the keypad to start the engine up. You are doing this so that you can hear the engine's two honk response to your commands to change CV's
4. Hold the MENU button down for 5 seconds. The MultiMAUS controller will now display its LOCO menu
5. Arrow over until you get to the PROGRAM menu, hit OK
6. Arrow over until you get to the MODE, hit OK
7. Arrow over until you get to POM, hit OK. You have now put the MultiMAUS controller into POM (Programming on the Main) mode
8. Arrow over until you get back to the CV MODIFICATION menu.
9. Hit OK and the screen will ask you to enter a CV number. Using the keypad enter 29 and hit OK
10. Now the screen will ask you for a value to enter for CV29. The value you enter will determine whether you want to run the engine at its long or short address. Here are the values you would want to enter:
    a. Short Address – 6
    b. Long Address - 38

11. Hit OK and you will get a two honk response from the engine indicating that it understood what you sent it
12. Hit STOP until you get back to the engine control screen

Remember, it is important to ensure you set CV29 to the correct value because MTH engines can have both long and short addresses in memory and CV29 allows you to switch between the short or long address.