

Retrofitting M-track Mode on MK60-equipped E46 M3s

Disclaimer: I am not responsible if any modules get damaged during this procedure. While nothing should go wrong as long as you follow these directions, I cannot guarantee that. Please do not perform this procedure if you're unwilling to risk your modules.

Forward: This guide assumes you already installed and updated (if necessary) the "BMW Standard Tools" suite of software. This guide also assumes that you have already tested your interface and it was found to be functional.

Please DO NOT contact me regarding the acquisition or installation of the software and hardware

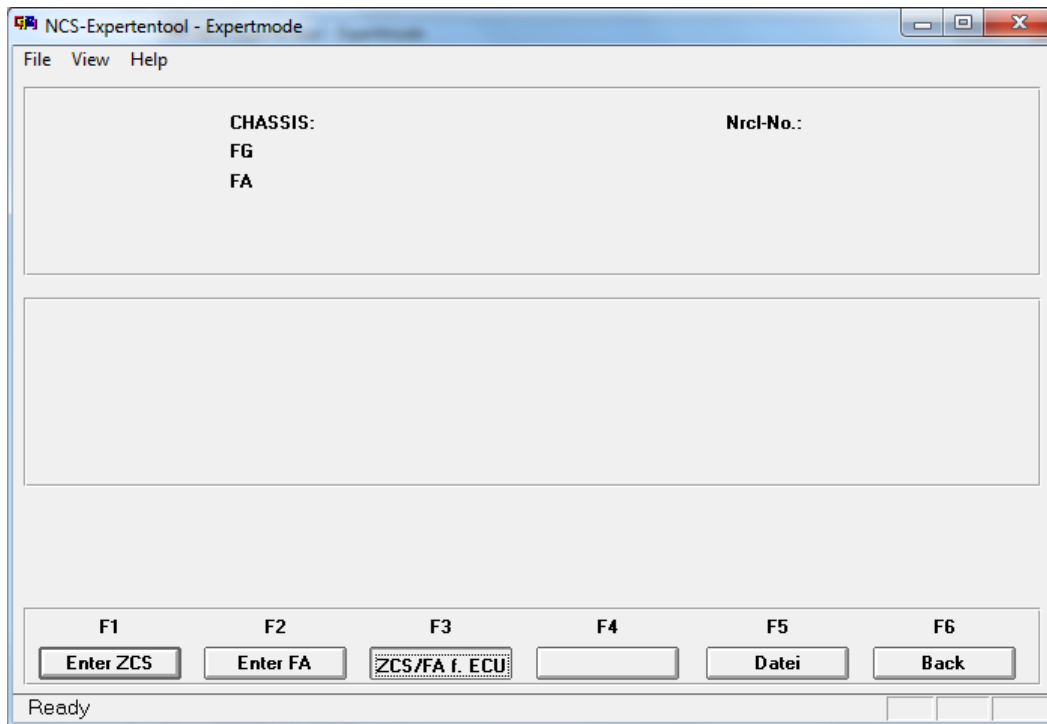
Now that that's out of the way, let's get started –

Requirements:

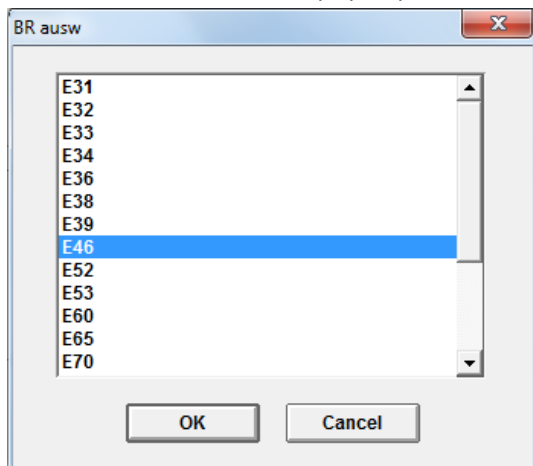
- An E46 M3 with the MK60 DSC module (found in MY2003 and later M3s)
- BMW Standard Tools with all data files present ("EDIABAS 6.4.3" should be appropriate for most)
- NCS-Expert profile that allows for manipulation (you can either make one, or download one online. "FISTER Profile" or "Revtor's NCS Expert Profile" both work well)
- Daten files applicable for your car (if 2005 or later, updated files from Progman or Ista/P are required)
- *Recommended:* Some sort power supply that can stably supply 12.5-14V at 10A
 - This particular procedure should be quick enough that you can run on your battery, but if your battery is weak or you want to take things slowly, it'd be a good idea to use a power supply.
- *Optional:* An instrument cluster with the M-track symbol
 - If the LED doesn't light up, you can either solder one in or follow the portion of the guide that modifies the coding to use a different set of lights

Coding:

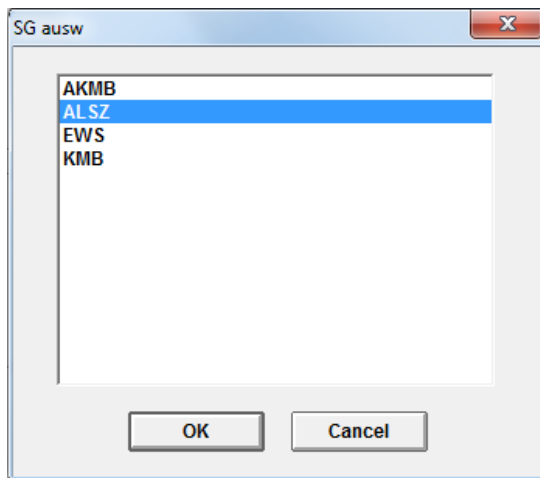
1. Start NCS Expert
2. Load the "Expertmode" profile (File -> Load Profile -> Expert Mode)
3. Hit "VIN/ZCS/FA"
4. Press "ZCS/FA f. ECU"



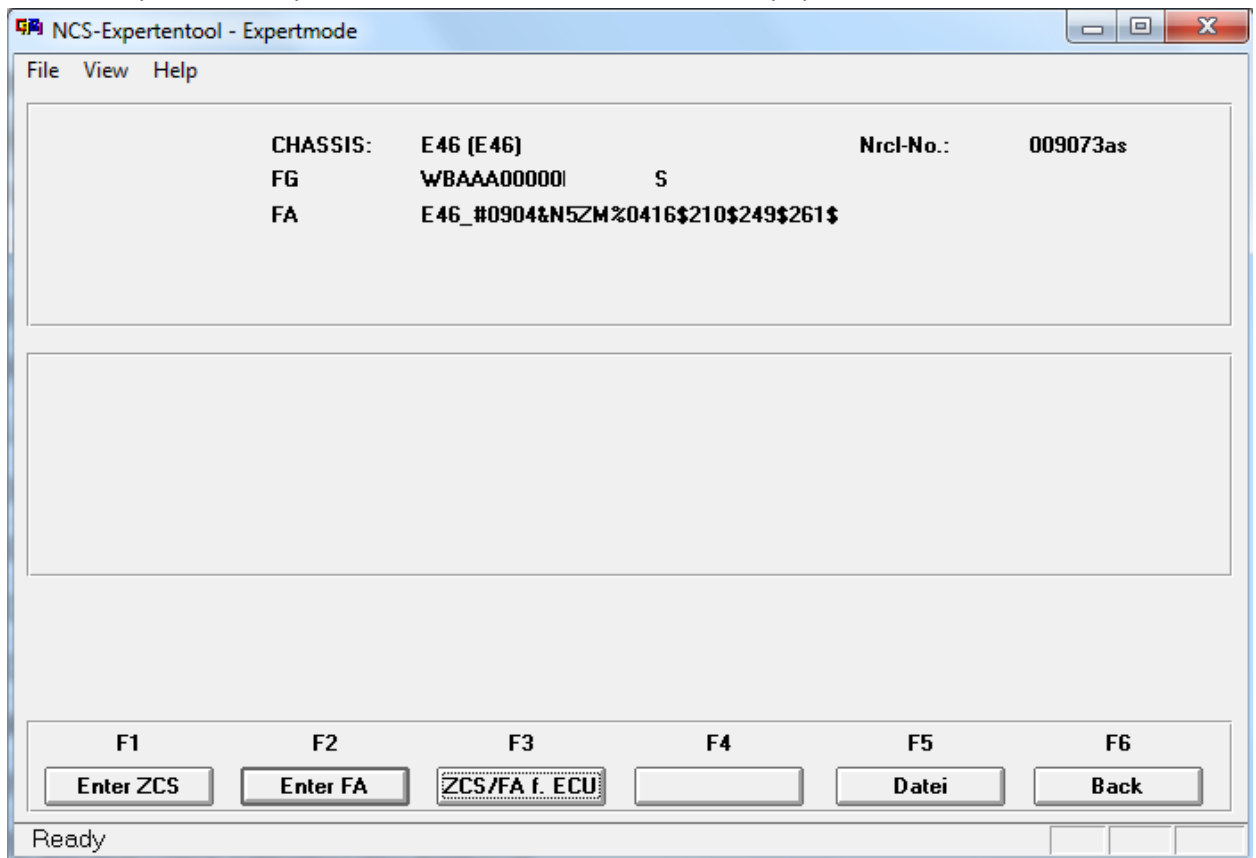
5. Select E46 in the box that pops up



6. Now there will be a list of 4 modules to read the VO from – pick either AKMB or ALSZ, doesn't matter which



7. After a couple seconds, you should see the “FG” and “FA” fields populate.



8. Hit Enter FA.

9. Click Okay past the chassis and VIN. Most of the VIN won't match your real one, don't worry about that.
10. Now you will have a box titled "Enter FA" with a bunch of codes listed. Under Attribute type in "\$7MA" and click "add".

Enter FA

Attribute: \$7MA Chasis: E46_

Add

#0904
\$210
\$249
\$261
\$354
\$403
\$431
\$441
\$459
\$464
\$473
\$490
\$494

OK

11. Ensure that \$7MA got added to the list, and then hit okay.

Enter FA

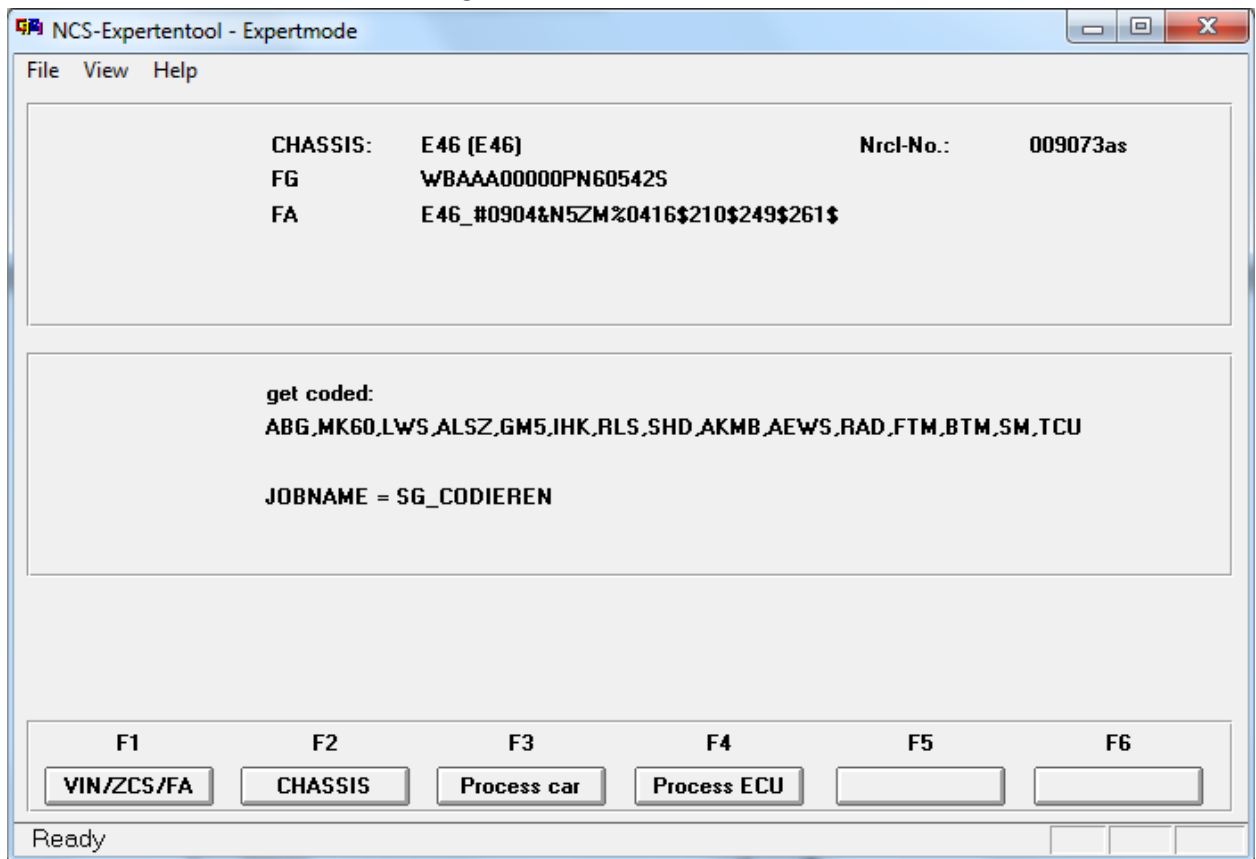
Attribute: \$7MA Chasis: E46_

Add

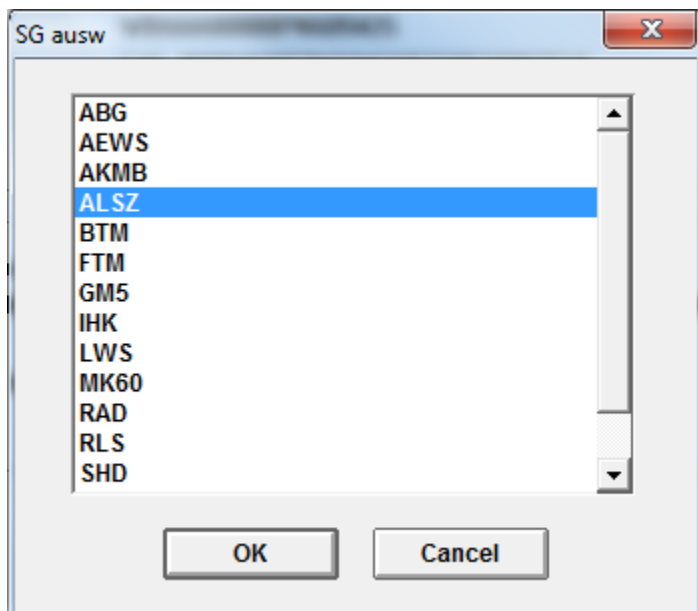
\$661
\$674
\$692
\$710
\$737
\$775
\$785
\$7MA
\$818
\$845
\$876
\$8SP
\$992

OK

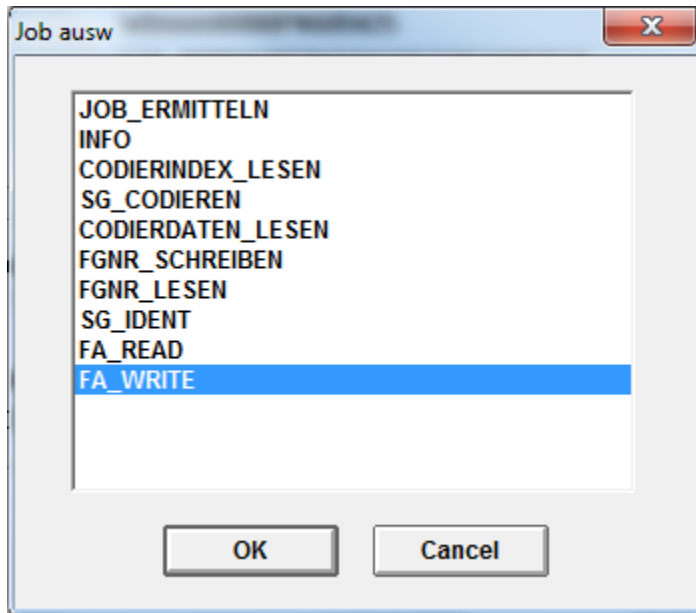
12. Click "back". You should see something like this:



13. Click "Process ECU" and then select "ALSZ"



14. Click "job" and change the job type to "FA_WRITE"



15. Hit "Execute Job"
16. Click "SG/SGET" and pick "AKMB"
17. Make sure "JOBNAME" is still "FA_WRITE" and hit "execute job"
18. Change the job type to "SG_CODIEREN" and hit execute job again
19. Click "SG/SGET" and pick "MK60"
20. Make sure the job is still "SG_CODIEREN" and hit execute job

If you happened to have retrofitted the ZCP brakes and steering rack, have a functional M-track mode symbol, and your car is a coupe, you're done! Otherwise, go on to the next page

Tweaking the MK60 Settings:

1. Assuming you didn't close NCS Expert, click file -> Load profile, and pick your profile that has manipulation enabled (FISTER Profile or Revtor's profile as mentioned in the requirements)
2. Hit "Process ECU" and pick the MK60 module
3. Click "READ ECU"
4. Browse to C:\NCSEXPER\WORK
5. Look for FSW_PSW.TRC and open it in notepad.
6. Apply whichever of the following changes are appropriate for your car:
 - a. If you have non-ZCP brakes, look for "DRUCKMODELL_HINTERACHSE" and set it to "typ_2"
 - b. If you have the non-ZCP steering rack, look for "LENKWINKELKENNLINIE_2" and set it to "wert_05"
 - c. If you have a convertible, set "BAUART_MK60" to "cabrio_m"
 - d. If you don't have a functional M-track symbol, and don't want to solder the LED, set "DTC_LAMPE" to "nicht_aktiv"
 - i. This will make the DSC system act like the non-M DSC where a single press makes the DSC symbol light up, and a long press makes the DSC and Brake lights turn on.
7. Save the file as "FSW_PSW.MAN"
8. Change the job to "SG_CODIEREN"
9. Execute Job

You're done!