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"

P NCS-Expertentool	- Expertmode	-			
File View Help					
	CHASSIS:			Nrcl-No.:	
	FG				
	FA				
F1	F2	F3	F4	F5	F6
Enter ZCS	Enter FA	ZCS/FA f. ECU		Datei	Back
Ready					

5. Select E46 in the box that pops up

BR ausv	v						x
E	31						_
E	32						
E	33						
E	34						
E	36						
E	38						
E	39						
E	46						
E	52						
E	53						
E	60						
E	65						
E	70						-
,							_
	((ок		Can	:el	

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

SG au	ISW				X
	AKMB				_
	ALSZ EWS KMB				
		(ОК	Cancel	

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

GP NO	CS-Expe	rtentool	- Expertmode				
File	View	Help					
			CHASSIS: FG FA	E46 (E46) WBAAA00000 E46_#0904&N5ZM%	S :0416\$210\$249\$261\$	Nrcl-No.:	009073as
	F1		F2	F3	F4	F5	F6
	Enter 2	ZCS	Enter FA	ZCS/FA f. ECU		Datei	Back
Rea	idy						

- 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 ▼	
ОК	

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

Attribute: \$7MA	Chasis: E46_
Add	
\$661 \$674 \$692 \$710 \$737	
\$775 \$785 \$7MA	
\$818 \$845 \$876 \$85P \$992	

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

çpi n	CS-Expe	rtentool -	Expertmode				
File	View	Help					
			CHASSIS: FG FA	E46 (E46) WBAAA00000PN60 E46_#0904&N5ZM2	5425 \$0416\$210\$249\$261\$	Nrcl-No.:	009073as
			get coded: ABG,MK60,LW JOBNAME = SI	'S,ALSZ,GM5,IHK,RI G_CODIEREN	_S,SHD,AKMB,AEWS,I	RAD,FTM,BTM,S	M,TCU
	F1 /IN/2C	S/FA	F2 CHASSIS	F3 Process car	F4 Process ECU	F5	F6
Rea	ady						

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

SG ausw		1000		x
ABG AEV AKM ALS BTM FTM GM9 IHK LW9 RAE RAE SHE	/S 1B Z 1 5 5 5 60			•
	ОК	Ca	ancel	

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

Job ausw	
JOB_ERMITTELN INFO CODIERINDEX_LE SEN SG_CODIEREN CODIERDATEN_LE SEN FGNR_SCHREIBEN FGNR_LE SEN SG_IDENT FA_READ FA_WRITE	
OK Cancel	

- 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!