

SYNC Module [APIM] Programming

Activation

1.  **WARNING:** Before beginning any service procedure in this section, refer to Health and Safety Precautions in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

Refer to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).

2. If a new APIM is being installed, install the new APIM before carrying out the following procedure.
Refer to: [SYNC Module \[APIM\]](#) (415-00C Information and Entertainment System - General Information - Vehicles With: Touchscreen Display, Removal and Installation).

3. **NOTE:**

- *This programming procedure deletes any phones that were paired with the SYNC® system.*
- *To prevent timeout errors and to minimize programming time, a hardwired Internet connection is strongly recommended when programming.*
- *A USB flash drive with a minimum storage size of 32 gigabytes (GB) is required for this procedure (obtain locally).*
 - *Some programming files are large, allow extra time for the files to download.*
 - *It is important that the diagnostic scan tool has enough available hard drive space to accommodate the programming file download.*
 - *If a "Disk Space Error" is received, create additional free space on the hard drive.*
- *The diagnostic scan tool is required.*
 - *Ensure that the IDS version and patch software levels are up to date.*

4. Connect a battery charger to the vehicle and select the low charge setting. The negative battery charger lead must be connected to a clean chassis ground, not the negative battery post.

5. Plug the diagnostic scan tool into a power supply due to the length of time the programming requires.
6. Connect the diagnostic scan tool to the VCM, and the VCM to the DLC.
7. Close the IDS software program.
8. Ignition ON.
9. **NOTE:**
 - *Using the diagnostic scan tool, open Internet Explorer and access the technician service publication website.*
 - *Run OASIS using "Read VIN & DTCs."*
 - *If the "Read VIN & DTCs" button is green with a red VCM icon, refer to the "SYNC - Software Programming" document under the "Service Tips" tab.*
 - *If the "Read VIN & DTCs" button is red with a grey VCM icon, ensure pop-ups are enabled, follow the Internet Explorer pop-ups, and then refer to the "SYNC - Software Programming" document under the "Service Tips" tab.*
 - *If the "SYNC - Software Programming" document is not followed, the programming may stop or encounter errors due to improperly configured Internet browser settings.*
10. From the OASIS tab, select the "SYNC" button. The Last Recorded State — Software is displayed.
11. **NOTE:** *There are 3 types of APIM programming available:*
 - *Standard — Used to update the APIM and any currently installed Applications to the latest software levels.*
 - *Custom — Used to show all the available software options (including Applications that may not have been installed previously) that can be programmed into the APIM. Use this selection when upgrades become available or as directed by a TSB or FSA.*
 - *Module Replacement — Used when the APIM has been replaced. This type of programming performs the required provisioning (restores software for newly installed hardware).*
12. Scroll to the bottom of the screen, select 1 of the 3 options (Standard, Custom, or Module Replacement), and select the "Read SYNC" button. The VIN, current APIM assembly, VIP, and CIP software levels are compared to the last recorded state in the Ford online database, and the available software is displayed.
13. **NOTE:** *Do **not** disconnect the VCM during APIM programming unless directed by the*

diagnostic scan tool on-screen prompts.

Select the "Program SYNC" button to begin the APIM programming process.

14. Follow the diagnostic scan tool on-screen directions.
15. When prompted, connect the USB flash drive to the diagnostic scan tool.
16. Ensure the USB flash drive being used is formatted correctly. To see the available drives, hold down the Windows icon keyboard key and press the E keyboard key. Right click on the USB flash drive, and select Properties. If "File system" under the General tab is not exFAT, the drive must be formatted. To format the USB flash drive, right click on the USB flash drive, select Format, select "exFAT" for the File system, and select "Default allocation size" for the Allocation unit size. De-selecting Quick Format is not necessary, and will result in a more lengthy operation.
17. Follow the on-screen instructions to download software onto the USB flash drive.
18. When prompted by the diagnostic scan tool, safely remove/eject the USB flash drive from the diagnostic scan tool and connect it to the USB hub to install the software into the APIM. The update should start automatically, and may take 10 minutes or longer. It is normal for the APIM to reset during this step.
19. Once the FDIM pop up stating "Installation Complete" appears, select "Close," remove the USB flash drive from the USB hub and connect it to the diagnostic scan tool, and select "OK" on the diagnostic scan tool. This initiates the remaining automated configuration steps and reports the APIM assembly, VIP, Calibration, CIP, and Application software levels to the Ford online database. Failure to follow this step results in an inaccurate database as well as omitted, improperly installed, or improperly configured Applications (features) such as navigation (if equipped). It is normal for the APIM to reset during this step.
20. After programming is complete, the diagnostic scan tool displays "Programming has been successfully completed."