NAV-TV
INTERFACING THE FUTURE

3950 NW 120th Ave, Coral Springs, FL 33065 TEL 561-955-9770 FAX 561-955-9760

www.nav-tv.com   info@nav-tv.com

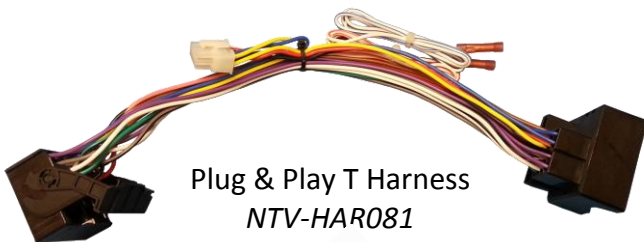# MB Sprinter-CAM
NTV-KIT477

Overview

The MB Sprinter-CAM allows the user to add an aftermarket rear camera to the factory screen on the Mercedes Sprinter. If desired, forced camera is an option through a mounted toggle switch (not included).

ATTENTION: This module locks to the VIN and can only be used on ONE vehicle at a time.

Kit Contents

Plug & Play T Harness
NTV-HAR081

CAN-XG Adapter
NTV-HAR058

USB Cable (updates)
NTV-CAB009

MB Sprinter-CAM
Module
NTV-ASY171

SMB to RCA Adapter
NTV-CAB007

Module Pin Outs

| PIN #	Description	Color
1	12v Constant (+)	Yellow
2	Input 1 (de-program wire)	Red
3	Input 2 (program wire)	Blue
4	Input 3 (Force CAM)	Pink
8	CAN HI (Radio Side)	White/Green
9	CAN HI (Car Side)	Brown/Black
10	Ground (-)	Black
17	CAN LO (Radio Side)	Green
18	CAN LO (Car Side)	Brown

Wire Side

Installation

1. Remove the factory radio. This requires pulling panels and removing screws. Disconnect all connected harnesses and set the radio aside.

2. Connect the male end of the factory 44-pin plug to the female end of the provided *Plug & Play T-Harness*.
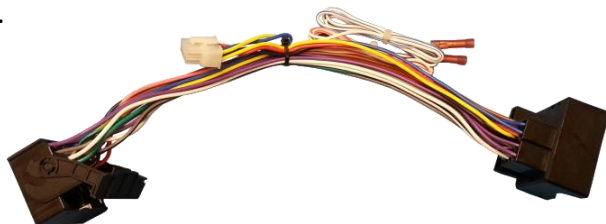
3. Disconnect the two smaller plugs on the factory 44-pin plug and connect them both to the male end of the provided *Plug & Play T-Harness*.
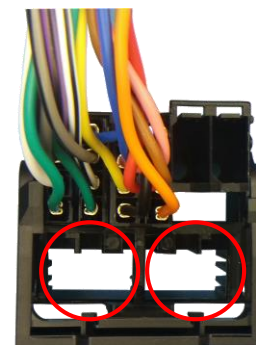
4. Connect the *CAN-XG Adapter* harness to the 8-pin plug located in the center of the *Plug & Play T-Harness*.

5. Connect the *MB Sprinter-CAM module* to the 18-pin Molex connector on the end of the *CAN-XG Adapter*.
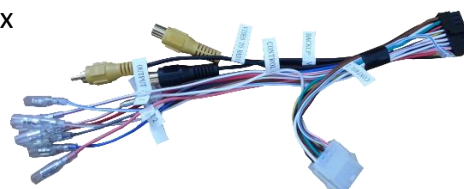
6. Connect the provided **SMB to RCA Adapter** to the green port on the back of the Sprinter's factory radio (if there is already a plug at the green port, disconnect it and use the provided SMB cable instead).

7. After installing and running the reverse camera to the dash opening (connect power to an ACC source, NOT reverse!), connect the camera's signal lead to the RCA side of the **SMB to RCA Adapter**. *Note: ACC power in Mercedes can often be found at the cigarette lighter.*

8. Connect the male end of the provided 44-pin **Plug & Play T-Harness** back to the radio and **leave the module outside of the dash, or accessible.**

9. Proceed to **Programming (below)**.

10. Once programming is complete, start the vehicle and place it into reverse. The reverse camera's image should appear on the screen automatically.

11. **Optional:** If forced camera is desired, connect one side of a toggle switch (not included) to ACC, and the other side to **INPUT 3 (pink).** Activating this switch will force the rear camera in any gear (reverse camera must be powered with ACC and **not** a reverse wire!)

Module Programming

1. Begin by installing this kit **(page 2, steps 1-9)**.
2. From the 18-pin Molex connector, find the **Blue wire** labeled **Input 2**.
3. Cut the metal connector off of the **blue wire** and strip the end back.
4. Connect this wire **temporarily** to 12v (+). **When programming is complete, you must remove this wire from power!** Note: the yellow wire on the white 8-PIN molex connector is a CAN wire, not constant power. Use the RED wire in this plug (constant 12v) or the yellow wire from 18-PIN XG module.
5. Turn the vehicle's ignition **ON** (not ACC or running, but **ON**).
6. Wait at least **1 minute** for the radio to fully boot and settle.
7. With **Input 2** connected to 12v (+), **toggle (pull and release once) the high-beam head lamp lever** and 'DIAGNOSIS' will appear on the screen. Refer to the chart below during programming.
8. Once the radio has been programmed, it will shut down (not reboot, but turn off).
9. After a few seconds, press the **power button** on the radio to bring the radio back up.
10. **Remove Input 2 from 12v (+). Insulate the wire end.**
11. Continue with installation: **step 10**.

LED Response	Description
NO LED	***Programming…***
1 flash	***NO VIN*** (VIN isn't identified OR the module has a VIN stored already)
2 flashes	***Vehicle is already provisioned*** (Programming has been completed already)
3 flashes	***Programming rejected*** (CAN needs to go down for 2 mins)
4 flashes	***Programming complete*** (The radio has accepted the program)

IMPORTANT NOTES:

- **This module locks to the vehicle's VIN and can only be used to program a reverse camera on ONE vehicle at a time.**

Module De-Programming

1. Access the Sprinter module.
2. Locate the wires labeled **Input 1 (red)** & **Input 2 (blue).**
3. Strip the ends of **Input 1 & Input 2** back, and twist them together.
4. Connect the twisted pair ***temporarily*** to 12v (+) CONSTANT.
5. Repeat ***Programming*** steps 5-10 and then remove both wires from each other and from power and insulate. ***Once the vehicle has been de-programmed, the VIN is no longer locked to the vehicle. This will allow the installer to use the module on another vehicle.***