

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

# **CMAX-PRG**

Rear-Camera integration kit for '15-'17 Ford CMAX with 8" MyTouch NTV-KIT767



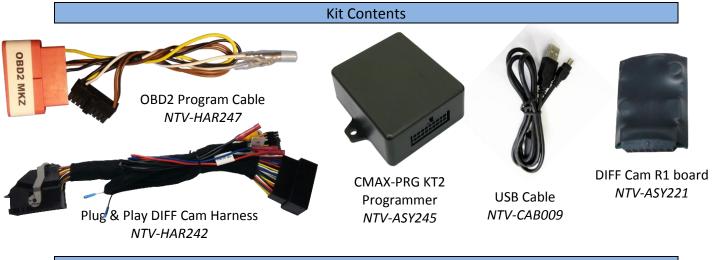


BHM 08/24/16 NTV-DOC267

#### Overview

The CMAX-PRG Kit programs the Ford CMAX My Ford Touch radio for rear view camera, includes differential video converter for aftermarket (composite) back-up cameras.

# Following installation, the programmer module w/ harness MUST remain in the vehicle (glove box, etc)!



DIFF CAM R1 pin outs

Pin	Description	Color
1	12v (output)	Red
3	GROUND (-) (output)	Black
6	Manual Activation	Blue (not used for FORD)
7	CAN HI	Yellow/Black
8	Constant (+) IN	Yellow
9	CAM RCA shield	Black
10	CAM RCA positive	Yellow
12	DIFF VIDEO (-)	White
13	DIFF VIDEO (+)	Gray/Black
14	CAN LO	Orange/White



Wire Side

## **OBD2** Programmer pin outs

Pin	Description	Color	_
1	Constant 12v (+) IN	Yellow	18 17 16 15 14 13 12 11 10
2	De-Program wire	White/Blue	987654321
9	CAN HI	Brown/Black	Wire Side
10	Ground (-)	Black	
18	CAN LO	Brown	

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

#### Installation

- 1. Using plastic panel tools, remove the dash trim pieces surrounding the LCD to expose the screws securing the My Ford Touch LCD panel in place.
- 2. Remove the screen from the dash, disconnect all the connectors & set the screen to the side.
- 3. Gather the Plug & Play DIFF Cam harness from the My Touch Cam kit. Connect the main Ford LCD harness (male end) into the female end of the Plug n' Play harness.
- 4. Connect the DIFF Cam R1 board to the 14-pin connector (may be already connected).
- 5. Ground your camera negative wire to a solid bare metal chassis ground at the back of the vehicle and run the RCA and power connection from your rear view camera to the video interface. Plug the RCA from your rear view camera into the female RCA connection at the video adapter. *The RED wire of the video interface will output 12 Volt + Accessory to power your camera. The output is limited to 1 AMP. If your camera requires more than 1 AMP to function, make sure to use a relay.*
- 6. Plug the factory 54 pin connector back into the monitor.
- 7. Leave all connections accessible and proceed to the programming section (page 4).

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

## **Programming:**

NOTE: THE MYFORD TOUCH PROGRAMMER CAN ONLY BE USED TO ACTIVATE THE REAR VIEW CAMERA ON ONE VEHICLE AND MUST REMAIN WITH THAT VEHICLE. FACTORY FORD MYFORD TOUCH UPDATES MAY DELETE THE REAR VIEW CAMERA OPTION AND PUT THE VEHICLE BACK TO AN "AS BUILT" STATE. IF THIS HAPPENS THE UNIT WILL NEED TO BE REACTIVATED BY COMPLETING THE PROGRAMMING STEPS AGAIN. NAV-TV RECOMMENDS THAT THE MYFORD TOUCH PROGRAMMER BE KEPT WITH THE VEHICLE IN THE GLOVE BOX OR OTHER COMPARTMENT AT ALL TIMES.

- 1. BE SURE THE WHITE/BLUE WIRES ARE **NOT CONNECTED**.
- 2. Turn the key to the RUN position and keep it in the RUN position until the radio is completely booted and settled to a source screen (ie: FM, CD).
- 3. With the ignition and radio ON, Plug the CMAX-PRG module harness into the factory Ford OBD plug.
- 4. Leave the module connected to the OBD until the programming sequence is complete (see below for a description).
- 5. The radio will program and restart in approximately 20 seconds. Once restarted, the radio will go into a self-diagnostics screen. It will take approximately 1-2 minutes to boot into the radio screen.
- 6. Once the radio restarts, place the vehicle into reverse and verify the radio displays the rear view camera image or goes to a blank screen if a camera is not installed yet. NOTE: IF THE REAR VIEW CAMERA IS NOT ALREADY CONNECTED TO THE RADIO THE SCREEN MAY TAKE AS LONG AS 15 SECONDS TO GO TO A BLACK SCREEN AND MAY GIVE YOU A WARNING THAT SAYS "CAMERA FAULT".
- 7. Disconnect the CMAX-PRG programmer module from the factory OBD2 plug.
- Verify that the screen displays a rear view camera image once the vehicle is placed into reverse.
  If the image is displayed correctly, reassemble the vehicle and place the CMAX-PRG
  PROGRAMMER INTO THE GLOVE BOX OF THE VEHICLE.
- 9. Reassemble the vehicle.

**De-Programming:** 

NOTE: BEFORE THE CMAX-PRG PROGRAMMER CAN BE USED ON ANOTHER VEHICLE, THE ORIGINAL VEHICLE MUST BE DE-PROGRAMMED.

- 1. <u>The CMAX-PRG PROGRAMMER WILL NOT UN-PROGRAM ANY VEHICLE IF THE VEHICLE WAS</u> <u>ORIGINALLY PROGRAMMED WITH ANOTHER PROGRAMMER, INCLUDING FACTORY</u> PROGRAMMING, OR A DIFFERENT MYFORD TOUCH CAM PROGRAMMER.
- 2. Connect the white/blue wires TOGETHER.
- Repeat steps 2-5 under the *Programming* section, from page 3.
  \*Note: The programmer will not de-program the factory installed rear view camera option.

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

## FAQ

Q. The radio went through the programming sequence but I have a blank screen or distorted view of the camera image when I place the vehicle into reverse.

A. Verify that the video adapter and the rear view camera have sufficient power and ground. If using the reverse lamps to power the camera, a relay is required. The lamp output has a low current rating and will not drive a camera. The red wire on the video adapter provides a 1 AMP accessory output for your convenience.

Q. The rear view camera image is distorted and lacks color.

A. Check that the video adapter violet and white/violet wires are populated in the proper pin locations, and that the camera has sufficient voltage and a proper ground.

Q. The system went through the programming sequence, but the screen doesn't go into rearview camera mode. A. Verify that the white/blue wires weren't connected when programming.

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

## CMAX-PRG USB Updater/Additional Licenses

• To verify that this module has been installed previously, you may download the CMAX-PRG proprietary USB Updater to check stored VIN's used previously, if any. The downloadable ZIP file is located on the NAV-TV website on the CMAX-PRG product page.

Click on the **Q** Files button at the bottom of the product page to download.

 The CMAX-PRG features an option for NAV-TV dealers to purchase licenses instead of multiple pieces of hardware, reducing overhead costs. *Contact NAV-TV* (561-955-9770) for more information regarding purchasing one single programmer, allocated for use in 10, 20 or more vehicles. Additional licenses may also be sent via email.

	I NAV-TV License Manager Sep 2 2015				
	Select bundle	RG (NTV-KIT627)\SW\gm-ios3-camera-off.en¢			
	Select product	Ţ			
	USB Device				
	Loaded update file				
Daukla alialista	Doubleclick parameters to change				
Double-click to check VIN usage	Current VIN Usage				
	Update	C	lose		



Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.