

# NAV-TV

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## Metris F-CAM/ Metris-PRG/Metris-PKG

Dual-camera interface for Mercedes Metris Van  
NTV-KIT714/KIT715/KIT719

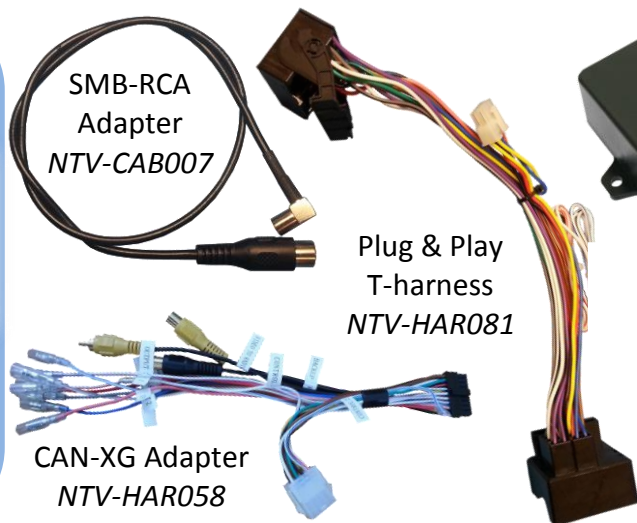


## Overview

The Metris-PRG interfaces an aftermarket rear camera (and optional front camera/AUX video source) into the 2016 Mercedes Metris full size van. All connections are made behind the factory screen. Forcing either camera is available via steering wheel buttons or wire-triggers if desired.

## Kit Contents

*KIT714 required if OEM RVC exists. Includes:*



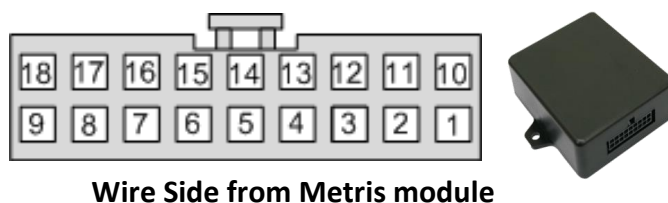
*KIT719 includes CAM 7*



## Metris-PRG pin out & Compatibility

PIN #	Description	Color
1	12v (+) Constant	Yellow
2	Input 1 <b>Force Rear Camera</b>	Red
3	Input 2 <b>Force Front Camera*</b>	Blue
4	--Not Used--	Pink
6	RCA MALE	Yellow
7	RCA Shield	Black
8	CAN HI (Radio Side)	White/Green
9	CAN HI (Car Side)	Brown/Black
10	Ground (-)	Black
11	Output 1 <b>12v (+) ACC OUT</b>	White/Red
12	Output 2 <b>Reverse 12v OUT</b>	White/Blue
13	Output 3 <b>12v when forced front</b>	White/Purple
15	RCA Female (Normally Open)	White
16	RCA Female (Normally Closed)	Red
17	CAN LO (Radio Side)	Brown
18	CAN LO (Car Side)	Brown/Black

NTV-KIT #	Description
KIT714 Metris F-CAM	Required if OEM rear camera exists and adding AUX video
KIT715 Metris-PRG	Used for adding 2 <b>aftermarket</b> cameras
KIT719 Metris-PKG	Metris-PRG with CAM 7



*\*Forced rear camera only supported when adding an **aftermarket** rear camera.*

*All existing wires not mentioned here are NOT used for this installation.*

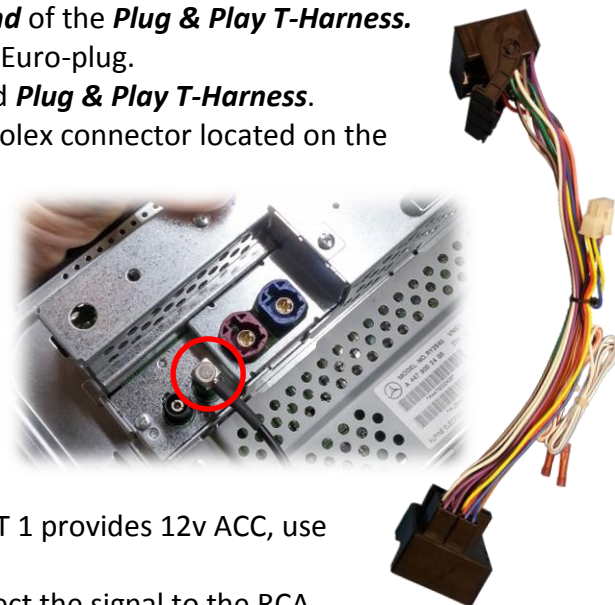
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## Metris-PRG Installation

1. Remove the factory screen (this is the radio as well). This requires prying the dash panel (surrounding the radio and vents) and removing Torx screws which secure the screen to the sub-dash. Disconnect all harnesses and set the radio to the side.
2. Remove the (2x) 12-pin plugs from the factory euro-plug and re-insert them into the **male side** of the provided **Plug & Play T-Harness**. You'll need to remove the plastic cover from the OEM plug to gain access to these plugs (see below):



3. Insert these plugs (just removed from step 2) into the **male end** of the **Plug & Play T-Harness**.
4. Replace the cover (removed from step 2) back on to the OEM Euro-plug.
5. Connect the OEM Euro-plug to the **female end** of the provided **Plug & Play T-Harness**.
6. Connect the provided **CAN-XG Adapter** to the 8-pin (white) Molex connector located on the Plug & Play T-Harness (white/blue & white/red wires not used, cut off).
7. Connect the Metris-PRG module to the 18-pin connector.
8. Connect the provided **SMB-RCA Adapter** to the **green port** on the back side of the radio.
9. Connect the 'Video to Radio' RCA (only male RCA) to the RCA end of the **SMB-RCA Adapter** from step 10.
10. After installing the rear camera, connect the signal RCA to the **black RCA labeled 'Backup CAM'** at the 18-pin Metris-PRG module. Power your camera with an ACC source (OUTPUT 1 provides 12v ACC, use this to **trigger a relay**, especially if powering 2 cameras).
11. **Optional:** if adding a front camera or AUX Video source, connect the signal to the RCA labeled 'Video IN' (at 18-pin connector). Power this video source with ACC power. **Note: when forcing AUX Video/front camera, the OEM message 'Check entire surroundings!' will always display on screen. This is a factory limitation.**
12. Connect the radio to the male side of the **Plug & Play T-harness**. Reconnect all other plugs to the radio and proceed to **Metris-PRG Programming**.



Metris-PRG Programming

1. After all connections are made, turn the key to the **ON** position (don't start vehicle).
2. The radio will turn on, and then shut down (and stay off) within 1 minute.
3. Once the radio is off, press the **power button** once to turn it on.
4. If programming of the radio was performed successfully, the camera image will display on screen while in reverse.

**Flash-code reference table: reference while programming**

LED Response	Description
1 flash	<b>Waiting for Ignition...</b> (Turn ignition to ON)
2 flashes	<b>Waiting for Vehicle VIN...</b>
3 flashes	<b>Query Vehicle</b> (Reading/decoding the VIN and vehicle components)
4 flashes	<b>Programming...</b>
5 flashes	<b>Programming Complete</b>
6 flashes	<b>No Programming Needed</b> (Already programmed)
7 flashes	<b>Radio Not Supported</b> (Verify this vehicle is compatible)
8 flashes	<b>Out of Licenses</b> (Contact NAV-TV @ 561-955-9770)

**IMPORTANT NOTES:**

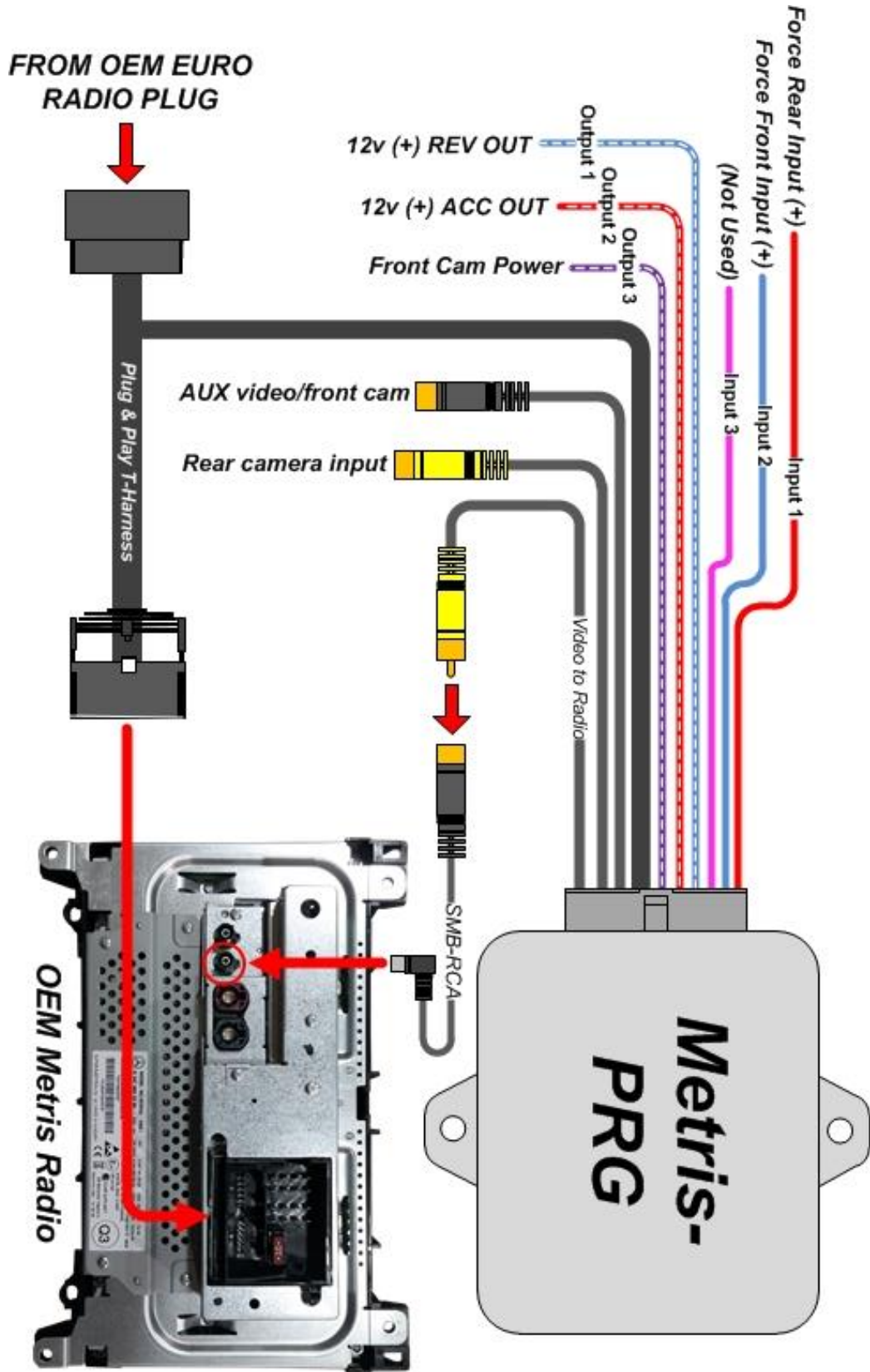
- ***This module locks to the vehicle's VIN and can only be used to program a reverse camera on ONE vehicle***
- ***This module must remain in line (via T-Harness) to this vehicle at all times (programmer & emulator)***
- ***There is no way to de-program this module. Once programmed, this kit must remain in the vehicle forever! (The module will not work on another vehicle after it has been programmed once!)***
- ***If this Metris Van has an existing OEM Camera and you're adding AUX video (or front camera), you MUST purchase NTV-KIT714 (Metris F-CAM) which includes additional parts required for RVC signal separation to prevent 'Ghosting' image.***

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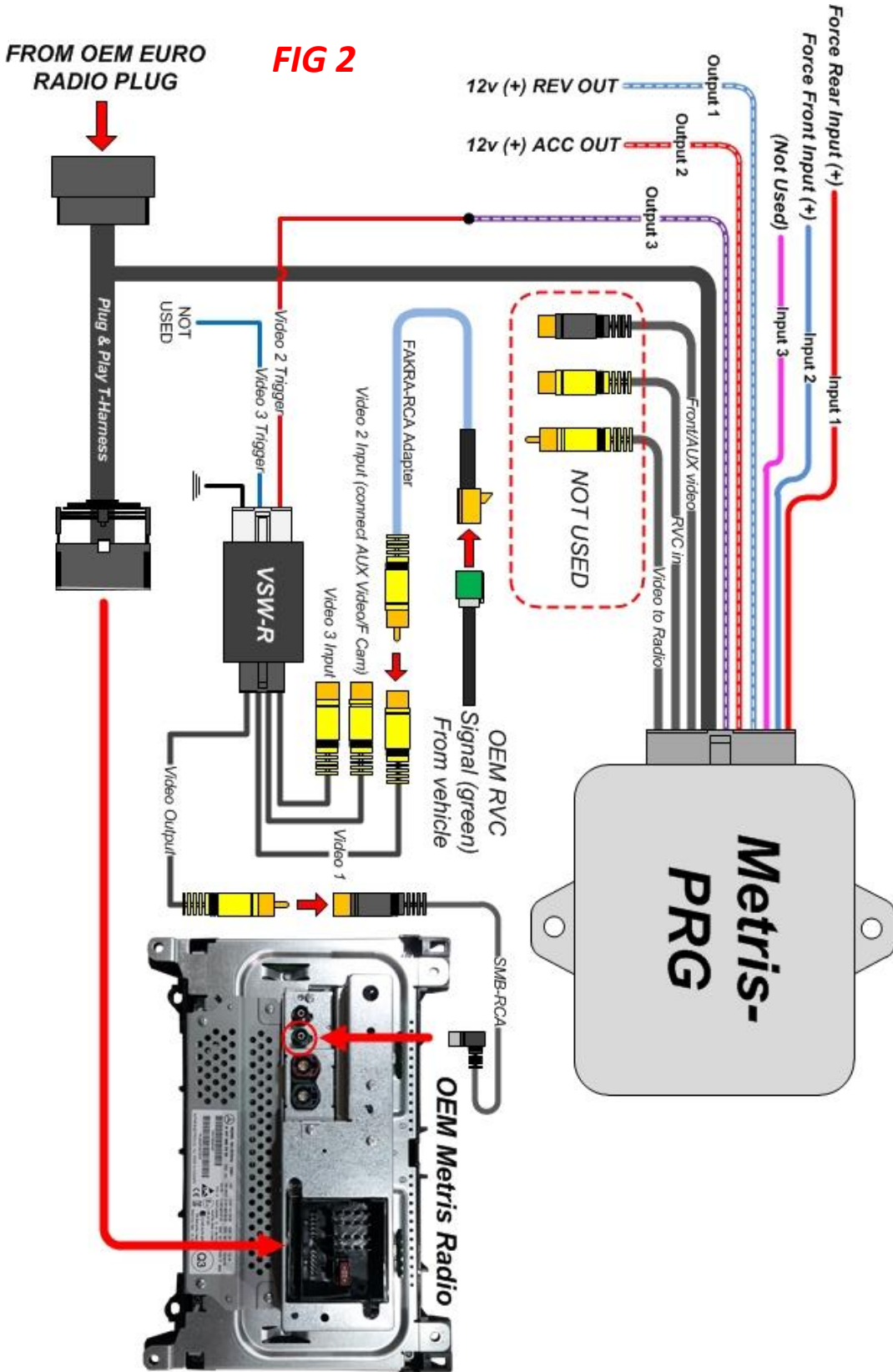
Installation Diagram (NO OEM RVC, KIT715)

**FIG 1**



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Installation Diagram (WITH OEM RVC, KIT714)



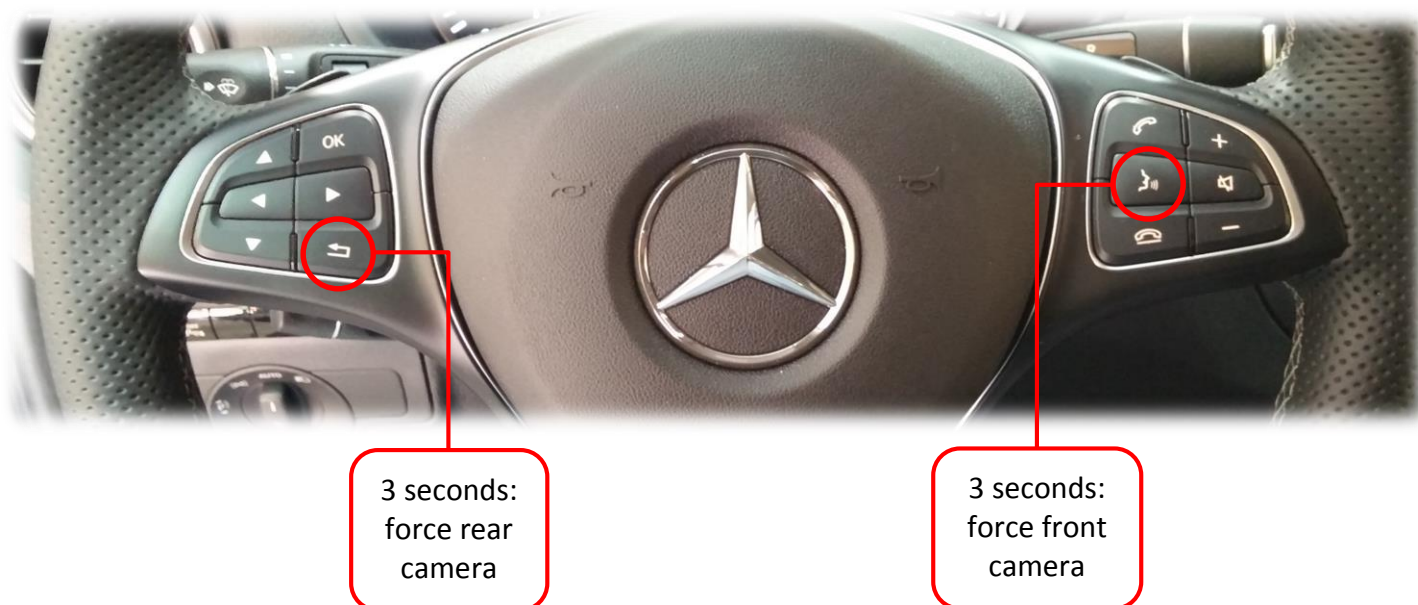
*When installing the Metris-PRG into a Metris with an existing OEM rear camera, you must purchase NTV-KIT714 (Metris F-CAM) which includes additional parts for signal separation to prevent a 'ghosting' image. In this case, install/wire the kit like shown below.*

## Metris-PRG Operation

- Typically, no user interaction is necessary for the Metris-PRG. Any time the vehicle is placed into reverse, the rear-camera image will appear on screen.

**Forced rear camera** (viewing camera image in any gear and any speed) can be activated by **holding clear (steering wheel) for 3 seconds** or sending 12v (+) to **Input 1 (red)** through a toggle (not included). *Note: Camera must be powered with an ACC source, NOT reverse lights for this operation.*

**Forced front camera/AUX video** (viewing front camera/AUX video image in any gear and any speed) can be activated by **holding Voice Command for 3 seconds** or sending 12v (+) to **Input 2 (blue)** through a toggle (not included).



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