

NAV-TV

INTERFACING THE FUTURE

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UCTv2-W

'18 Wrangler uConnect 4.0 (CarPlay/Android Auto) Dual Camera Interface

NTV-KIT851



Overview

The *UCTv2-W* interface integrates 2 video inputs (including one rear camera) to the factory 8.4" touch screen in the 2018 Jeep Wrangler. Forcing the cameras at any time is an option (OEM camera forcing is not supported at this time).

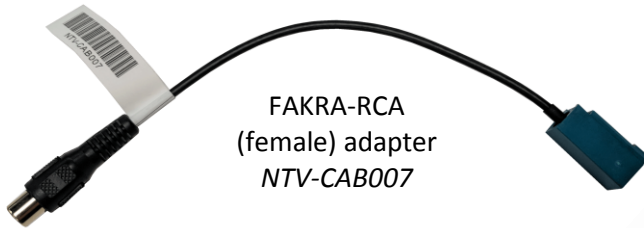
Kit Content



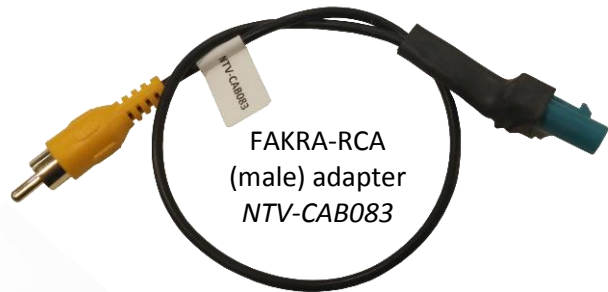
Plug & Play T-harness
NTV-HAR264



UCTv2-W
Module (KT2)
NTV-ASY245



FAKRA-RCA
(female) adapter
NTV-CAB007



FAKRA-RCA
(male) adapter
NTV-CAB083

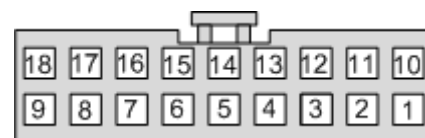


USB Cable (updates)
NTV-CAB009

UCTv2-W Pin Out

PIN #	Description	Color
1	12v (+) Constant	Yellow
2	INPUT 1: <i>VIM Activation</i>	Red
3	--NOT USED--	Blue
4	INPUT 3: <i>Front CAM/Cargo Cam (selectable)</i>	Pink
5	<i>RX (not present)</i>	--
6	RCA MALE	--
7	RCA Shield	--
8	CAN HI (Radio Side)	Brown/White
9	CAN HI (Car Side)	Blue/White
10	Ground (-)	Black
11	OUTPUT 1 <i>Provides 12v (+) ACC OUT</i>	White/Red
12	OUTPUT (2) when AUX is activated (AVSW V1 Trigger)	Blue/White
13	OUTPUT (3) when Front CAM is activated (AVSW V2 Trigger)	Purple
14	TX INPUT (UART control to SVS-6 RX)	White/Brown
15	RCA Female (Normally Open)	--
16	RCA Female (Normally Closed)	--
17	CAN LO (Radio Side)	Brown
18	CAN LO (Car Side)	Blue

OUTPUTs 2 & 3 send 12v (+) with corresponding button press (force cam)



Wire Side

UCTv2-W Module Installation

1. Remove the factory radio (screen), grab the provided **Plug & Play T-harness** and connect the female side to the factory 44-pin plug. Make certain the lock connects together securely.
2. Install camera(s) and run signal/power leads into the front dash opening. **Note:** 12v ACC is provided from **output 1** (PIN 11, white/red). **If connecting any camera (s) which draw 1amp or more, trigger a relay with this output instead powering directly!**
3. Make required connections as shown below in FIG 1. If this vehicle has an OEM reverse camera (and you're adding a front camera), you must utilize the additional provided FAKRA-RCA (female) like shown in FIG 2 (page 5).
4. Connect the male side of the **Plug & Play T-Harness** to the main radio display. Proceed to page 5 for programming.

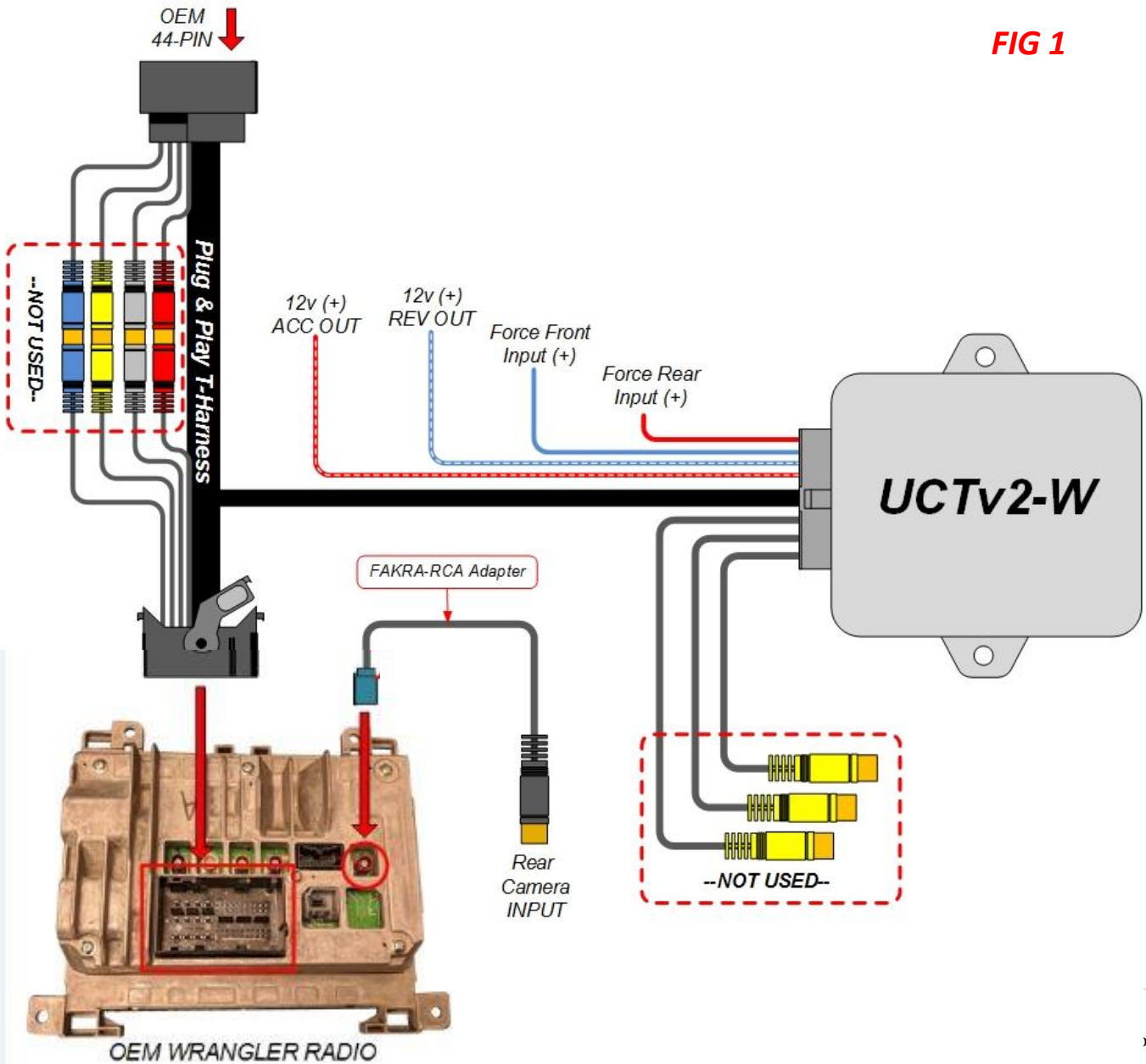
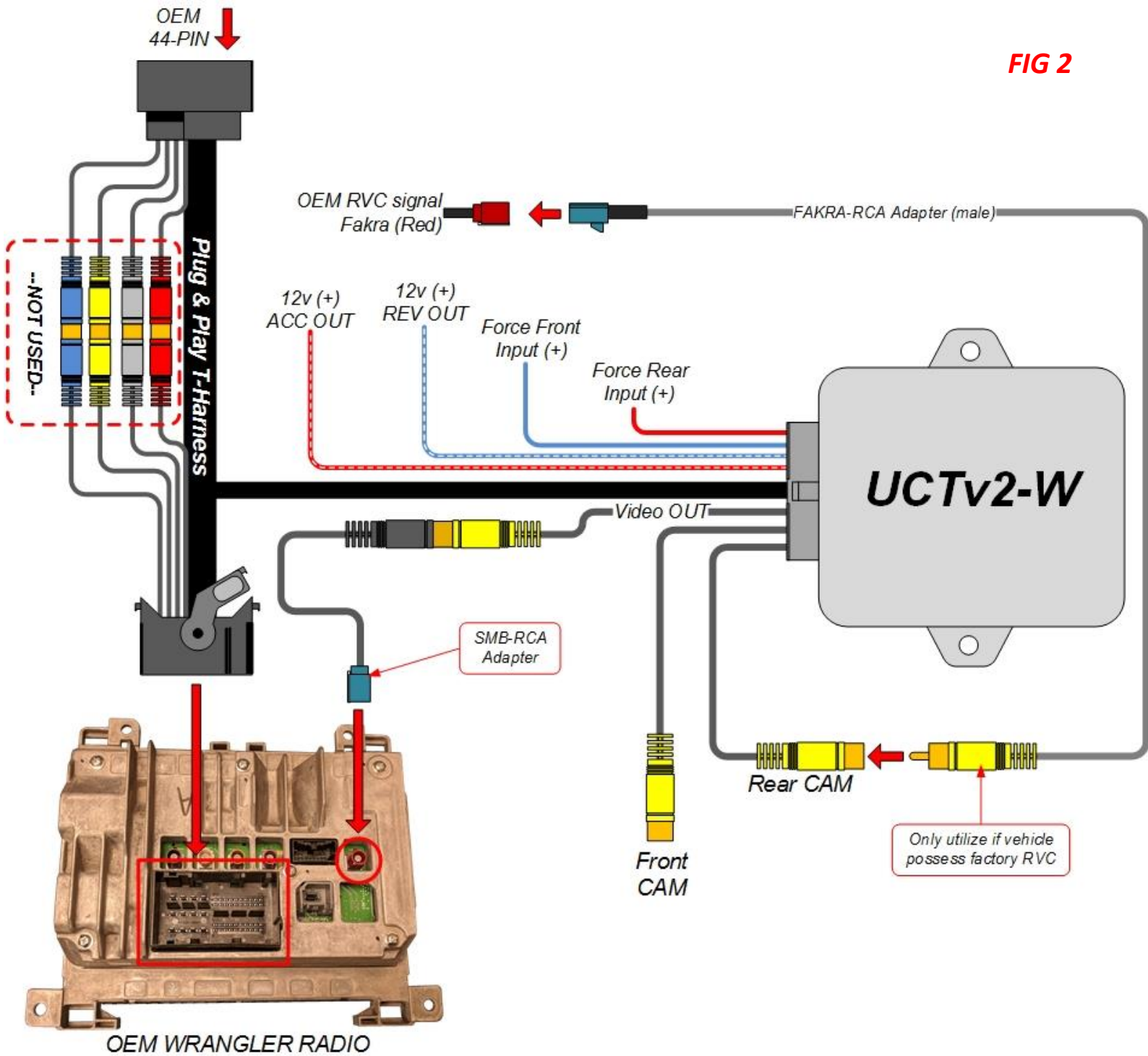


FIG 2



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.

UCTv2-W Programming

Programming the UCTv2-W is performed in the vehicle, through the factory dash MUTE button, TUNING KNOB, and CLUSTER LCD for feedback.



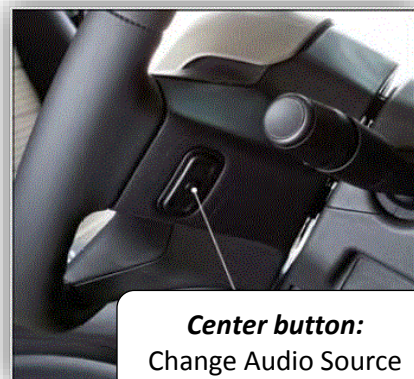
Press and HOLD (15 seconds) to enter NAV-TV settings mode

While in NAV-TV settings mode only: Rotate clockwise (slowly, one detent/time) to scroll through options. Press ENTER to change setting.

1. Before attempting to program, after making connections, let the vehicle perform a CAN-reset: Close all doors/trunk/hood, lock the vehicle and waiting 10 minutes before proceeding to program.
2. Turn the vehicle's ignition on. Be certain you're resting in **FM mode** (see an FM station frequency on the cluster), otherwise the cluster information may not display.



To show the FM source on the **cluster**, first clear any messages shown (door status, etc) with the UP or DOWN arrows on the steering wheel. Press the audio source button until 'FM' is displayed.



Center button:
Change Audio Source

3. Close all doors (*door status may override NAV-TV settings cluster feedback*).
4. View the chart on the next page for settings descriptions and the diagram above to begin programming.
5. NAV-TV programming mode will time out (back to factory) after 15 seconds. *Scroll to the end of the settings menu and select 'EXIT' to exit and save settings.*

UCTv2-W Programming Parameters (OEM Cluster)

Parameter (cluster)	Adjustment Options	Description
NAV-TV Settings	TUNE-Next Item / Enter Change	Rotate TUNE knob to access different menus, press knob inwards to enter/change setting
GEAR	AUTO / STICK	AUTO: Select this option if the vehicle has an automatic transmission STICK: Select this option if the vehicle has a manual transmission
SWITCH	RELAY / AVSW / SVS-6	RELAY: Uses RCA inputs on the UCTv2-W module itself (UCTv2-W) AVSW: Select when using AVSW board (UCTv2-W+) SVS-6: Select when using SVS-6 switcher (UCTv2-W MULTI-CAM)
RVC	OEM / AFTERMARKET / OFF	OEM: Vehicle has a manufacturer-installed reverse camera. AFTERMARKET: Any aftermarket reverse camera. OFF: Choose if not adding a reverse tailgate camera.
F. RVC	OFF / ON	ON: Enables option of forcing rear view camera.*
FRONT CAM	OFF / ON / <8	ON: Enables option of installed front camera. <8: Front camera will display between 1-8 MPH.
AUX VID	<p>NOT AVAILABLE WITH THIS RELEASE</p> <div style="border: 2px solid red; padding: 10px; margin: 10px auto; width: 80%;"> <p>After completing desired programming options, you MUST reset the radio before Rear-Camera will fully program. See the next page for the reset procedure.</p> </div>	
TURN SIGNALS		
Cargo CAM**		
INPUT3		
EXIT		



The **SWITCH** you choose determines which options will display on the cluster, to reduce confusion.

Option color	SWITCH chosen:
	ANY

*Factory Rear camera is controlled via LIN. Forced OEM RVC is not supported with the UCTv2-W.

-- Required for 2018 Wrangler --

Panasonic Radio Reset Procedure

For vehicles equipped with the new *Panasonic* (CarPlay/Android Auto) radio, the method for programming rear-camera has changed and requires additional steps. Follow the procedure below for these applications:

1. After Installing the kit and adjusting the menu for desired options, shut down the vehicle with the key (or push button).
2. Disconnect the **vehicle-side** of the supplied T-Harness for 5 seconds, then reconnect it.
3. Turn the vehicle on (to ignition, beyond accessory), wait **1 minute**.
4. Turn the vehicle off again. **Wait for LED on module to go out.** Wait for 30 more seconds.
5. Turn the vehicle on (to ignition, beyond accessory), wait for the radio to fully boot. Wait for 30 more seconds.
6. Turn the vehicle off again. **Wait for LED on module to go out.** Wait for 30 more seconds.
7. Turn the vehicle on once more and the camera should be programmed and functioning properly.

For further information on this process and video reference, see our YouTube video here:

<https://www.youtube.com/watch?v=XOtkOUCLXik>

UCTv2-W Camera Force Buttons



Rear Camera Operation: Placing the vehicle in to reverse will automatically display any connected camera. This image will take precedence over all other images.
Force Rear Camera: To force rear camera, double-tap the **Rear Defrost** button. To exit forced rear camera, repeat the same process. **Note: forced rear camera is only supported on aftermarket cameras.**



Force Front Camera: To force front camera, double-tap the **Front Defrost** button. To exit **Front Cam** mode, Repeat the same process.

- If using AUX video mode for an A/V source, the red & black RCAs located on the **Plug & Play T-Harness** must be opened up with an AVSW (NTV-KIT224).



FAQs

Q1. I can't get into programming mode.

A1. Turn off the vehicle and remove the key. Close all points of entry and use the remote to lock the vehicle. Wait approx. 5 minutes without opening or disturbing the vehicle. Unlock and cycle the ignition to the 'RUN' position. ***Make certain that the cluster is in FM radio mode before you begin programming;*** and no errors are displayed (door open, etc), otherwise the cluster information might not display. Hold down the "MUTE" button until you see the display options post on the cluster.

Q2. When I try to force (front, rear) camera, nothing happens.

A2. Make certain you've enabled the options you want to use in the NAVTV settings mode and that you scrolled to the end *and selected 'EXIT' (or it will not save).*

Q3. I hear no audio when my auxiliary source is playing on screen.

A3. Verify that the audio RCAs are connected properly to the AVSW.

Q4. Everything works properly, but when an audio source is connected to the 3.5mm audio jack, there's no audio.

A4. Make sure the audio RCAs are connected together on the Plug & Play harness.

Q5. When I place the vehicle into reverse, I get a black or blue screen.

A5. Make sure the camera is getting sufficient power and the RCA is connected to the proper yellow RCA on the 24-pin harness.

Q6. The camera image is displayed properly when the vehicle is in reverse, but there's only a black or blue screen when the camera is forced.

A6. Make sure the camera power is not connected to the reverse lamps. Camera power needs to be connected to an accessory wire (cigarette lighter). If the camera is OEM, forcing it to display in any gear is *not* supported.