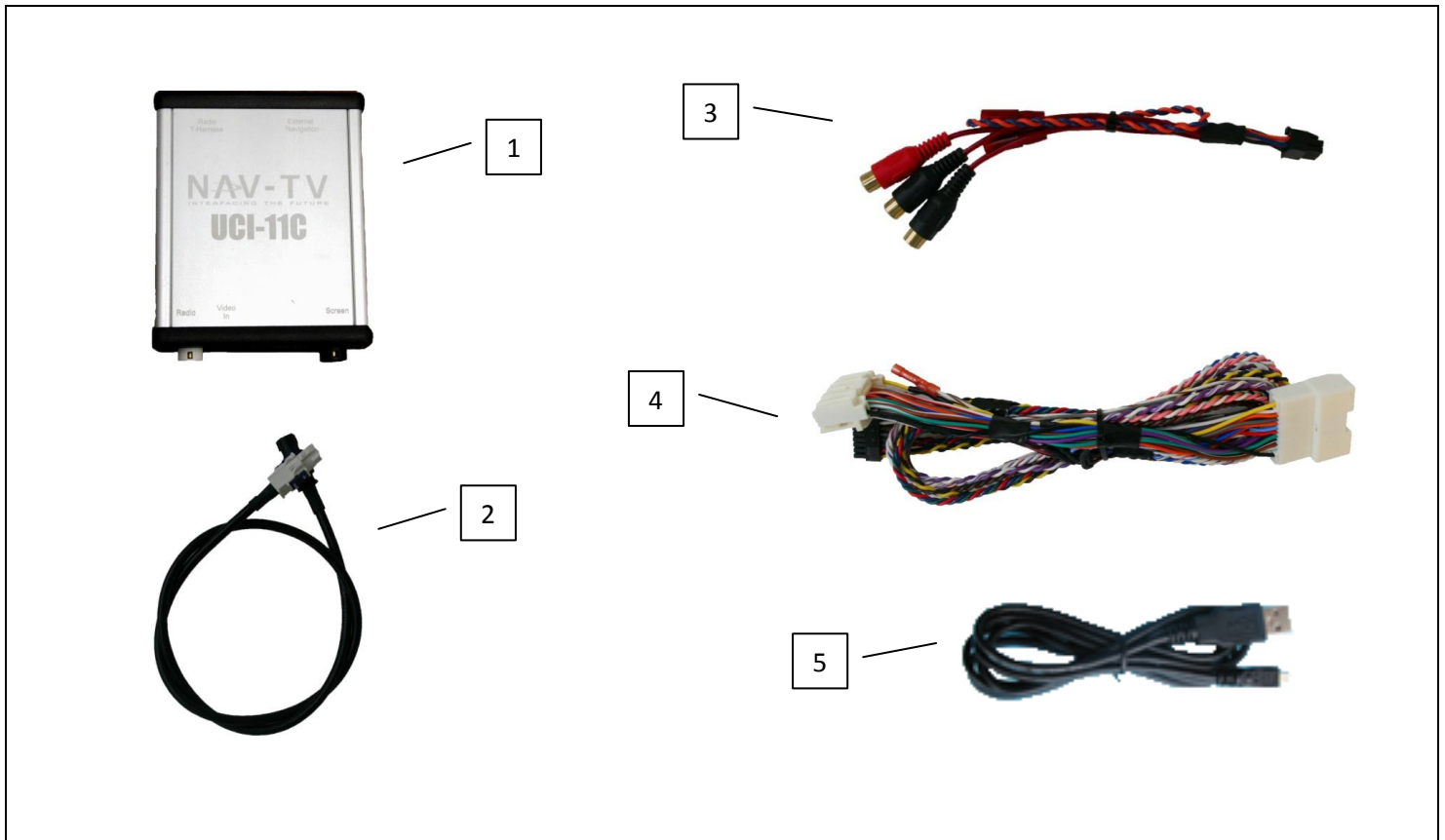


UCI-11C

Rear view camera & Navigation solution for Dodge, Chrysler & Fiat UConnect Touch 4.3" & 8.4" systems

Overview:

- Adds touch screen controlled navigation to vehicles without factory navigation
- Provides a rear view camera solution for both the 4.3" and 8.4" UConnect Touch radios (camera not included)
- Allows DVD video to be viewed while the vehicle is in drive (only on 8.4" DVD equipped systems)



Product Description

1	UCI-11C interface module	4	Radio T-harness
2	LVDS cable	5	USB update cable
3	Video IN cable		

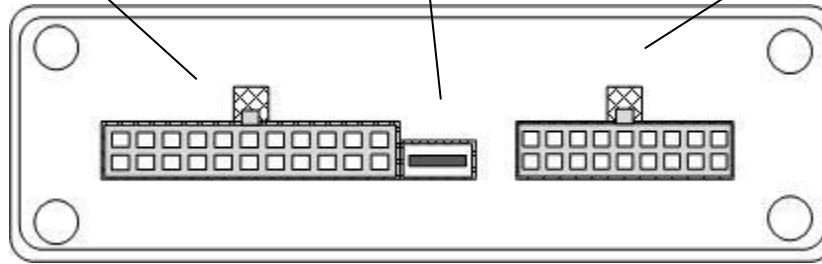


Connector pin out

Navigation/AV
(reserved)

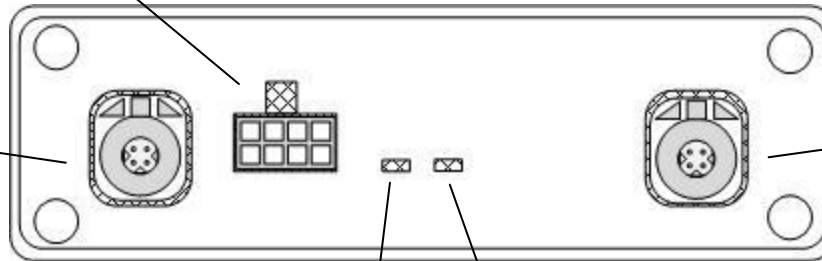
USB (update port)

Radio T-
Harness



Video IN

LVDS IN
(from radio
White)



LVDS OUT
(to screen
Black)

LED
Activity

LED
N/A

*** The connectors are viewed from the wire insertion side**

8 Pin Video IN Connector

1	Shield	RCA	3	Shield	RCA
5	Video Signal		7	Video Signal	
2	Shield	RCA	4	Video +	Twisted Pair
6	Video Signal		8	Video -	



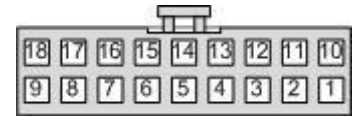
24 pin Navigation Connector

1	+12V OUT	13	Ground OUT
2	Acc OUT	14	Mute IN
3	RX IN	15	TX OUT
4	EMPTY	16	EMPTY
5	RGB BLUE IN	17	EMPTY
6	RGB GREEN IN	18	EMPTY
7	RGB RED IN	19	EMPTY
8	RGB SYNC IN	20	EMPTY
9	EMPTY	21	EMPTY
10	EMPTY	22	Audio Ground IN
11	EMPTY	23	Audio Left IN
12	EMPTY	24	Audio Right IN



18 pin Radio T-Harness connector

1	+12v Power		10	Ground	
2	Audio Ground OUT	Radio	11	Audio Ground IN	Car
3	Audio Right OUT	Radio	12	Audio Right IN	Car
4	Audio Left OUT	Radio	13	Audio Left IN	Car
5	1A 12v OUTPUT	OUT 1	14	1A 12v OUTPUT	OUT 2
6	Infotainment CAN HI	Radio	15	Infotainment CAN LO	Radio
7	Infotainment CAN HI	Screen	16	Infotainment CAN LO	Screen
8	Vehicle CAN HI	Car	17	Vehicle CAN LO	Car
9	Vehicle CAN HI	Radio	18	Vehicle CAN LO	Radio



UCI Installation

TOOLS REQUIRED

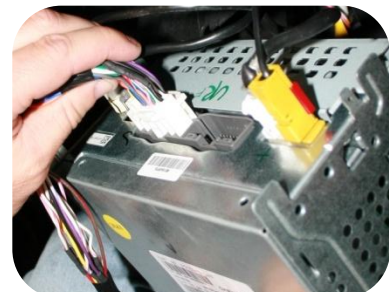
Phillips head screwdriver

Plastic pry tool

Small pocket screwdriver

Refer to online document for vehicle specific installation

1. Gain access to the back of the radio head. Pull out the radio enough to access the wiring behind the radio.
2. Disconnect the white 22 pin connector from behind the radio/gateway.
3. In the kit is a 22 pin T-harness, connect the removed harness from the radio to the female receptacle of the supplied harness. Take care not to bend any of the pins in the female receptacle when inserting.
4. Plug the male plug of the T-harness into the radio where the factory connector was located.




5. Gain access to the rear of the screen & disconnect the 3 cables that are attached.
6. Set the unit aside for ease of installation of the UCI.
7. The free end of the 22 pin T-harness that is plugged into the radio head, is routed behind the dash to the screen location.
8. The 18 pin connector is inserted into the port labeled "Radio T-harness".
9. Locate the WHITE, ROUND connector that was removed from the screen. Insert this cable into the WHITE port labeled "LVDS IN".
10. Take the provided LVDS cable and insert the BLACK end into the BLACK port (LVDS OUT). The other end will be connected to the screen later.
11. If installing a rear view camera, insert the 8 pin MOLEX plug into the port labeled "Video IN". Of the connections available, there's;
 - a. Twisted Pair – Used for factory installed camera only on the 4.3" screens. This input is not used on the 8.4" screens. On the 8.4" screens, the factory camera input is on the back of the radio head.
 - b. Video 1, 2 & 3- Used for an aftermarket camera input using composite video (yellow RCA connection).

**Power connections for the rear view camera can be made at the cigarette lighter.*
12. If installing navigation into the system, proceed to the navigation installation section. Otherwise continue to step 13.
13. After all the connections are made, securely mount the UCI module in the dash.
14. Connect the WHITE end of the provided LVDS cable into the screen. Make all other connections and reassemble the radio/screen.
15. Make the necessary changes in the SETUP menu & test.
16. Using the plastic pry tool, gently pry around the dash panel to release the locking tabs. Take extra care when releasing these tabs, they may fall from the dash panel and into the dash.

If Installing Directus Navigation

Once you complete step 12 of the UCI installation, continue from this point.

1. Plug in the supplied 24 pin Navigation harness into the port labeled NAVIGATION/AV.
 2. Route this cable down to the driver's side under dash or any location that is secure. Be sure to securely fasten it to existing wiring and brackets. Route away from any sharp or moving parts.
 3. Using Velcro, secure the module. For added stability, a large zip tie should be used to secure the module in place.
 4. Plug the routed cable from the UCI into the Directus navigation unit.
 - a. Black Din - RGB
 - b. Grey Din – DATA
 - c. 4-pin MOLEX – DC IN
- 
- NOT USED**
5. Included in the kit is an external speaker, it is used for turn by turn navigation or any audio output from the navigation unit. The speaker can be mounted on one of the metal rails running vertically under the steering column. It is recommended that the speaker faces the opening under the steering column for best volume.
 6. Plug the speaker into the 3.5mm jack labeled SPK on the navigation.

7. The GPS antenna needs to be installed, right side up, in a location that has a clear line of sight of the sky. The antenna can be mounted on the dash, or located in the dash below the dash pad without any metal obstructions. Be sure the antenna is securely mounted with Velcro, 2 sided stick tape or onto a metal surface.
8. Connect the antenna to the jack labeled GPS ANT on the navigation unit.
9. Return to step 13 in the UCI installation instructions above.

If installing the Kenwood/Garmin navigation unit

1. Plug in the supplied 24 pin Navigation harness into the port labeled NAVIGATION/AV.
2. Route this cable down to the driver’s side under dash or any location that is secure. Be sure to securely fasten it to existing wiring and brackets. Route away from any sharp or moving parts.
3. Using Velcro, secure the module. For added stability, a large zip tie should be used to secure the module in place.
4. Plug the routed cable from the UCI into the Kenwood navigation unit.
 - a. In pin position 12, on the cable that plugs into the UCI, is the High resolution wire. This wire is Blue/Black with a label on it. When installing onto the 8.4” screen, leave the wire intact. When installing onto the 4.3” screen, cut this wire.
5. The GPS antenna needs to be installed, right side up, in a location that has a clear line of sight of the sky. The antenna can be mounted on the dash, or located in the dash below the dash pad without any metal obstructions. Be sure the antenna is securely mounted with Velcro, 2 sided stick tape or onto a metal surface.
6. Connect the antenna to the square jack on the navigation unit.
7. Return to step 13 in the UCI installation instructions above.



Settings

4.3” Monitor

Adjusting the rearview camera settings

To access the settings screen, press and hold the “Settings” button for 3 seconds.

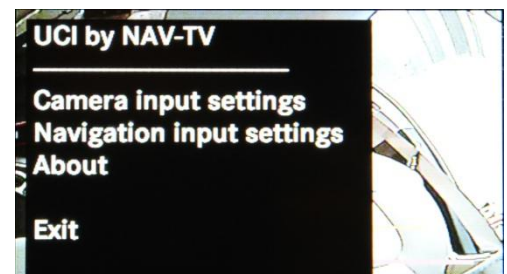
- On the touch screen, select “Camera Input Settings”.

Adjusting the input:

- Touch the “Input” soft key
- Every press of the icon will change the input: OFF, DIFF (factory camera), Video 1, Video 2, Video 3. The input image will be displayed in the back ground.

Adjusting brightness:

- Touch the “Brightness” soft key.
- Press the “-“ or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

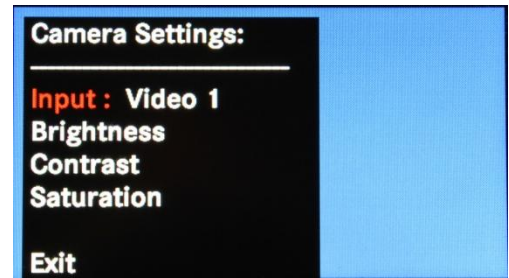


Adjusting Contrast:

- Touch the “Contrast” soft key.
- Press the “-“ or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

Adjusting the Saturation:

- Touch the “Saturation” soft key.
 - Press the “-“ or “+” soft key to adjust the image in 10% increments.
 - Press the “Exit” soft key.
- To exit the Camera Input Setting, press the “Exit” soft key.



Adjusting the navigation settings (if installed)

- Press the “Navigation input settings” soft key.

Adjusting the input:

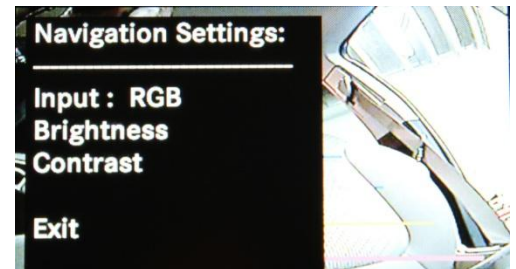
- Touch the “Input” soft key
- Every press of the icon will change the input: OFF, RGB, Video 1, Video 2, Video 3. The input image will be displayed in the back ground.

Adjusting brightness:

- Touch the “Brightness” soft key.
- Press the “-“ or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

Adjusting Contrast:

- Touch the “Contrast” soft key.
 - Press the “-“ or “+” soft key to adjust the image in 10% increments.
 - Press the “Exit” soft key.
- To exit the Navigation input setting, press the “Exit” soft key.



To view the current hardware/software revision

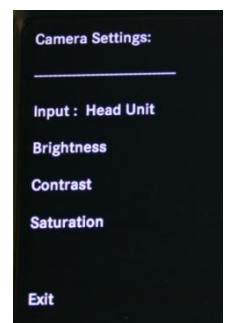
- Press the “About” soft key to show current software revision.
 - Press the “Exit” soft key to return to the main menu.
- To return to the system, press the “Exit” soft key.

8.4” Monitor

Adjusting the rearview camera settings

To access the settings screen, Press and hold the radio power button for 3 seconds.

****If the vehicle has a factory camera, set the Camera input to “HEAD UNIT”. All settings for the factory camera can be changed in the factory, not the UCI, “Settings” menu.***



- On the touch screen, select “Camera Input Settings”.

Adjusting the input:

- Touch the “Input” soft key
- Every press of the icon will change the input: OFF, Head Unit (factory camera), Video 1, Video 2, Video 3. The input image will be displayed in the back ground. (If the radio is set for Head Unit, the camera adjustments are accessed in the factory menu).

Adjusting brightness:

- Touch the “Brightness” soft key.
- Press the “-“or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

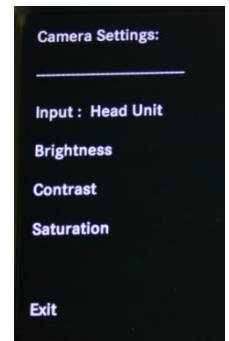
Adjusting Contrast:

- Touch the “Contrast” soft key.
- Press the “-“or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

Adjusting the Saturation:

- Touch the “Saturation” soft key.
- Press the “-“or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

- To exit the Camera Input Setting, press the “Exit” soft key.



Adjusting the navigation settings (if installed)

- Press the “Navigation input settings” soft key.

Adjusting the input:

- Touch the “Input” soft key
- Every press of the icon will change the input: OFF & ON. Only the RGB input is available. The input image will be displayed in the back ground.

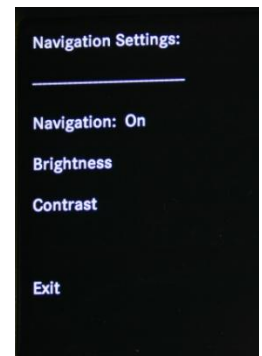
Adjusting brightness:

- Touch the “Brightness” soft key.
- Press the “-“or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

Adjusting Contrast:

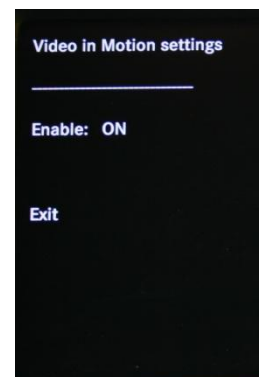
- Touch the “Contrast” soft key.
- Press the “-“or “+” soft key to adjust the image in 10% increments.
- Press the “Exit” soft key.

- To exit the Navigation input setting, press the “Exit” soft key.



Changing the Video in motion settings

- Press the “Video in Motion” soft key.
 - Touch the “Video in Motion” soft key to change status: ON or OFF
This function enables and disables the ability to watch DVD videos while the vehicle is in drive.
 - Press the “Exit” soft key to return to the main menu.



To view the current hardware/software revision

- Press the “About” soft key to show current software revision.
- Press the “Exit” soft key to return to the main menu.
- To return to the system, press the “Exit” soft key.

*** Note: Changes in the settings menu will not be saved until “Exit” is pressed. Changes will not be saved if the ignition is cycled before the “Exit” soft key is pressed.**



Operation

Rear View Camera



The rear view surroundings will be displayed anytime the vehicle is shifted into REVERSE. The image will be displayed on the factory touch screen along with the text “Check Entire Surroundings”. The text will remain on the screen for 10 seconds and then will fade out. Once the vehicle is shifted out of REVERSE, the image will fade into the previous mode or screen. Do not rely completely on the rear camera image; periodically check your surroundings for obstacles.

Navigation

4.3” monitor

To display navigation, press the “Screen Off” button. This will display the navigation home page. To exit navigation press the Screen Off button again. Audio prompts will be heard through the external speaker. Refer to the navigation documentation for operation.

8.4” monitor

When navigation is enabled, a new icon will show up in the bottom right corner of the screen, where the “More” soft key is located. To access the navigation, press the “Nav” soft button on the lower right corner. The navigation screen will be displayed. All the functions of the navigation can be controlled through the factory touch screen. (Refer to the user manual for operation). To exit the navigation screen, press the desired source. The “More” soft touch button for the factory SETTINGS screen can be accessed through the navigation screen. While in navigation mode, if the climate control is adjusted the navigation screen will disappear anytime the system is being accessed. 3 seconds after the last operation, the navigation screen will return.

FAQ:

Q. When the vehicle is in reverse, I get a blank screen.

A. Verify that whatever input the camera is connected to, i.e. video 1, which is what is selected in the “Camera Settings Input”. If the wrong input is selected, there will not be an image.

Q. When the vehicle is in reverse, the camera image is garbled and flickers.

A. The camera is insufficiently powered. The common cause is the camera is powered from the reverse lamps. It is recommended to make the power connections at the cigarette lighter.

Q. When I change the settings in the UCI menu, they’re not being saved.

A. To save the changes in the settings menu, the “Exit” icon needs to be used to exit the menu. Any other way of exiting the menu will not save the settings.

Q. When I display the navigation screen, the image isn’t displayed properly. ie. garbled or skewed.

A. On the Kenwood navigations, verify the Blue/Black wire in position 12, is cut for a 4.3” screen or intact for an 8.4” screen.

The Directus units are preconfigured for a specific screen size. Verify that the correct navigation unit is being installed for the particular screen in the vehicle. These units cannot be user configured.