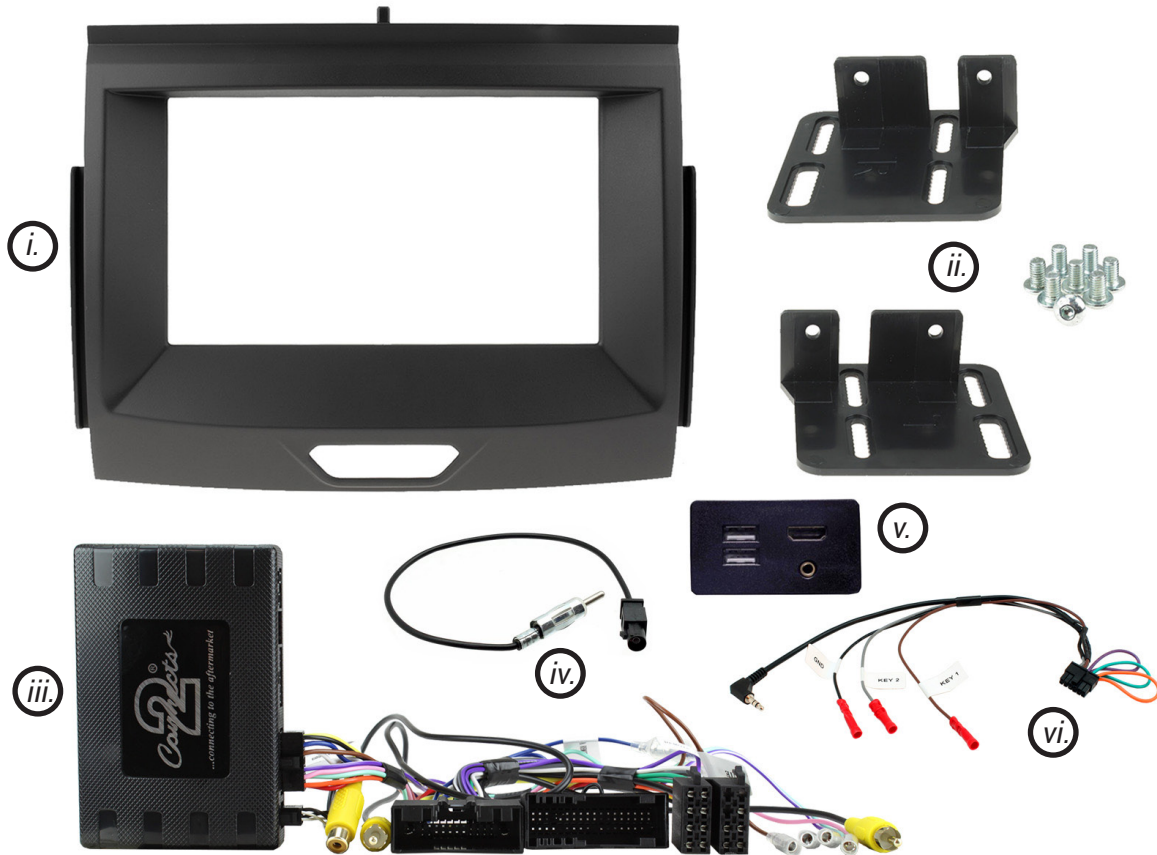




CTKFD91

Double DIN Installation Kit for Ford SYNC3 vehicles



IN THE KIT

- | | | | |
|------|-------------------------------|-----|----------------------|
| i. | Double DIN Fascia Panel | iv. | Audi Antenna Adapter |
| ii. | Brackets & Hex Screws (8) | v. | USB Retention Lead |
| iii. | Retention Interface & Harness | vi. | Universal Patch Lead |

Designed and
Engineered
in the UK. 

APPLICATION

Note: Application data is subject to change at any time

Ford Ranger 2016 - 2022

For SYNC3 systems only.

FEATURES

- Allows for the installation of a double DIN aftermarket stereo
- Includes mounting brackets and fitting accessories
- Retains vehicles settings, steering wheel and phone button functionality
- Retains original fitted reverse camera feed
- Generates settings menus, parking sensor audio and graphics
- Provides outputs for Park Brake, Reverse Gear, Speed Pulse and Mute

DISCLAIMER

The information provided in this document is subject to change without notice due to manufacturer changes and/or improvements to the product/s. This instruction manual is based on documented data and research. The manufacturer of this product cannot be held responsible for any changes made to the vehicle by the manufacturer or damages that may occur through the installation of this product in accordance with the steps outlined herein.

PRODUCT INFORMATION

The new CTKFD91 is a complete installation kit for the Ford Ranger which allows the user to update their in-car entertainment system to a new aftermarket unit whilst retaining a whole host of features and functions which would have previously had been lost with the factory unit. The interface which comes with the kit not only retains the use of the steering wheel controls, but also enables the retention of vehicle settings and functions which include the climate control functionality and display, park pilot functionality, as well as the original vehicle camera (if vehicle is equipped).

Note: This product is SYNC3 systems only.

WIRING KEY

IN ISO CONNECTOR

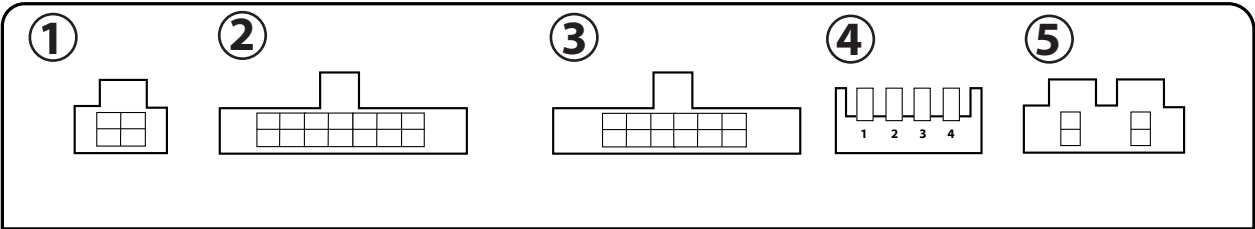
Purple	Right Rear Speaker +	Yellow	Permanent 12V
Purple/Black	Right Rear Speaker -	Black	Ground
Green	Left Rear Speaker +	Red	Ignition 12V
Green/Black	Left Rear Speaker -	Orange	Illumination
Grey	Right Front Speaker +		
Grey/Black	Right Front Speaker -		
White	Left Front Speaker +		
White/Black	Left Front Speaker -		

ADDITIONAL CONNECTIONS

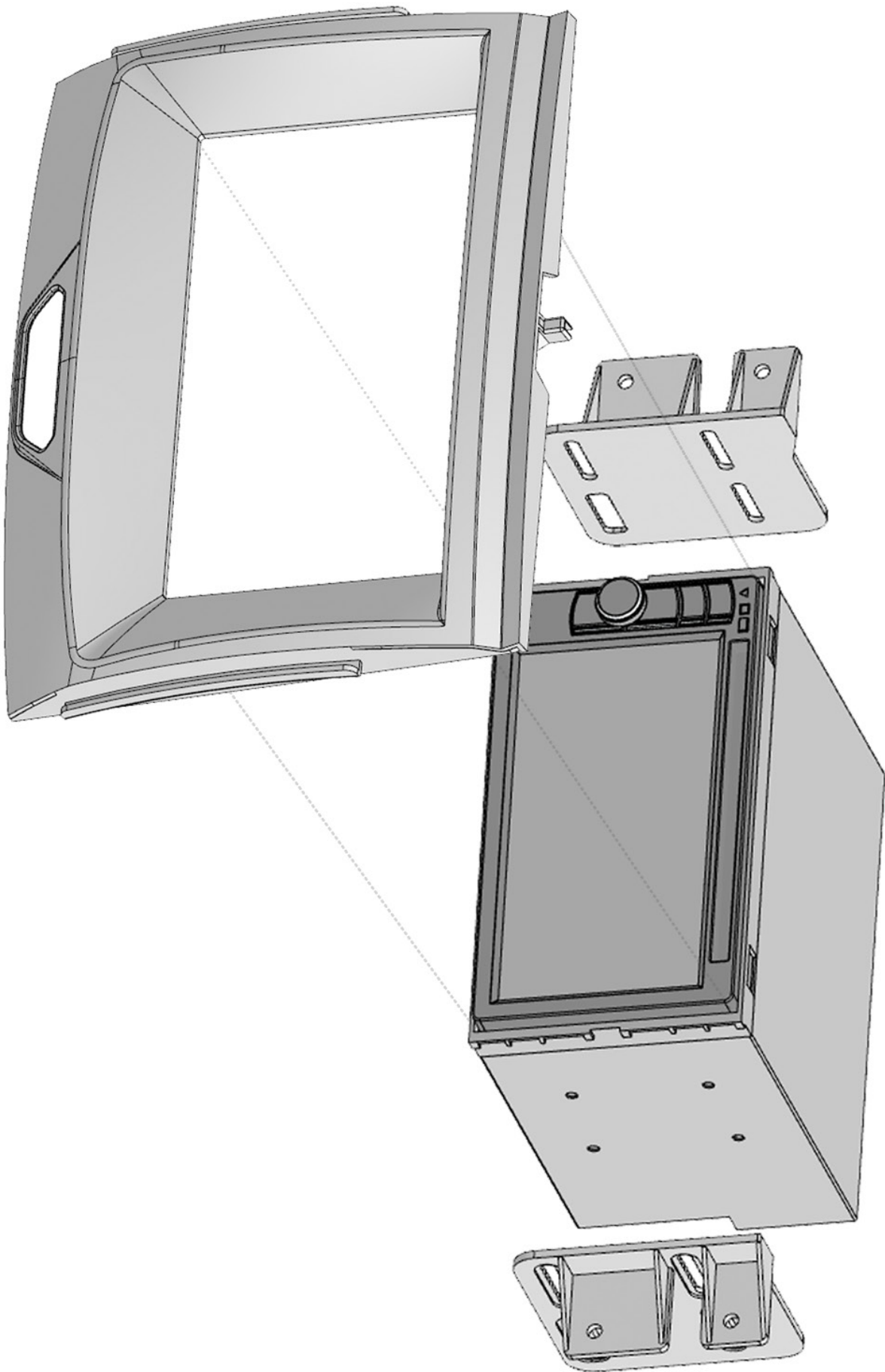
Purple/White	Reverse Gear	Yellow RCA (M)	Reverse Camera Retention
Light Pink	Speed Pulse		
Light Green	Park Brake		
Grey	Mute		

INTERFACE CONNECTIONS

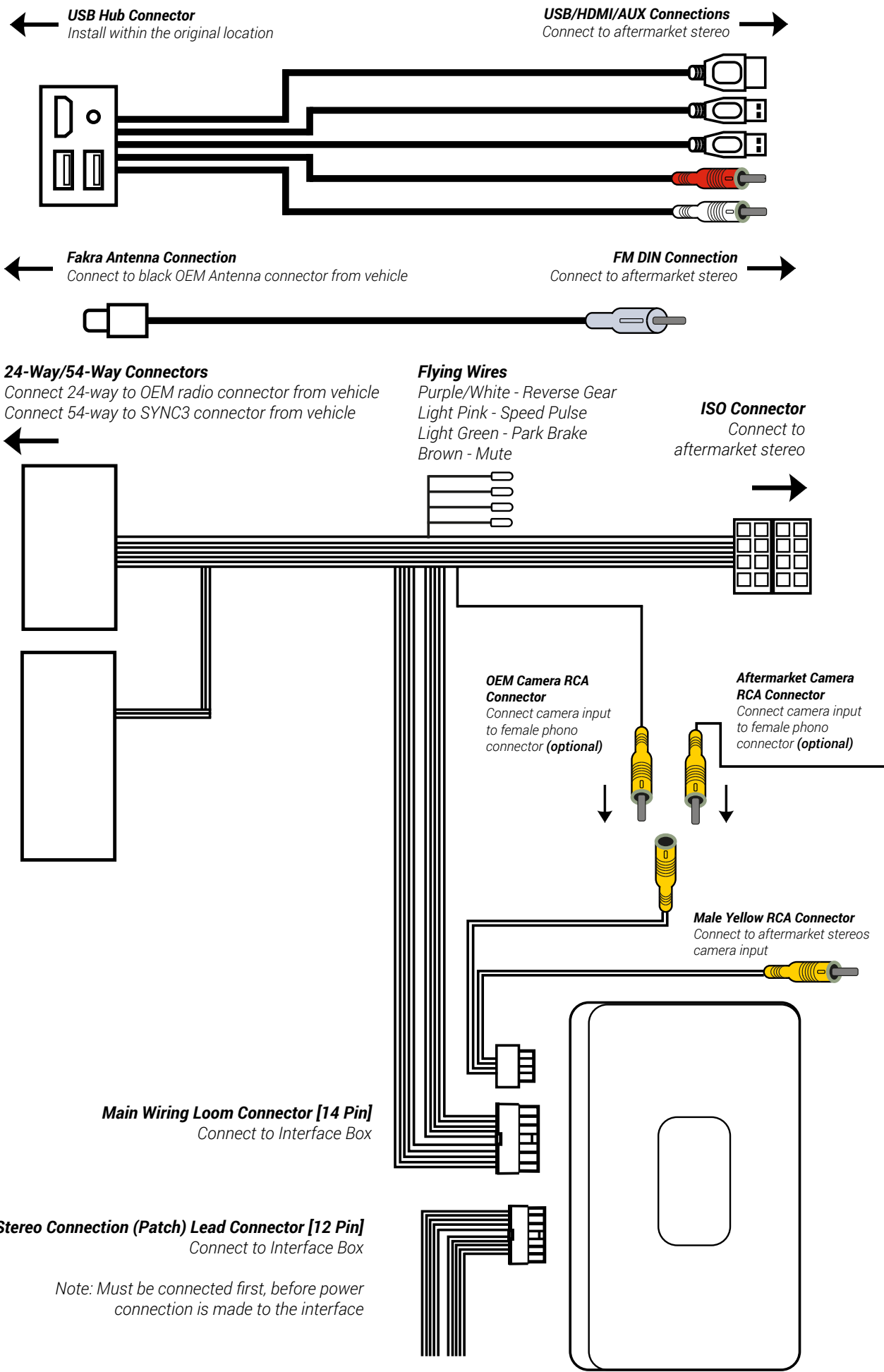
- ① Reverse Camera Extension Harness Input
- ② Power Harness Input
- ③ Head Unit Connection (Patch) Lead Input
- ④ DIP Switch 1 - 'ON' for Pioneer, 'OFF' for other brand head units
DIP Switch 2 - 'ON' for PAL reversing camera, 'OFF' for NTSC reversing camera (Default is 'OFF'/NTSC)
DIP Switch 3 - Change from 'OFF' to 'ON' and back to reset screen settings to factory defaults.
Note: During this procedure, the screen background will change to red and no settings adjustments can be made.
DIP Switch 4 - Not Used
- ⑤ Not Used



OVERVIEW DIAGRAM - FASCIA ASSEMBLY



WIRING DIAGRAM



PRIOR TO INSTALLATION

Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources. Please ensure that the correct tools are used during the installation to avoid damage to the vehicle or product. **Connects2 can not be held responsible for the installation of this product.**

INSTALLATION GUIDE - FASCIA

DASH DISASSEMBLY



Begin by removing both the left and right air vent panels that surround the main fascia/head unit. To do this, use a panel removal tool to unclip all the clips.



Ensure that the gear stick is pulled back to allow room for work.

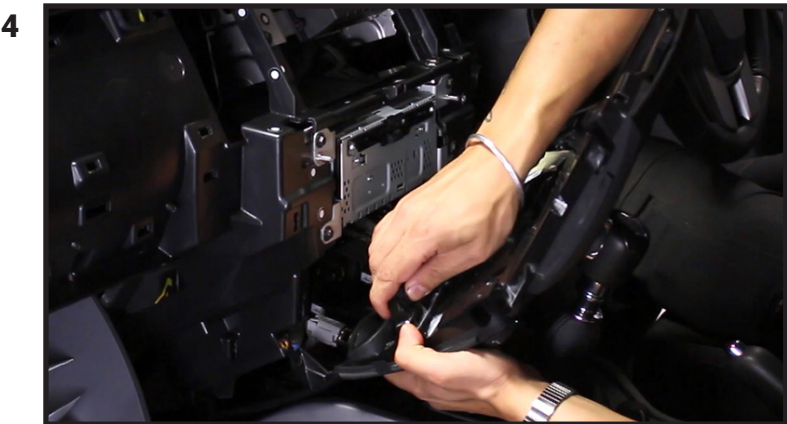
Start by removing the 2 lower side panels held in by clips either side of the centre console.

These 2 panels will uncover 2x screws holding the 12V panel in place. Remove these screws and pull away from the dashboard.

Then begin to remove all the clips that hold the long centre trim panel in place.



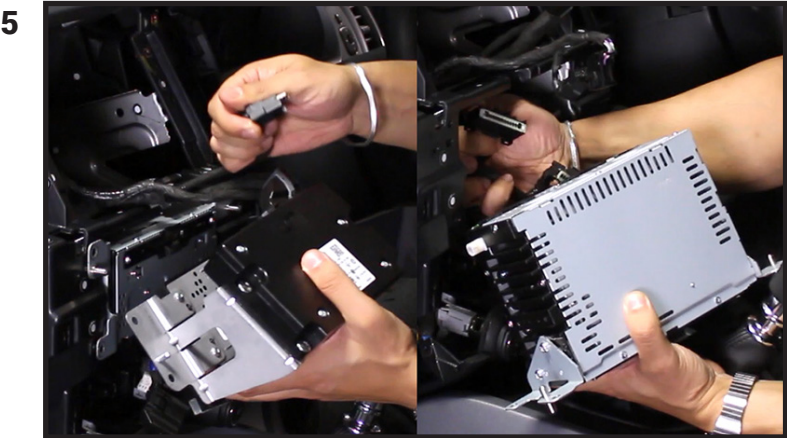
Faced with the main fascia/climate panel begin to remove the 6x screws that hold this in place (2x top, 2 slightly middle, 2 down bottom).



When these screws have been removed, disconnect the wiring from behind the panel and put to one side.

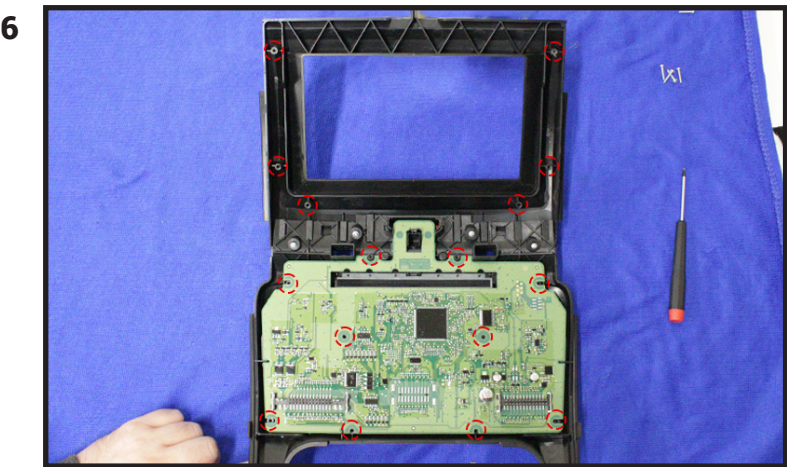
INSTALLATION GUIDE - FASCIA

DASH DISASSEMBLY



With the front panel removed, undo all the screws surrounding the main head unit and proceed to disconnect all of the wiring.

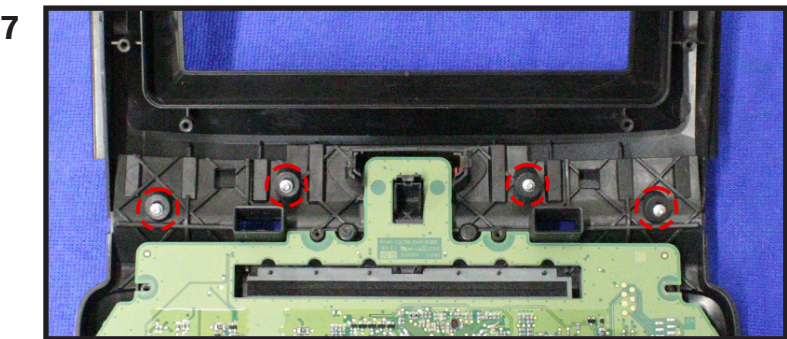
FASCIA ASSEMBLY



Take original fascia and flip over. Remove 16x screws (as seen in image) that hold the back trim in place.

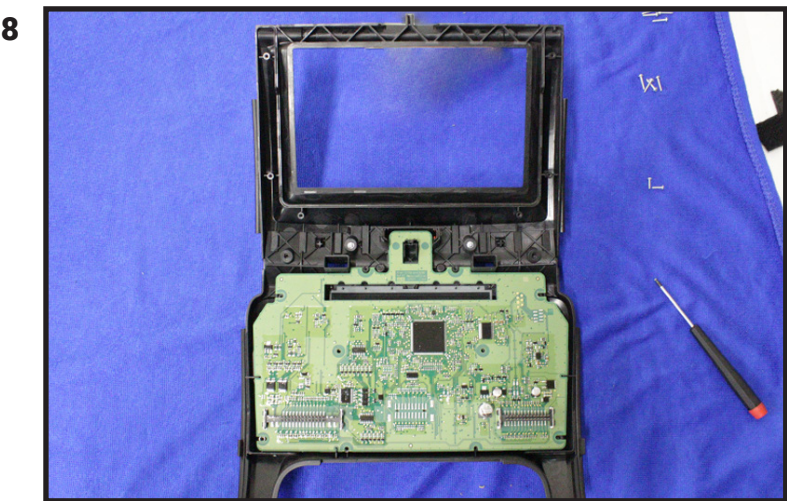
Avoid unscrewing the 2x screws around the bottom right connector (this isn't necessary).

Note: With the PCB exposed, try not to flip the fascia at any point to avoid loose elements falling all over the place. If you do need to revolve the fascia, place a hand firmly on the back to ensure nothing falls out of place.



With the screws removed, pull the panel off and put to one side.

Proceed to undo the 4x screws that hold the top fascia panel in place. Once free, place the original fascia into storage.



Take the new fascia and place it into an identical location as the OE fascia, then loosely screw into place.

To ensure that the placement of the hazard switch in front is located correctly, with the fascia screwed loose, push the fascia upwards by the bottom of the aperture, when done screw down securely and test that the hazard switch works without fouling.

If hazard switch is fouling, look at repeating the process.

INSTALLATION GUIDE - FASCIA

FASCIA ASSEMBLY



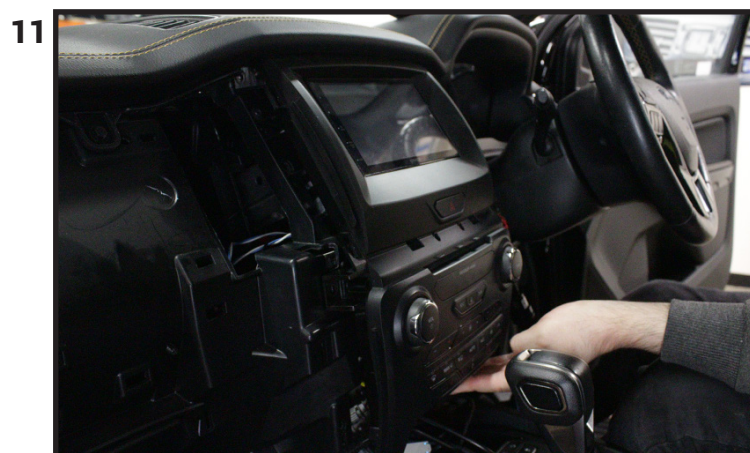
When happy with the fitment of the main fascia, re-attach the back panel utilizing all 16x previous screws.

KIT ASSEMBLY



Brackets should be placed onto either side of the head unit loosely, then dry fitted into the dashboard to gauge the correct depth.

Note: With brackets screwed completely to head unit, there may be flex in the back of brackets which will bow out to touch interior vehicle structure, if this does occur, flex in rear of brackets just before inserting and all will be fine.



With the wiring process complete and the stereo screwed into the dash, begin to place the fascia into the dashboard, ensure the top lip of the fascia is pushed up and behind the trim of the dashboard.

When seated correctly, screw back into place using the 6x previous screws.

Ensure you hold the fascia up when tightening the screws to ensure the best fitment.



Once the unit has been completely tested and you are happy with the fitment of the new fascia panel, simply re-fit the dashboard in reverse order to complete the installation.

For further help, please contact and fill out a support ticket with the full details of your issue at:

support.connects2.com/tickets/technical

INSTALLATION GUIDE - WIRING

See wiring diagram on Pg.4 for more information

Before installing the interface, the factory stereo must be removed and disconnected. To do this, please consult the vehicle owner's manual/handbook or contact a fitting professional.

For universal patch lead, prepare the wiring loops in accordance with the instruction manual supplied before installation.

1. Connect the 12 Pin connector from the stereo connection (patch) lead to the interface box.
2. Connect the opposite end of the stereo connection (patch) lead to the steering wheel control input on the back of the aftermarket stereo.

NOTE: This may be a 3.5mm jack connector or a wired input depending on the brand of aftermarket stereo being fitted. Please consult the aftermarket stereo installation manual for further information on where to make the connection.

! IMPORTANT: THIS STEP MUST BE COMPLETED BEFORE CONNECTING POWER TO THE INTERFACE. FAILURE TO DO SO MAY RESULT IN A LACK OF FUNCTIONALITY AND THE NEED TO REINSTALL THE PRODUCT.

3. Connect the 14 Pin connector from supplied wiring loom to the interface box.
4. Connect the power/speaker ISO connector to the power/speaker ISO connector at the rear of aftermarket stereo.

Note: For aftermarket stereos which do not have an ISO connector, please see 'Wiring Key' on Pg.2 for information on which wires to connect.

5. Connect any additional flying wires from the harness to the head unit as required.

Note: Additional 'flying' wires can be connected to the vehicle to support various features i.e. parking brake trigger, reverse gear and speed pulse. Details of these can be found under 'Additional Connections'.

5. Connect 4 Pin camera extension harness to the interface box.
6. Connect the male yellow RCA from the camera extension harness to the reverse camera input of the aftermarket head unit.
- 7a. To retain the original vehicles reverse camera (if applicable), connect the male yellow RCA from the harness to the female yellow RCA on the camera extension.
- 7b. To connect an aftermarket reversing camera, connect the male yellow RCA from the camera to the female yellow RCA on the camera extension harness (optional).

Note: Ensure that the 'Camera Connected' option in the Preferences menu is set to 'Yes' for the camera to function correctly.

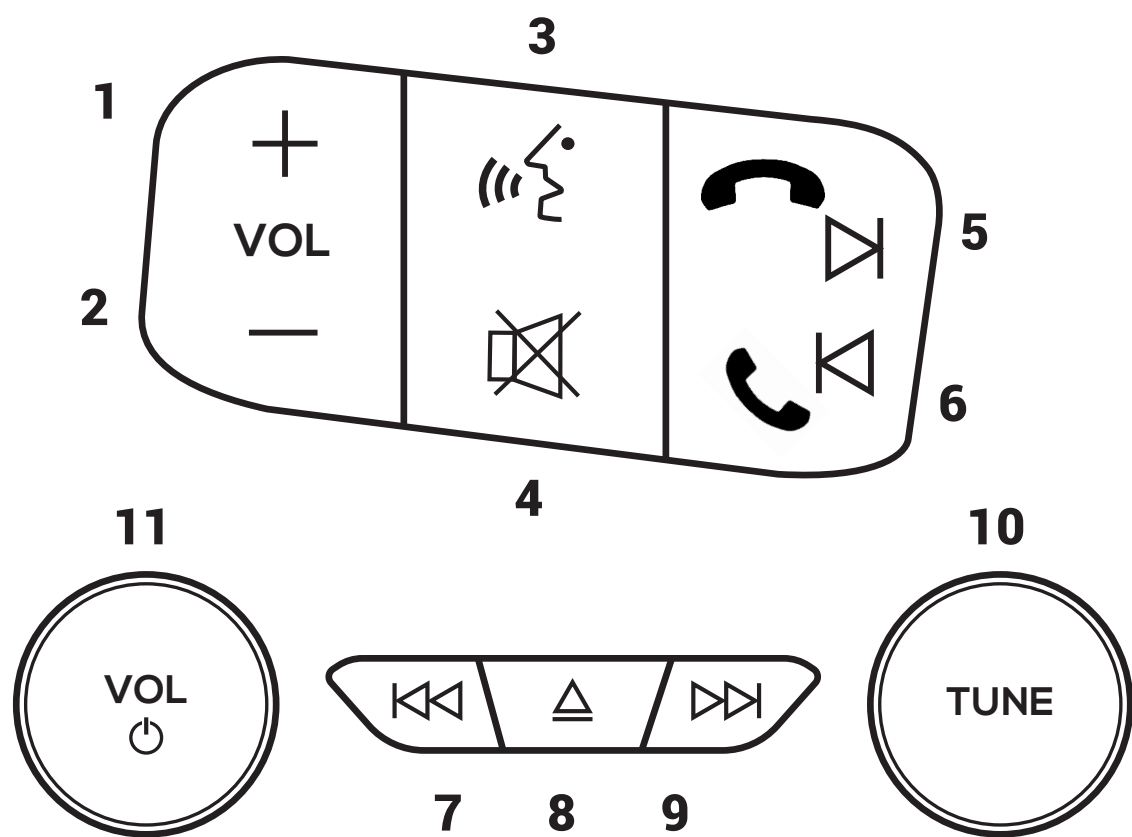
8. Install the replacement USB connector into the vehicles original location and connect the corresponding ports to the rear of the aftermarket head unit.
9. Attach the antenna adapter in between the vehicles pre-existing black antenna connector (not the white) as well as the rear of the aftermarket head unit.
10. Connect the 24-way connector on the supplied harness to the vehicles original radio connector from the vehicle.
11. Connect the 54-way connector on the supplied harness to the vehicles SYNC3 connector from the vehicle.
12. Test stereo and steering wheel control functionality for correct operation before reassembling the vehicle dashboard. If steering wheel control functions are unresponsive, please uninstall the interface and wiring and reinstall carefully in accordance with the above steps.

For further help, please contact and fill out a support ticket with the full details of your issue at:
support.connects2.com/tickets/technical

USER GUIDE

STEERING WHEEL CONTROL FUNCTIONALITY

The following diagram, though based on careful research, is an example only. Individual steering wheel control configurations may differ.



- Normal Mode
- 1. Volume Up
 - 2. Volume Down
 - 3. Speech
 - 4. Mute
 - 5. Track Forward (Short Press)
Hang Up (Long Press)
 - 6. Track Back (Short Press)
Pick Up (Long Press)
 - 7. Track Back
 - 8. **Enter Config Menu (Short Press)**
 - 9. Track Forward
 - 10. Seek Forward/Back (Rotation)
 - 11. Volume Up/Down (Rotation)
Enter/Manipulate Climate Control (Short Press/Rotation)
Switch Camera Feed/Park Pilot (Short Press)*
- In Configuration Menu
- 7. Back/Exit Menu
 - 10. Change Current Value (Rotation)
 - 11. Menu Up/Down (Rotation)
Select Current Highlighted Item (Short Press)

To exit the Configuration Menu, select 'EXIT' or use button.

* vehicle must be in reverse in order for this function to work.

USER GUIDE

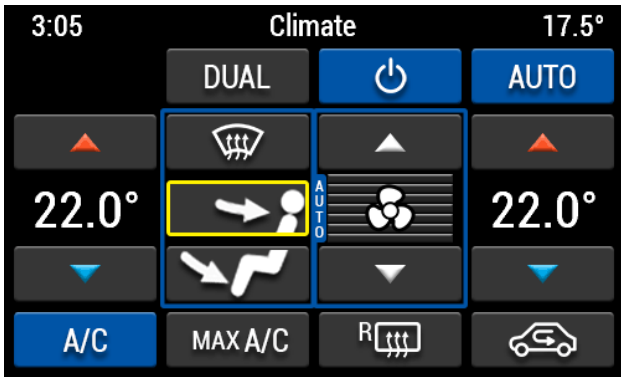
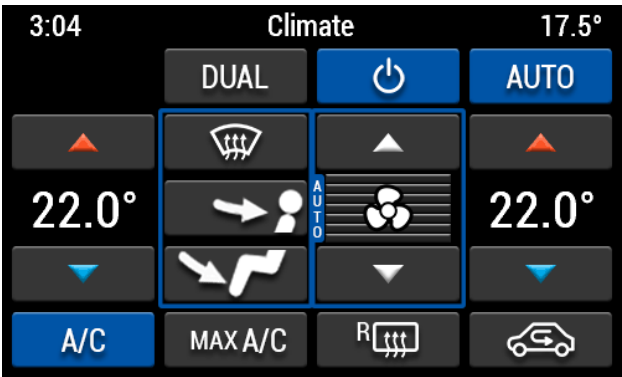
CLIMATE CONTROL FUNCTIONALITY

The climate control graphics have been replicated and will work like before on the new aftermarket head unit.

The original climate controls are accessible by single pressing either of the original buttons on the lower climate panel, or by pressing the Volume Button (**Fig.11**).

You can control/toggle select options through a single press of the Volume Button (**Fig.11**) or by utilising the pre-existing climate button.

The timeout delay of the climate control screen as well as the overlay timing can altered within the settings menu of the interface (*see page 12*).

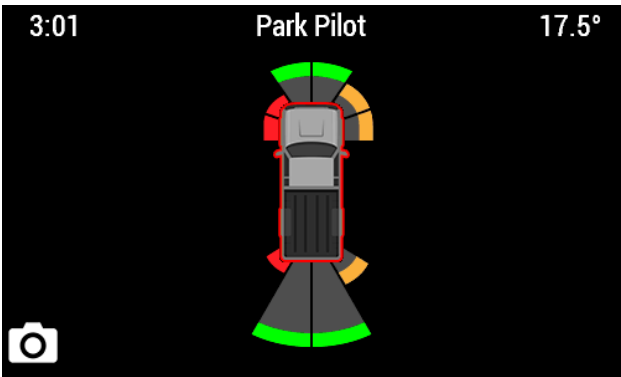
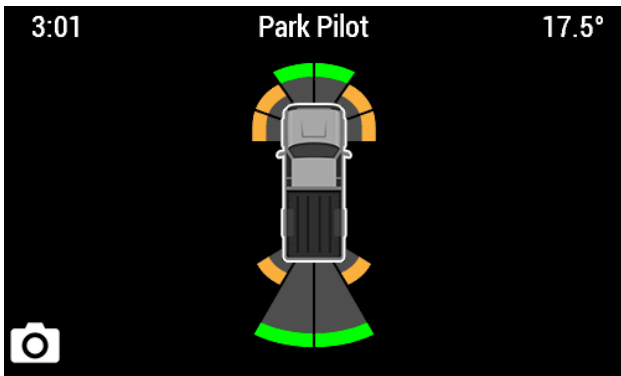
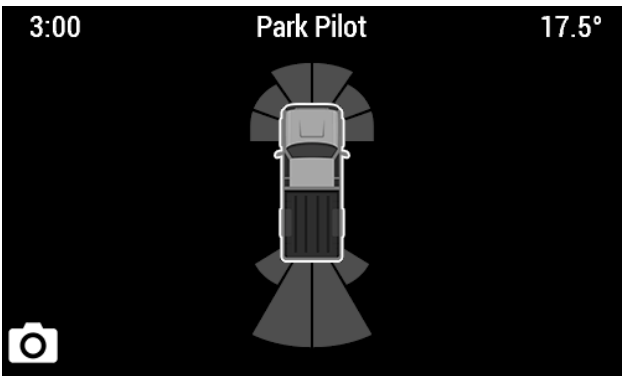


PARK PILOT - CAMERA FUNCTIONALITY

The park pilot functionality has been replicated and will work like before on the new aftermarket head unit.

When switching the vehicle into reverse, the vehicles screen will switch to either the reverse camera or park pilot system (dependent on the selected setting - *see page 12*).

To switch between either park pilot or the reverse camera feed whilst reversing, simply single press the Volume Button (**Fig.11**) - the amount of delay between switching can be altered via the settings menu (*see page 12*).



USER GUIDE

CONFIGURATION MENU

Pressing the ‘Eject Button’ (Fig.8) on the climate control panel will enter the “Configuration Menu”.

Here you are able to navigate through the various options and settings.

VEHICLE SETTINGS

Within this menu, you are able to alter vehicle settings that would have been lost if not for the interface. Below is a list of what the interface will currently retain*:

**Note: Although care has been taken to ensure the accuracy of this menu structure at the time of printing this document, sudden changes in software by the manufacturer or incompatibilities with the interface cannot be accounted for. Do not consider this list to be exhaustive.*

Ambient Lighting	Time/Date	Camera Delay
> Light Blue	> Hours (+/-)	> On
> Orange	> Minutes (+/-)	> Off
> Blue	> Day (+/-)	
> Red	> Month (+/-)	Enhanced Park Pilot
> Green	> Year (+/-)	> On
> Dark Blue		> Off
> Purple		
> Brightness (0-100%)		

INSTALLER SETTINGS

The “Installer Settings” menu contains parameters that can be selected to enhance/adapt the interface layout and functionality.

Screen Size/Position

Allows the user to setup the display screen to the exact/desired size of the aftermarket stereo being fitted.

Picture Settings

Allows the user to adjust the Brightness, Contrast and Saturation levels of the menus/parking graphics.

Camera Connected

Select ‘Yes’ if an optional camera is connected.

Video Blanking Time

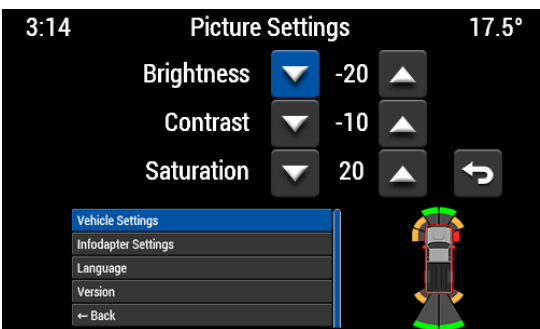
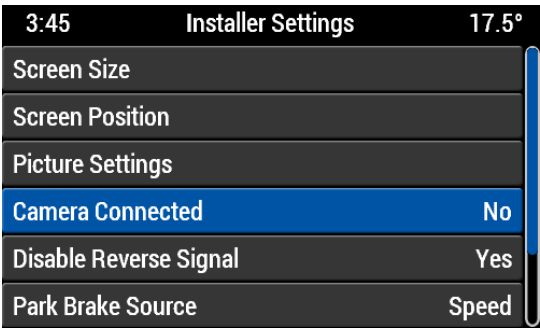
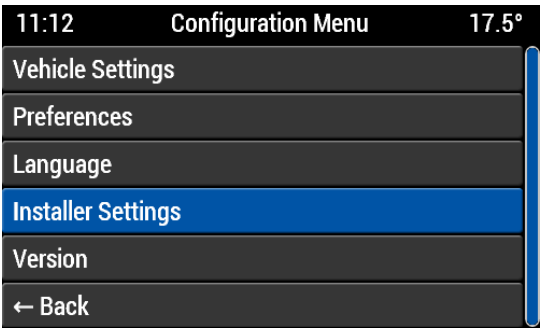
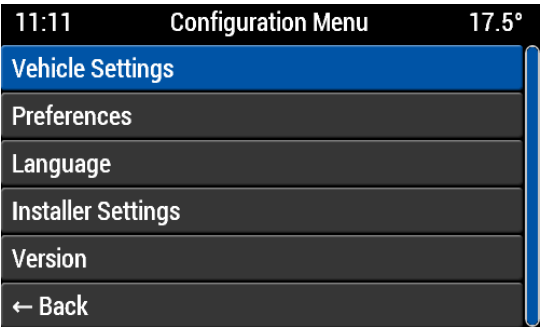
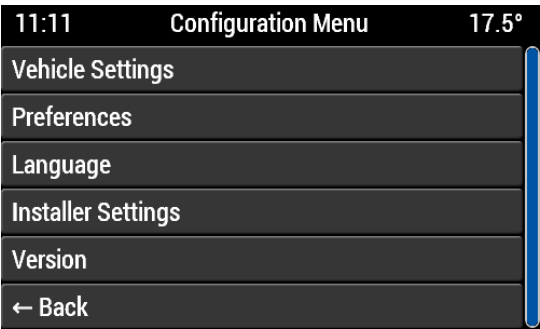
If the reverse camera or interface image rolls after switching on, or after switching between the two, adjust this setting to minimise the time taken for the rolling to stop when switching video signals.

Park Brake Source

Set output to activate when park brake is on (Brake), when speed is less than 3km/h (Speed) or to remain on at all times (Always On).

Ambient Lighting

Select whether the vehicle has pre-existing lighting fitted or not.

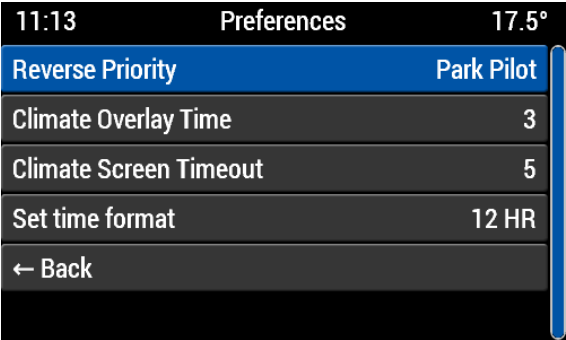


USER GUIDE

CONFIGURATION MENU

Preferences

- Reverse Priority**
Select which image (Camera or Park Pilot) will be shown by default when reversing.
- (Note: this option is only available when "Camera Connected" is set to 'Yes')*
- Climate Overlay Time**
Set the amount of time that the climate control overlays the current screen.
- Climate Screen Timeout**
Select the amount of time until the climate control screen times out without any interaction.
- Set Time Format**
Select time format between AM and PM (12HR and 24HR).



LANGUAGE & VERSION

The latter of the settings menu gives the user a selection of languages - English/German/French etc. - as well as the ability to view the current firmware version.

NOTES