

# Stinger Heigh10 Install Guidance for Land Rover Defender Kit - UN1810E-LR1

There were two types of factory audio connector used by Land Rover on Tdci model Defenders. See pics below.

Earlier cars used the industry standard car audio ISO connections. Pictured Left.

Later cars used Land Rover's own large grey audio multiplug connector. Pictured Right.



<2011/2012 ISO Connector



2012> Puma Connector

If your Defender uses factory ISO audio connections you will need to use the additional ISO adaptor harness included (pictured below) within the Heigh10 kit to convert the factory ISO connector to the large grey 'Puma' connector found on the H10 OBD/Binnacle harness.



On later model Defenders that use the large grey audio connector you DO NOT need to use the additional ISO adaptor harness included (pictured above) within the H10 kit. The large grey connector on the OBD/Binnacle harness will connect directly into the OE grey audio connector in the dashboard.

**IMPORTANT.** If your post 2012 model Defender has had an aftermarket head unit installed then it will most likely have had an ISO adaptor harness fitted to convert the OE large grey 'Puma' connector to ISO audio

connections. Remove any ISO adaptor harnesses first so that you're connecting the large grey connector on the H10 OBD/Binnacle harness directly into the OE grey audio 'Puma' connector in the Defender dashboard.

The OBD/Binnacle Harness provides the electronic signal from the ECU and instruments to the Heigh10. If you're not bothered about having any of the Vehicle Information options within the H10 Menu then there is no need to install the OBD/Binnacle harness. The H10 will function as normal minus any OBD/Vehicle Information.

On post 2012 cars you should retain your original ISO adaptor and use the shorter head-unit loom that connects into the back of the H10 and the separate camera/sub-woofer input harness (if required).

For earlier factory ISO equipped cars you can connect the head unit into the factory ISO connection using the shorter head-unit ISO loom supplied with the H10 kit and the separate camera/sub-woofer input harness (if required).



The OBD piggy back connector can be tricky to install. Dropping the speaker from the dashboard (adjacent the fusebox) will make accessing the connector easier. Some people drop the fusebox from the vehicle to install. Most people give up and leave the factory connector dangling which isn't an issue.

Does the GPS antenna need to be used? **YES**. Attach to the windscreen. The GPS improves navigation and is crucial for the vehicle's pitch and roll function within the off-road screen to operate and calibrate effectively.

Do I need to install the DAB antenna? If you already have a DAB antenna installed then simply connect your existing antenna to the H10 instead of the antenna found in the H10 Kit. Some countries do not broadcast DAB radio transmissions in which case, there is no need to install the DAB antenna.

The USB extension socket can replace the factory fit 12v cigar lighter socket in the H10 fascia.

How do I remove the heater graphic? This is secured in place using factory heat-stakes. To remove it without causing damage to the OEM printed decal, the heat-stakes must be carefully heated or cautiously cut away.

Best method of re-attaching heater graphic? Hot Glue or melting of heat-stakes.

Do I need to install the bulky harness with the large bundle of Pink/White/Yellow RCA connectors on it? This loom only requires fitting if you're utilising any of the functions (see labels on the wires) that this loom feeds.

The iGo Navigation tab within the H10 menu was a subscription only option. The iGo Nav sim is no longer available to buy in Europe.

# **Checking Firmware/Firmware Update**

Checking which firmware is on the H10 unit is a simple process of accessing the info within the various menu screens.

Go to, Main Menu - Settings - System Settings - Installer Settings - enter the passcode '0052' - System Information

The bottom right of the *System Information* screen will display the current firmware. The Defender specific kit requires a minimum of 'V12' Firmware to display Vehicle Information via the OBD connection. All Heigh10 units dispatched from 12/03/24 will have V12 or later versions of firmware pre-installed.

Just like your mobile phone, Stinger may periodically roll-out firmware updates to improve the H10 operating system. It's a good idea to occasionally check the Stinger website for any Firmware updates.

Firmware updates are carried out via the USB input of the Heigh10.

Latest firmware can be found on the Defender product page on the Stinger website. Go to <u>www.stingerelectronics-eu.com</u>. Search 'UN1810E-LR1'

**Firmware Update Procedure. Option 1** (as recommended by Stinger) Video Guide: https://www.youtube.com/watch?v=j9s4oZR1G7A

Go to 'Downloads' on the Defender Heigh10 product page to find the firmware file. File would need to remain in the compressed zip folder as the head unit needs to be able to extract it for itself. Place just the file only onto an empty USB flashdrive. Plug into H10 USB. Update PAC.

Alternative method of Firmware update. Option 2 (We've found that this method is the one that seems to work for everyone!)

Uncompress the folder at your computer and place just the file only onto an empty USB flashdrive. Plug into H10. Update PAC.

## Not seeing Vehicle Info icon on the H10 menu.

Check Firmware is V12 or later as per steps above.

Check the connections of the PAC Link harness, as per Step 3 on the Connection Diagram on the Resources section on the Heigh10 page at www.mudstuff.co.uk

The 'Vehicle Info' icon on the screen will only appear if the link harness is connected as this provides the electronic link between the H10 and the OBD/instrument binnacle. The respective connectors on the PAC Link harness don't look like they connect together & the wire colours on the respective connectors are not the same. We **REPEATEDLY** see these incorrectly connected or not connected at all. Note: June 2025. It would appear Stinger has now updated the wire colours on the PAC Link so that they are colour matched.

The PAC Link connectors can sometimes pull apart when the unit is being installed because everything is so tight for room behind the Defender dashboard. We recommend taping this connection together. This is usually the reason no Vehicle Info is displaying on the H10.



The H10 unit needs to go through a powering down/up cycle 'reboot' after any firmware update. Multiple ignition off/on cycles will perform a reboot. Alternatively, disconnecting the OBD connection effectively breaks the link between the OBD and H10. Reconnect OBD connection after disconnecting it. Some customers have reported that the Vehicle Info button hasn't appeared following a Firmware update but then it has suddenly re-appeared in the menu after a few ignition stop/start cycles.

The earlier 2.4Tdci engine uses a different CAN software than the 2.2Tdci, therefore some of the OBD info (e.g. oil temp) is unable to be displayed on the Heigh10.



This is a limitation of the vehicles network outputs. The older 2.4Tdci uses an old-fashioned mechanical method of output that cannot be fed into the head unit unlike its newer platform (2.2Tdci) equivalent.

It would appear not all Defenders have an outside temp sensor. If your display is showing an empty reading alongside the Outside Temp on the home screen then it is not possible for it to display on the screen because the OBD cannot see an outside temperature signal.

The Fuel Level read-out only displays a value when the tank level drops to 99%. When you fill/brim the tank, the fuel level on the H10 will show an empty field.

Pressing on any individual 'gauge' within the Vehicle Info screen will cycle that gauge through the various information options so that you can assign a gauge location to display whichever parameter you would like. i.e., fuel level, coolant temp, oil pressure etc. Presets 1 & 2 give you the option to have 2 different layouts.

# Calibration of Off-Road info screen

Step 1 – Drive the vehicle for approx. 20 minutes until the H10 picks up GPS signal. Try to use a route with gradients rather than a predominantly flat route.

Step 2 – Carry out 4-6 figure of eight manoeuvres until off road data is calibrated and present.

Step 3 – Test and repeat if necessary. (Customers have reported this can take multiple attempts)

**Step 2** is particularly important for the calibration process to be successful.

## **Reverse Camera Issues**

If you are have having issues getting the reverse camera to operate correctly on CAM1. Swap over to CAM2 as the trigger. Don't forget to change the camera trigger to Camera 2 within the camera menu. To do this go to – MAIN MENU – SETTINGS – CAMERA SETTINGS – CAM2- toggle Trigger to ON

We've discovered that Reverse camera freezing and glitches can normally be attributed to the combination of LED Reverse lamp and using a piggy back loom connected to an LED reverse lamp. It would appear the earth/ground on (some) LED lamps don't provide a reliable enough connection when wired via a piggy back loom. We therefore recommend connecting the earth/ground on any reverse camera directly to the chassis/body rather than piggy-backing off the reverse lamp.

The Heigh10 does not have an option to flip image within the Camera Menu settings. If you're seeing a reversed/mirror image on your screen, then your camera will have a loop wire that you need to cut to flip the image. Check your camera instructions.

## Radio or DAB interference.

Cheap/Poor quality LED DRLs and LED/HID headlamps are a well-documented cause of interference with AM/FM/DAB radio signals whether household or automotive. Interference normally occurs when the lamps are switched on/off. Aftermarket filter kits are available to wire into your lamps. Do a Google search for 'ferrite coil', 'ferrite bead', 'ferrite choke'.

We also see interference caused by some USB accessories. When tracing interference faults, remove any plug-in USB accessories from the 12v socket.

Check the 'Resources' tab on the Heigh10 page on the MUD website for additional H10 wiring information.

Can I buy just the Heigh10 as a standalone unit? YES.

Can I buy just the Defender fascia. **NO**.

**Factory Sub-Woofer integration.** If you have a later model Defender with the factory sub installed you will have to provide an ignition feed from the Heigh10 to power the amp. Connect the P-Control wire on the Heigh10 to the BLUE wire on the factory sub wiring under the cubby box.

Stinger Technical Queries should be sent to the following email address: <u>technical@connects2.com</u> This is a direct line to the dedicated Stinger H10 tech-desk that will raise a ticket for any install/operating issues. Reporting issues to Stinger helps to improve your H10 operating system going forwards.