

# PURE



Installation Guide

## Highway 300Di

## Kit List

The following items are included in the Highway 300Di kit as standard:


- Highway 300Di Controller
- Highway 300Di Main Unit
- Highway 300Di Controller bracket with captive cable
- Highway 300Di Controller mount with adjustable angle
- Wiring loom with ISO connectors
- USB extension lead
- 3.5mm to 3.5mm jack audio cable
- Coaxial FM aerial loop through cable
- Active aerial removal tool
- Self adhesive controller bracket mounting pad
- Self adhesive L-Band antenna strip
- Glass cleaner wipe x 2
- Active aerial receiver (with captive cable)
- Active aerial transmitter (with grounding tail attached)
- Active aerial transmitter self adhesive mounting plinth
- Clear self-adhesive paint protector label for the magnetic grounding tail
- Flexible aerial mast
- Owner's manual
- Product registration card

## Considerations before starting

### Minimum vehicle requirements

- Fitted audio system including aux-in or FM aerial connection.
- Standard 12V power system - not suitable for 24V systems.

### Recommended for best results

- Steel roof (for supplied PURE active aerial).
- Windscreen without heat reflective metallic coating, tinting or built-in heating elements.
- Check that the latest version of software is installed. To find out which version your unit has installed: Press the  button, Select Settings > Software update. Visit <http://support.pure.com> to see if there is a later software version available. Download the file and copy it to a USB stick. For instructions on how to install a software update see page 14 of the Owner's manual.

### Aerial positioning

- Check cable length and choose an area outside the swept area of the windscreen wipers.
- If the car has a heat-reflective windscreen there may be a special clear area designed for RF devices - if not in a suitable position for the aerial you may have to consider mounting on rear windscreen or other static glass areas.
- Consider whether use of the optional internal film aerial may be better/preferred if supplied version not suitable.

### Main unit positioning

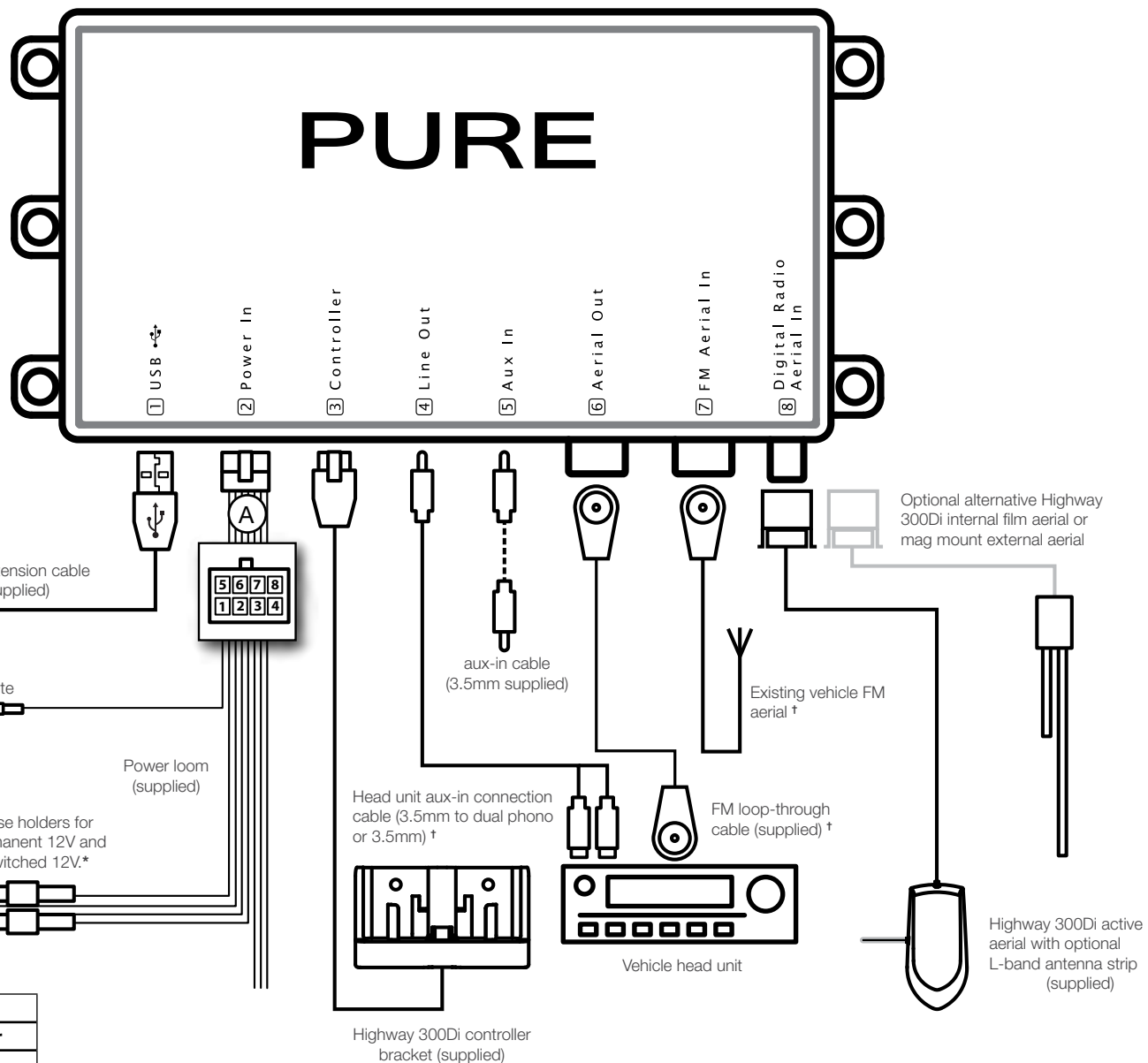
Consider length of controller cable and USB/aux audio extension and possible routing, whether access required to unit after fitting and distance from aerial and suitable power connection (avoid using safety critical power circuits such as airbag/ABS system etc).

### Controller positioning

- Consider usability and visibility from driving seat, possible mounting points/brackets, cable length and routing to main unit.
- Decide on connection to head unit - aux in or FM and whether FM pass-through is required.

# Wiring diagram

(A) Highway 300Di power connector pins		
Pin	Function	Colour
1	Nav_Tel_Audio+	Purple
2	Nav_Phone_Mute	Grey
3	Cabin illumination	Brown
4	12V Permanent battery supply (with series fuse holder)	Red
5	Nav_Tel_Audio_GND	Pink
6	12V Switched ignition (with series fuse holder)	Orange
7	Car mute (with crimp)	Yellow
8	Ground	Black



(B) ISO connector pins		
Pin	Function	Colour
1	Mute 1 (with crimp)	White
2	Mute 2 (with crimp)	Yellow
3	Mute 3 (with crimp)	Blue
4	12V Switched ignition (with series fuse holder)*	Orange
5	Not used	Green
6	Cabin illumination	Brown
7	12V Permanent battery supply (with series fuse holder)*	Red
8	Ground	Black

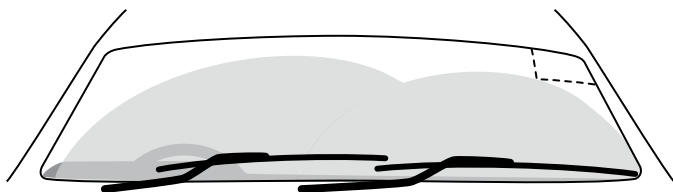
\* On some vehicles switched and permanent live connections may be reversed. Open the fuse holders and swap the connections round if required.

† If connected to car stereo aux-in then FM aerial connections to Highway 300Di are not required.

## Fitting the active aerial

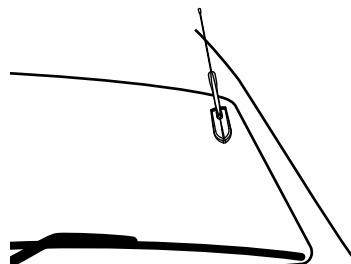
### 1. Decide where the aerial will be mounted

- Ensure it will not obscure the drivers view and will be outside the swept area of the windscreen wipers.
- Make sure there is enough cable to reach to where you will mount the main unit.
- If the car has a heat-reflective windscreen there may be a special clear area designed for RF devices – if not in a suitable position for the aerial you may have to consider mounting on rear windscreen, on another static glass area or using a different type of aerial.



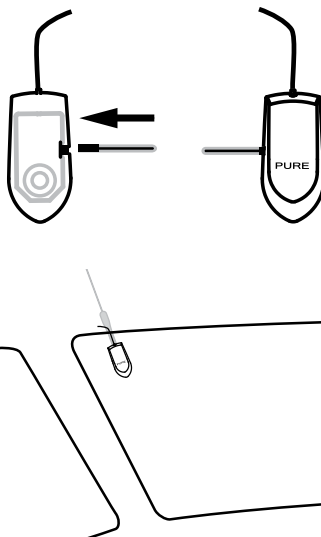
### 2. Trial position the aerial

- Screw the aerial mast on and trial position the aerial, using the magnetic grounding tail attached to the roof to hold the unit in place as close to the roof as possible.
- Line the aerial up so that it looks right and generally follows the line of the airflow - stand a couple of metres in front of the car to check the alignment.
- Check that it sits flat and evenly against the glass and is not resting on any trim strips or seals around the glass.
- Do not remove the adhesive backing at this stage.



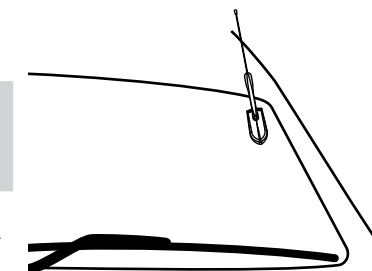
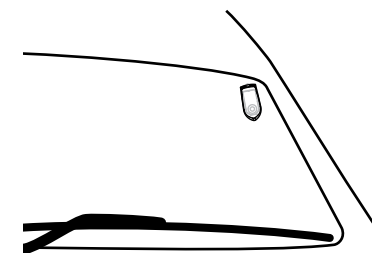
### 3. Attach the internal receiver

- If fitting the unit in an area where L-Band digital radio is broadcast or expected fit the L-Band antenna strip to the cutout in the receiver baseplate as shown.
- From inside the car check that the entire baseplate is visible and there is room for the L-band aerial strip (if fitted), line up the aerial receiver part so it lines up with the external transmitter and check that the aerial cable length is OK.
- Clean the area using the supplied cleaning wipe and dry with a clean dry cloth.
- If possible, warm the area – this will help to improve adhesion.
- Remove the backing from the grey adhesive pad and carefully stick the aerial receiver in place lined up with the external transmitter. Press firmly and hold the unit in place for at least a minute to ensure adhesion.
- If fitted, remove the backing from the L-Band antenna strip and stick it down.



### 4. Attach the external transmitter

- From outside the car - lift the aerial transmitter unit from the car.
- Clean an area of around 6 inches square on the outside of the glass and roof using the supplied cleaning wipe, while the area is wet from the wipe, dry with a clean dry cloth.
- If possible, warm the area – this will help to improve adhesion. It is recommended the aerial is installed in ambient temperatures above zero degrees Celsius.
- Remove the backing from the grey adhesive pad on the mounting plinth and carefully position it directly over the internal receiver (without the aerial transmitter fitted). Press firmly and hold in place for at least a minute to ensure good adhesion.



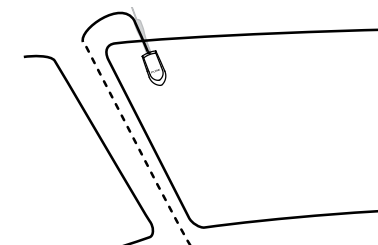
#### IMPORTANT NOTE

Make sure that the plinth is securely fastened to the vehicle glass all the way round before proceeding.

- Put the front edge of the aerial into place on the mounting plinth and push down firmly on the rear to click the aerial into place.
- Adjust the angle of the aerial mast as required. More vertical generally ensures better reception.
- Trim to shape and attach the clear protective film sticker under where the tail magnet contacts the roof to prevent scratching.

### 5. Route the cable

Route the aerial cable to position the connector to where you will fit the main unit.



## Fit cables and connections

### Fit USB/aux in cables

Route the USB extension and aux-in cable from e.g. the glove box, to where you will fit the main unit, as required. Note that even if this cable is not required for use with music devices - it is recommended it is installed to enable easy access to the USB socket for software updates.

### Fit connections to the head unit

Slide out the head unit and connect aux-in cable from Highway or connect the FM pass-through cable and reroute the existing FM aerial cable and the pass through cable to where you will fit the main unit.

*Note if the Line out connection on Highway is used the FM transmit/pass through is disabled.*

### Connect the power loom

Connect the supplied loom to the vehicle's system ensuring the Highway 300Di power connector is positioned where you will fit the main unit.

*Note The supplied loom provides a permanent live and ignition controlled live feed to Highway but also offers other connections that may not be required. Ensure any unused wires are safely taped up and securely tied.*

### Mount the controller

1. Run the cable for the controller from where you will fit the main unit to the desired mounting position e.g. on the dashboard and mount the bracket as required - either using the supplied sticky pad, swivel bracket or third party mounting bracket.
2. Once secure - click the controller onto the controller bracket making sure it is securely mounted.

### Connect all cables to the main unit






1. Connect all cables to the main unit and trial fit it in place.
2. Slide the head unit back into place.

### Check operation/setup

1. As soon as the power is connected, Highway 300Di will switch on automatically, once it has started up it will ask you to select a language.
2. Turn the **Select** knob to browse and press the knob to choose your preferred language.
3. An autotune will be performed to scan for digital stations and Highway will tune to a digital station when complete.
4. Switch on the head unit and select the aux-in source or FM radio depending on fitting method.
5. Check all sources/connections work.

## Installer settings

Installer settings are provided to enable the initial setup, to prevent unintentional changing these appear in a hidden menu. To access the installer settings:

1. Press , , , ,  in quick succession.
2. Turn the **Select** knob to browse through the following options and press the **Select** knob to choose one.

### Aerial input source

Choose the required source depending on the type of aerial you are using:

- |                         |   |
|-------------------------|---|
| Connector 8 (powered)   | Choose this if using the supplied active aerial. (Default)  |
| Connector 8 (unpowered) | Choose this if using an alternative unpowered digital aerial like a film windscreen aerial or mag-mount type. |
| Connector 7             | Choose this if using the existing car FM aerial.  |

### Autotune

Performs a scan for digital stations as per initial start-up.

### FM pass-through

Choose from two FM pass-through connection options:

- |          |  |
|----------|--|
| Disabled | Highway 300Di output effectively replaces all FM stations when Highway is switched on (Default). |
| Enabled  | Highway 300Di output is blended in to the FM waveband, alongside normal broadcast FM stations.   |

### Software upgrade

Use this option to update Highway 300Di's software if you have an update available and loaded on a USB stick. See the Owner's manual for more details.

### Factory reset

Use this option to reset all settings including the installer settings above to defaults.

### Finish/make tidy

1. Once correct function of all connections has been checked, fasten connectors to the main unit with cable ties as required and securely mount the main unit in place.
2. Route and tie any cables securely in place and replace any trim panels.
3. Select **Restore defaults** from the **Settings** menu to reset any changes made during testing. (See page 15 of the Owner's manual).
4. Update the software installed, if required, see page 2.

### Hand over to the owner

- Give them kit (Packaging, Owner's manual, Registration card, Aerial removal tool).
- Explain which installation method has been used and why.
- Demo main functions including - Selecting digital stations, changing FM frequency used, connecting an iPod/USB device/aux in.
- Demo active aerial removal and mast unscrew.

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# PURE

## United Kingdom

PURE (headquarters)  
Imagination Technologies Ltd.  
Home Park Estate,  
Kings Langley  
Herts, WD4 8LZ  
United Kingdom  
[www.pure.com](http://www.pure.com)  
<http://support.pure.com>

## Deutschland

PURE  
Karl-Marx Strasse 6,  
64589 Stockstadt/Rhein  
Germany  
[www.pure.com/de](http://www.pure.com/de)  
<http://support.pure.com/de>

## Schweiz

PURE - Vertrieb über:  
TELANOR AG  
Unterhaltungselektronik  
Bachstrasse 42  
4654 Lostorf  
Schweiz/Switzerland  
[www.telanor.ch](http://www.telanor.ch)  
[info@telanor.ch](mailto:info@telanor.ch)

## Australasia

PURE Australasia Pty Ltd  
[www.pure.com/au](http://www.pure.com/au)  
<http://support.pure.com/au>