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### 1 Introduction

Congratulations on your purchase of this High Quality GVIF Interface unit. This manual can be used as a main guideline for installation of the kit and its correct use.

To ensure your safety and the correct operation of the product please read this instruction manual prior to attempting to fit the kit or any of its components.

### 2 Safety Issues and General Don'ts Before You Begin

The GVIF unit connects to the DVD player of your factory installed satellite Navigation System. It is important that you comply with the recommendations of this manual before commencing any work to minimise the possibility of damaging your cars electronic components or the GVIF unit:

1. Never disconnect any cable to the SAT NAV DVD player or GVIF units whilst they are awake – make sure all power is switched off including removing the ignition key and that the Canbus has gone to sleep (for most cars this means all interior lights have gone off and so has the Sat Nav Screen and radio!
2. Do not open the cover of the GVIF unit. There are no serviceable parts inside if opened this will void the warranty
3. Do not attempt to shorten or extend any of the input/output cables between the DVD player, the GVIF unit and the LCD screen. This will void your warranty and can damage any of the components if done incorrectly.
4. Do not take power from the original power supply and socket to the Sat Nav DVD payer – you risk damaging the connector and loosening the cables/connectors. Also if you take power from there you will leave a trace when you want to remove the unit – for example when the car goes to a dealer or you sell it
5. Do not drive and watch the DVD or any other video source on the Sat Nav Screen.
6. Be careful when mounting the GVIF unit and when selecting the routing of cables to avoid being damaged by the moving of the seat mechanism and components. The GVIF unit will need to be located next to the Sat

Nav DVD player – in some cases this is under the seat of the car. Make sure the seat can move up and down and back and forth without hitting the GVIF unit or the cables.

7. The GVIF unit has the option on some cars to be connected to the CanBus system of your car. Unless you have purchased the BMW Canbus unit, which requires these connections to be made to allow the controlling of the GVIF unit, HIDS4U strongly recommend that you **DO NOT** connect the **CanBus** cables **and we take no responsibility for any damage caused by connecting these cables**. Working on CanBus is a specialist field and damage can be caused if this is not carried out professionally. There is no real advantage in connecting the CanBus – as it only allows you to toggle the AV inputs by using the OEM menu buttons. However, it is easier and more convenient to use either the remote control or the toggle button provided to do this without the associated risks of damaging the CanBus. If you have bought the BMW unit we recommend that this unit is fitted by a professional auto-electrician

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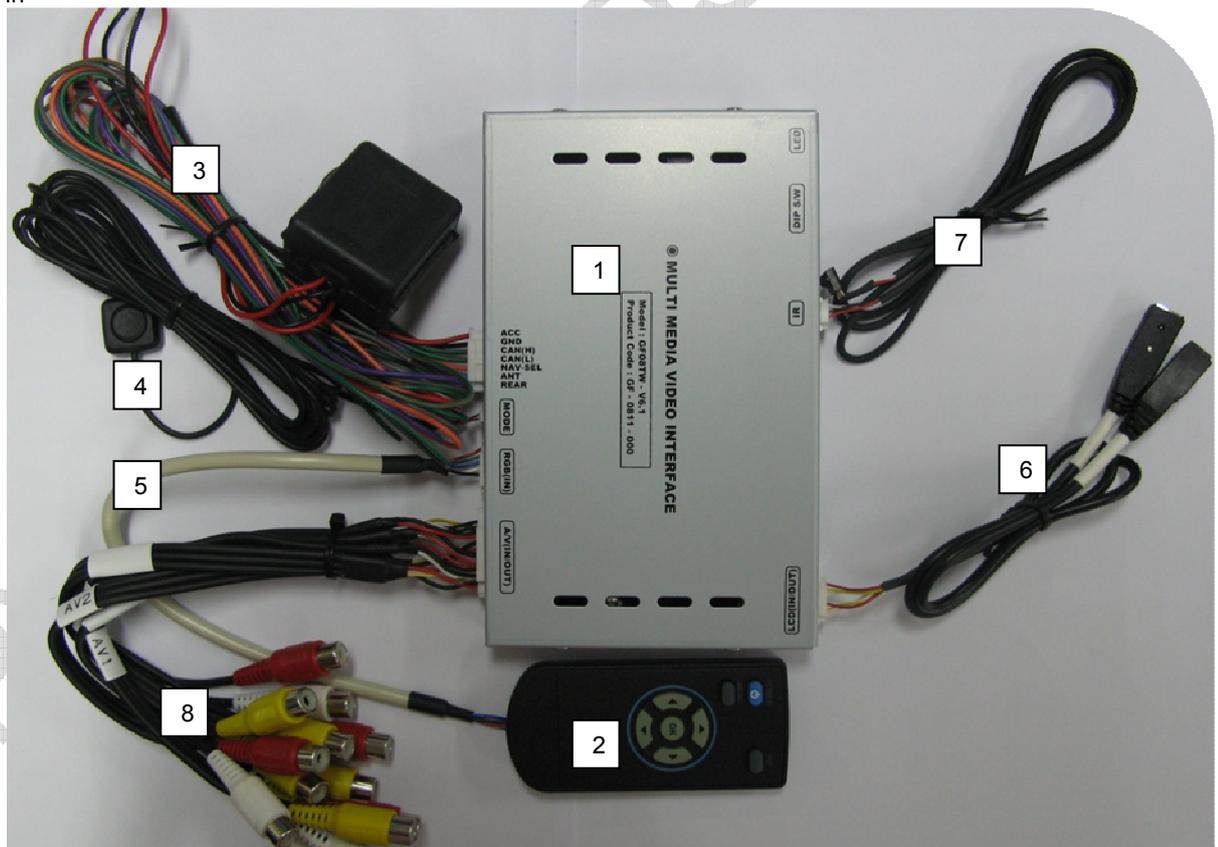
### 3 Getting Started

Prior to commencing any work on the installation of the kit we recommend that you firstly do a 'dry run' to test that all components are in the box and are functioning correctly, you have all the required components and the unit is suitable for your vehicle.

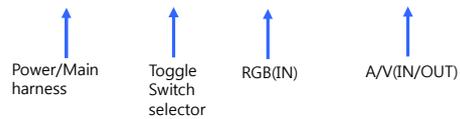
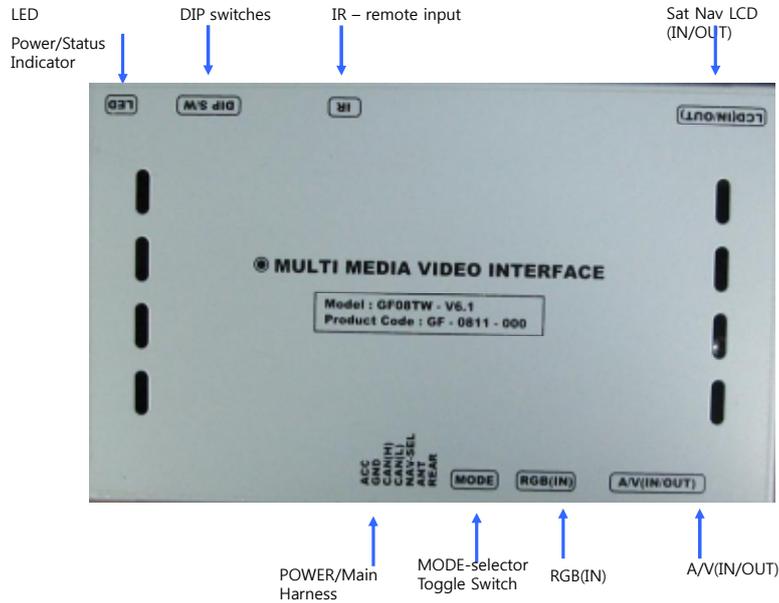
#### a) Step 1 – Checking Contents of the box

The box contains a the following components:

1. GVIF Box
2. Remote Control
3. Main Power and connector cable with filter and additional earth
4. Wired toggle selector switch with cable and plug
5. RGB cable for LCD screen (not actually required)
6. LCD Cable – input from DVD player and Output to Sat Nav Screen
7. Infra-red remote sensor and cable with plug
8. AV input and output cables (3 x AV in 2 x Video Out and 1 x Audio Out + Reversing Camera Video in



A quick summary of all the inputs and outputs:



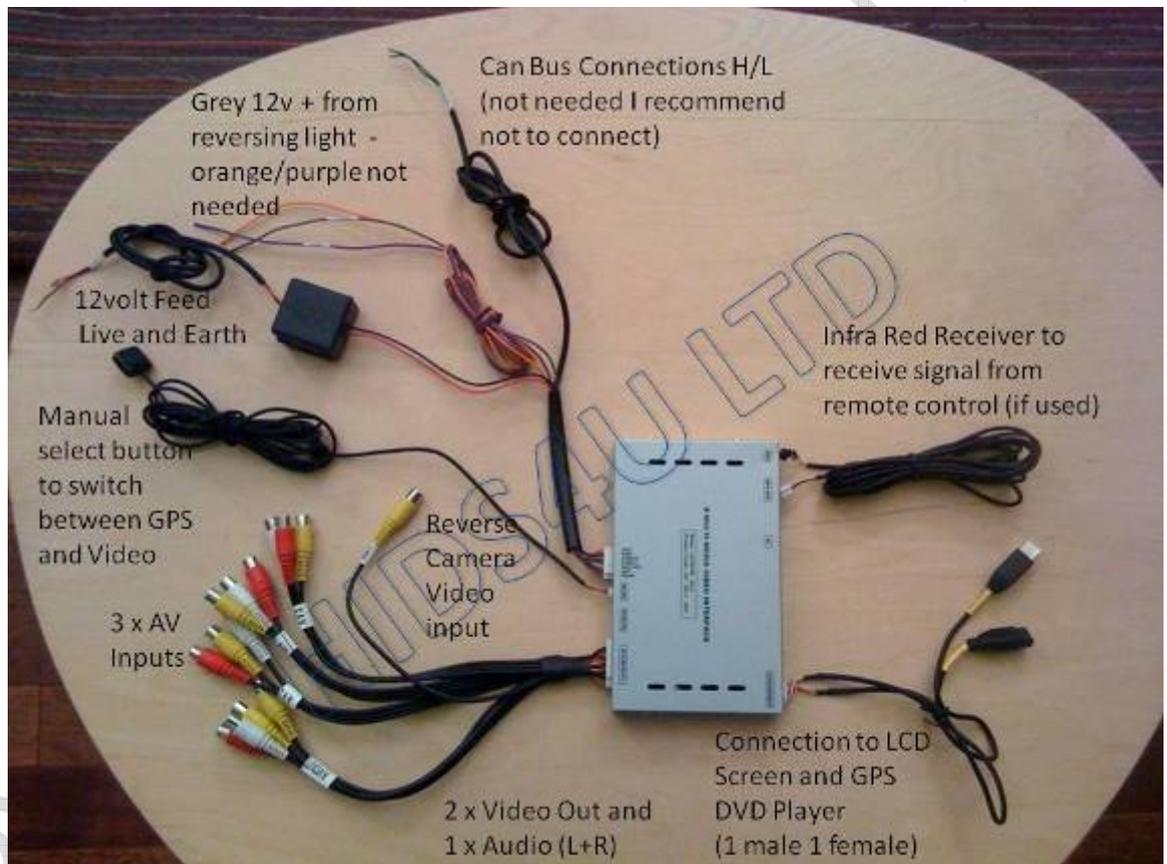
## b) Step Two – Locate a Power Supply

The GVIF unit uses a very small amount of power (11 watts) and the power supply to it can be taken from the nearest convenient source that is fed with a ignition live feed. We recommend taking the supply from an auxiliary socket or similar wherever possible.

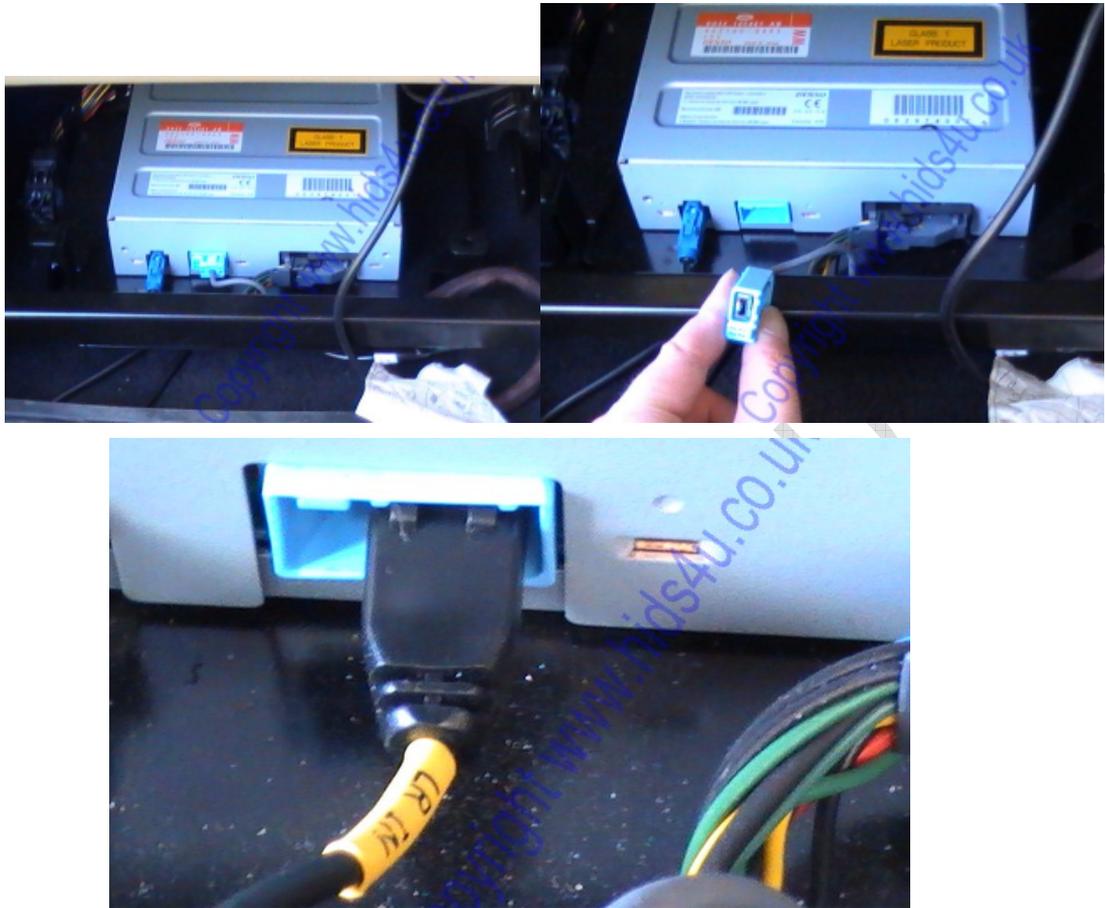
## c) Step Three – Pre Installation Test

It is recommend to carry out a pre test of the GVIF unit prior to removing any components on the car, to check that no damage has occurred during delivery and to make sure that the unit is compatible with your car. Then do the following:

1. Remove the GVIF unit from the box and connect all of the input and output cables excluding the RGB cable to it – like in the diagram below, NOTE there is an additional earth on the black filter box, item 3 in picture 2 pages back, a green cable that can be connected to the body or metal fixing :



2. Make sure the car is asleep – then unplug the Sat Nav LCD output cable, normally a blue plug see below, from the Sat Nav DVD Player – and insert the LR IN plug in its place into the DVD player as shown below, making sure the 2 ridges are facing upwards



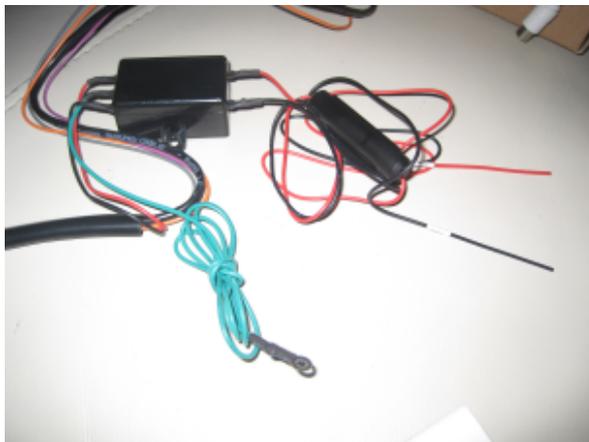
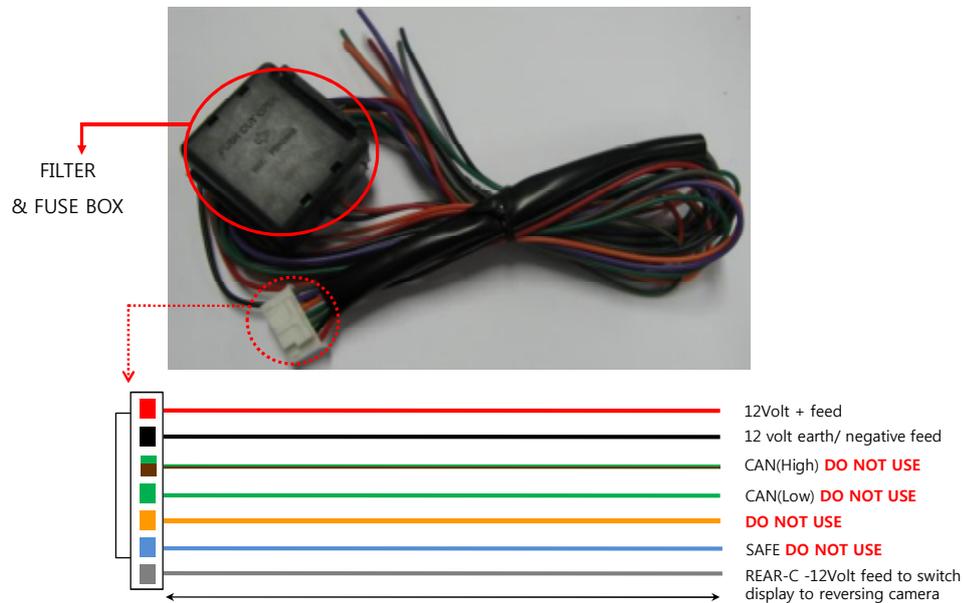
**Note:** It is possible to push the plug LR IN into the DVD player upside down. Please make sure the side with the two ridges are facing upwards. If its installed upside down there will be no SAT Nav image on the LCD screen. Simply unplug and rotate by 180 degrees.

3. Connect together the **LR Out** connector and the LCD Screen plug that you disconnected from the DVD Sat Nav player in step 2 there is an arrow on the LR Out lead and again this should be facing UP

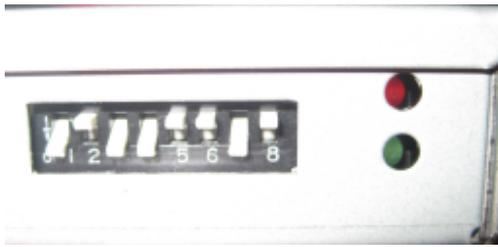


4. Connect the 12volt positive and negative supply to the main wiring harness of the GVIF unit – these are the red and black cables coming from the filter/fuse part of the harness and also the green cable to earth as shown below:

## -Main Power harness



5. If you have a camera or ipod connect the video output socket to one of the AV inputs. Note video sockets are yellow on both the outputs from the video device and the input to the GVIF unit harness. Alternatively if you have purchased a reversing or other camera then you can connect this to one of the AV inputs. You can take a temporary power supply to the camera from the same source as the GVIF unit. **NOTE: the unit accepts both PAL and NTSC inputs.**
6. Power up the unit by turning on the ignition. The Sat Nav LCD display should work as normal and there should be a Red LED light illuminated on the GVIF unit. **NOTE: The GREEN LED only illuminates when the GVIF unit receives an external video input and not when the Sat Nav is on by simply pressing the toggle button**



7. Press the toggle selector button on the unit should change the Sat Nav LCD display – to NAVI, AV1, AV2, AV3 etc with each click (depending on the positions of the Toggle switches see page 12).
8. If you have a video source connected then turn on this device and play video. Press the toggle switch until the corresponding AV input is selected and you image is displayed on the Sat Nav LCD Screen

**NOTE: The GVIF unit will not be able to display any images on the screen if the OEM Menu is selected at the Sat Nav LCD screen or if the Display at the screen is selected to 4x4 info or TV. These signals don't come from the Sat Nav DVD player but go direct to the screen hence the GVIF unit cannot switch these.**

9. Connect the grey wire (rear –c) to the 12 volt + feed and the LCD should switch to AV4 – reversing camera – if no camera connected it will go black.

## 4 Installation

You are now ready to begin the installation. In most cases the following tools are required:

- Pliers/snips
- Screw driver
- Scotch locks or cable connectors
- Stanley knife
- Cable ties
- Loom/insulation tape
- 3M double sided tape

On the majority of cars it is possible to install this kit without removing the Sat Nav DVD player. If it is necessary to remove your DVD player or parts of your interior then please consult an appropriate car manual or mechanic. These instructions don't cover such work.

### **a) Step one – Cable Routing and Locating GVIF unit**

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1. The GVIF unit will be located adjacent to the Sat Nav DVD player. It will be necessary to route all cables safely to this point from various locations of the car. The number and types of cables that need to be brought to the GVIF unit depends upon what auxiliary equipment you chose to install but typically will include:
  - a. 12 volt main power supply to GVIF unit – (positive and negative)
  - b. 12 volt positive (only) power supply that is taken from the reversing lights or loom



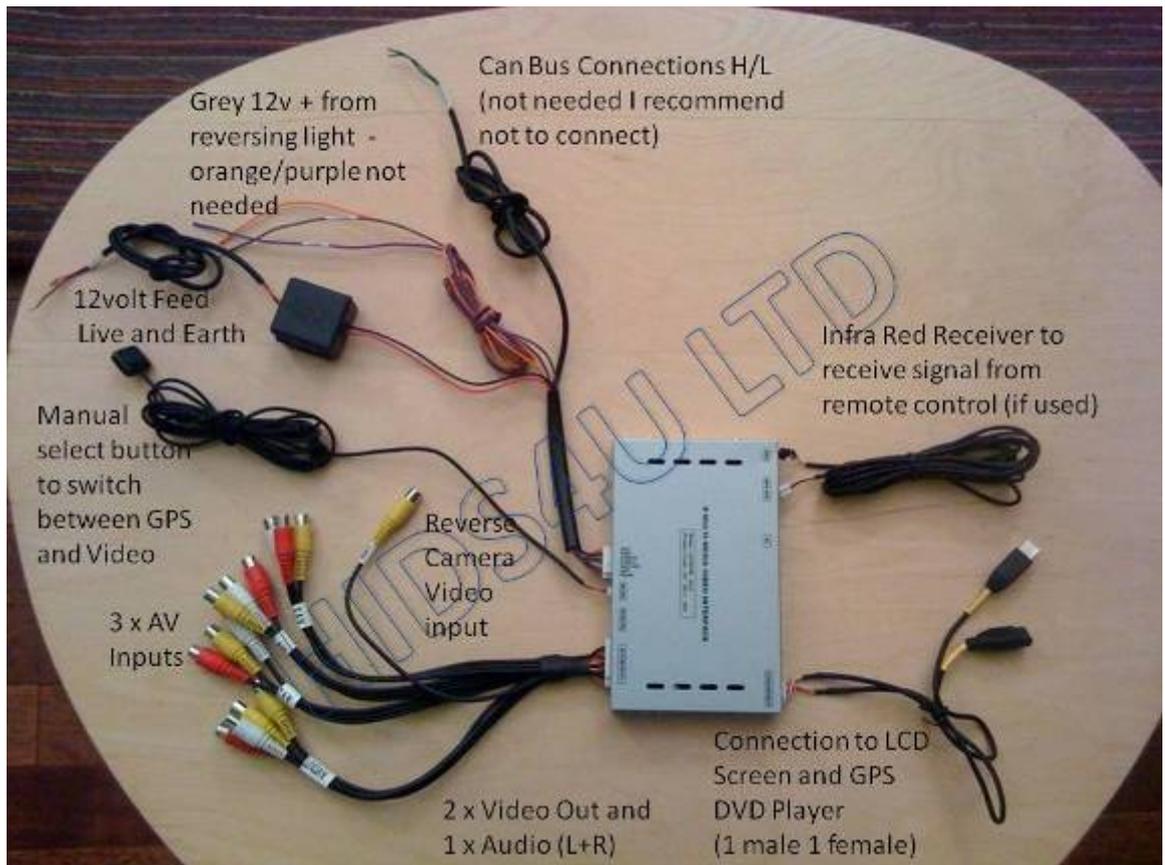


- c. A video input cable from a reversing camera



- d. Cable from the toggle selector switch from selected mounting location of the switch (normally on console or dashboard)
- e. Cable from the Infra-red sensor – to pick up the signal from the remote control. This can normally be located somewhere discrete on the centre console or dashboard
- f. AV cables to headrest or other LCD screens
- g. Audio output cable from the GVIF unit will need to be routed to the Aux input to the cars Audio System

A schematic layout of these connections is shown below:



## 5 Functions and Setting Up Information

### a) Dip Switches

Dip Switch Setting on the GVIF unit have been provided to allow you to customise the way the GVIF unit works. For most users it allows you to decide how many AV devices you have connected and the turn on or off the camera and other functions. The first switch is for an external NAVI system that can be connected to the GVIF unit using the RGB cables and almost always will be not required. To avoid seeing the blank NAVI screen when you press the toggle selector switch once, simply move the Dip switch number 1 to the ON position (Down). It will now bypass the NAVI screen when you toggle and go straight to AV1.

**NOTE: On = switch DOWN and OFF = switch UP.** As with the NAVI – you have the option to skip the AV inputs 1,2 and 3. If you only have AV connected to AV1 then you can turn the dip switches 3 and 4 to ON. This way when you press the toggle switch the display will go from OEM Sat Nav to AV1 then next click will be back to the OEM Sat Nav, skipping AV2 and AV3.

The dip switch 5 should be ON for all Land Rovers and OFF for all Lexus cars

Dip switch 6 will be **OFF** ie. UP for all cars with factory fitted Sat Nav

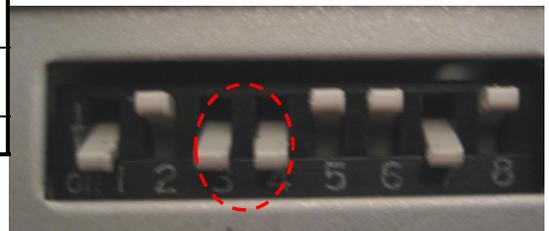
If you have connected a reversing camera to the GVIF unit and want the Sat Nav Screen to automatically display the Reversing Camera image then dip switch 7 should be ON ie **DOWN**

Dip Switch Positions ON :DOWN, OFF : UP

#PIN	FUNCTION	DIP S/W Selection
1	RGB INPUT MUTE	ON : Skipping RGB Mode OFF : RGB Display
2	AV 1 MUTE	ON : Skipping AV 1 OFF : AV1 Display Active
3	AV 2 MUTE	ON : Skipping AV 2 OFF : AV2 Display Active
4	AV 3 MUTE	ON : Skipping AV 3 OFF : AV3 Display Active
5	To select car model	OFF : Land Rover ON : Lexus
6	To select original NAVI	ON : For using aftermarket NAVI OFF : For OEM original NAVI
7	Rear Mode	ON : External Rear Camera OFF : OEM Rear Camera
8		N.C

**An Example of the settings for a Land Rover with OEM Sat Nav, AV1 on, AV2 and AV3 skip and reversing camera on is shown in picture below:**

- ▷ DIP : 1 -> ON ie DOWN
- ▷ DIP : 2,3,4 -> Turn OFF ones with AV devices connected to them and turn ON the ones you want to skip. eg AV2 and AV3 = DIP switch 3 and 4 are on
- ▷ DIP : 5 -> OFF for Land Rover
- ▷ DIP : 6 -> OFF for OEM NAV
- ▷ DIP : 7 -> ON To activate autoswitch to reversing camera that's connected to GVIF unit
- ▷ DIP : 8 -> OFF



## b) Remote Control

The main function of the remote control is to give you access to the set up menus for the screen and AV inputs as well as where required to select the required AV input that is displayed on the Sat Nav LCD Screen. There is a normal menu that allows you to adjust the normal screen settings and in addition there is a 'setup' menu that allows you to configure the GVIF unit.

How to Enter the Factory 'Setup' menu:



POWER  
MENU : On Screen Display (OSD) Menu  
OK : Select  
▲ : Up  
▼ : Down  
◀ : Left  
▶ : Right

\*FACTORY MODE (Interface setting)  
: To enter the 'Setting Menu' you need to swiftly press the keys in the following order ▲ -> ▼ -> ▲ -> MENU

NOTES:  
1. PIP does not work on this product  
2. The power button does not work

When selecting the menu (without doing the sequence described above but simply pressing the menu button on the remote control) you will get the following:

## OSD(On Screen Display)

· Analog RGB Mode



· Video Mode



### IMAGE Menu

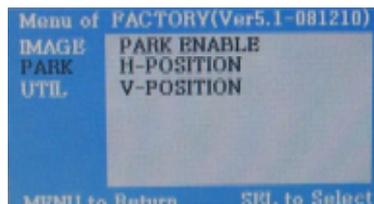
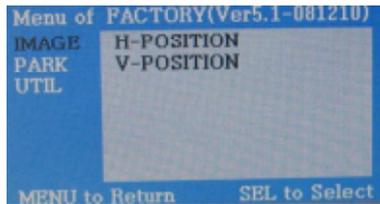
- BRIGHTNESS
- CONTRAST
- SATURATION (colour)
- HUE
- SHARPNESS
- USER IMAGE

The OSD will be specific to the AV input you that have displayed on the SAT Nav LCD Screen at the time when pressing the menu button. This means if watching AV1, then the image settings will only be applied to that device and not other AV inputs.

To access the UTIL, utility menu, you need to enter the factory 'setup' using the keys described earlier in quick succession:

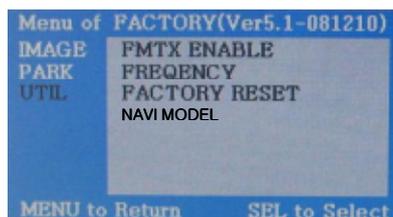
## Factory Mode - Settings

To enter the Factory Mode you need to press the following keys  
VERY FAST: ▲ ▼ ▲ followed by pressing the MENU key



### Factory Mode

- IMAGE :
  - H-POSITION : Move of Screen to Left, Right
  - V-POSITION : Move of Screen to Up, Right



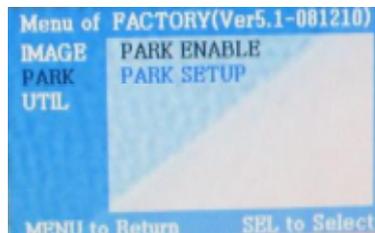
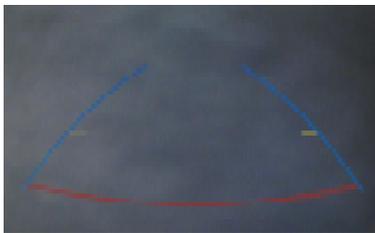
### Factory Mode

- UTIL :
  - FMTX ENABLE : FMTX Setting **MAY NOT AVAILABLE AS WAS REMOVED BY MANUFACTURER**
  - FREQUENCY
  - FACTORY RESET
  - NAVI MODEL : KD680\_NEW – Chinese Navigation **This is for an External Sat Nav**  
NAV N GO – European Navigation

### c) Parking Guide lines

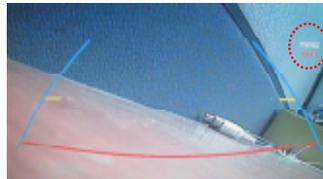
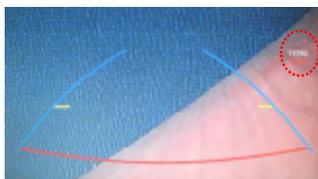
It is possible to enable the parking lines that are viewed when the reversing camera is displayed. These act as guides to help you establish the arc of the car and also when you need to STOP! It is possible to customise the type of lines and the position for your camera. PLEASE REMEMBER – they are a guide as is the camera. You can't rely on the camera alone so don't forget to look behind you and in the mirrors. To enter the set up mode you need to enter the Factory Settings Menu. (by pressing ▲ → ▼ → ▲ → MENU)

### How to setup parking guide lines



To enable the lines selecting "PARK ENABLE" OK  
To adjust the guide lines with pressing "PARK SETUP" 'OK'

Factory Default –Types:0, H\_Pos:50, V\_Pos:120



There are 4 settings of the lines, the distance is controlled by ▲, ▼ keys on the remote. After each adjustment press "OK" to save change.



④ After Step. 3, press ▲, ▼ buttons of the remote to control left, right position with pressing 'OK' button, and then you can control up, down position

## 6 Trouble Shooting Guide

Symptom	Suggestion/Solution
<p>When the car starts up the OEM sat nav is not displayed:</p> <ol style="list-style-type: none"> <li>1. Screen is black</li> <li>2. Screen says Sat Nav Not available</li> <li>3. Screen is flickering</li> <li>4. Screen has white or red/blue stripes</li> </ol>	<p>Check the position of the DIP switches to make sure you have the OEM sat Nav engaged (dip switch 6 should be <b>OFF</b>)</p> <p>Check that the cable from the DVD player to and from the GVIF unit and to the LCD screen are inserted the correct way round. It is possible to push it into the cable from the DVD player and even into the DVD player the wrong way round. Normally in this case you will get a blank screen. Turn off the ignition – let car sleep then -Rotate one or both of the plugs and try again. There is a small Arrow symbol (triangle) on the lead</p> <p>Or for 2,3 and 4 please check all connections off the LCD in/out cable – disconnect and reconnect and see if this corrects it. If not try gently to wiggle the connectors and check the connection of the lead at the GVIF unit itself. Gently remove this as its a fragile lead</p> <p>There have been some cases where the sequence of the wires in the LCDin/out lead to the GVIF unit have been mixed up.</p> <p>There have also been a batch of faulty leads recently so if none of the above fixes the issue please call us.</p>
<p>The screen does not automatically switch to the reversing camera image when i select reverse gear</p>	<p>Check the position of dip switch 7 and correct if required</p> <p>Check that there is 12 volt positive feed supplied to the GVIF unit from the vehicles reversing lights or loom. If necessary connect a temporary 12volt feed to the input wire and the unit should switch to the reversing camera</p> <p>Check that the reversing camera is working properly and has power. Try connecting it to another AV input temporary and making sure the camera has power (if fed only from reverse normally)</p>
<p>Only RED LED power status light comes illuminates on the GVIF unit even when I select AV1 or other AV input</p>	<p>The LED status light will only turn green if there is an active AV source supplied to the GVIF unit – it won't switch to green just because the display has been selected by the toggle switch or remote control</p>
<p>The image is black and white or dark</p>	<p>Try pressing menu whilst the particular video devices is being displayed and adjust the brightness and in particular the saturation settings</p>
<p>The image is not in the centre of the screen</p>	<p>Enter the Factory Settings Menu – whilst the AV is being displayed – then using the appropriate options adjust the image position using the horizontal and vertical settings</p>
<p>I can't see the tow bar or bumper of my car when reversing</p> <p>How can I override the reversing camera?</p>	<p>The width of the angle is dependent on the type of camera you have purchased. But please remember that reversing cameras are designed to give good wide angled views of the area behind the car and not to look straight down onto a towbar. It is possible to connect an additional camera to the car to allow you to add a camera that points to the towbar. However, please remember that the camera that is connected to the Reverse Camera input (AV4) will be displayed when reverse gear is selected if you have provided a 12volt feed to the Reverse Input on the GVIF harness. The reverse camera mode overrides the toggle switch. It is easy to add a simple on/ff switch on this feed and mount it somewhere in the cockpit to allow you to override the reversing camera function when you are towing.</p>

<p>The reversing image or AV is not displayed – only 4x4 info or settings or TV</p>	<p>The GVIF unit will not be able to display any images on the screen if the OEM Menu is selected at the Sat Nav LCD screen or if the Display at the screen is selected to 4x4 info or TV. These signals don't come from the Sat Nav DVD player but go direct to the screen hence the GVIF unit cannot switch these. Simple press the main function buttons in front of the screen and return the display to Sat Nav</p>
<p>The camera shows a black and white image</p>	<p>With the camera displayed enter the menu button on the remote control and adjust the properties. Note in low light many cameras only show black and white.</p>

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