Manual Version: 170817 (V20170125)

RL3-NAC

Installation Manual

Product Name: **RL3-NAC**

Product Application:

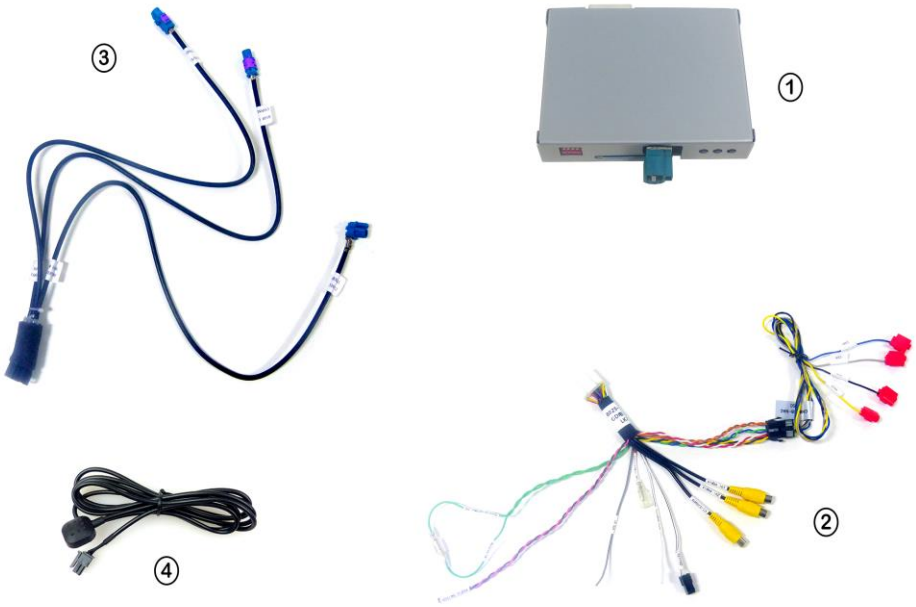
2 Video inputs and 1 Reverse Camera input.

Car Types:

Peugeot and Citroen with NAC systems (both High-End and Low-End).

Peugeot 3008, 5008, Citroen C3, C6 etc.

What's in the box



Item	Qty	Description	Part No.
1	1	Camera Interface	
2	1	Power/RCA Harness	
3	1	LVDS Cable	
4	1	External Switch	
5	-	Optional Camera's available	

1. Description

The RL3-NAC camera interface will enable user to install Reverse Camera, Video input1 and Video input2 onto the NAC System. All connection is plug and play. CAN decoder built in which makes camera installation simple.

It has three video inputs.

Reverse Guidelines and Parking Sensors shown on Peugeot 5008.

CAN Decoder analysis steering wheel position and Parking sensor data to show as overlay on reverse camera image (not all vehicles).

Using OSD menu user can select to show Reverse image only, with guidelines and parking sensors or select either guidelines or parking sensors.

Citroen C6.

User can switch video input source from OEM "Navi" key or use external switch button.

2. Interface Functions

- The Reverse Camera is automatically triggered when engaging the reverse gear of the car. The display is also equipped with moving reverse guidelines and parking sensors which help guide the driver while reversing the car. The Guidelines are accurate as CAN code is used to generate them using the steering wheel position as a reference.
- The User can switch to the front camera using a push button switch. This can be used in cases when the driver is parking the car without having to engage the reverse gear for example in situations where the driver is parking in a garage.
- This interface is suitable for both high end and low end NAC Systems Using DIP 8 ON or OFF can select which version is being used. The connection for both systems is slightly different. Please refer to the installation section.

**NOTE: User can select Video Input1 or Video Input2 using Dip settings depending on user and how many video inputs being inserted. Please refer to DIP settings section .*

3. Installation

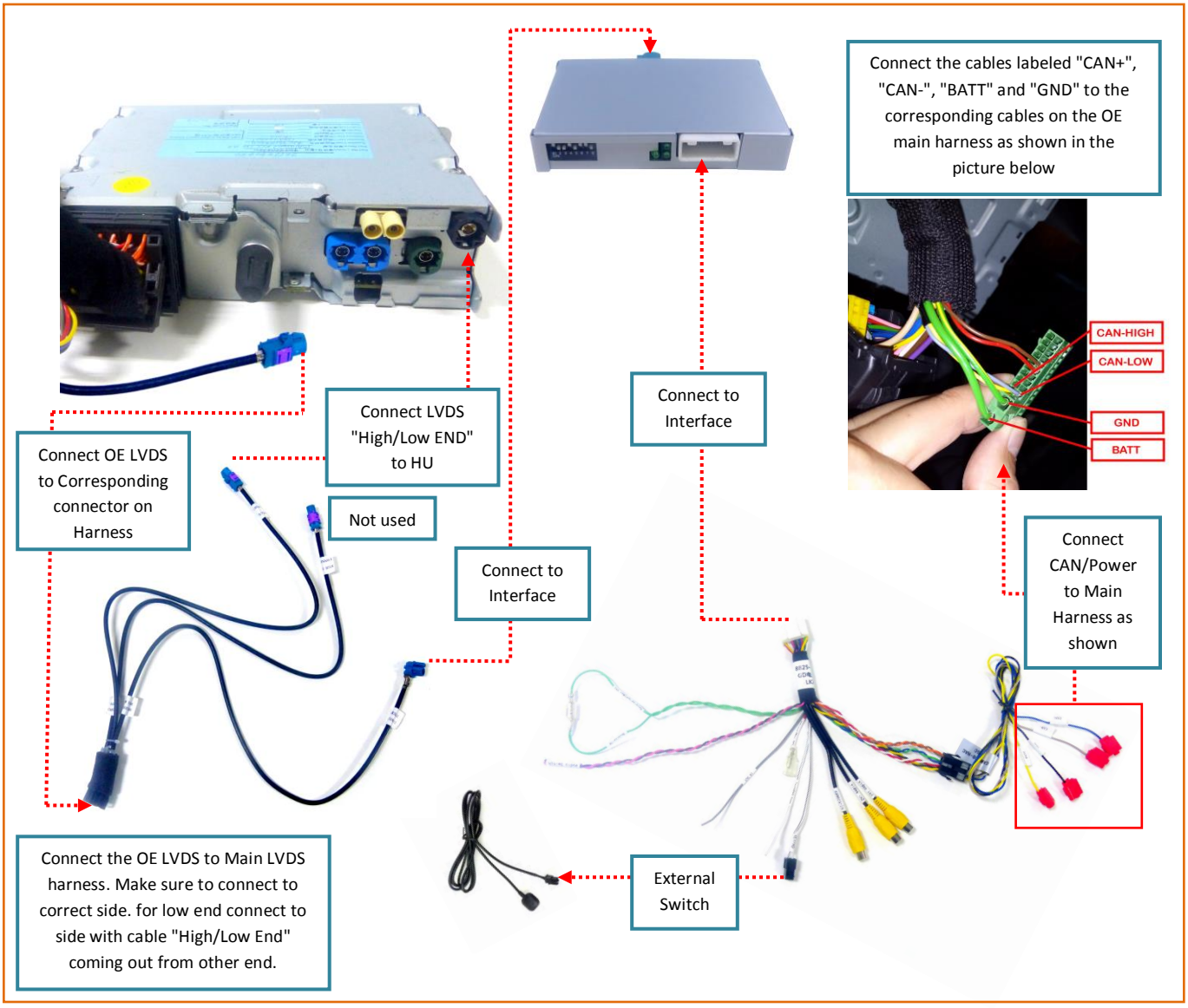
Installation of this interface is very easy as it is completely plug and play. There is no need to open the radio to insert any PCB etc.

- Each car model has a different process to open the dashboard panel. (Please check the Car manufacturers manuals to know how to disassemble the dashboard).

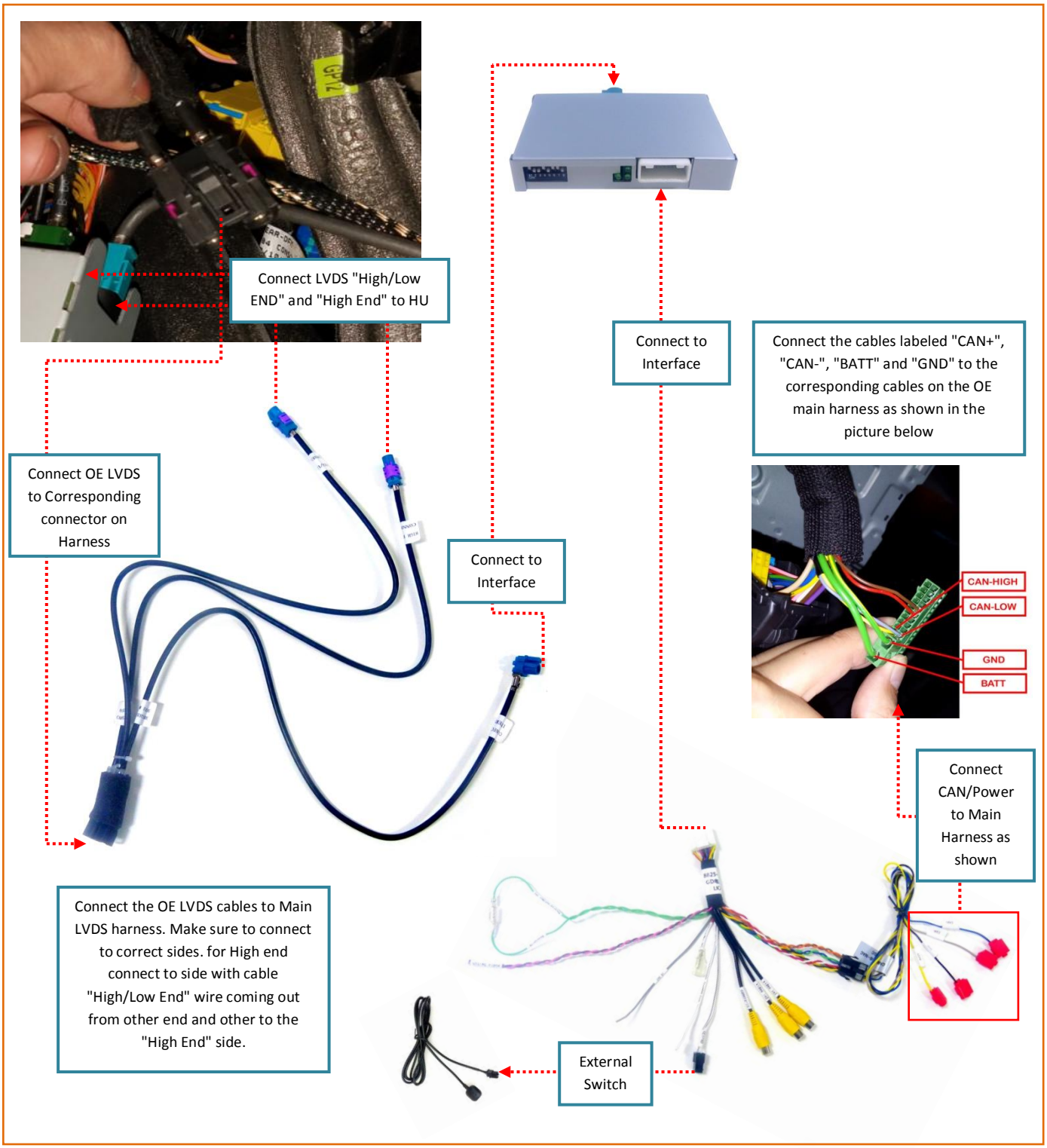
- The LVDS cable from the HU unit will be removed (if low end one LVDS will be connected and if high end two LVDS cables will be connected) and LVDS cable connected in between.

- CAN High, CAN Low, ACC and GND will be connected as shown in connections section.

System connection for Low End

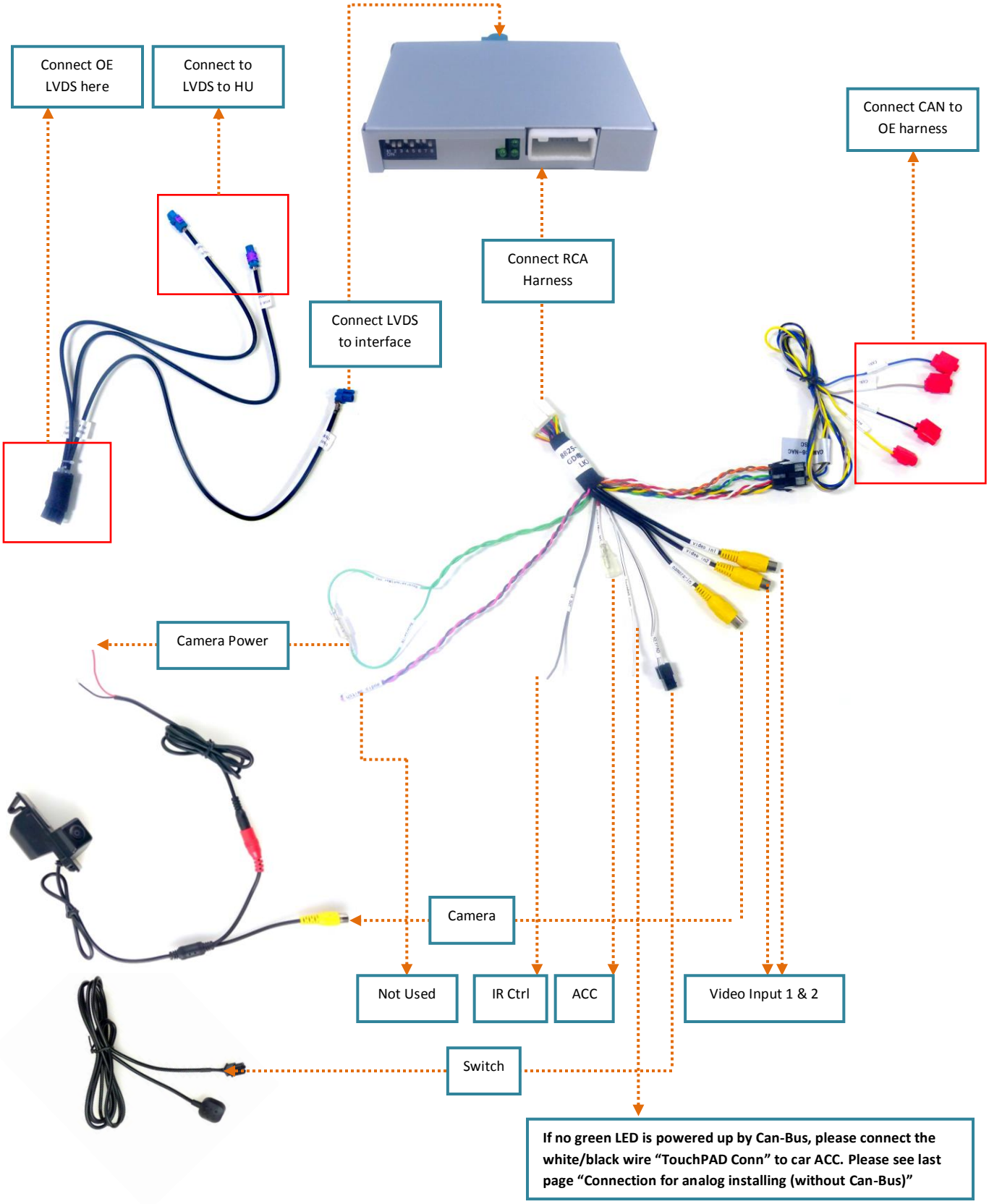


System connection for High End



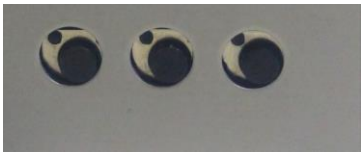
**NOTE: Make sure to connect both OE LVDS cables for High End. Make sure all connectors are secure to avoid shaking video.*

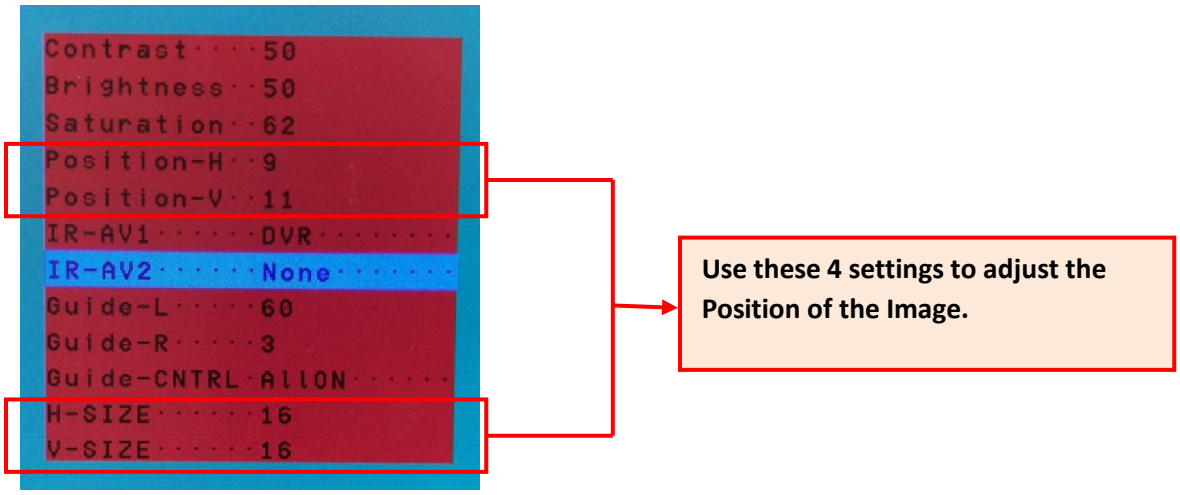
4. Connection Diagram



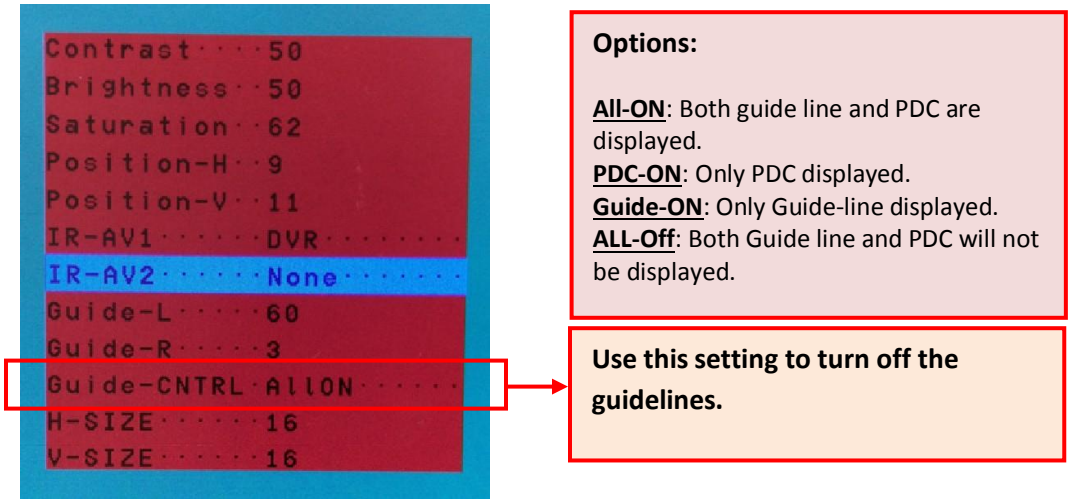
5. Settings

Please check the image position for each video input enabled and make sure they are positioned correctly. In case they are not use the 3 keys on the bottom of the interface to adjust the image using "Position-H" , "Position-V" and "H-SIZE" , "V-SIZE". Each Video input has separate memory state so fine position each video input in the same manner.





Engage Reverse Gear and fine position the image in same manner. User can also select if user wants to turn Guidelines ON or OFF and can also select if Parking Sensors are ON or OFF. For this again use the 3 buttons on the bottom of the interface to access the OSD menu. Once in the menu navigate to settings for "Guide-CNTRL" and select as desired.



6. DIP Settings

DIP Down= ON DIP UP= OFF 			
DIP	**ON**	**OFF**	**Default**
1	No function	No function	UP(OFF)
2	Video Input1	Video Input1	DOWN(ON)
3	Video Input2	Video Input2	DOWN(ON)
4	No function	No function	UP(OFF)
5	Reverse camera installed (When R engaged aftermarket camera shown)	OE camera is installed (When R engaged OE camera shown)	DOWN(ON)
6	No Function	No Function	UP(OFF)
7	No Function	No Function	UP(OFF)
8	Low End System	High End System	DOWN(ON)

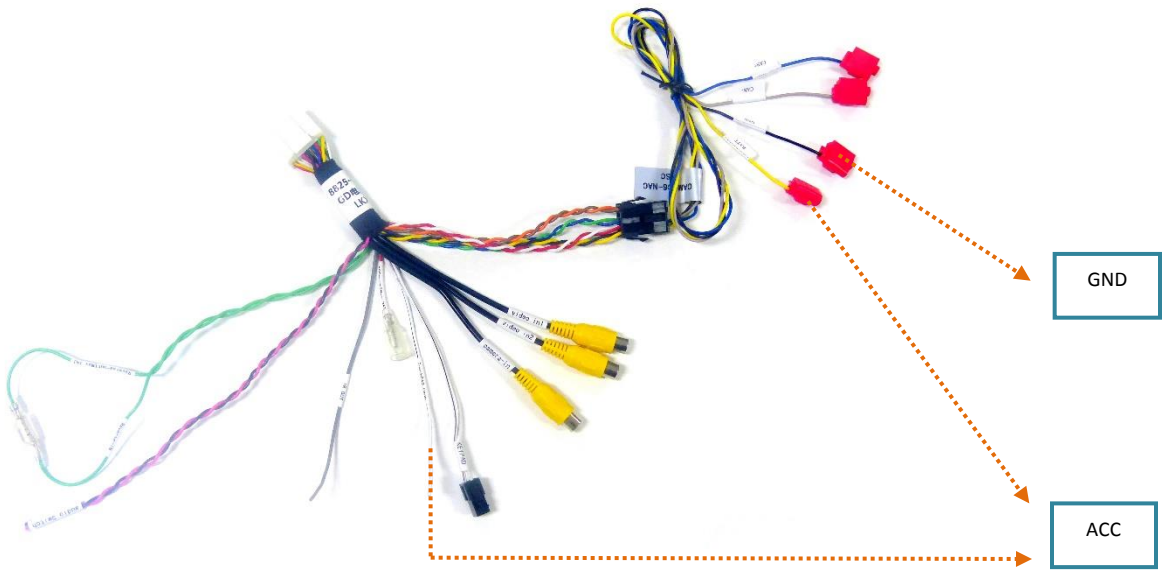
DIP Down= ON DIP UP= OFF 			
DIP	**ON**	**OFF**	**Default**
1	No function	No function	UP(OFF)
2	No function	No function	UP(OFF)
3	No function	No function	UP(OFF)
4	No function	No function	UP(OFF)

Note: *If a Video input is not being used please turn the respective DIP setting OFF in order to avoid black screen while switching video source.*

7. Parameters

No.	Name	Parameter
1	Front Cam Video , Reverse Cam video	0.7Vpp with 75 ohm impedance NTSC/PAL/SECAM automatic switch
2	Reverse Control wire	>5V will force into camera mode. these wires can tolerate 12V for <10 seconds.
3	Normal Power consumption	4.8W
4	Standby current	< 10uA
5	Reverse trigger threshold	>5V trigger
6	Work temperature	-40°C to +85°C
7	Dimensions	11.2*9.0*2.2cm

Connection for analog installing (without Can-Bus)



Damage to the head-unit is possible, if this VL3-NAC/RL3-NAC interface is installed to older Citroen/Peugeot SMEG or SMEG+ head-units! Use this VL3-NAC/RL3-NAC interface only on Citroen/Peugeot NAC head-units (from about 2016-) which you can see on these pictures:

NAC-Systems

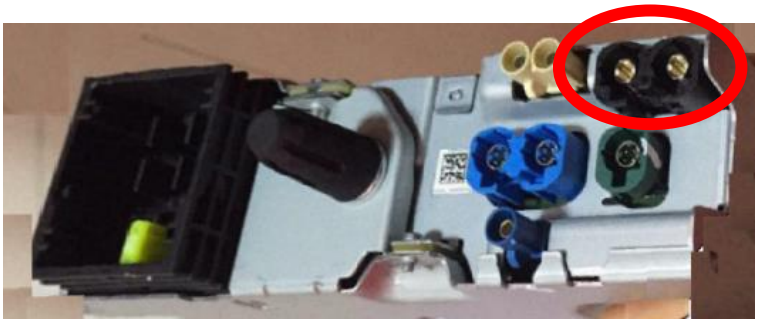
Furthermore, there is also **damage** to the head-unit possible when installed to the correct, NAC systems, **if the 4pin HSD connectors of this harness are wrong-plugged.**

Prior to installation must be determined whether the head-unit of the vehicle is a

low version head-unit (single black male 4pin HSD on backside)

OR

high version head-unit (double black male 4pin HSD on the backside)



Then follow the manual for high or low version connections of the 4pin HSD connectors.

Schaden an der Head-Unit des Fahrzeugs kann entstehen, wenn das Interface VL3-NAC oder RL3-NAC an einer älteren Citroen/Peugeot SMEG oder SMEG+ angeschlossen wird.VL3-NAC/RL3-NAC dürfen nur für Citroen/Peugeot NAC Head-Units (ab Ende 2016-) genutzt werden wie auf den Bilder anbei:

NAC-Systeme

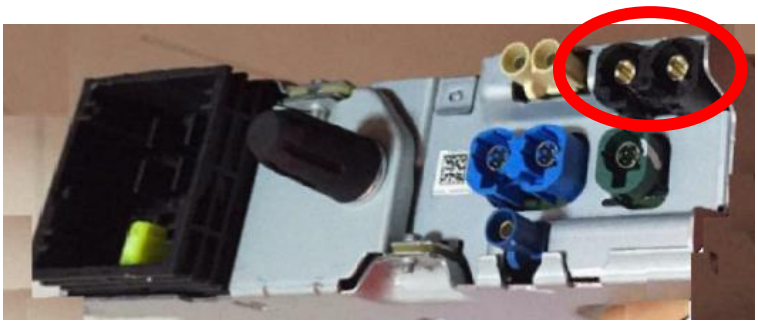
Schaden an der Head-Unit kann auch an einem NAC System entstehen, **falls die 4-Pin HSD Stecker falsch angeschlossen werden**.

Vor der Installation muss zuerst festgestellt werden, um welche NAC Version es sich handelt.

Low Version Head-Unit (einzelner schwarzer 4-Pin HSD Stecker auf Rückseite)

ODER

High Version Head-Unit (doppelter schwarzer 4-Pin HSD Stecker auf Rückseite)



In der Folge die Einbauanleitung für Low oder High Version genau befolgen.