Video-inserter
CI-RL5-MIB-STD2

Video-inserter with 1 video input and 1 rear-view camera input

Compatible with VW vehicles
with Composition Media or Discover Media system
Skoda vehicles with Amundsen or Bolero system
Seat vehicles with Media system plus

Product features

- **Video-inserter for factory-infotainment systems**
- **1 CVBS video-input for after-market device (e.g. USB-Player, DVB-T2 tuner)**
- **1 CVBS rear-view camera video-input**
- **Automatic switching to rear-view camera input on engagement of the reverse gear**
- **Video-in-motion (ONLY for connected video-sources)**
- **Video-inputs NTSC compatible**

Contents

Legal Information

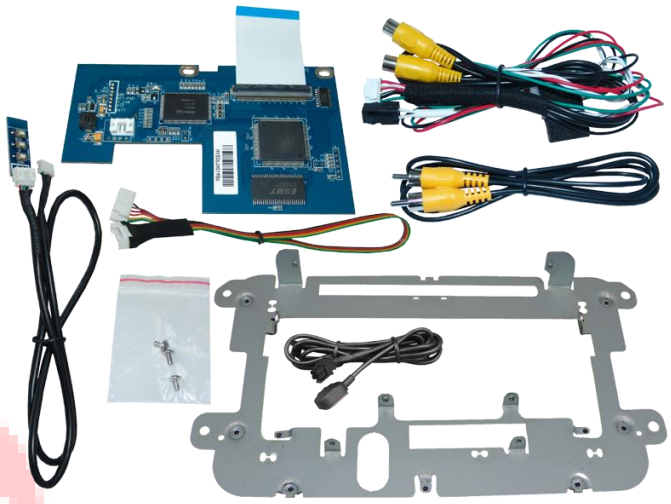
By law, watching moving pictures while driving is prohibited, the driver must not be distracted. We do not accept any liability for material damage or personal injury resulting, directly or indirectly, from installation or operation of this product. This product should only be used while standing or to display fixed menus or rear-view-camera video when the vehicle is moving, for example the MP3 menu for DVD upgrades.

Changes/updates of the vehicle's software can cause malfunctions of the interface. We offer free software-updates for our interfaces for one year after purchase. To receive a free update, the interface must be sent in at own cost. Labour cost for and other expenses involved with the software-updates will not be refunded.

1. 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.

1.1. Delivery contents



Take down the serial number of the interface and store this manual for support purposes:

_____

1.2. Checking the compatibility of vehicle and accessories

Compatibility

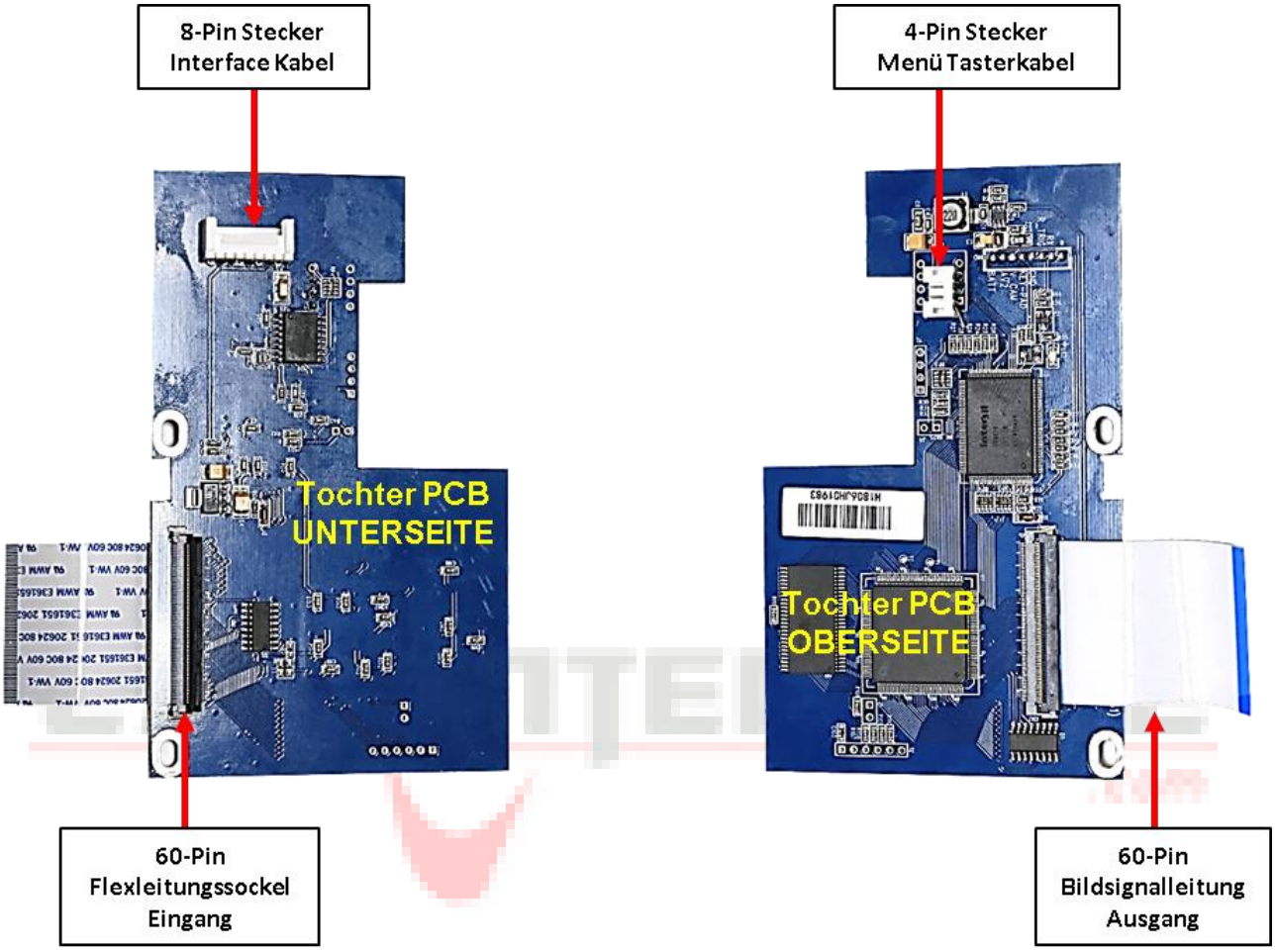
Vehicle	Compatible vehicles	Infotainment systems
VW	**Amarok** (2H) since model year 2017 **Beetle** (5C) since model year 2015 **Caddy4** (SA) model year 2016-2020 **Multivan T6** (SG) 07/2015-10/2019 **Scirocco3** (13) model year 2016-2018 **Sharan** (7N) since model year 2016	**MIB STD2 PQ /+NAV** **Composition Media / Discover Media** 1x SD vertical left or 2x SD vertical left + right and disc drive above 6.33inch monitor
Skoda	**Yeti** (5L) model year 2015-2017	**MIB STD2 PQ/+NAV - Amundsen/Bolero** 1x SD-Slot vertikal left or 2x SD-Slot vertical left + right beside the 6.33 Zoll monitor
Seat	**Alhambra2** (7N) since model year 2016	**MIB STD2 PQ/+NAV - Media System Plus** 1x SD vertical left or 2x SD vertical left + right beside the 6.33inch monitor

Limitations

Video only	The interface inserts ONLY video signals into the infotainment. For sound use the possibly existing factory audio-AUX-input or a FM-modulator.
Factory rear-view camera	Automatically switching-back from inserted video to factory rear-view camera is only possible while the reverse gear is engaged. To delay the switch-back, an additional electronic part is required.
Video input signal	NTSC video sources compatible only.

1.3. Connectors - Video-interface (daughter PCB)

The video-interface (daughter PCBs) converts the video signals of connected after-market sources in a factory monitor compatible picture signal which is inserted in the factory monitor, by using separate trigger options.



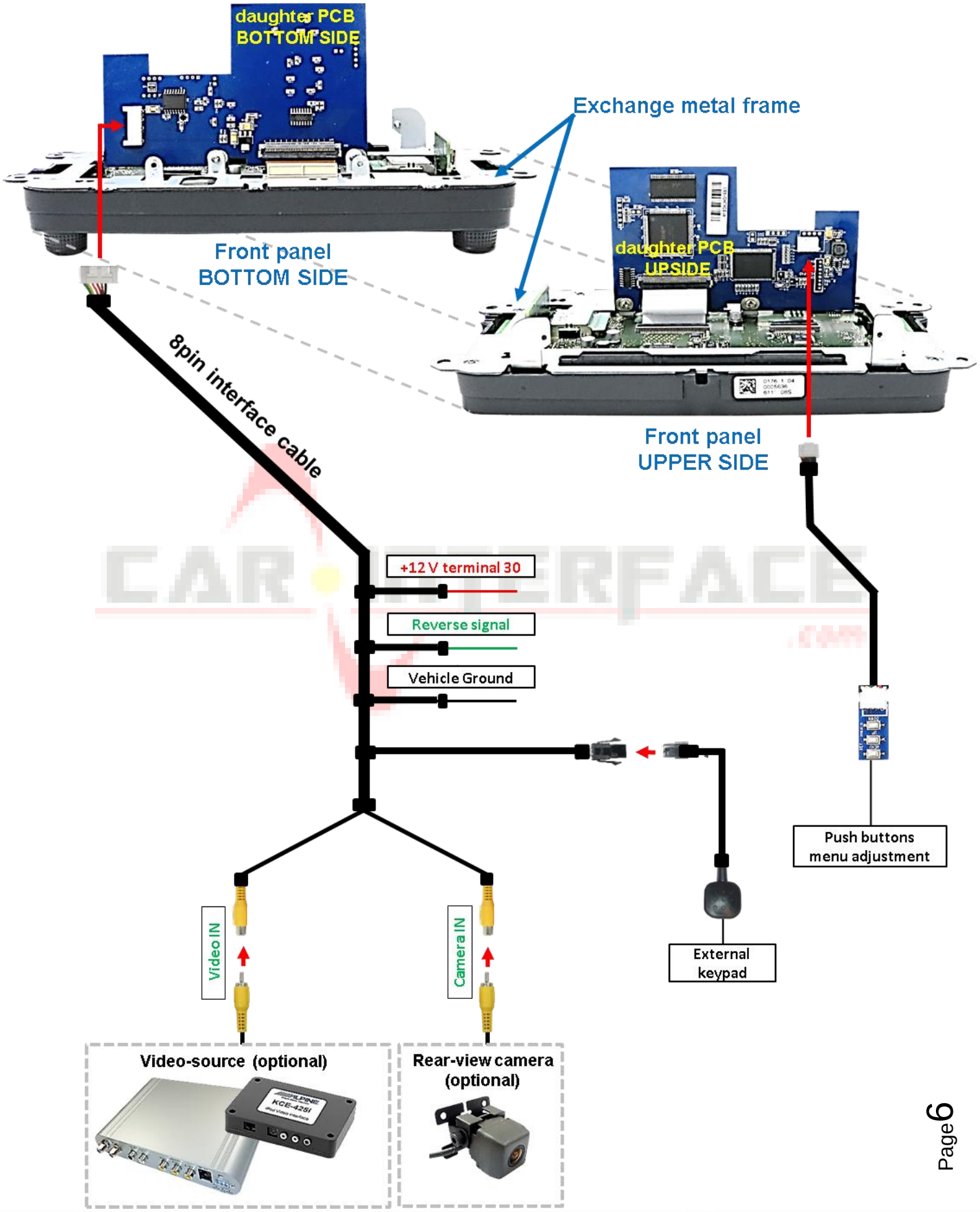
2. Installation

Switch off ignition and disconnect the vehicle's battery! The interface needs a permanent 12V source. If according to factory rules disconnecting the battery is to be avoided, it is usually sufficient to put the vehicle to "Sleep-Mode". In case it does not succeed, disconnect the battery with a resistor lead.
If power source is not taken directly from the battery, the connection has to be checked for being start-up proven and permanent.

2.1. Place of installation

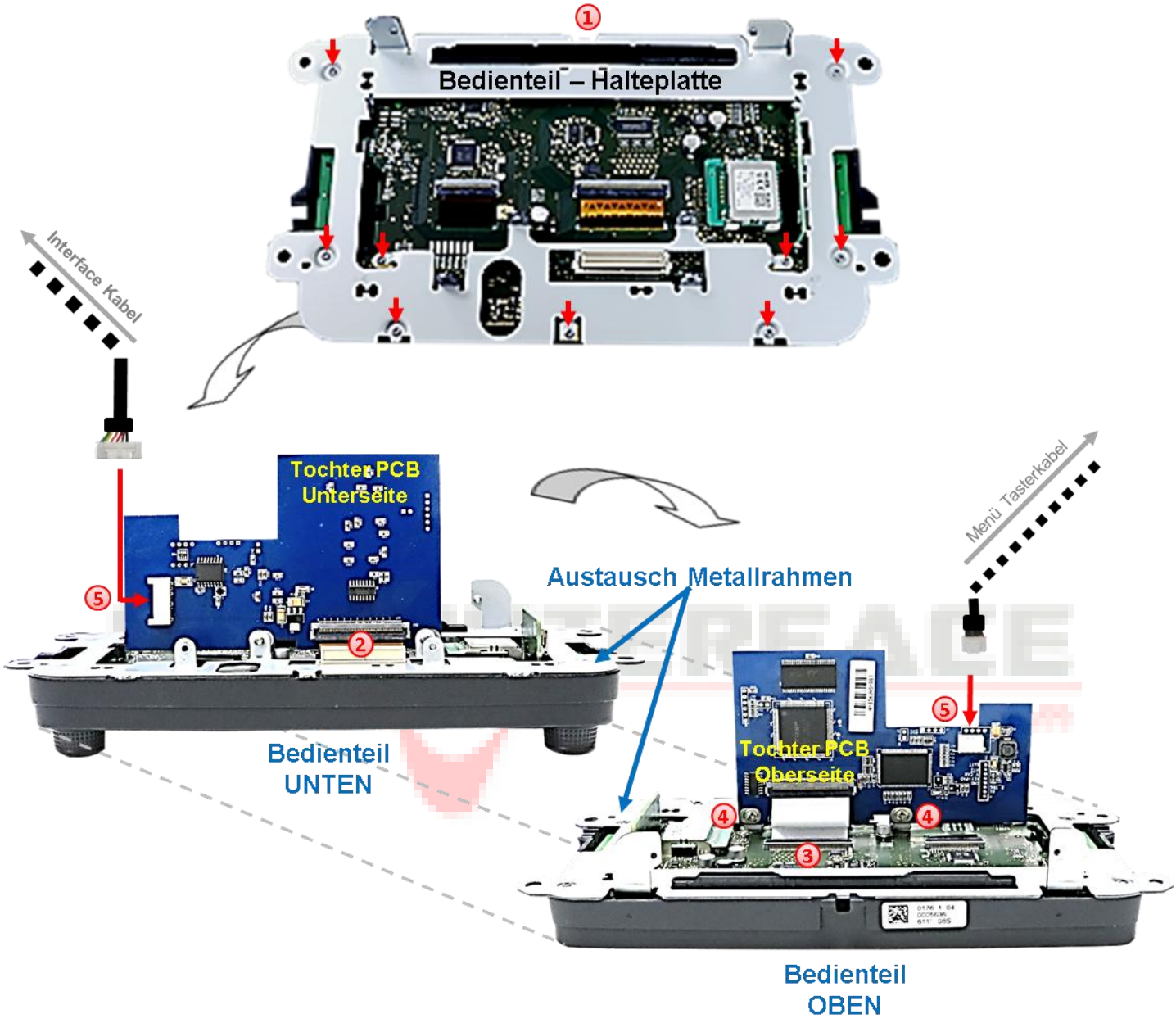
The daughter PCB shell be connected inside the factory head unit housing and installed by using the delivered exchange metal frame

2.2. Connection Scheme



2.3. Installation - ribbon cables into the monitor panel

Remove the head-unit, disconnect and remove the DVD drive unit and further disconnect and remove the frontpanel, which is fixed to the head-unit housing by 6 Torx screws (T9).



1. Replace the original front panel-retaining plate, which is fixed by 9 Torx screws, against the enclosed exchange metal frame.

2. Disconnect the golden coloured 60pin ribbon cable at the front panel mainboard 60pin ribbon cable base and connect it to the 60pin ribbon cable base at the daughter PCB's bottom side (heed the following warning notes!).

3. Connect the daughter PCB's pre-assembeled 60pin ribbon cable to the previously become free 60pin ribbon cable base of the mainboard. (heed the following warning notes!).

4. After the ribbon cable connection, fix the daughtger PCB at the front panel-retaining plate by using the enclosed screws.

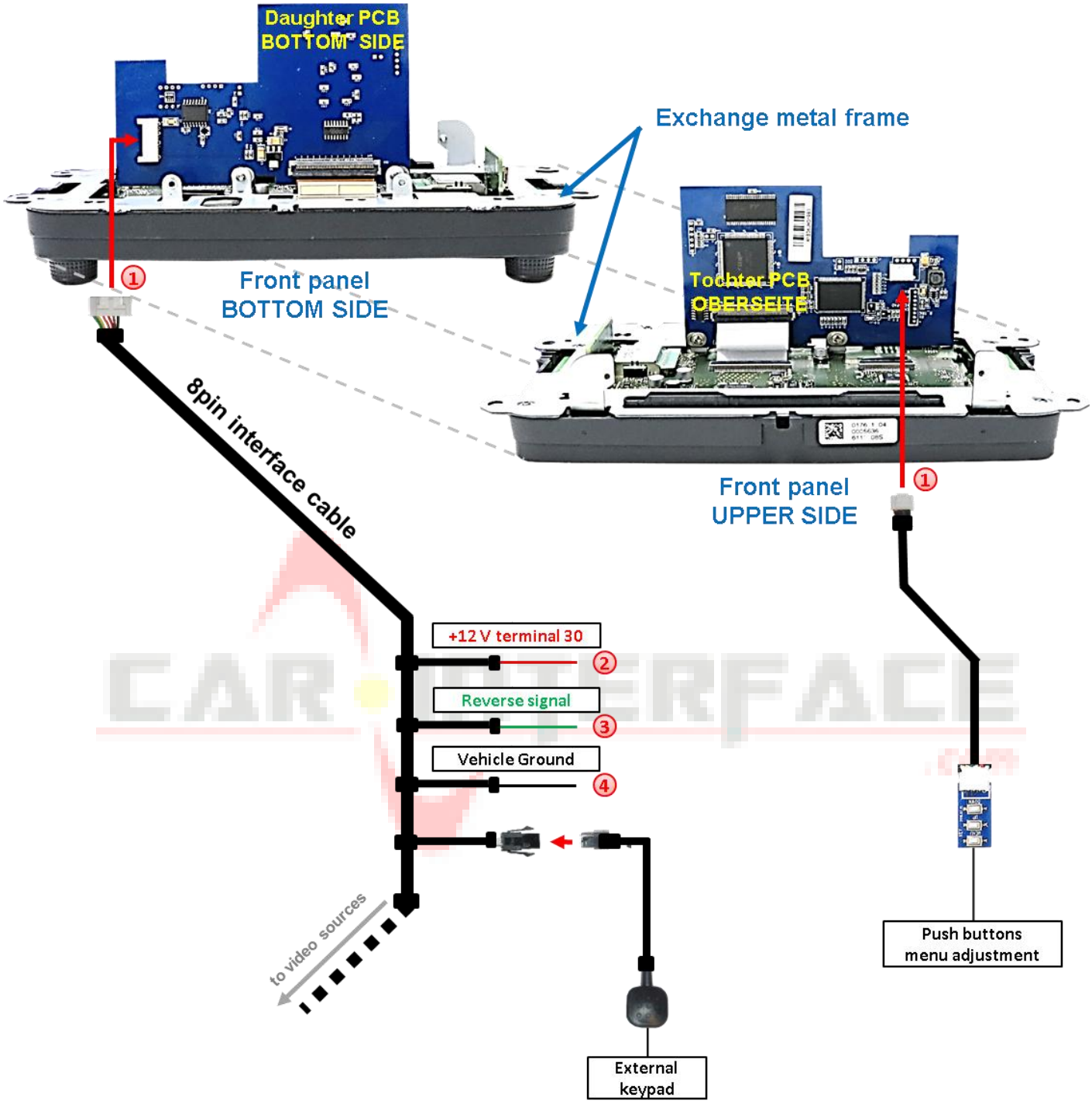
5. After the daughter PCB's previously mounted 20pin LVDS cable is lead out from the housing at a suitable location, reconnect the front panel with its 6 screws to the head unit's housing. Avoid cable contusion or cable injury caused by sharp-edged metal.

2.3.1. Warning notes, concerning the installation of ribbon cables

1) The contacting ends of ribbon cables always have to be installed in a straight and precise 180° position to the connector. Each deviation from a perfect contact position will curse faulty contact and even danger of short circuit

2) The ribbon cable's contacting side always has to correspond to the contacting side of the connector, concerning the mounting position.

2.4. Cable connection – daughter PCB



1. Connect the 8pin interface cable's 8pin connector and the menu pushbutton cable's 4pin connector to the 6pin and 4pin connectors of the daughter PCB.

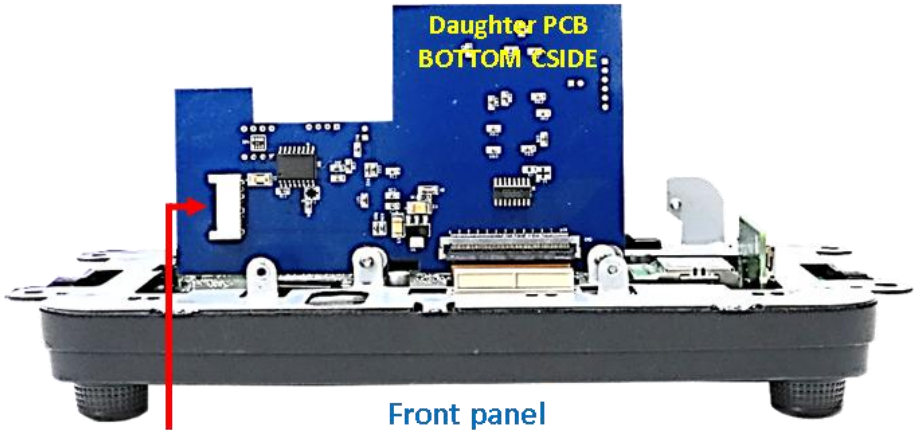
2. Connect the 6pin interface cable's single red colored wire to **+12V terminal 30** (e.g. glove compartment illumination).

3. Connect the 6pin interface cable's single green colored wire to **+12V reverse signal** (see following chapter).

4. Connect the 6pin interface cable's black wire to vehicle Ground.

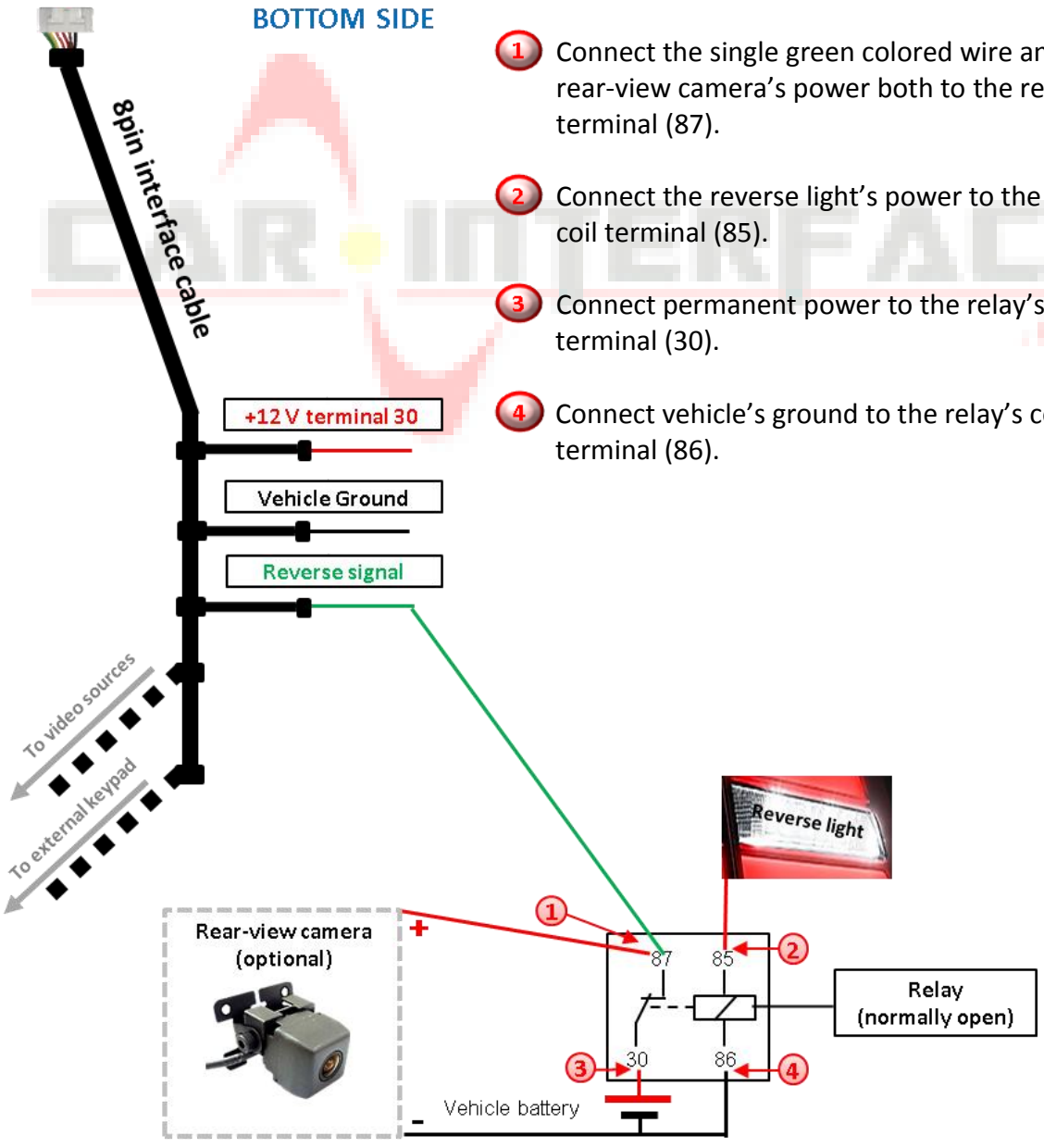
2.5. After-market rear-view camera:

To switch the interface's rear-view camera input, an external switching signal from the reverse gear light is required. As the reverse gear light signal contains electronic interference, a traditional open relay (e.g AC-RW-1230 with wiring AC-RS5) or filter (e.g. AC-PNF-RVC) is required. Below schema shows the use of a relay (normally open).



Front panel
BOTTOM SIDE

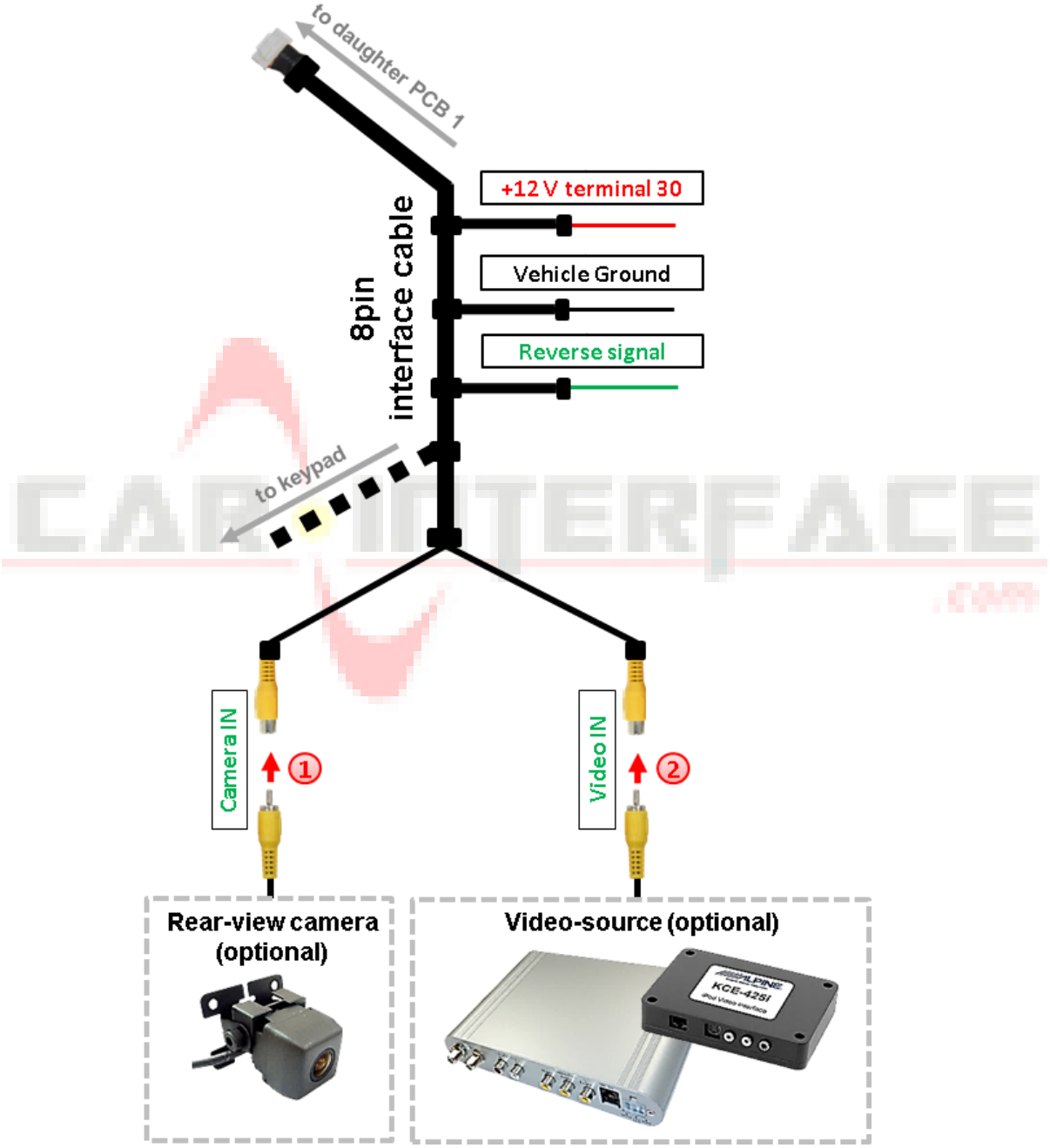
1. Connect the single green colored wire and the rear-view camera's power both to the relay's terminal (87).
2. Connect the reverse light's power to the relay's coil terminal (85).
3. Connect permanent power to the relay's input terminal (30).
4. Connect vehicle's ground to the relay's coil terminal (86).



2.6. Connection – video inputs

It is possible to connect one after-market video sources and one after-market rear-view camera to the video-interface.

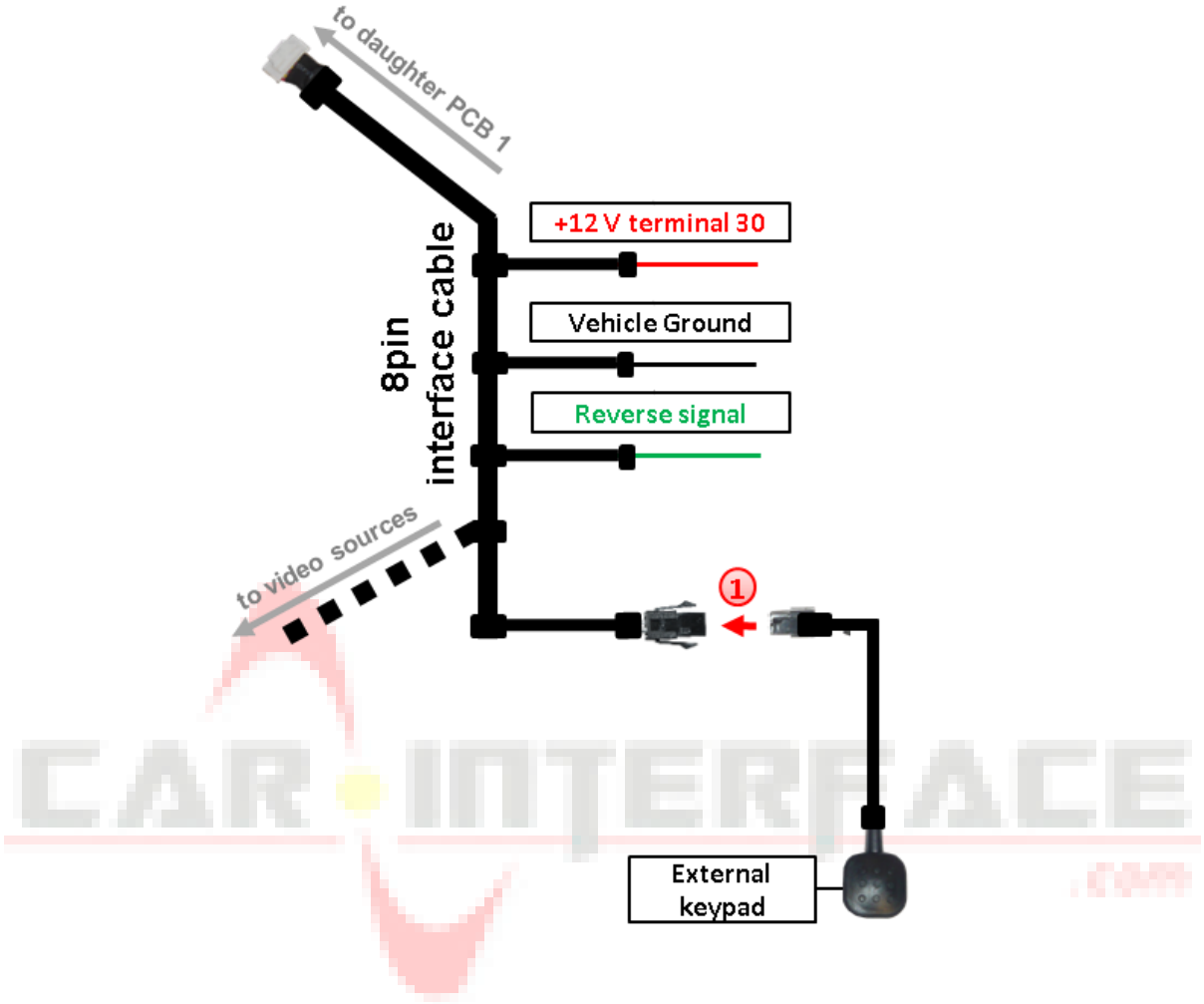
Before final installation of the peripheral devices, we recommend a test-run to detect a incompatibility of vehicle and interface. Due to changes in the production of the vehicle manufacturer there's always a possibility of incompatibility.



1. Connect the rear-view camera's RCA to the 8pin interface cable's female RCA **„Camera IN"**.

2. Connect the RCA of the video source to the 8pin interface cable's female RCA **„Video IN1"**.

2.7. Connection – external keypad



1 Connect the keypad's female 4pin connector to the male 4pin connector of the 6pin interface cable.

3. Interface operation by external keypad

Use the external keypad to switch to the connected video source. Each press will switch between the factory video and the connected video source.

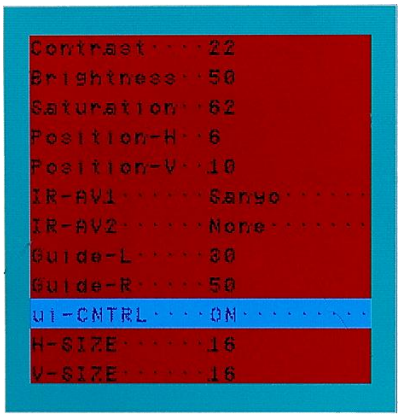
4. Picture settings

Push buttons
Menu adjustment

The picture settings are adjustable by the 3 push-buttons of the daughjter PCB's menu keypad. Press the 1. button to open the OSD settings menu or to switch to the next menu item. By pressing the other both push buttons the selected value will be changed. To avoid accidental changes during or after the installation, we recommend to disconnect the keypad from the pushbutton cable after the adjustments are done. Adjustments have to be done, while the selected input is visible on the monitor.

Note: The OSD menu is only shown when a working video source is connected to the selected video-input of the interface.

The following settings are available:



Contrast
Brightness
Saturation
Position H (horizontal)
Position V (vertical)
IR-AV1/2 (no function)
Guide L/R (no function)
UI-CNTRL (no function)
Size H/V (picture size horizontal/vertical)

Note: To adjust the reverse picture settings, engage the reverse gear.

5. Specifications

BATT/ACC range	7V - 25V
Stand-by power drain	6mA
Power	100mA @12V
Video input	0.7V - 1V
Video input formats	NTSC
RGB-video amplitude	0.7V with 75 Ohm impedance
Temperature range	-40°C to +85°C
Dimensions PCB1	123x 11 x 76 mm (W x H x D)

6. FAQ – Trouble shooting Interface functions

For any troubles which may occur, check the following table for a solution before requesting support from your vendor.

Symptom	Reason	Possible solution
No picture/black picture (factory picture).	Not all connectors have been reconnected to factory head-unit or monitor after installation.	Connect missing connectors.
	The ribbon cables have been damaged	Check the ribbon cables and the connectors, Change if necessary.
	Not all connectors have been reconnected to the head unit and the monitor.	Check the connectors and reconnect all disconnected connections.
	No power on video-interface (daughter PCB)	Make sure that the orange colored wire has been connected to +12 V S-Contact.
No picture/black picture/white picture (inserted picture) but factory picture is OK.	No picture from video source.	Check on other monitor whether video source is OK.
	No video-source connected to the selected interface input.	Make sure that the video source has been connected to the according input.
	Ribbon cable connection has been reversed	Make sure that the ribbon cable connection is done correctly: “MONITOR OUT or TO LCD” to panel and “TO PCB” to mainboard
Inserted picture distorted, flickering or running vertically.	Some interfaces can only handle NTSC input.	Check manual whether there is a limitation to NTSC mentioned. If yes, set source fixed to NTSC output.
Camera input picture flickers.	Camera is being tested under fluorescent light which shines directly into the camera.	Test camera under natural light outside the garage.
Camera input picture black.	Camera power taken directly from reverse gear lamp.	Use relay or electronics to "clean" reverse gear lamp power. Alternatively, if CAN-bus box is compatible with the vehicle, camera power can be taken from green wire of 6pin to 8pin cable.
Camera input picture has distortion.		
Not possible to switch video sources by external keypad. Not possible to switch video sources by external keypad.	Pressed too short.	For video source switching a longer press of about 2.5 seconds is required.
Interface does not switch to camera input when reverse gear is engaged.	The grey wire of the 6pin cable doesn’t receive the +12V reverse signal	Apply +12V from the reverse light. Use a relay or electronics to "clean" reverse gear lamp power.

E11 10R-03 5384

Made in China