

c.LOGiC lite-Interface

C1-NTG25

for Mercedes Benz Comand APS NTG2.5 navigation systems

Product features

- full plug and play multimedia interface
- 1 AV-input with separate IR-control channel
- control of after-market devices (e.g. DVB-T tuner, DVD-player, DVD-changer, ...) by factory navigation buttons
- Coding of TV option
- power on remote out trigger signal (+12V) to switch on connected devices
- video in motion

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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. Labor 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 SW-version and HW-version of the interface boxes, and store this manual for support purposes.



If remote function of the connected device should be used, additional IR-remote cables and Y-adapters are needed, see chapter [AV-source](#) .

1.2. Check compatibility of vehicle and accessories

Requirements	
<i>Vehicle</i>	CLS-Coupe (W219) from approx. 04/2008, E-class (W211) from approx. 04/2008, SL-class (R230) from approx. 04/2008, SLK-class (R171) from approx. 04/2008, R-class (W251) from approx. 04/2008, ML-class (W164) from approx. 04/2008
<i>Navigation</i>	Comand APS NTG2.5
Limitations	
<i>Factory-TV-tuner</i>	Must NOT be installed. If uninstalled, optical ring must be closed.
<i>Video-in-motion function</i>	Navigation does NOT work while VIM is activated.

1.3. Setting the dip switches of the CAN-box TV-500

Vehicle/ navigation	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
All vehicles	OFF	OFF	OFF	OFF	OFF	OFF

Note: Dip switch functions of the TV-500

Dip 1 – activation TV-free

Dip 2 – no function

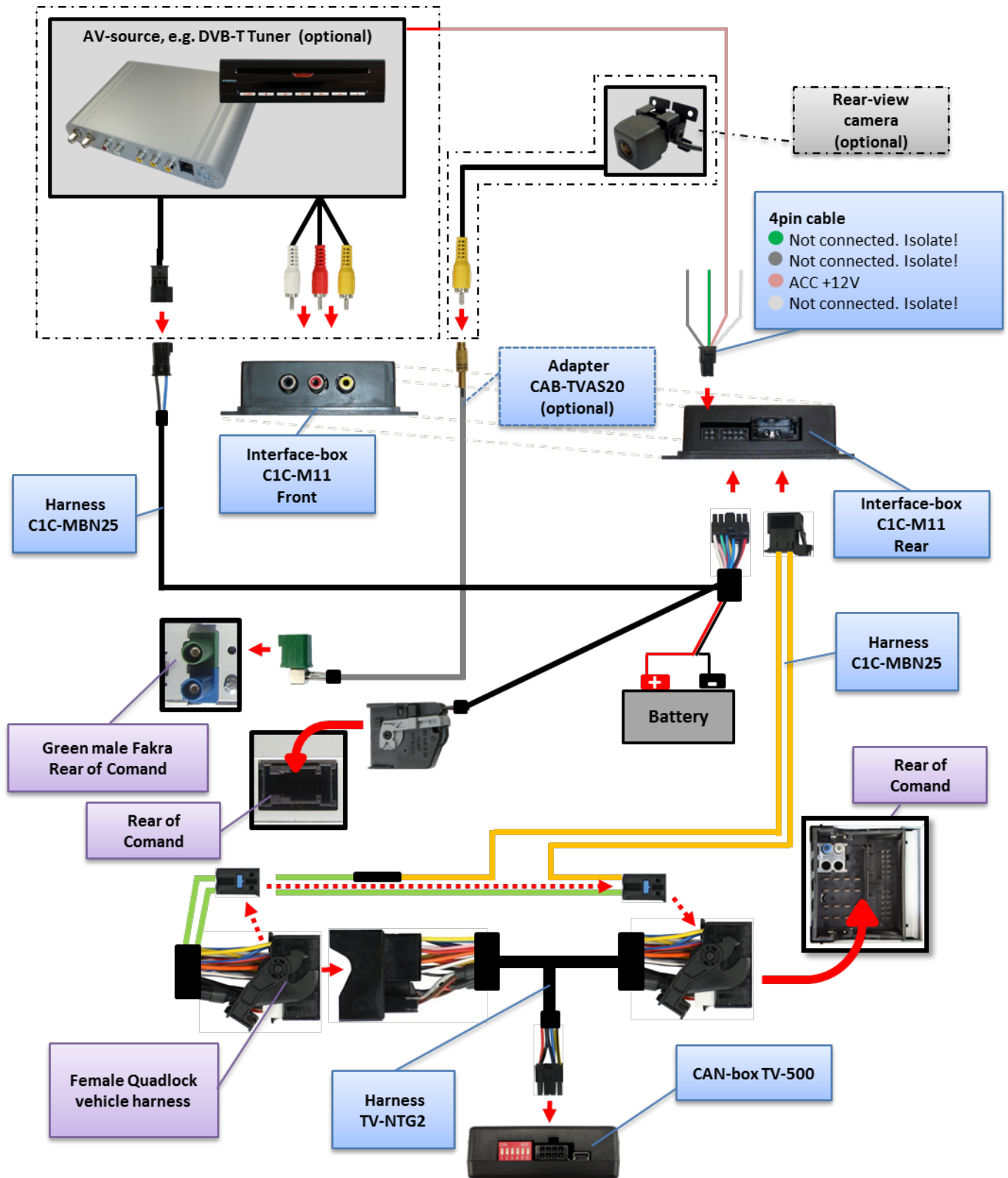
Dip 3 – no function

Dip 4 – no function

Dip 5 – CAN-bus termination resistor on the vehicle side

Dip 6 – CAN-bus termination resistor on the head-unit side

2. Connection schema



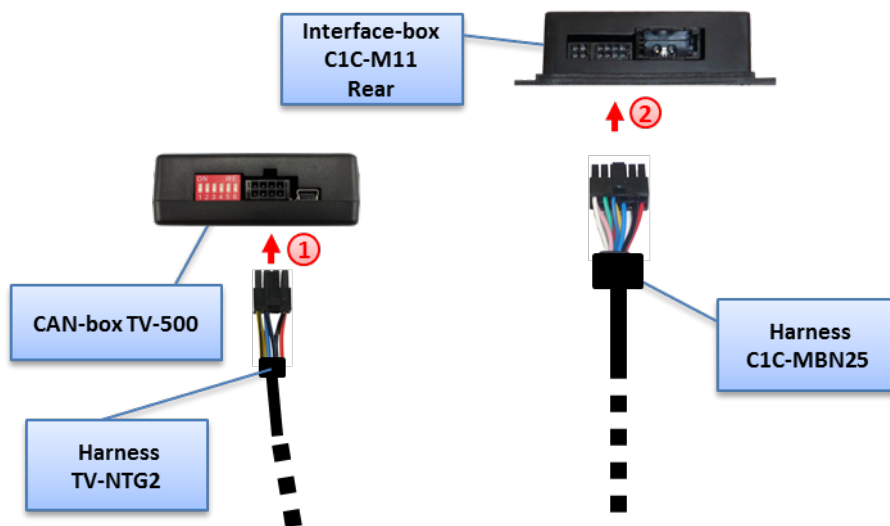
3. Installation

Switch off ignition and disconnect the vehicle's battery! If according to factory rules disconnecting the battery has to be avoided, it is usually sufficient to put the vehicle in sleep-mode. In case the sleep-mode does not show success, disconnect the battery with a resistor lead.

Place of installation is behind the Comand head-unit.

Note: The loose white and green cable of harness TV-NTG25 are not required and must be isolated.

3.1. Interconnecting Interface-box, CAN-box and harnesses

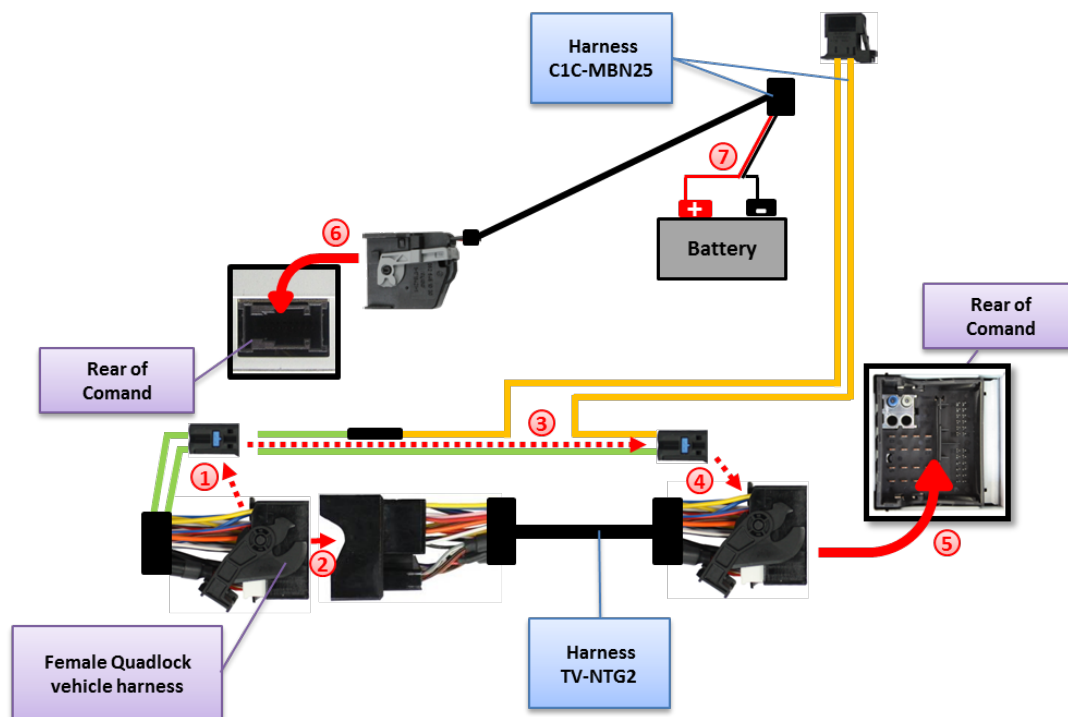


① Plug harness TV-NTG2 into 8pin Molex of CAN-box TV-500.

② Plug harness C1C-MBN25 into 8pin Molex of Interface-box C1C-M11.

3.2. Connections to the head-unit

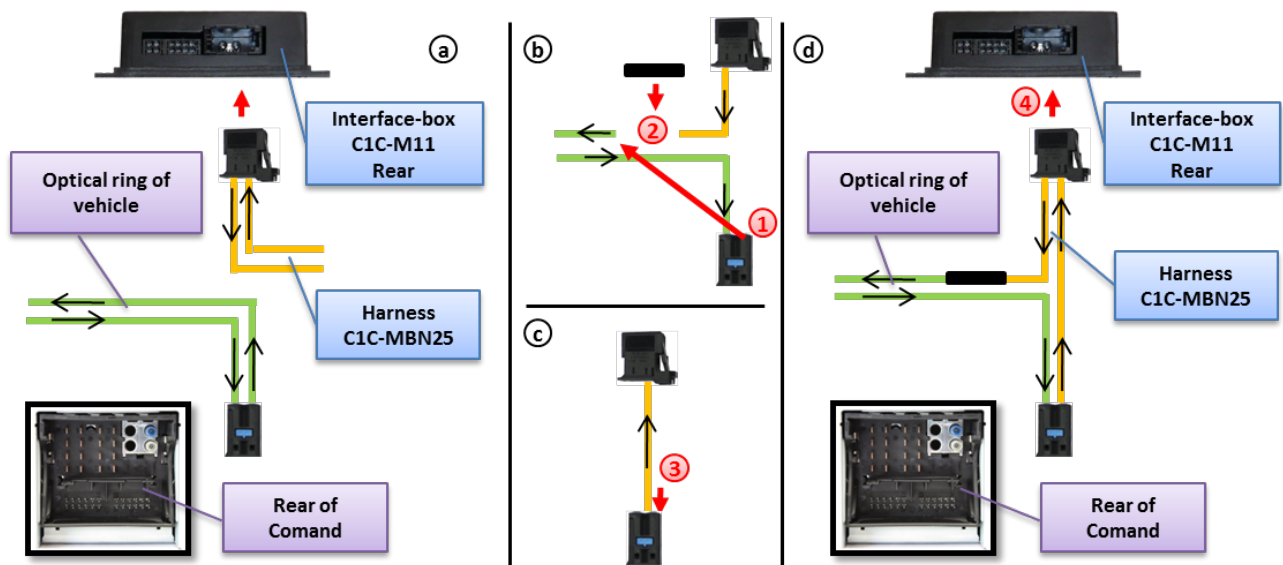
Remove the head-unit from the dash-board.



- ① Disconnect female Quadlock connector from the back of the Comand and remove MOST®-insert from the female Quadlock connector of the factory harness.
- ② Connect male Quadlock connector of harness TV-NTG2 to the female Quadlock connector of the vehicle harness.
- ③ Connect the optical leads of the vehicle harness to the optical leads of harness C1C-MBN25, see next chapter "Connecting optical ring".
- ④ Plug MOST®-insert at the respective position (the insert of the Comand's male Quadlock connector which contains the optical sensor and light) into the female Quadlock connector of harness TV-NTG2.
- ⑤ Connect female Quadlock connector of harness TV-NTG2 to the male Quadlock connector of the Comand.
- ⑥ Plug female 18pin AMP connector of C1C-MBN25 into male 18pin AMP connector of the Comand.
- ⑦ Connect red wire of harness C1C-MBN25 to +12V permanent and the black wire to ground.

Note: Vehicles without MOST®-components, which means without factory CDC, without factory phone or other MOST®-components have no optical leads at the Comand. In this case plug the optical leads of harness C1C-MBN25 into the enclosed MOST®-insert (take notice of the direction of the arrows) and plug the MOST®-insert at the respective position (the insert of the Comand's male Quadlock connector which contains the optical sensor and light) into the female Quadlock connector of harness TV-NTG2 (see point ④).

3.3. Connecting optical ring



- 1 Remove the vehicle harness' optical output lead (see arrows on MOST[®]-connector) from the MOST[®]-insert.
- 2 With the included optical bridge, connect the removed vehicle harness' optical output lead to the optical output lead of the C1C-MBN25 (see arrows on MOST[®]-connector).
- 3 Plug the optical input lead of harness C1C-MBN25 into the free connector of the MOST[®]-insert of the vehicle harness.
- 4 Plug male MOST[®]-connector of harness C1C-MBN25 into female MOST[®]-connector of the interface-box C1C-M11.

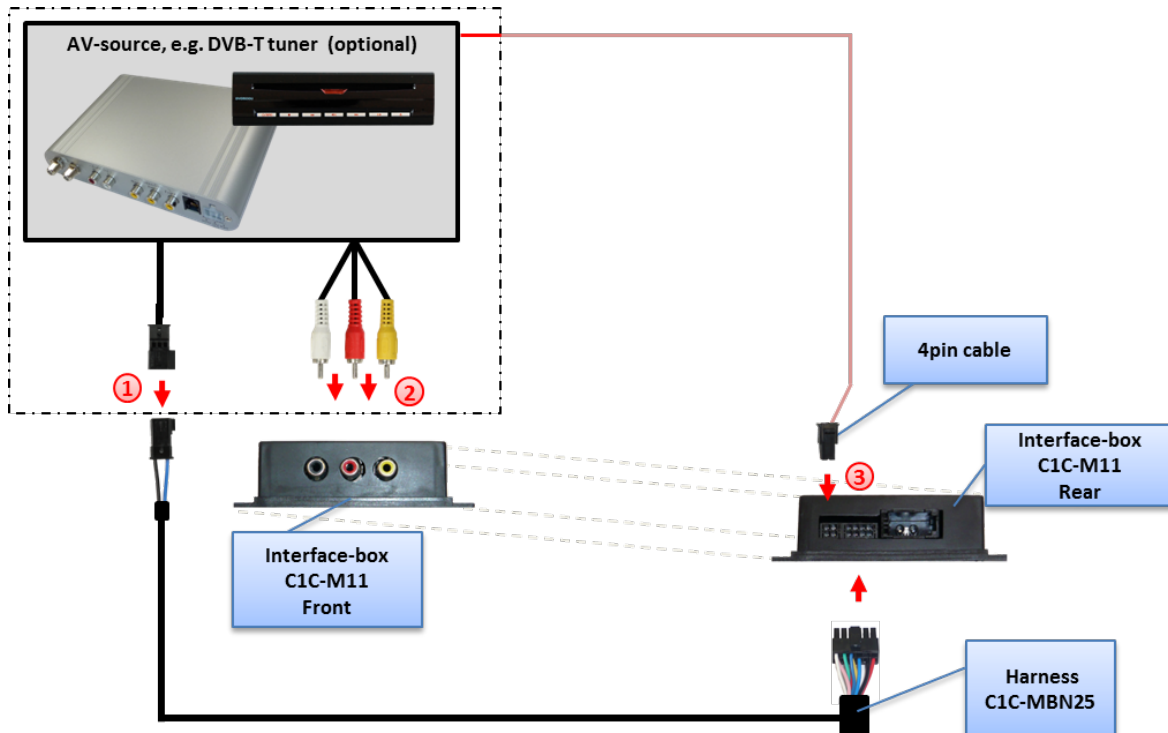
3.4. Connecting peripheral devices

It is possible to connect one after-market AV-source to the c.LOGiC Interface.

Before final installation of the peripheral devices, we recommend to test-run the c.LOGiC functions to detect incompatibility of vehicle, navigation, factory accessories or peripheral devices as soon as possible.

3.4.1. AV-source

The c.LOGiC lite interface has the possibility to connect and remotely control by navigation buttons one pre-programmed device. The device list in the device control table (Appendix A) shows the pre-programmed remote channels and the related IR-remote cables STA-xxx which must be ordered separately for the control of the device.



- ① Using the respective STA-xxx IR-control cable, interconnect the blue-black female 3pin AMP connector of harness C1C-MBN25 and the IR-port of the AV-source.
- ② Using RCA-cables, interconnect the female RCA-ports of the interface-box C1C-M11 with the AV-outputs of the AV-source.
- ③ The pink ACC-output wire (+12V max. 1A) of the 4pin cable can be connected to the ACC-input wires of the connected device to switch it on. It carries +12V when the head-unit is running.

3.4.2. Installing AV-source's IR-sensor additionally

Additionally to the control via OEM navigation, it is possible to install the original IR-sensor of a connected device. By using the respective Y-adapter (e.g. STA-Y35MM or STA-RJ12) for the IR-Port of the connected device, the controls of navigation AND device's IR-sensor can be connected and used simultaneously. Installation of the IR-sensor is recommended as the controls via navigation are limited, and not all functions may be covered.

3.5. Coding

To enable the c.LOGiC functions on the Comand, they need to be coded once on the Comand by pressing Comand button combinations.

3.5.1. TV-option

In order to use the c.LOGiC it is necessary to code the Comand's TV-option. When the Comand has booted, choose "Comand" in the tachometer-display and press the "UP" and the "+" key of the steering wheel until the Comand screen becomes black. After the Comand has automatically rebooted, the option **TV** is available in the menu.



Note: In some cases the steering wheel keys "UP", "DOWN", "+" and "-" can be interchanged for coding.

3.5.2. Reversing the coding

The above described coding can be reversed by pressing the key used for coding UP (TV-icon) and the "-" key at the same time until the Comand resets itself.

3.6. Activation of remote functions

To activate the remote functions, push the "OK"-button while in c.LOGiC mode (see chapter Selecting the c.LOGiC as current AV-source) and select the **Preset** option.



Now select the **Autostore** option to activate the controls. Numbered buttons will be added to the menu.



Note: After loss of battery power, the activation has to be repeated.

4. Operation

4.1. Activation of the video-in-motion function

The video-in-motion function is activated is by pressing the "hang up" button on the steering-wheel for more than 3 seconds. Repeat action to deactivate the video in motion function.



Note: As long as the video-in-motion function is activated, the **navigation** of the command **will NOT be working!**

4.2. Selecting the c.LOGiC as current AV-source

Push the **OK** button of the Comand and then select **TV** to choose the c.LOGiC as current AV-source.

4.3. Assigning device control for connected AV-source

After selecting the c.LOGiC as current AV-source, push "*" -button. The OSD will show "Channel [] [] Prog [] []". Now enter the device-related IR-code as described in device control table (appendix A), followed by number "11" and push "OK"-button to confirm the assignment.



Note: The IR-control channel is preset to RC-Code 41 compatible DVB-T tuners.

4.4. Button assignment table

The button assignment table shows which functions of the connected device can be executed by Comand buttons. Once an AV-input is activated, the Comand button in the left column will execute the function described in the corresponding device column. The function description equals the remote control buttons of the additional device. On the additional devices the writing may vary (e.g. AV instead of Source).



Button assignment table c.LOGiC Mercedes Benz Comand APS NTG2.5


COMAND button	DVB-T	USB-LiNK	DVD-player	DVD-changer	iPod®-control	Analog-tuner
1	SCAN	POWER	PLAY	PLAY	PLAY/PAUSE	SCAN
2	↑	↑	↑	↑	↑	VOL +
3	EPG	EXIT	STOP	STOP	POWER	FM
4	←	←	←	←	←	CH -
5	OK	OK / PLAY	OK	OK	ENTER	MODE
6	→	→	→	→	→	CH +
7	EXIT	MEDIA	PBC	DISC	SHUFFLE	ADJUST
8	↓	↓	↓	↓	↓	VOL -
9	MENU	SETUP	SETUP	SETUP	LIGHT	MODE
<<	CH -	TRACK -	TRACK -	TRACK -	TRACK -	CH -
>>	CH +	TRACK +	TRACK +	TRACK +	TRACK +	CH +

Additionally to the Comand buttons, the steering-wheel buttons UP and DOWN can be used for remote functions. Longpress UP has the same function as “<<” on the Comand and longpress DOWN has the same function as “>>” on the Comand.

Note: The user must not longpress the above mentioned buttons while in c.LOGiC mode. The remote functions could be disturbed. If so repeat 3.5. activation of remote functions.

5. Specifications

Operation voltage	10.5 – 14.8V DC
Stand-by power drain	<1mA
Operation power drain	180mA
Power consumption	2.5W
Temperature range	-30°C to +80°C
Weight	95g
Measurements (box only) B x H x T	106 x 30 x 71 mm

CE  12V DC

6. Technical Support

Caraudio-Systems Vertriebs GmbH

manufacturer/distribution

Rheinhorststr. 22

D-67071 Ludwigshafen am Rhein

NavLinkz GmbH

corporate sales/tech dealer-support

Eurotec-Ring 45

D-47445 Moers

phone +49 180 3 907050

email support@caraudio-systems.de

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