

dvbLOGiC DVB-T2 / DVB-T Tuner

CI-DT3-LR

Compatible with Land Rover touch-screen navigation systems version 1

Product features

- Full plug and play vehicle-specific dual DVB-T / DVB-T2 Tuner + USB-AV-Player
- DVB-T2 HEVC/H265/264 and DVB-T MPEG2/MPEG4 compatible
- Recording function for broadcasted TV
- AFS - auto frequency switching
- USB-AV-Player for USB-media (audio, video, photo) up to 2TB (FAT32 and NTFS)
- Support of all common Audio & Video formats (e.g MPEG-I/II/IV, H264, H265, VOB, AVI, DivX, Xvid, MKV, TS, MOV, RMVB, mp3, WAV, AAC)
- USB-AV-Player with last position memory for Audio and Video playback
- with two active DVB-T glass-mount antennas and USB extension with installation socket
- integrated into and controllable by vehicle infotainment
- AV-input with IR-control channel
- control of after-market devices, e.g. DVD-player, DAB+ tuner
- after-market rear-view camera input
- automatic switching to rear-view camera input (only from dvbLOGiC mode)
- rear-seat-entertainment AV-output for AV-sources connected to the dvbLOGiC
- optional remote control for full DVB-tuner and USB AV-Player functions/rear-seat-entertainment
- power-on remote-out trigger-signal (+12V max 1A) to switch on connected devices
- video-in-motion

Contents

1. Prior to Installation

- 1.1. Delivery contents
- 1.2. Check compatibility of vehicle and accessories
- 1.3. Setting the dip switches of the CAN-box TV-500
- 1.4. Setting the dip switches of the tuner-box DT3C-M715
 - 1.4.1. Automatic switching to rear-view camera
 - 1.4.2. Deactivating dvbLOGiC AV input

2. Connection schema

3. Installation

- 3.1. Interconnecting tuner-box, CAN-box and harnesses
- 3.2. Connections to the factory navigation
- 3.3. Antennas and optional IR-remote control set
- 3.4. USB-AV-Player
- 3.5. Connecting peripheral devices
 - 3.5.1. AV-source
 - 3.5.2. Installing AV-source's IR-sensor additionally
 - 3.5.3. After-market rear-view camera
 - 3.5.4. After-market rear-seat-entertainment
- 3.6. Activation of remote functions

4. Operation

- 4.1. Activation of the video-in-motion function
- 4.2. Selecting the dvbLOGiC as current AV-source
- 4.3. Switching between internal DVB-T and AV-input
- 4.4. Assigning device control for connected AV-source
- 4.5. Button assignment table

5. Specifications

Appendix A – Device control table

Appendix B – DVB-T function manual

Appendix C – Antenna positioning

Legal Information

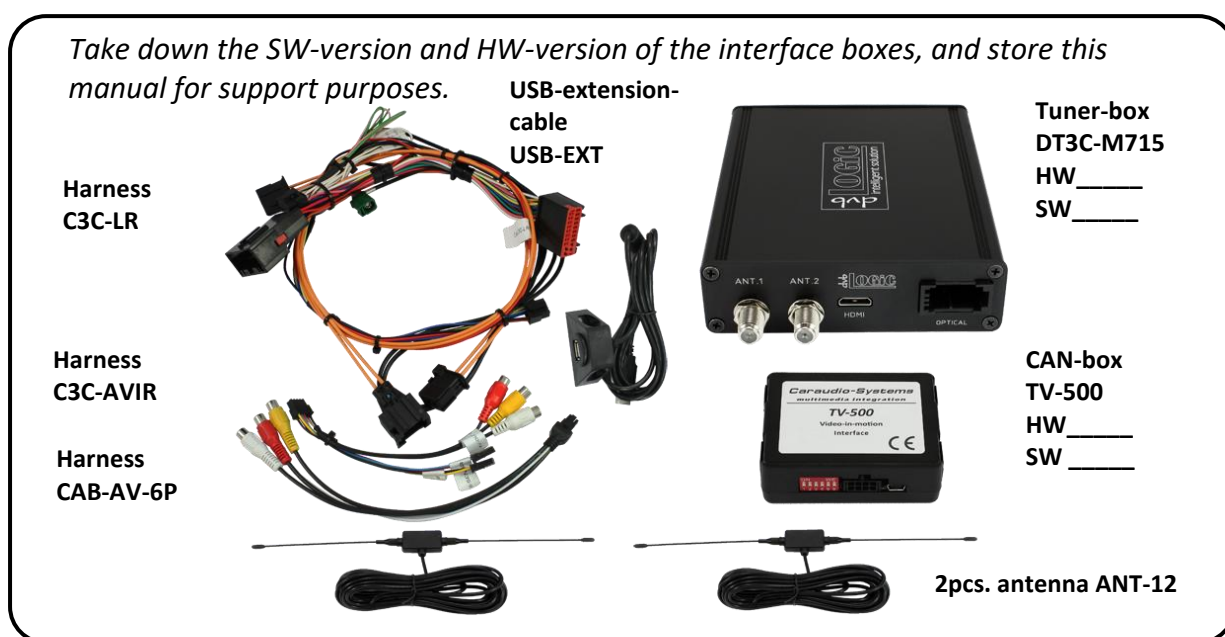
By law, watching moving pictures while driving is prohibited, the driver must not be distracted. We do not accept any liability for material damage or personal injury resulting, directly or indirectly, from installation or operation of this product. This product should only be used while standing or 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



If remote function for a peripheral device shall be used, additional an IR-remote cable and Y-adapter are needed, see chapter [AV-source](#).

1.2. Check compatibility of vehicle and accessories

Requirements

Vehicle Range Rover (Vogue) L322 (2005-2009), Range Rover Sport L320 (2005-2009), Discovery3 L319 (2004-2009)

Navigation Touch-Screen navigation version 1

Limitations

Factory-TV-tuner Must NOT be installed. If uninstalled, optical ring must be closed.

Teletext Teletext of the dvbLOGiC can only be used with the optionally available C3-IRSET remote control set.

After-market rear-view cam Automatic switching to camera only from dvbLOGiC mode.

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
Vehicles without rear-view camera or with after-market rear-view camera	ON	OFF	OFF	OFF	ON	ON
Vehicles with factory rear-view camera	ON	ON	OFF	OFF	ON	ON

Note: Dip switch functions of the TV-500

Dip 1 – activation TV-free

Dip 2 – factory rear-view camera existing

Dip 3 – TV icon simulation

Dip 4 – no function

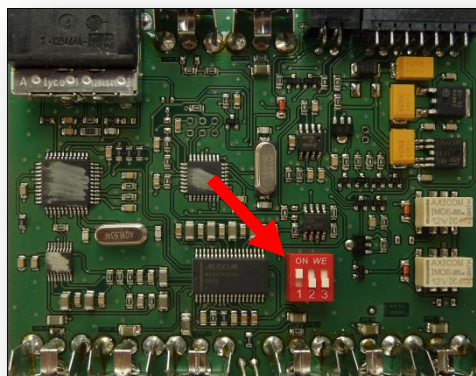
Dip 5 – CAN-bus termination resistor on the vehicle side

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

1.4. Setting the dip switches of the tuner-box DT3C-M715

The default dip switch settings of the tuner-box need to be changed **ONLY** if an after-market rear-view camera shall be connected or if the AV-input of the dvbLOGiC shall be deactivated. The dip switches are located **inside** the tuner-box. For changes it is necessary to open the box. Default settings are:

dip1 = ON, dip2 = OFF, dip3 = OFF

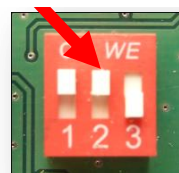


1.4.1. Automatic switching to after-market rear-view camera

If an after-market rear-view camera shall be connected, in order for the dvbLOGiC to automatically switch to its camera input when reverse is engaged, set dip2 = ON (up).

Note: Automatic switching to after-market rear-view camera works only from dvbLOGiC mode.

Dip switches of tuner-box



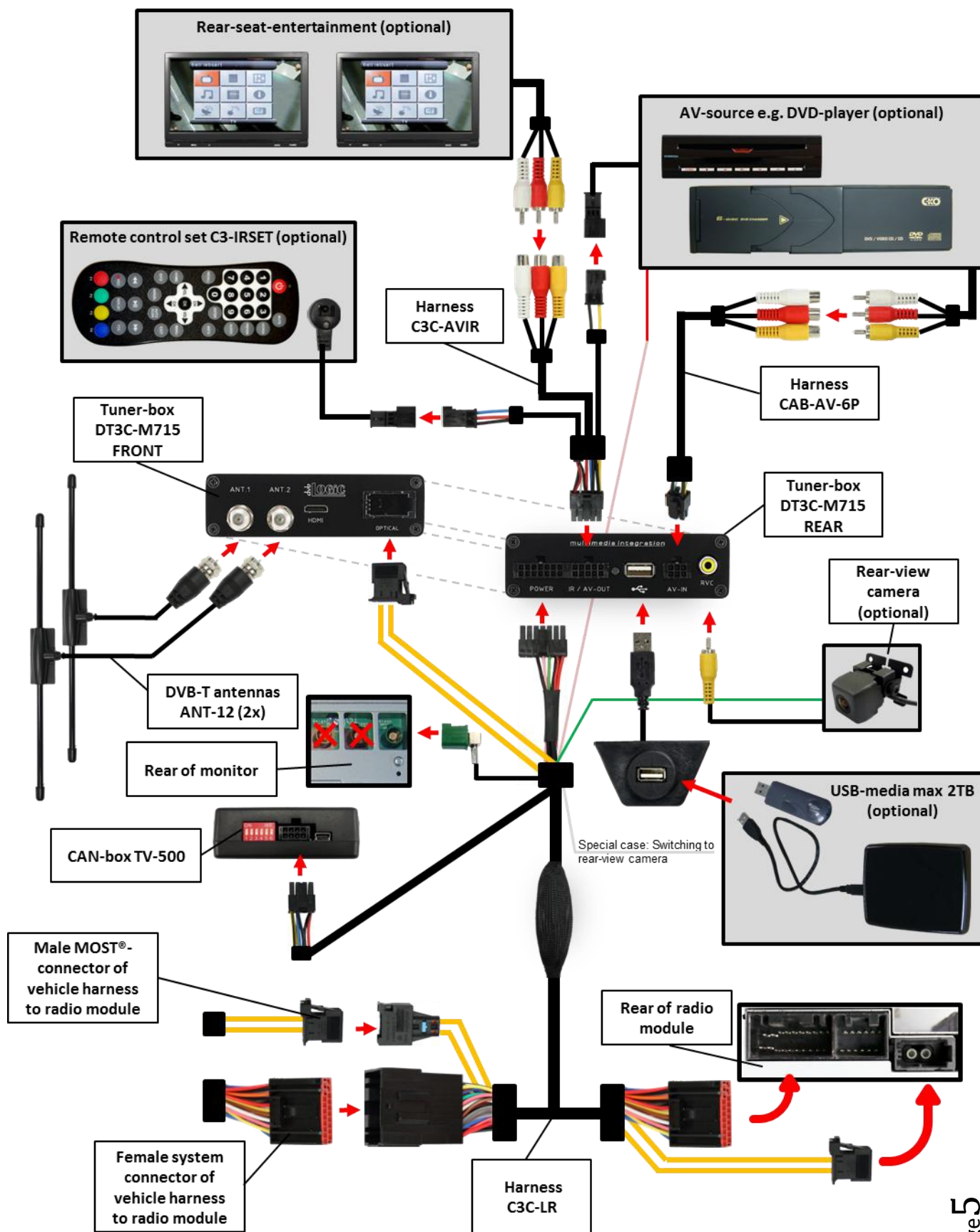
1.4.2. Deactivating dvbLOGiC AV input

If no peripheral AV-source shall be connected to the dvbLOGiC, we recommend to disable the AV-input, to avoid customers switching by mistake to black/no picture of the AV-input. In order to disable the AV-input of the dvbLOGiC, set dip1 = OFF (down).

Dip switches of tuner-box



2. Connection schema

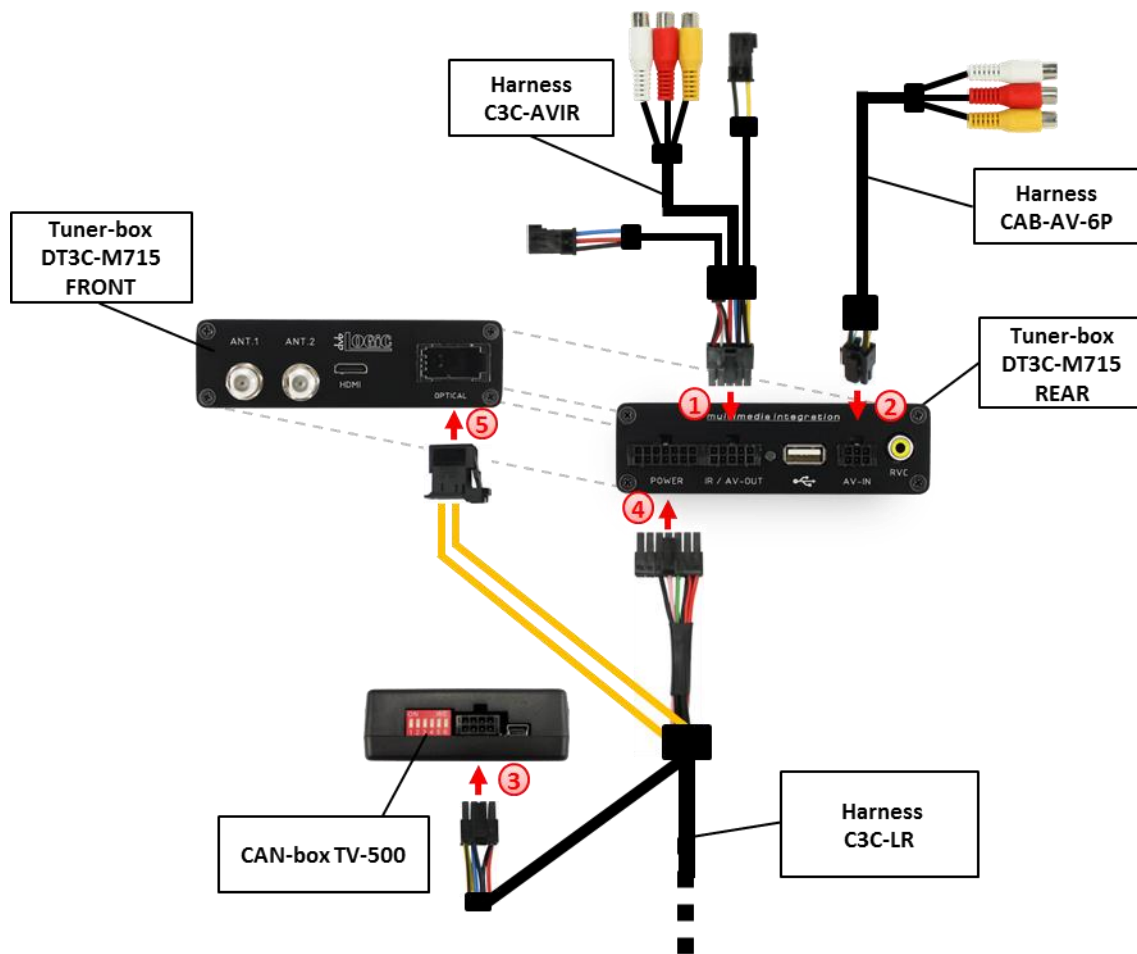


3. Installation

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 factory navigation monitor and on the rear of the radio module. On Range Rover (Vogue) the radio module is a hide-away box which is located behind the glove box.

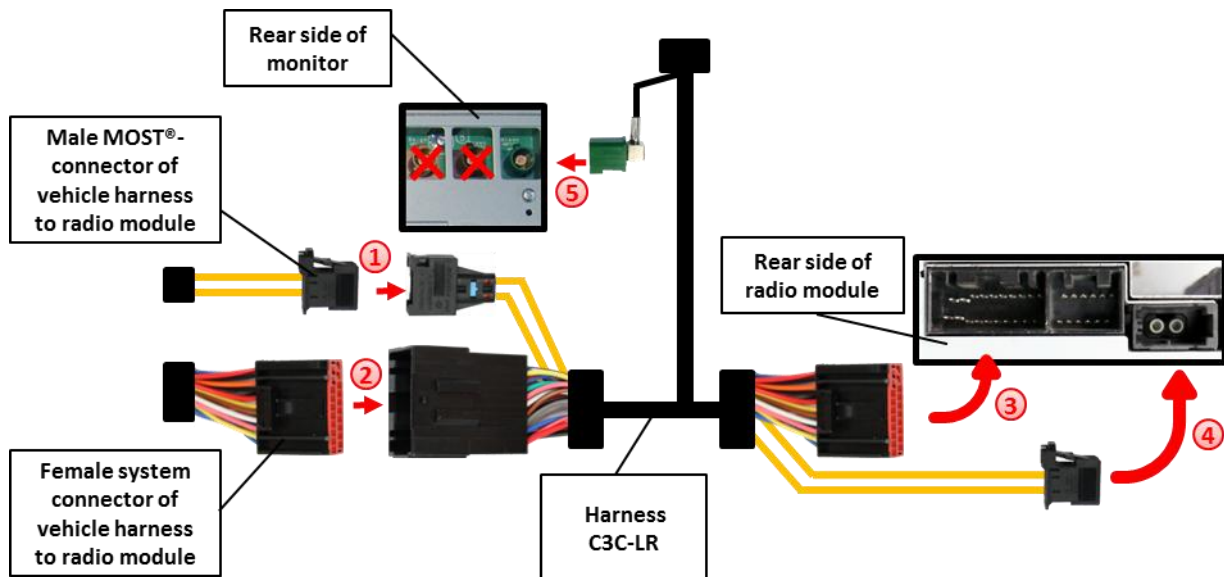
3.1. Interconnecting tuner-box, CAN-box and harnesses



- ① Plug harness C3C-AVIR into 10pin Molex of tuner-box DT3C-M715.
- ② Plug harness CAB-AV-6P into 6pin Molex of tuner-box DT3C-M715.
- ③ Plug harness C3C-LR into 8pin Molex of CAN-box TV-500.
- ④ Plug harness C3C-LR into 14pin Molex of tuner-box DT3C-M715.
- ⑤ Plug male MOST®-connector of C3C-LR into female MOST®-socket of tuner-box DT3C-M715.

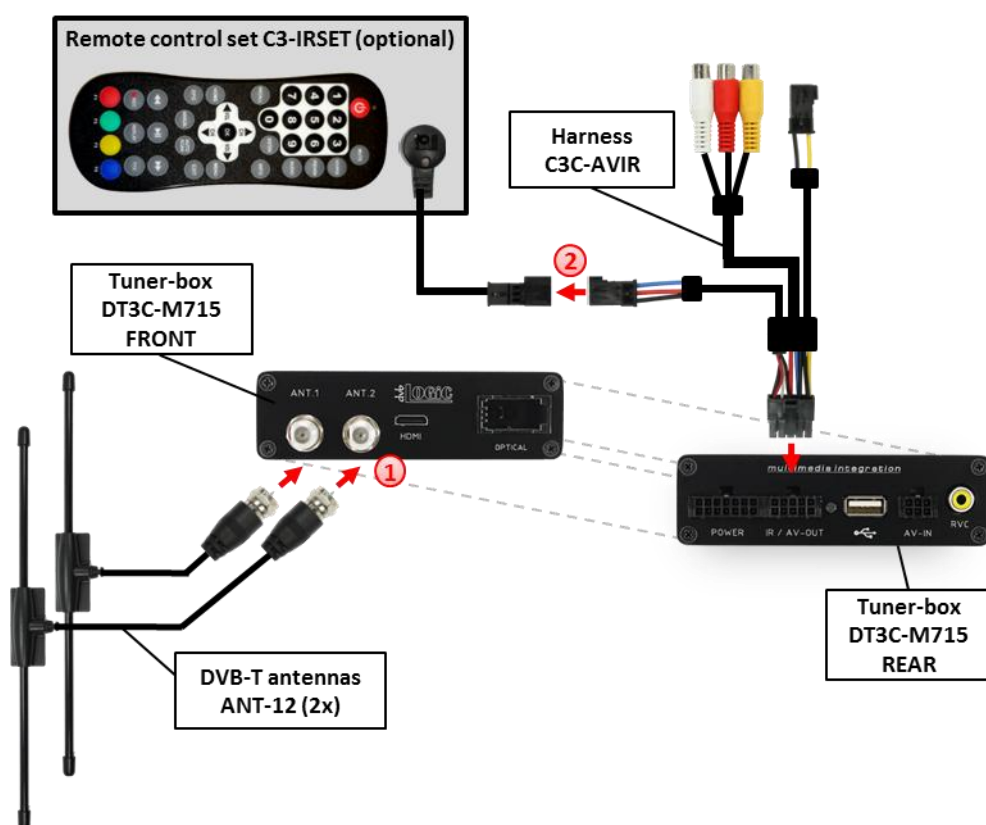
3.2. Connections to the factory navigation

Access to rear side of the factory navigation monitor and the rear of the factory navigation radio module is necessary.



- ① Transfer male MOST®-connector of vehicle harness from rear of radio module into harness C3C-LR.
- ② Transfer female system-connector of vehicle harness from rear of radio module into harness C3C-LR.
- ③ Plug female system-connector of C3C-LR into male socket of radio module.
- ④ Plug male MOST®-connector of C3C-LR into male MOST®-socket of radio module.
- ⑤ Plug female Fakra-connector of C3C-LR into male Fakra-socket of monitor.

3.3. Antennas and optional IR-remote control set



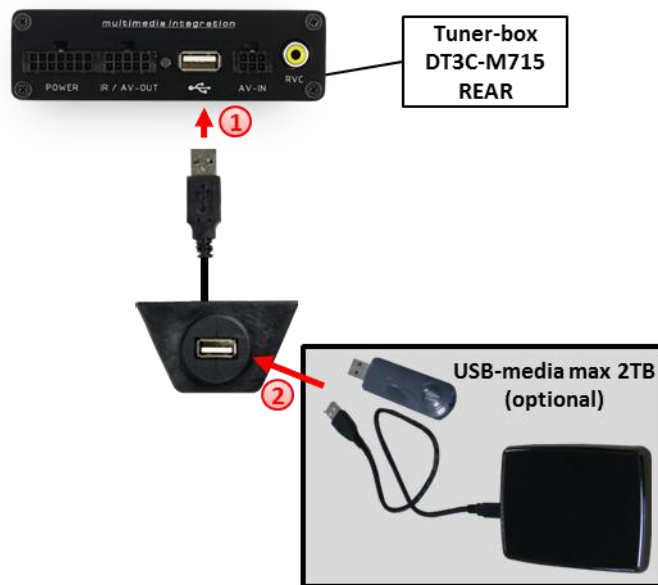
- ① Mount antennas ANT-12 and connect them to the female f-plug connectors on front of tuner-box DT3C-M715.

We strongly recommend to first test the reception quality of the chosen mounting position of the antennas before final installation! See “Appendix C – Antenna positioning” for additional information.

- ② The C3-IRSET consists of the external C3C-SENSOR IR-sensor and the C3C-RC IR-remote control and can be used to control the dvbLOGiC’s internal DVB-T tuner functions additionally to the control through the navigations buttons. Connect the C3C-SENSOR to the female black/red/blue 3pin AMP connector of harness C3C-AVIR and locate the sensor in an accessible place.

Note: To use the teletext function of the dvbLOGiC’s internal DVB-T tuner, the C3-IRSET is necessary to enter the page numbers.

3.4. USB-AV-Player



- ① Connect the USB extension USBC-EXT to the USB-port on the rear of the tuner-box DT3C-M715.
- ② Connect USB-media (up to 2TB, FAT32 and NTFS) to the USB-port of the USB-extension USBC-EXT.

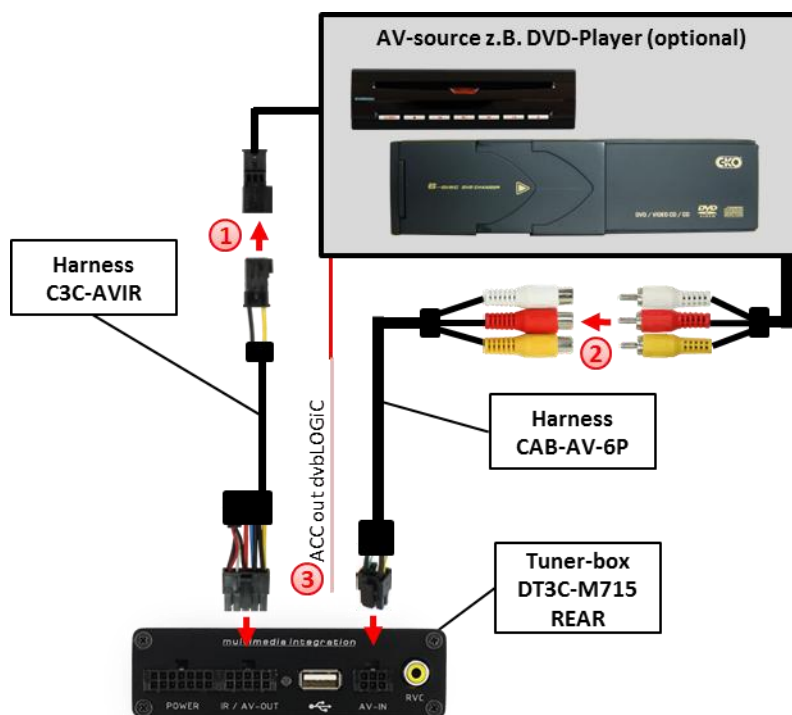
3.5. Connecting peripheral devices

It is possible to connect an after-market AV-source and rear-seat-entertainment to the dvbLOGiC Tuner.

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

3.5.1. AV-source

The dvbLOGiC has the possibility to connect and remotely control by navigation buttons a 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.

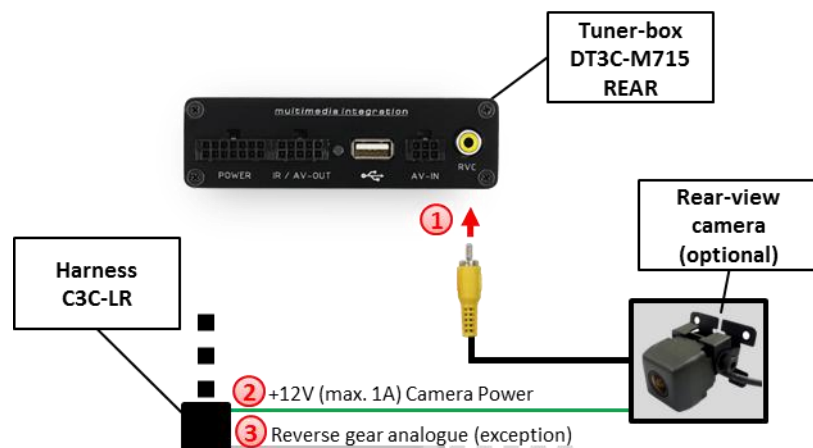


- ① Using the respective STA-xxx IR-control cable, interconnect the yellow female 3pin AMP connector of harness C3C-AVIR and the IR-port of the AV-source.
- ② Using an RCA-cable, interconnect the female RCA-port AV1 of harness CAB-AV-6P with the AV-output of the AV-source.
- ③ The pink ACC-output wire (+12V max. 1A) of harness C3C-LR can be connected to the ACC-input wires of the connected device to switch it on. It carries +12V when the navigation system is running.

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

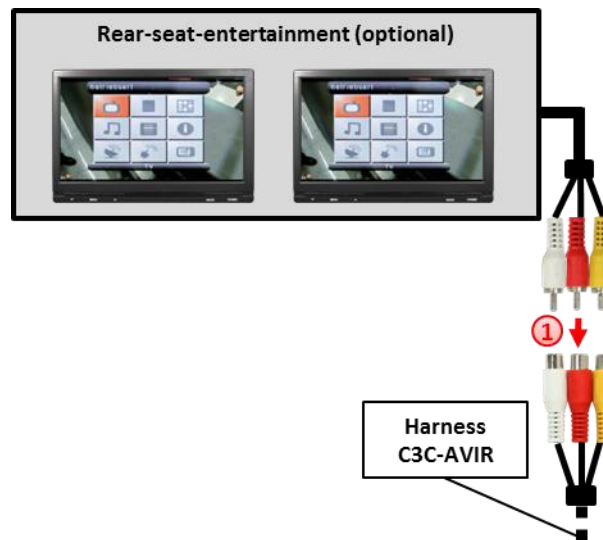
Additionally to the control via OEM navigation, it is possible to install the original IR-sensor of a connected device. By using the respective Y-adapter (e.g. STA-Y35MM or STA-RJ12) for the IR-Port of the connected device, the controls of navigation AND device's IR-sensor can be connected and used simultaneously.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

3.5.3. After-market rear-view camera



- ① Connect the video RCA of the after-market rear-view camera to the the female RCA connector RVC of tuner-box DT3C-M715.
- ② Connect the green wire of C3C-LR to the camera power supply (+12V max. 1A). The green wire is high (+12V) when reverse gear is engaged.
 - **Note:** Automatic switching to after-market rear-view camera works only from dvbLOGiC mode.
- ③ On some vehicles the reverse light signal doesn't exist on the CAN-bus. Connect the white wire of harness C3C-LR to reverse light signal (+12V of reverse light) if the dvbLOGiC doesn't switch to the rear-view camera automatically.

3.5.4. After-market rear-seat-entertainment



- 1 Using RCA-cables, connect the rear-seat-entertainment to the female RCA-connector VIDEO OUT of harness C3C-AVIR.

Note: As the output is a full output, not shared with the video signal for the navigation system, splitting the video with an RCA Y-cable might give a good enough picture for two rear-seat-entertainment monitors. If not, or if connecting more than two monitors, use a video splitter.

3.6. Activation of remote functions

To activate the remote functions, the following Procedure needs to be performed after installation:

- select **TV** from the navigations main menu
- open TV-layer menu (picture 1)
- select **TV** (system format menu)
- choose **PAL B/G**
- exit system format menu by ↵

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 permanently without disturbing the navigation performance.

4.2. Selecting the dvbLOGiC as current AV-source

Select **TV** from the navigation's main menu to choose the dvbLOGiC as current AV-source.


4.3. Switching between internal DVB-T and AV-input

After selecting the dvbLOGiC as current AV source.

- select **Auto** to enter RC-code menu
- select **RC1** to switch to internal DVB-T or **RC2** to switch to AV-input
- return to number pad by 
- **wait 15 seconds**, then the number pad can be used for remote functions

Note: If the AV-input is deactivated (see chapter 1.4.2.), it is not possible to switch to the dvbLOGiC's AV-input.

4.4. Assigning device control for connected AV-source

- select **TV** from the navigation's main menu
- Open TV-layer menu (picture 1)
- select **Auto** to enter RC-code menu (picture 2)
- select **RC2** (not shown on picture)
- return to number pad by 
- **within 10 seconds**, enter the device-related IR-code as described in device control table (appendix A) and wait another 15 seconds.

Note: If the AV-input is deactivated (see chapter 1.4.2.), it is not necessary, nor possible to assign device controls. Selecting **RC1** does not change any settings.



4.5. Button assignment table


The button assignment table shows which functions of dvbLOGiC and additionally connected devices can be executed by touch-screen buttons. Once DVB-T or AV-input mode is activated, the touch-screen number pad 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 optional dvbLOGiC remote control or the additional device. On the additional device the writing may vary (e.g. AV instead of Source).

Button assignment table dvbLOGiC Landrover						
Touch-screen button	Internal DVB-T	DAB tuner	DVD-player	DVD-changer	iPod®-control	Analog-tuner
1	AUTO	SCAN	PLAY	PLAY	PLAY/PAUSE	SCAN
2	↑	↑	↑	↑	↑	VOL +
3	EPG	FAV	STOP	STOP	POWER	FM
4	←	←	←	←	←	CH -
5	OK	OK	OK	OK	ENTER	MODE
6	→	→	→	→	→	CH +
7	EXIT	FAV+/-	PBC	DISC	SHUFFLE	ADJUST
8	↓	↓	↓	↓	↓	VOL -
9	MENU	SETUP	SETUP	SETUP	LIGHT	MODE
<	CH -	↓	TRACK -	TRACK -	TRACK -	CH -
>	CH +	↑	TRACK +	TRACK +	TRACK +	CH +

Additionally to the touch-screen buttons, the steering-wheel buttons UP and DOWN can be used for remote functions. DOWN-button has the same function as “|<” on the touch-screen and UP-button has the same function as “>|” on the touch-screen.

5. Specifications

Operation voltage	10.5 – 14.8V DC
Stand-by power drain	<1mA
Operation power drain	<1200mA
Power consumption	<16,5W
Temperature range	-30°C to +80°C
Weight	333g
Measurements (box only) B x H x T	140 x 30 x 105 mm

CE  12V DC

Legal disclaimer: Mentioned company and trademarks, as well as product names/codes are registered trademarks ® of their corresponding legal owners.