

c.LOGiC-Interface

CI-C2-E65-TV

**Compatible with BMW E65 Professional
navigation systems
with old iDrive (E65) and menu button,
without factory rear-seat entertainment**

**Vehicles with factory TV-tuner port
(Factory TV-tuner must be uninstalled)**

Product features

- Full plug and play multimedia interface
- 2 AV-inputs with separate IR-control channels
- control of after-market devices, e.g. DVB-T tuner, DVD-player, DVD-changer, ...
- after-market rear-view camera input
- automatic switching to after-market rear-view camera input (only from interface mode)
- rear-view camera power (+12V max 1A)
- Rear-seat-entertainment video-output for Video-sources connected to the c.LOGiC
- power-on remote-out trigger-signal (+12V max 1A) to switch on connected devices
- video-in-motion

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Appendix A – Device control table

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 for the connected devices shall be used, additional an IR-Remote cable and Y-adaptor are needed, see chapter [AV-source\(s\)](#).

1.2. Check compatibility of vehicle and accessories

Requirements

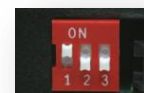
<i>Vehicle</i>	7series (E65/E66)
<i>Navigation</i>	Navigation system Professional E65 with old iDrive and menu button, without factory rear-seat entertainment
	Vehicles with factory TV-tuner port

Limitations

<i>factory-TV-tuner</i>	Must NOT be installed. If uninstalled, optical ring must be closed.
<i>factory DVD-changer or factory nightvision</i>	After-market rear-view camera cannot be connected to the c.LOGiC interface.
<i>After-market rear-view cam</i>	Only works from c.LOGiC mode, not from OEM.

1.3. Setting the dip switches of the CAN-box TV-436

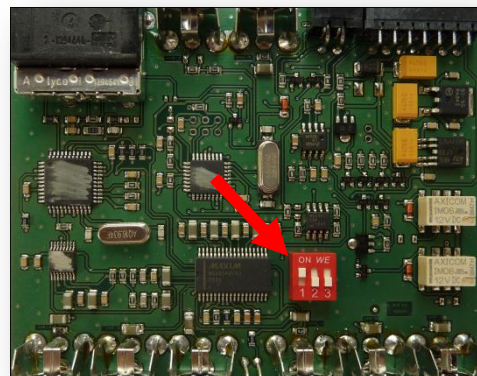
Alle vehicles dip 1 ON, dip 2 OFF, dip 3 OFF



1.4. Setting the dip switches of the MOST®-box C2C-M336

The default dip switch settings of the MOST®-box need to be changed **ONLY** if a rear-view camera is or shall be connected or if the AV2 of the c.LOGiC shall be deactivated. The dip switches are located **inside** the MOST®-box . For changes it is necessary to open the box. Default settings are:

dip1 = ON, dip2 = OFF, dip3 = OFF

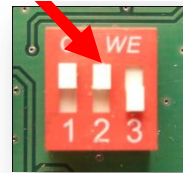


1.4.1. Automatic switching to rear-view camera

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

Note: Automatic switching works only from c.LOGiC mode.

dip switches
of MOST®-box



1.4.2. Deactivating c.LOGiC AV2-input

If only one AV-source shall be connected to the c.LOGiC, we recommend to disable the AV2-input, to avoid customers switching by mistake to black/no picture of the AV2-input. In order to disable the AV2-input of the c.LOGiC, set dip1 = OFF (down).



2. 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.

Complete and correct function of the c.LOGiC is possible only when CAN **and** MOST® (tuner) connections are made properly. On vehicles without TV-icon, it will be coded automatically after installation.

Place of installation is at the rear of the navigation screen and at the rear of the navigation computer.

Note: The loose white and green cable of harness TV-BM65 are not required and must be isolated.

2.1. Installation of CAN-box TV-436

The CAN interface is connected to the backside of the OEM screen.



Remove 3 TORX screws at the OEM screen.



Remove cover grill (only plugged). Place soft towel beneath the navigation monitor to avoid scratches



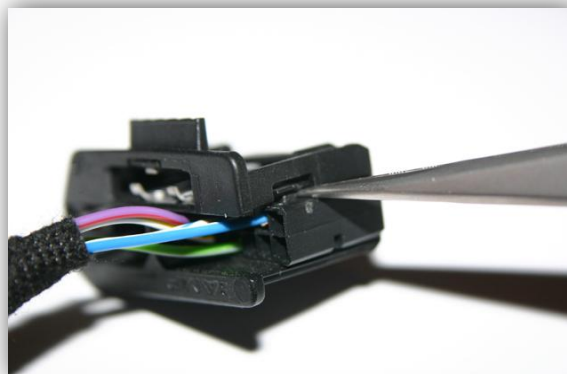
Flip down the board monitor. *NOTE:* The OEM screen gets stuck with its connector at the upper side of the cockpit. Insert a hard plastic sheet like a credit card to prevent cockpit from taking damage.



Remove the black connector at the backside of the screen as shown below.



Remove 12-pin insert from black vehicle harness connector.



Insert 12-pin insert into black connector of the CAN interface harness TV-BM65.



Insert the completed black connector into CAN interface harness TV-BM65.



Connect 12-pin insert from CAN interface harness TV-BM65 into black connector from vehicle harness.



Insert completed connector into the plug on the backside of the navigation monitor.
Connect 8pin Molex connector of TV-BM65 to CAN-box TV-436.

NOTE: Pictures do NOT show the fibre optics connected in car!

2.2. Installation of MOST®-box C2C-M336

The fibre optical interface installation is made at the navigation computer, which is located at the left side in the trunk behind a cover and has to be removed.

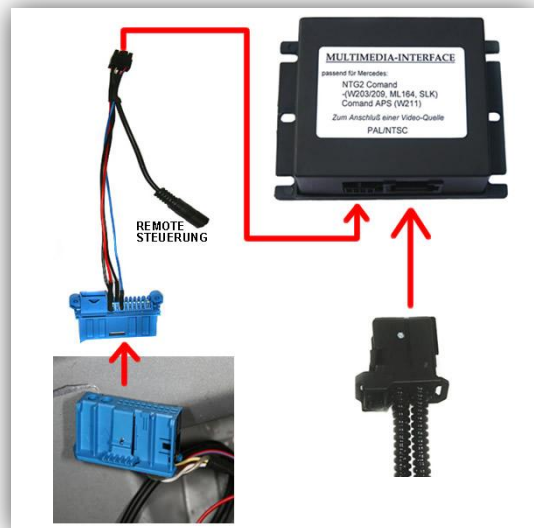


The factory TV-tuner must be uninstalled.

Remove the factory optical leads of the factory TV-tuner port (blue female connector) and connect it to the black male MOST®-connector enclosed to harness C2C-BM01. Pay attention to the directional arrow on the optical lead connectors.

Connect the black male MOST®-connector to the female MOST®-connector on the rear of the MOST®-box C2C-M336 (OPTICAL).

Connect the blue male connector of harness C2C-BM01 to the factory TV-tuner port (blue female connector).



Picture exemplary

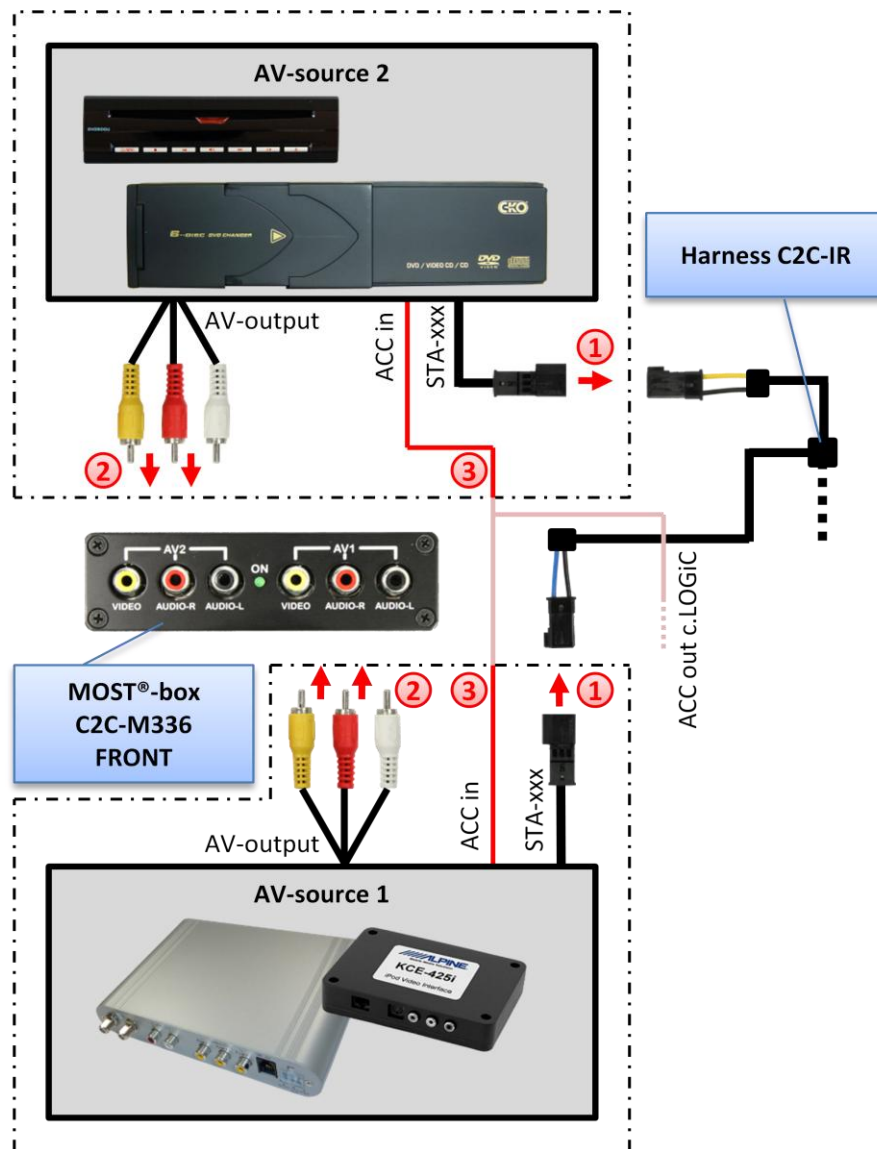
2.3. Connecting peripheral devices

It is possible to connect up to 2 after-market AV-sources, after-market rear-view camera and rear-seat-entertainment to the c.LOGiC Interface. Also factory nightvision, factory DVD-changer or factory rear-view camera must be connected 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.

2.3.1. AV-source(s)

The c.LOGiC interface has the possibility to connect and remotely control by navigation buttons up to 2 pre-programmed devices. The device list in the device control table 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.

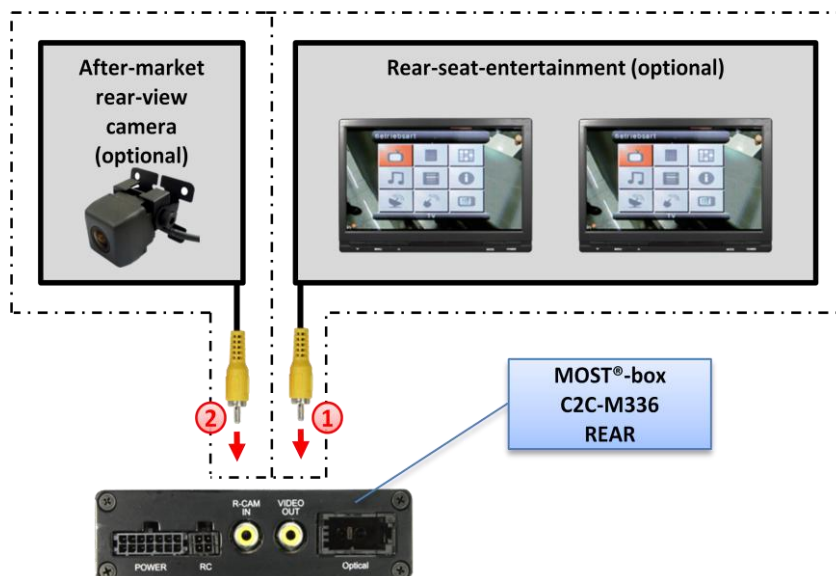


- ① Using the respective STA-xxx IR-control cable(s), interconnect the blue (yellow) female 3pin AMP connector of harness C2C-IR and the IR-port of AV-source 1 (AV-source 2).
- ② Using RCA cable(s), interconnect the female RCA port AV1(AV2) of the MOST®-box C2C-M336 with the AV-output of the AV-source 1 (AV-source 2).
- ③ The pink ACC-output wire (+12V max 1A) of harness C3C-BMW0x can be connected to the ACC-input wires of the connected device to switch it on. It carries +12V when the navigation computer is running.

2.3.2. 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.

2.3.3. After-market rear-view camera and rear-seat-entertainment



- ① Using RCA-cables, connect the rear-seat-entertainment to the female RCA-connector VIDEO OUT of MOST®-box C2C-M336.

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.

- ② Connect the video RCA of the after-market rear-view camera to the female RCA connector R-CAM IN of MOST®-box C2C-M336. The green wire of harness C2C-BMW02 can be used as +12V power (max 1A) supply for the rear-view camera.

Note: Automatic switching to the camera-input when reverse gear is engaged works only in c.LOGiC mode.

2.3.4. Factory nightvision, factory DVD-changer, factory rear-view camera

On vehicles with factory nightvision, factory DVD-changer or factory rear-view camera, pin out the video-signal and video-signal ground from the white 18pin AMP connector of the vehicles harness (rear of navigation computer) and connect them by male RCA-connector to the R-CAM IN of tuner-box.

Navi	Video-signal	Video-signal ground
E65	Pin 1 (yellow-black)	Pin 10 (green)

The factory component will work as before.

3. Operation

3.1. Activation of the video-in-motion function

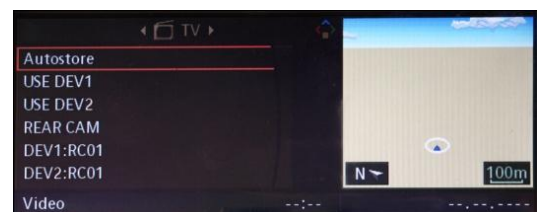
The video-in-motion function is permanently active without disturbing the navigation performance.

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

In the vehicle's main menu, select **Infotainment** and then **TV** by iDrive to choose the c.LOGiC as current AV-source.

3.3. Assigning device controls

After selecting the c.LOGiC as current AV source, push iDrive knob to open the c.LOGiC control menu. Select control levels setup "DEV1: RCxx" ("DEV2:RCxx") and assign related IR-code for AV1 (AV2) as described in device control table.



Note: The IR-control channel DEVV1 is preset to RC-Code 41 compatible DVB-T tuners and DEV2 is preset to RC-Code 09 for the usbLiNK.

If the AV2 is deactivated (see chapter Deactivating c.LOGiC AV2-input), the menu items "USE DEV2" and "DEV2: RCxx" will not be available.

3.4. Switching to AV1, AV2 or after-market rear-view camera

In the c.LOGiC control menu, choose **USE DEV1** to enter AV1, **USE DEV2** to enter AV2 (not available if AV2 is deactivated, see chapter Deactivating c.LOGiC AV2-input) or **REAR CAM** to switch to the c.LOGiC after-market rear-view camera-input (even if the automatic switching to the camera input is disabled, see chapter Automatic switching to rear-view camera). After selection the menu will close automatically and switch to the selected source. The iDrive knob, some multi-function-steering wheel buttons (MFSW) and some navigation buttons (HU) are now available for remote functions (see assignment table for iDrive below). By pressing the iDrive-MENU-button, the system returns to the factory iDrive functions. By pressing the iDrive knob again, the c.LOGiC control menu will be re-entered.

3.5. Button assignment table iDrive


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

iDrive Aktion	Gerät			
	DVD	DVC	DVB-T	iPod
MENU long	Setup	Setup	Setup	Setup
MENU short	Return to factory iDrive functions	Return to factory iDrive functions	Return to factory iDrive functions	Return to factory iDrive functions
OPTIONS long *2	Audio	Audio	Info	KCE: Light Bulb, Vlink: Subtitle
OPTIONS short *2	Subtitle	Subtitle	Signal strength	KCE: lower vol, Vlink: Display
ENTER long	STOP	STOP	EXIT	-
ENTER short	Power	Power	Power	Power
NORTH long	OK	OK	OK	OK
NORTH short	Menu / PBC *1	Menu / PBC *1	EPG	Shuffle
WEST long	hoch	up	up	Previous chapter
WEST short	Play/Resume	Play/Resume	Exit	Play/Resume
SOUTH long	left	left	left	left
SOUTH short	Source	Source	AV	Source
EAST long	down	down	down	Next chapter
EAST short	Zoom	Next DVD or DVD selection menu	Channel scan	KCE: increase vol, Vlink: ESC
Left turn	right	right	right	right
Right turn	Next chapter	Next chapter	Next channel	Up
MENU long	Previous chapter	Previous chapter	Previous channel	Down
DOWN short on MFSW *3	Previous chapter	Previous chapter	Previous channel	Previous chapter
UP short on MFSW *3	Next chapter	Next chapter	Next channel	Next chapter
RIGHT short on HU *3	Previous chapter	Previous chapter	Previous channel	Previous chapter
LEFT short on HU *3	Next chapter	Next chapter	Next channel	Next chapter

*1 DVD title menu *2 not available on all vehicles *3 multi function steering wheel and head-unit

4. Specifications

Operation voltage	10.5 – 14.8V DC
Stand-by power drain	<1mA
Operation power drain	210mA
Power consumption	2.9W
Temperature range	-30°C to +80°C
Weight	202g
Measurements (box only) B x H x T	90 x 30 x 105 mm

CE  12V DC

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