CP740BMW Pro Audio Player

Operating Manual

Art. Nr.:	**15.740**
Modell Version:	**CP740BMW**
Document version:	OM740-A1.1
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Table of contents

1. About this manual

First we would like to thank you for choosing on of our products. This manual will help you to operate the product in a safe and practical manner. **Please read the complete manual before installing and operating the product.** Should there be any question that is not covered by this manual, please kindly ask the seller where you have purchased your item or contact the manufacturer. Contact details can be found at the end of this manual.

2. Scope of delivery

- CP740BMW Pro Audio Player
- Mounting kit consisting of two PVC self sticking brackets (grey)
- Antenna
- EN operating manual

3. Installation

3.1 Sicherheitshinweise

This symbol indicates crucial positions in the manual that informs you about possible hazards or malfunctions.

Hinweis This symbol indicates special hints in the manual

Please be aware that operating this device while driving can distract you from road traffic with may lead to an accident! For your own safety NEVER operate the the device while the car is moving! **Only control the device if the current traffic situation allows it!** Do not let you distract you from the device! Under any circumstances make sure you comply with any road traffic laws and regulations must be kept. Should the product be damaged, deformed through pressure, fall, hits etc., do not connect or operate the device but send it to the manufacturer for service check and possible repair.

More information, help and tools are available on the manufacturers web site:

http://www.cartain.de/index.php/support

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Support email address: info@cartain.de

3.2 Before your start

Before installing the device remove the black protection socket inside the jack on the backside.

Choose a dry and safe place for installing the CP740BMW. Remember that you need access to the front plate to change the USB stick. If unsure how to install the product, ask a automotive service station or a car Hi-Fi specialist. Before finally installing the device, check if the device is working properly.

Mount the antenna shipped with the product at the port „BT" on the backside.

Make sure places are clean and free from any grease where you like to install the self-adhesive mounting brackets. Make sure the device cannot get loose and does not interfere other parts of your car.

3.3 Installation

The CP740BMW is equipped with the identical connectors as the original CD changer from stock. For any connection retrofit, the same rules as for the original CD changer apply.
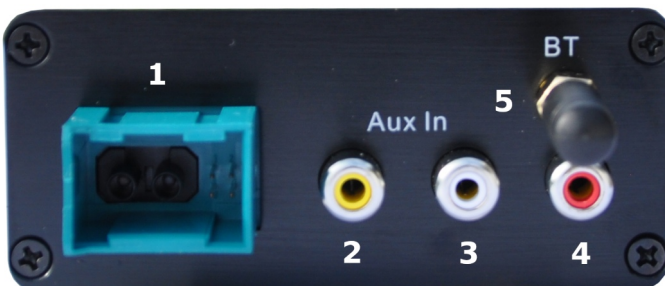
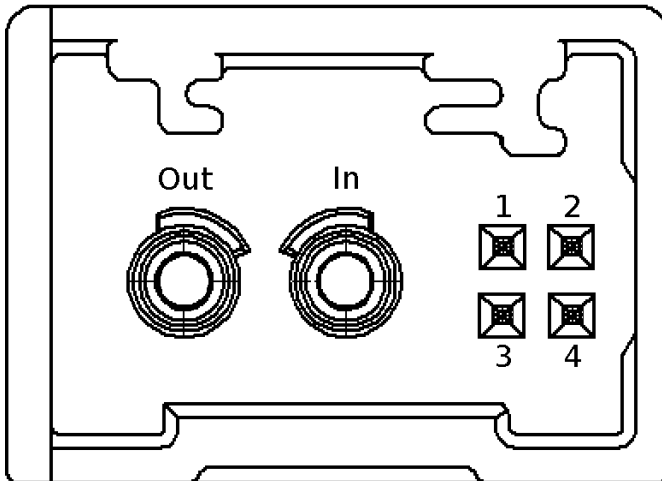## 3.4 Elements and connectors

3.4.1 Front side view

1: Four status LEDs
2: USB jack

3.4.2 Back side view

1: MOST jack

2: Video loop-through

3: Input Aux In left

4: Input Aux In right

5: Antenna 2,4GHz SMA

3.4.3 Assignment MOST jack

Optical contacts

Out: optical output (MOST)
In: optical input (MOST)

Electrical contacts

1: 12V permanent / Terminal 30
2: Ground / Terminal 31
3: Video Signal Output
4: Video Signal Ground

⚠️ **BMW 7 series E65 E66: Please remove cable from Pin 3 and 4 !!!**

3.4.4 Power supply

For powering up the device, **only Pin contact 1 and 2 is needed.** The device can be powered from permanent and switched 12V supply. It will always switch itself of after a minute, after the MOST network is going off, like when you remove the key or lock the car.

3.5 Cars with no CD changer wiring

Cars that are not equipped with an original CD Changer from factory (SA672) or do not have a CD changer preparation option (SA694) may need additional wiring and coding of the head unit. Ask your seller or the manufacturer where to get appropriate material to retrofit the CD changer connector.

4. Operation / first startup

4.1. *Preparation of the USB Stick*

The CP740BMW accepts almost any USB Stick from 1.1, 2.0. 3.0 with a maximum of 256GB capacity (or even more) if it has been properly prepared with FAT32 format.

Hinweis   **Only USB sticks with FAT32 format will be read!**

Should you have bought a new USB memory stick, please make sure it has the correct format. You can do this by inserting it into your PC or Laptop. Go to "properties" of the device. If you see a format like "NTFS" or "exFAT", the stick needs to be formatted with FAT32 format. Some Windows™ operating systems will not allow to format media greater than 32GB with FAT32. But there is a

free tool that allows formatting any stick with FAT32. It is called „guiformat"
and can be downloaded from the manufacturer#s web site. kann das
Programm „guiformat" dazu verwendet werden:

http://www.cartain.de/downloads/guiformat.exe

Now create 6 folders on the Stick that start with a number from 1 to 5

The six main folders

These five main folders represent the six virtual CD's in a changer magazine. The CP740BMW will create its own lists and databases from the fodler content into a Folder called INDEX. You do not have to create this INDEX folder. It is automatically created by the device. You can always delete the INDEX folder, the CP740 will automatically recreate this folder next time you insert the card. The first time the card is inserted, creating the INDEX will take some additional time (up to a few mimutes) before you can play music.

The folder number 6 is NOT USED because it represents a virtual menu folder for device settings and BT Phone streaming.

You can also create sub folders within the six main folders. And into these folders, you can create further sub sub folders. The maximum nesting level is 5. Any further sub level will be ignored.

Verschachtelte Unterordner
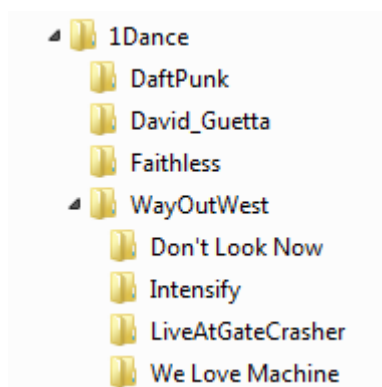
Sub folders are a good possibility to organize your music collection. The order of playback is the same order you copied the files onto the card.

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4.2 Device configuration

The CP740BMW can be configured through a special configuration file on your USB stick. The file is called "CP700.INI". It is a simple Ascii text file that can be opened and edited with any notepad or other plain text editor. Lines that start with a semicolon ";" will be ignored by the device. These lines are used for comments for example.

You can let your create such a configuration file on the manuacturers web site: https://cartain.de/index.php/de/support/ini-generator

Support > CP7xx INI Configurator

The most important parameter in the CP700.INI is the emulation mode called "EMU=". It controls as with kind of changer the CP740BMW shows up at the head unit. If there is no CP700.INI, by default the device will act as a audio E60 CD changer with no extra functionality. The following example shows how it will be set to this:

EMU=E60CDC

If this line is active, the CP740BMW behaves like an old CH changer from the E60 series. There is no folder browsing and only some basic title information. If your head unit is able to show mp3 features (maybe need some activation in advance) then you can use the following line:

EMU=E60FULL

This activates the full mp3 feature set and lets the CP740BMW act as a MP3 Changer unit that came across 2006 to the market.

4.3 MP3 Tag / title display

As mentioned before, the CP740BMW can basically simulate two units:

- Standard Audio 6 CD changer Part.No. 6512 6986081   (*EMU=E60CDC*)
- *MP3/Audio CD/CDR changer 6512 9200633   (EMU=E60FULL)*

Die MP3-Variante beinhalten die Darstellung der Dateinamen, Ordner, Titel und Interpreten, sowie die Navigation durch die Ordnerstruktur auf dem USB Stick

⚠️ **If your head unit is not properly coded for this MP3 functionality, it is possible that the CP740BMW is not recognized at all!**

Hinweis **Changes in the cp700.ini file will take effect after device**

restart! After you changed something in the ini, let to CP740BMW go to sleep or disconnect and reconnect it to activate the changes.

You can program/code the MP3 option with either the original BMW diagnosis system (ISTA-P) or over third party tools like "Rheingold" or NCS Expert. Within NCS you add the feature **+KMP3** or if you modify your head unit directly (Coding tool, NCS dummy) change in unit „CAPPL" the option „mp3" to „*mp3=full*„.

4.4 User interface

The CP740BMW can be controlled like the original CD Changer. There is no visible difference in the CDC menu in your head unit. To start playback, go into menu "Entertainment" or choose "CDC" in the main menu (depends on the head unit model). The 6 CDs correlate to the 6 main folders on the SD card.

5. *Operating state / indicator light*

5.1. LEDs on the front plate

The LED (light emitting diode) array on the front plate (1) shows the current state of the CP740BMW. The following table lists all possible operation states:

1	LED-Anzeige	Zustand
○○○○	Off	Sleep mode (or no power connected)
●○○○	First on	Device started
☀●○○	1. blinkt, 2. leuchet	Index is being checked
☀☀○	1. and 2. blinking	Index is being written
●●●●	3 or 4 LEDs on	Device ready for play
○○●○	Running spot	Device is playing (Aux, BT or USB)
☀☀☀☀	All blinking fast	Update is progress, do not unplug the stick
●○●○	1/3 and 2/4 blinking	Software missing

5.2 Messages on displays

In conjunction with this product the following messages can appear on your BMW head unit display

CD Check	Index is being checked or created
No Magazin	Kein USB Stick im Steckplatz (2)
No Discs	Did not found any usable files for playback

5.3 Common problems and solutions

- ***Device does not play my music from USB stick***

  Solution: In most cases the 5 folders that start with the numbers 1 to 5 are missing on the stick. Only the file inside these folders are recognized and played.

- ***I see only a wheel with numbers on the display but no list***

  Solution: The device is in mode "Audio CD changer". Change entry „EMU=E60CDC" to „EMU=E60FULL" within the CP700.ini file on your USB stick.

- ***I only see "reading medium" and no progress***

  Your head Head-Unit (Radio/Nav) is not prepared for MP3 functionality. You need to activation option mp3_wechsler=aktiv or mp3=full in your head unit. Or you change back to simple Audio CD changer emulation mode by changing the entry „EMU=E60CDC" within the CP700.ini file on your USB stick.

- ***LED 1/3 and 2/4 are blinking***

  The operating system could no be started because it is either corrupt or non-existent. Try reinstalling it by putting a "update.bin" onto the USB stick and plug it into the device. The firmware update process starts automatically by blinking all LEDs very fast. Wait until all LEDs are off again and wait for 10 seconds. Then unplug and plug in the device again.

6. Wireless features

6.1 Pair your mobile phone

To pair your mobile phone with the CP740BMW, you need to activate „Bluetooth" in your phone. Go to settings and search for the option „Add a new device". Wait untill a device named „CP740BMW" appears in the list. Click on it and start the pairing process. Sometimes, especially if there was a different phone connected before, this operatin may be tried several times. Also try to Reset Bluetooth in the iDrive Menu by going into **CD6**, then **BT Settings** , **BT Reset**. If the phone is porperly connected, you can see its name in CD6, folder **BT Status**. E65 E66 cars: You always need to change to USB stick (CD 1 to 5) to get the folder content of CD6 udpated. The E65 only re-reads folder content, after the cd has changed for a moment.

Example display (CCC E6x E9x)

> Root **>** BT Status
  Audio: MikesHandy
  Control: MikesHandy
  Message: MikesHandy

6.2 Reconnect

Should one of the 3 features not be connected, try to reset CP740 by choosing CD6, then **BT Settings** , **BT Reset**. If the phone is porperly connected, you can see its name in CD6, folder **BT Status**. After your phone is connected, it may ask if the device shall be allowed to read your messages. **If you like to get popup messages on the screen, you need to allow this.**

7. Wireless playback

7.1 Source select

As soon as your telephone is connected to the CP740BMW, you can choose between the sources A2DP and Aux In by selecting CD 6 in your on-board monitor. Music can be heard from the mobile device via A2DP, and the sound of the source connected to the rear-mounted chinch / RCA socket via Aux In. You can use the forward / backward buttons on the device and on the steering wheel to change the track being played.

Hinweis   **No Audio playback in the first run**
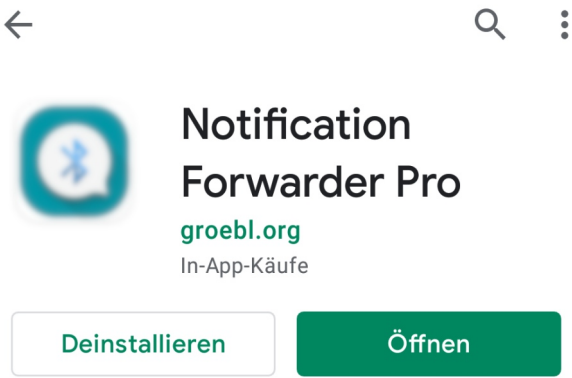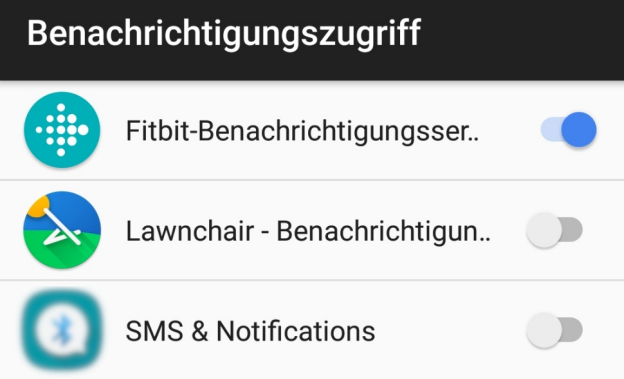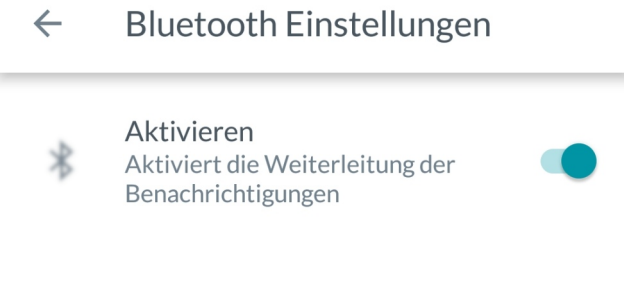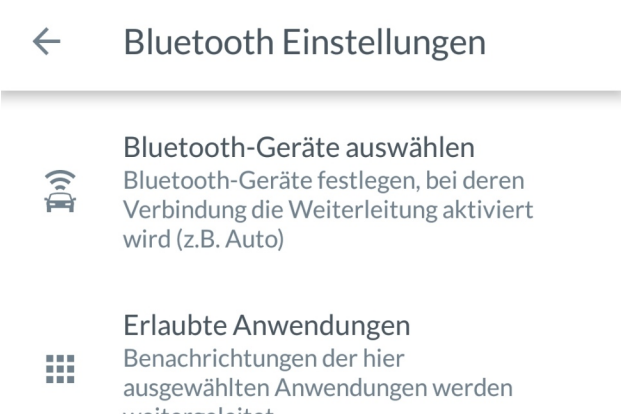
If you can't hear audio of the phone, try pressing the volume button of the car radio two times. This will stop and restart the playback process on the mobile. Also make sure you increase the volume of your phone to max. level.

8. Reading messages

For your own safety, please note that operating the CP740BMW while driving can distract you from the traffic and cause an accident. Only operate your CP740BMW when the traffic flow allows it! Under no circumstances let yourself be distracted by the device! The road traffic regulations must be observed in any case.

The device can read new messages from your phone and display them on the screen. To do this, the mobile phone has to forward the messages internally. This can be done on Android devices e.g. with the help of the "Notification Forwarder Pro" app. You can find this in the Google Play Store.

8.1 Installation der App „Notification Forwarder Pro"

← Q ⋮ **Notification Forwarder Pro** groebl.org In-App-Käufe [Deinstallieren] [**Öffnen**]	• Visit the Google Play Store and install the app „Notification Forwarder Pro" • When started for the first time There is a message: Change SMS-App? Use SMS & Notifications instead of SMS/MMS as SMS standard App? Confirm with YES. • Open the menue of the app • Open Bluetooth settings
Benachrichtigungszugriff Fitbit-Benachrichtigungsser.. 🔵 Lawnchair - Benachrichtigun.. ⚪ SMS & Notifications ⚪	• Activate forwardings of notifications • activate slider „SMS & Notifications" • If you are asked if oyu like to allow notification and SMS access, confirm/accept it.
← Bluetooth Einstellungen ✳ **Aktivieren** Aktiviert die Weiterleitung der Benachrichtigungen 🟢	• Go to the menu Bluetooth-settings and make sure, you activate the slider „Activate forwarding" • Select Bluetooth devices in the Bluetooth settings, please tick the box next to the CP740BMW.
← Bluetooth Einstellungen 🚗 **Bluetooth-Geräte auswählen** Bluetooth-Geräte festlegen, bei deren Verbindung die Weiterleitung aktiviert wird (z.B. Auto) ⬛ **Erlaubte Anwendungen** Benachrichtungen der hier ausgewählten Anwendungen werden weitergeleitet	• Next go to the main menu, allowed applications and activate, for example, WhatsApp as an application.

8.2 Message list

The list of messages received since the last start can be displayed on CD 6, Messages folder. In order to display the entire text of the message, the message must be played like a song. Activate the detailed view as well: press the selected message with iDrive and check the "Details" box in the context menu that appears right down to the bottom)

9. Technical Details (subject to change)

USB Sticks	Up to 2 TB (USB 1, 1.1, 2.0)	
Supported audio files	.MP3 MPEG Layer III (immer 44,1 kHz) 32 to 320 kbps;	
Complies with	ISO/IEC 11172-3 ISO ISO/IEC 13818-3 EN 60065:2014 EN 55013:2013 EN 55020:2007+A11(2011) EN 50581:2012 ISO 7637-2:2011 ISO 16750:2003	
Current consumption (Maximalwerte)	Play Mode	120mA/1,6 W
	Sleep Mode	0,1mA/0,016W
Aux In	Level	Max 0dB, 3Vpp
Power suppy	8-16V DC	
BMW / MOST connection	Input 12V Power +	Stereo Outputs & Control via BMW MOST Netzwerk
Weight	195g	
Max. enviroment temperature	-35°C....+70°C	
Case Dimension	78x30x97mm	
Case type	Coated aluminum die cast	

10. Video input / TV module Simulation

The CP740BMW offers the option of fading in audio and video sources on the original monitor. This is only possible with Navigation Professional (CCC) without an existing TV option. To achieve this, the CP740BMW can simulate an original TV module.

If you want the CP740BMW to offer this function, you must update the firmware of the device to the CP745BMW. The software is installed as described in this manual under point 11.

The firmware versions are available on the Cartain support page at

https://www.cartain.de/index.php/de/support/cp740bmw-support-de/cp745bmw-update

cartain.de > Support > CP740BMW > Update to CP745BMW

After the CP745BMW firmware has been imported and the device has restarted, make sure that you have activated the "TV" option in your CCC navigation device. You can activate this option using suitable OBD software or a coding specialist.

11. Firmware Update

To keep the device up to date, it can be updated with new firmware at any time via USB. To do this, copy the update.bin file from our website www.cartain.de> Support to a FAT32 formatted USB stick, insert it into the device and restart it by

a) Locks the vehicle for 5 minutes or
b) Unplug the device for at least 5 seconds and then plug it in again.

12. Proper disposal

Wrong disposal poses a danger for the enviroment! Packaging parts and materials are valuable resources and can be recycled in many cases. To save our enviroment, please follow these points:

- Only give the devide and packaging materials to a official disposal system!
- Follow local reycycling laws and regulations!

Parts that are maked with the waste bin symbol MUST NOT be put into common household waste! These parts may contain substances that are harmful for the enviroment. Please ask your local waste disposal and recycling office or the seller how to properly dispose these parts! At any time, the manufacturer will take back the unit free of charge.

13. Liablities and intended use

Only use the CP740BMW for what it is desiged for and only with proper wired connections. Else, any warranty will void. Verwenden Sie den CP600BMW nur für den Any liablitity or warranty will be rejected if

- You do not follow the instruction in this manual
- Not intended use
- Installation through not authorised personnel
- Use of inpropriate replacement parts
- Unauthorised modifications

14. CE Compliance

This device:

Product name: Cartain CP740BMW
Manufacturer: Elektronik-Idee Weber GmbH

has been designed, developed and manufactured in conformity with the EC directive for electromagnetic compatibility 2014/30/EU (L96, 29.03.14, S 79-106) in sole responsibility of

Elektronik-Idee Weber GmbH
Trasham 69
94161 Ruderting

The following standards apply:
EN 60065:2014 EN 55013:2013 EN 55020:2007+A11(2011) EN 50581:2012 ISO 7637-2:2011 ISO 16750:2003

Signed by:
Tobias Weber
Titel: Managing Director   Ruderting, 3.April 2020

WEEE-Reg.Nr DE91745909

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