This Service Information bulletin supersedes SI 65 08 07 dated May 2007.

NEW designates changes to this revision

SUBJECT

USB Audio Interface

MODEL

E90, E91, E92, E93* (3 Series) from 03/2007

E60, E61* (5 Series) from 03/2007

E63, E64* (6 Series) from 03/2007

E70 (X5)* from 4/2007

E71 (X6)

E82, E88 (1 Series)

INFORMATION

The USB audio interface is only available as a factory-installed option and cannot be retrofitted.

The USB audio interface allows the connection of compatible MP3 players, such as an Apple iPod Generation4 or higher, to the vehicle and operates them through the vehicle's audio controls.

In addition to MP3 players, audio files on USB sticks can also be played through the USB audio interface.

Only audio files can be played. Accessing other files, such as videos, is not possible.

The USB audio interface currently supports the following compressed formats:

- MP3 (mp3)
- AAC (aac, m4a, m4b)
- WAV/PCM (wav)
- WMA (wma, asf)
- Playlists in M3U format

It is possible to access all stored audio data directly through a playlist, as well as searching for genre, artist, album or title. However, the sorting and displaying of audio files in the vehicle can only be carried out correctly if all the data stored on the MP3 player (e.g., ID3 tags) contain only Roman characters. Only audio files can be

^{*}Only with USB audio interface (option 6FL)

played. Accessing other files (such as videos) is not possible.

Storage of the device and first installation

Observe all operating and storage instructions for the device if the iPod, MP3 player or USB stick is stored in the vehicle. It is recommended not to store iPods, MP3 players or USB sticks in the vehicle for any length of time, since extreme environmental conditions (temperature, humidity) may cause damage to the device.

Upon initial connection of an iPod, MP3 player or USB stick containing large amounts of data, audio files can be only accessed through the directory structure of the device. The search by genre, artist, album or title only becomes available after the corresponding file information has been transferred to the vehicle. The performance of an iPod, MP3 player or USB stick in the vehicle, such as duration of synchronization or operation speed, depends on the storage capacity and technology of the device, as well as the number and the format of stored audio files. For instance, the synchronization of a USB stick with 8 GB of flash storage can take up to 10 minutes; longer synchronization times could be due to device-specific characteristics. During this period of time, music titles can be selected through indexes and file names).

Should the interaction of an iPod, MP3 player or USB stick with the USB audio interface not function correctly, it may also be due to defective or unsupported encoding of audio files (e.g., bit rates bigger than 256 KB/s).

For questions, please contact your local customer service directly or via email at customer.service@bmw.com

Compatible devices

Due to the variety of MP3 players and USB sticks and their technical differences, flawless operation with the USB audio interface cannot be guaranteed for all devices.

The BMW USA website <u>www.bmwusa.com</u> is being enhanced to include information on compatible devices.

In the interim, lists of compatible devices are attached to this Service Information.

See Attachments A and B.

For more detailed information on how to operate the connected audio device (iPod, MP3 or USB device) through the vehicle audio system, refer to the Owner's Manual.

The message "Incompatible Device" indicates the usage of an incompatible type of device.

IMPORTANT: The playing of audio files from mobile phones equipped with a USB interface through the USB audio interface is not recommended. The receiving or placing of phone calls cannot be guaranteed, because some mobile phone models exclude Bluetooth functionality parallel to a USB connection.

NOTE: Charging the device through the cigarette lighter should be avoided because of possible audio distortions caused by the cigarette lighter.

Apple iPod devices

Identifying iPod models:

docs.info.apple.com/article.html?artnum=61688

Approved iPod models are shown in Attachment A.

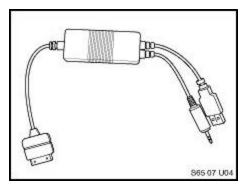
- iPod shuffle (with flash storage)
 - o **NOTE:** Can only be connected and used as "USB Mass Storage Class" devices along with a USB-cable, if the File Allocation Table (FAT) format is used.
- Details for using the iPod as a "storage drive" can be found online:

docs.info.apple.com/article.html?artnum=61131

• Information on how to detect the software version of an iPod is available online:

docs.info.apple.com/article.html?artnum=60984

NOTE: When the iPod is connected to iTunes through a PC, iTunes is capable of automatically updating the iPod software. This could adversely affect the interaction of the iPod with the USB audio interface.



Apple iPod devices must be connected to the vehicle through the provided adapter cable (Y cable from 30-pin-connector to USB and AUX-In).

It enables quick access to the iPod's audio files and also charges (with max. 500 mA) the iPod while connected to the vehicle via the USB connector. In addition, copy-protected music files can also be played.

IMPORTANT: If the provided adapter cable for the Apple iPod is not used, iPod devices can only be used as "storage drive" with the FAT format; the operation of iPod devices under MacOS is not possible either. Refer to the attached Aftersales Business Development & Marketing BMW Dealer Bulletin 65 04 07.

iPod devices can be disconnected from the vehicle at any time.

Only the audio content of videos can be played.

MP3 devices

Approved MP3 devices are shown in Attachment B.

MP3 players can be connected to the vehicle through an aftermarket USB cable.

These devices will then also be charged through the USB connection.

IMPORTANT: Copy-protected music files are not supported for these devices.

Devices with "Media Transfer Protocol (MTB)" cannot be used with the USB audio interface.

This applies especially for devices with the "PlaysForSure" logo. To convert the device to the "USB Mass Storage Class" mode, refer to the owner's manual of the MP3 player.

The MP3 player needs to be formatted with the FAT file system. The files of the first partition will be displayed

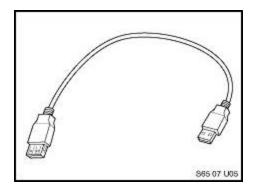
exclusively.

NOTE: During synchronization of an MP3 player with a PC, the software of the MP3 player could be automatically updated.

This could adversely affect the compatibility of the MP3 player with the USB audio interface.

USB devices

USB sticks can be connected directly to the USB audio interface.



On 3 Series vehicles only, the provided adapter cable has to be used when connecting a USB stick to the USB audio interface to prevent damage to the USB stick when closing the arm rest.

These devices will then also be charged through the USB connection.

IMPORTANT: Copy-protected music files are not supported for these devices.

USB hard disks, USB hubs and/or card readers with several inputs cannot be used with the USB audio interface.

IMPORTANT: The use of USB sticks with integrated hard disk is not recommended, since tests have shown that their audio quality may not be acceptable.

USB sticks need to be formatted with the FAT format. The files of the first partition will be displayed exclusively.

Due to the variety of USB sticks on the market and their technical differences, flawless operation in the vehicle can only be assured through an operating test in the vehicle itself.

TROUBLESHOOTING

Technical limitations of the USB audio interface

- 1. The connected USB device is not recognized and cannot be selected as an entertainment source. This is with the USB device connected at vehicle start-up, or if the USB device is connected with the ignition on (KL15 on):
 - o Not all USB devices are compatible with option 6FL. Please refer to the most current list of compatible and/or recommended USB devices. Refer to the attached compatibility charts.
 - o For diagnosis of the USB audio interface connection, please refer to SI B65 07 08.
- 2. A track cannot be played and/or is skipping:
 - o The file has an invalid format (not mp3, wma or aac), is corrupt or protected by Digital Rights

Management (DRM).

- 3. Playlists, genres, artists, albums and tracks on USB devices are not displayed:
 - o Only Roman characters are supported. Other character sets (Greek, Japanese, etc.) cannot be displayed.
- 4. The length of time until playlists, genres, artists, albums, and tracks on USB devices are displayed differs:
 - The length of time until playlists, genres, artists, albums, and tracks on USB devices are displayed depends upon the number of audio files on the device. In the case of a device with 80GB storage and 15,000 audio files, for example, this could take several hours.
- 5. The iPod can't be fully operated through the vehicle audio system:
 - o For an Apple iPod, it is recommended to use the "Adapter cable for Apple iPod" (Y-cable). If the Apple iPod is connected using the USB connector cable supplied with the iPod, the iPod is activated as a USB MSC device. This is only possible if the iPod has been configured accordingly, using iTunes and formatted using an FAT file system (Windows systems only, not Mac). In addition, no access to the playlists is possible in this operating mode, and the DRM-protected audio files cannot be played.
- 6. Distortions through the audio system when the device is connected to the cigarette lighter for charging:
 - There are malfunctions and audio interference if a device is connected to both the USB interface and the 12V socket. Depending on the model, the USB devices may be supplied with power by the USB interface itself. This means that no additional power connection is required, nor is one recommended.
- 7. The USB hard drive is not working correctly:
 - Trouble-free operation of USB hard drives cannot be guaranteed. The power supply of the USB is not sufficient for most hard drives. Audio interference may also occur. The use of hard drives is not supported or recommended.
- 8. iPod 3rd Generation is not working:
 - o iPods of the 3rd generation are not supported.
- 9. With the CCC head unit, the browsing history is not stored. For example, if the list of artists is browsed and an artist is selected, the cursor will appear at the beginning, or return to the artists list.
 - o Normal operation.
- 10. There are malfunctions if a mobile phone is connected to the USB interface and paired with the Bluetooth hands-free system:
 - o Some mobile phones deactivate Bluetooth if connected to USB.

Known issues

1. Intermittent inability to select and/or activate categories such as playlists, genres, artists, albums or tracks

after starting the vehicle with the USB device already connected. This occurs if very few audio files (less than 70) are stored on the USB device:

- o Disconnect/reconnect the USB device or store more audio files.
- 2. During operation, the entertainment source spontaneously switches from the audio device (iPod, MP3 player) to FM radio:
 - o New Program the vehicle with Program V27.1 or higher. Refer to SI B65 30 07.
- 3. The message "Reading data" is permanently displayed:
 - o Make a new selection; disconnect/reconnect the device; change the entertainment source and then change back again; and allow the vehicle to enter sleep mode.
- 4. The message "No supported audio files found" is displayed when a playlist is selected:
 - o If playlists and audio files are stored in different folders, absolute paths must be used, e.g., /dir1/dir2/track.mp3.
- 5. Interference is heard instead of an audio track after a vehicle start with a USB stick connected:
 - o Select a new track manually or skip forward/back.

ATTACHMENTS

view PDF attachment **B650807Attachment A**. view PDF attachment **B650807Attachment B**.

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