



USB Audio Interface

New information provided by this revision is preceded by this symbol  .

This Service Information bulletin replaces SI B65 08 07 **dated June 2012**

What's New:

- Additional option codes 6NH, 6NS, ZEB added
- SIB revised, format changes
- USB A and USB C pictures added
- Charge rates of the USB connection can be found in SI B65 09 16, link added

MODEL



All vehicles with one of the following option codes:

- Option **6FL** (USB Audio Interface)
- Option **6NL** (Connection Bluetooth + USB devices incl.)
- Option **6NH** (Hands-free Bluetooth and USB audio connection)
- Option **6NS** (Enhanced USB and Bluetooth plus Smartphone Integration)
- Option **ZEB** (Enhanced USB & Bluetooth)

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 it 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

NOTE: WAV files are not supported in playlists.

- WAV files are not supported in playlists.
- **UPDATE !** As the USB option changed over the years, the supported files were expanded. The training material and owner's manuals should be used to determine which files your specific vehicles USB system supports

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) contains only Roman characters. Playlists must contain absolute path indications if the audio file is not located in the same directory as the playlist itself.

UPDATE ! 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 example, 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 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 kbit/s).

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

UPDATE ! Compatible devices

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

For a list of compatible and/or recommended USB devices, please refer to the BMW USA website: www.bmwusa.com

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 in conjunction with a USB connection.

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

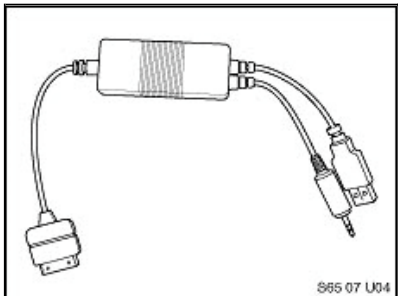
UPDATE ! Apple iPod devices

Identifying iPod models: See <https://www.apple.com>

- iPod shuffle (with flash storage).
- 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.
- **UPDATE !** IPOD Classic (rotary dial) / First Generation IPOD's
- Starting with the NBT EVO version ID5 the IPOD classic no longer communicates with our vehicles 100% due to the increased baud rate of the head unit. Now when connecting via USB white Apple cable, vehicle says 'loading' but never fully connects to IPOD. The iPod Classic is 10 years old and no longer supported for our newer vehicles. Customers will have to use a newer iPhone 6 or newer style Apple device to work with these advanced head units.

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.

Vehicles without option 6NL (Connection Bluetooth + USB devices incl.):

	Apple iPod devices must be connected to the vehicle through the adapter cable provided (Y cable from 30-pin-connector to USB and AUX-In). It enables quick access to the iPod's audio files and also charges 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 a "storage drive" with the FAT format; the operation of iPod devices under MacOS is also not possible. Refer to the Aftersales Business Development & Marketing BMW Dealer Bulletin 65 04 07. See Attachment A.
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Vehicles with option 6NL (Connection Bluetooth + USB devices incl.):

The Apple USB cable must be used (white USB cable which comes with the Apple device).

iPod devices can be disconnected from the vehicle at any time. Only the audio content of videos can be played.

UPDATE ! We have found that inexpensive 'aftermarket' cables may not be of sufficient quality and can cause intermittent connection/quality issues. When testing, we recommend using a genuine BMW or APPLE cable

UPDATE ! MP3 devices

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 to devices with the "PlaysForSure" logo. To convert the device into "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. Only the files of the first partition will be displayed.

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.

NOTE: On 1 Series, 3 Series and Z4 vehicles only, an 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 armrest. This adapter cable is no longer provided by the factory in these vehicles from May 2009 on. On a customer request basis, it can be ordered through parts (P/N 84 10 9 143 446

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



Charge rates of the USB connection vary by head unit and model year of the vehicle.



Note: Reference SI [B65 09 16](#) Head Unit Overview attachment for specific details on each head unit.

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

USB hard disks and USB hubs and/or card reader with several inputs cannot be used with the USB Audio Interface.

IMPORTANT: The use of USB sticks with an 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. Only the files of the first partition will be displayed.

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

Due to the variety of USB sticks on the market and their technical differences, faultless operation in the vehicle can only be ensured through testing the product in the vehicle.



Head units starting with MASK, CCC were only available with USB 2.0 / Type A



Head units starting with MGU in 2018 adds USB C (micro USB)
Some vehicles like G05 (X5) have both USB A and USB C installed



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):

-  Not all USB devices are compatible with option 6FL or option 6NL. Please refer to the latest list of compatible and/or recommended USB devices at www.bmwusa.com
 - 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:
 - 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:
 - Only Roman text characters are supported. Other character sets (Greek, Japanese, etc.) cannot be displayed.
 4. Time period differs for playlists, genres, artists, albums and tracks on USB devices are displayed:
 - The time period for playlists, genres, artists, albums and tracks on USB devices to be displayed depends upon the number of audio files on the final 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 (affects only option 6FL):
 - For use of 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 cigar lighter for charging:
 - There are malfunctions and audio interference, if a device is connected to both the USB connector and the 12V socket. Depending on the model, the USB devices may be supplied with power by the USB connector itself. This means that no additional power connection is required, nor is one recommended.
 7. 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 neither supported nor recommended.
 8. iPod 3rd Generation is not working:
 - 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 when returning to the artists list.
 - Normal operation.
 10. There are malfunctions if a mobile phone is connected to the USB Audio Interface and paired with the Bluetooth hands-free system:
 - Some mobile phones deactivate Bluetooth if connected to USB.

Concept related behaviors

1. Intermittent inability to select and/or activate categories such as playlists, genres, artists, albums, and 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:
 - Disconnect and/or reconnect the USB device, or store more audio files.
2. Message "Reading data" is permanently displayed:

- Make a new selection; disconnect and/or reconnect the device; change the entertainment source and change back again; allow the vehicle to enter sleep mode.
3. Message "No supported audio files found" is displayed when a playlist is selected:
- If playlists and audio files are stored in different folders, absolute paths must be used, e.g., /dir1/dir2/track.mp3.
4. Interference is heard instead of an audio track after a vehicle start with a USB stick connected:
- Select a new track manually, or skip forward or back.

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ATTACHMENTS

View PDF attachment [B650807 Attachment A](#).

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Date: Bulletin #	3/14/2007 07-ALL-03	Source: Name: Title: Phone #:	Product Planning & Strategy Jacob Harb Product Planning and Strategy Analyst 201.307.4407			

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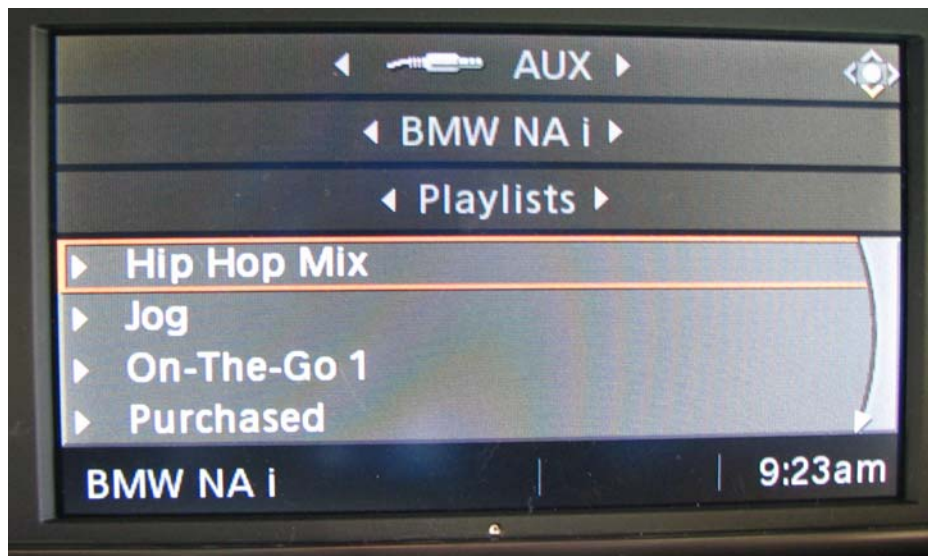
iPod and USB Adapter Overview

In keeping with BMW's commitment to technology leadership, BMW NA is proud to announce the availability of an iPod and USB Adapter as a factory option (SA 6FL). **This option will not remove the auxiliary input, it is a supplement and there are no conflicts with the CD Changer.** The photo below shows the interface:



Please note that the USB interface is located above the "AUX IN" interface.

Option 6FL will allow for full integration and functionality of an iPod through the vehicles audio system. Full functionality means that a customer will be able to charge and navigate through their iPod using song title, artist and playlists:



Please note that option 6FL is available on non iDrive equipped vehicles as well.

Included in option 6FL is the cable that is required to fully integrate an Apple iPod:



This cable will be supplied on a dealer level similar to the way that X5 Rear Seat Entertainment Headphones are included.

6FL is also compatible with the some non-Apple MP3 players and USB flash drives; allowing for access to music files while charging the device.

Option 6FL will be **available as of March 2007 production** on the following models:

3 Series Sedan/Sports Wagon
3 Series Coupe
3 Series Convertible
5 Series Sedan/Sports Wagon
X5 (April Production)
M5

The ordering guides on CenterNet have been updated to include option 6FL, pricing will be announced shortly, and bmwusa.com will also be updated to include this option.