

# 6FL USB audio interface



## Overview

### Product description

**The USB audio interface allows the connection and operation of Apple iPods, MP3 players and USB memory sticks via the vehicle's controls. Replay via the vehicle's audio system guarantees high sound quality. The display on the vehicle display offers easy operation for the selection of the audio files.**

### Functionality

Suitable MP3 players (e.g. Apple iPods, MP3 players with USB connection) and USB memory sticks can be connected to the vehicle.

The audio files can be selected comfortably from the playlists or searched for according to type of music, artist, title or album. The audio files are played back via the vehicle's audio system with high sound quality. The display of the contents occurs, depending on the equipment, on the display systems integrated into the vehicle.

The MP3 player can be placed in the storage compartment (E60/E61) or in the multimedia pocket (E81/E87, E90/E91/E92/E93).

### Operation

Depending on the vehicle's equipment, MP3 players and USB memory sticks can be operated with the USB audio interface via the vehicle's input elements:

### Your benefits

With a USB audio interface, the driver and passenger can play back their individual audio files in the vehicle with high sound quality.

## Technical information

### Function in detail

The USB (**U**niversal **S**erial **B**us) audio interface connects the vehicle to an external MP3 player or a USB memory stick.

The USB audio interface supports the common compression formats MP3 (mp3), AAC (aac, m4a, m4b), WAV/PCM (wav) and WMA (wma, asf), as well as playlists in M3U format. wav files are not supported in playlists.

When connecting MP3 players or USB memory sticks with very large quantities of data, at first it is only possible to access the music files via the device's directory structure. The comfortable search for type of music, artist, album or title is only possible once the corresponding file information has been transmitted to the vehicle. The behaviour of the MP3 player or USB memory stick in the vehicle, such as duration of the synchronisation and operating speed, depends on the storage capacity and technology of the device used as well as on the number and type of music titles stored.

Apple iPods are connected to the USB audio interface with the cable adapter for Apple iPod available in the BMW Group accessories (Y-adapter 30-pin plug to USB and AUX-IN). For MP3 players and USB memory sticks, a standard USB cable is sufficient. A short USB cable is included in the scope of supply (E81/E87, E90/E91/E92/E93). MP3 players are supplied with electricity and charged via this connection cable. The simultaneous connection of the MP3 player to the 12V power socket is not permissible.

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Due to the variety of MP3 players and USB memory sticks available on the market, flawless operation can only be ensured for selected devices. The devices tested by the BMW Group as compatible are communicated regularly.

Only the audio files will be played back. Access to other files (e.g. videos) is not possible. With some MP3 players and USB memory sticks, the USB connection must be switched on first and the mass storage mode ("USB mass storage class") activated. The playback of music files on mobile phones with USB interface is not recommended with the USB audio interface.

The USB connection is in the centre console. If MP3 players or USB memory sticks should remain in the vehicle, please heed the operating instructions. It is not recommended that you leave MP3 players or USB memory sticks in the vehicle for longer periods since extreme environmental conditions may occur in the vehicle (temperature, humidity).

## Apple iPod

The following devices are supported by the USB audio interface:

- iPods with hard disk (starting with the fourth generation)
- iPod nano with Flash storage (first and second generation)
- iPod mini with hard disk (first and second generation)

Apple iPods are connected to the vehicle via the cable adapter for Apple iPods available in the accessories of the BMW Group. This way, quick access to the iPod's audio files is enabled, and copy-protected music files can be replayed. The iPods are tested at BMW exclusively using the iPod adapter cable. Without this cable adapter, iPods can only be used conditionally.

- Use only with the FAT file system instead of the HFS+ file system.
- Activation of the "Use as volume" in iTunes.
- No access to copy-protected music files.
- Long synchronisation with the use of devices with large quantities of data.

The operation of iPods for MacOS is not possible without the cable adapter for Apple iPod.

The software version of the iPod can be determined on the main menu. iTunes can update the iPod's software automatically, which could compromise the interplay of the iPod with the USB audio interface.

## MP3 players

After the initial connection of the MP3 player to the vehicle, a database is generated from the file information (metadata) of the available music titles, which enables the selection of a playlist or comfortable searching according to type of music, artist, album and title. The duration of the synchronisation of an MP3 player is device-specific. During the synchronisation, the music titles can be selected via directories and file names. During the synchronisation of an MP3 player on the PC, the MP3 player's software can be updated automatically. This can compromise the compatibility of the MP3 player with the USB audio interface.

The MP3 player must be formatted with the FAT file system. Only the files in the first partition are displayed. With some MP3 players, the USB connection must be switched on and the mass storage mode ("USB mass storage class") activated.

## USB memory stick

USB hard disks and USB hubs and storage card readers with several slots cannot be used with the USB audio interface. The use of USB memory sticks with integrated hard disk is not recommended. Tests have shown that no sufficient audio quality can be ensured for this.

After the initial connection of the USB memory stick to the vehicle, a database is generated from the file information of the available music titles, which enables the selection of a playlist or comfortable searching according to type of music, artist, album and title. The duration of the synchronisation of a USB memory stick is device-specific. During the

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synchronisation, the music titles can be selected via directories and file names.

The USB memory stick must be formatted with the FAT file system. Only the files in the first partition are displayed.

Due to the multitude of USB memory sticks available on the market and their technical differences, flawless operation in the vehicle can only be ensured through a functional test in the vehicle.

## Operation

MP3 players and USB memory sticks can be operated with the vehicle's equipment-dependent input elements:

- "Radio BMW Professional" (SA 663) or iDrive controller - in E81/87, E90/E91/E92/E93 only with "Navigation system Business" (SA 606), "Navigation system Professional" (SA 609), "TV function" (SA 601) or "On-board monitor with TV" (SA 602).
- With the 8 freely-programmable favourites buttons, it is possible to access a particular piece of music directly.
- With the "Multifunction for steering wheel" (SA 249), it is possible to regulate the volume, the selection of the previous or next title and the fast forward or rewind in a piece of music via the steering wheel.
- With the "Voice control system" (SA 620), you can also control the functions with voice commands.

## Components

AUX-IN connector for the cable adapter for Apple iPod available in the BMW Group accessories and USB connection with sliding mechanism for protection against soiling



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