Enabling the Bluetooth Music Option with Combobox Module

Technical Documentation

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Introduction

Enabling the Bluetooth music option in a vehicle's infotainment system can significantly enhance the driving experience by allowing seamless audio streaming from mobile devices. This document provides a detailed guide on how to enable this feature using the combobox module in BMW vehicles, specifically for CIC and NBT head units. The process involves configuring several parameters to ensure optimal performance and compatibility with various devices.

Why Enable Bluetooth Music?

Enhanced Connectivity: Bluetooth music allows drivers and passengers to connect their smartphones or other Bluetooth-enabled devices to the car's audio system, providing a wireless solution for playing music.

Convenience: Eliminates the need for auxiliary cables or USB connections, offering a cleaner and more integrated setup.

Modern Features: Keeps the vehicle's infotainment system up-to-date with modern technology standards, improving overall user satisfaction.

How to Enable Bluetooth Music

To enable the Bluetooth music option, you will need to access the vehicle's head unit configuration and modify specific parameters. Below are the steps and explanations for both CIC (Car Information Computer) and NBT (Next Big Thing) head units.

Steps for CIC Units

1. Access the Head Unit Configuration: Navigate to the HU_CIC module.
2. Set the Following Settings to `aktiv`:

   - CDMM_Bluetooth_Audio: Enables the Bluetooth audio streaming functionality.
   - CDMM_BT_DATABASE: Activates the Bluetooth database to manage paired devices.
   - AUDIO_PLAYER_ON_OFF: Turns on the audio player function.
   - BT_MODUL_ON_OFF: Activates the Bluetooth module.
   - A2DP_PROFILE: Enables the Advanced Audio Distribution Profile (A2DP) for high-quality audio streaming.

3. Configure the Combobox Module:

   - Navigate to 3004_Bluetooth_Parameter and set A2DP_AVRCP_EIN_AUS to aktiv to enable the Audio/Video Remote Control Profile (AVRCP), allowing control over the Bluetooth audio playback.

Steps for NBT Units

1. Access the Head Unit Configuration: Navigate to the HU_NBT module.
2. Configure Audio and Tuner Settings:

   - AUDIO_OFFSET: Set to aktiv for proper audio synchronization.

- MICROPHONE_NUMBER: Set to wert_2 to specify the number of microphones in use.

3. Configure External Box Settings:

- AUX1_IN_HU: Set to wert_255 (Default) to configure auxiliary input settings.
- USB_AVAILABLE: Set to aktiv to enable USB connections.

4. Configure HMI Settings:

- CDMM_USB_AUDIO: Set to all to enable all USB audio functionalities.
- SVS and SYSTEM_TTS: Set to nicht_aktiv (Default) to disable unnecessary features.

5. Configure Telephony and Telematics Settings:

- ADRESSBOOK: Set to aktiv to enable phone book access.
- API_CAR_TYPE_IPOD_LOGO and API_MP4_ON_OFF: Set to bmw and aktiv, respectively, for compatibility with specific media types.
- AUDIO_NOTES_EIN_AUS, CALENDAR_EIN_AUS, EMAIL_EIN_AUS: Set to aktiv to enable additional functionalities like audio notes, calendar access, and email integration.
- BT_MODUL_ON_OFF and BLUETOOTH_2ND_HFP: Set to aktiv to enable Bluetooth module and secondary hands-free profile.

6. Configure Additional Settings:

- Various parameters such as CONTACT_BOOK_PICTURES, CONTACTS_EIN_AUS, DUN_PROFILE, ENT_BTAS_METADATA, and PHONE_CONFERENCE_CALL should be adjusted to ensure comprehensive Bluetooth functionality.

Conclusion

By carefully following the steps outlined in this document, you can successfully enable the Bluetooth music option in your BMW vehicle's infotainment system. This upgrade not only enhances connectivity and convenience but also modernizes your vehicle's audio capabilities, providing a superior in-car entertainment experience.