

## Top HiFi System

In addition to the stereo speaker system and the active HiFi system installed as standard, the Top HiFi system is offered for the E38.

Compared to the active HiFi system, the Top HiFi system features a higher performance amplifier (DSP amplifier) as well as an additional subwoofer speaker with 4 speakers under the parcel shelf.

The Top HiFi system also offers the possibility of setting balanced acoustics by means of a 7-band equalizer and a room simulation feature.

### Operation

Depending on the vehicle equipment level, the DSP amplifier can be operated via the on-board monitor control panel or via the DSP control panel. Here the space simulation functions as well as equalizer functions can be set. The DSP amplifier receives information from the control panel via the I-BUS.

### Room simulation

Due to its dimensions, a passenger cell produces rapid reflections which are not evaluated separately by the brain but rather as an energy increase of direct sound. The acoustics in the vehicle are therefore perceived as very dry and differ considerably from the acoustics usually found in the living room.

Vehicle acoustics can be made more similar to living room acoustics by adding artificial reflections. Three fixed settings can be selected: Concert hall, jazz club and cathedral. It is also possible to vary the parameters room size and reflection proportion proportion in seven steps thus adapting them to requirements.

### Equalizer

In order to realize personal sound corrections, the user has available a 7-band equalizer with a control range of +/- 10 dB.

Following medium frequencies can be varied: 80 Hz, 200 Hz, 500 Hz, 1 kHz, 2 kHz, 5 kHz and 12 kHz.

In conjunction with the room simulation feature, it is possible to store 3 different settings.

### Inputs and outputs

- AF input radio: The DSP receiver receives audio frequency signals, left and right separated, via the radio for radio and cassette playback.
- AF input CD changer: Via a separate interface, the DSP amplifier receives the playback information in digital form from the CD changer. The signals are then processed in the DSP amplifier from digital to analog for playback.
- AF input telephone: The telephone input only controls the front bass stages.
- Control input radio: The DSP amplifier is switched on and off by the radio via the control lin. OFF=0..6V, ON=7..UBatt.
- Control input telephone: The DSP amplifier detects via the control line whether the telephone function is active. OFF=0..6V, ON=7..UBatt.
- Speaker outputs: Each loudspeaker is activated by a separate output stage in the DSP amplifier. By way of diagnosis it is possible to drive all speakers one after the other at a preset volume and different frequency depending on the speaker.