## MATCH UP 7BMW

7-channel UPGRADE amplifier





#### **Features**

- 7-channel Plug & Play upgrade amplifier with integrated 8-channel 64 Bit DSP for BMW HiFi sound systems (option 676)
- Simple installation at the original mounting place via included Plug & Play connection cable and mounting plate
- MATCH Extension Card slot (MEC) for additional input / output modules like Bluetooth® Audio Streaming or High Resolution Audio Streaming via USB etc.
- Easiest configuration via the intuitive DSP PC-Tool software
- Unique DSP features such as the "Augmented Bass Processing" which dynamically optimizes the bass response of the under-seat woofers, the "StageXpander" that significantly broadens the stereo perspective and the "RealCenter" function, which allows a perfectly focused sound staging for both driver and co-driver
- Output power RMS / max.:  $5 \times 65 / 130$  Watts @  $4 \Omega$  (Front / Rear / Center channels)
  - + 2 x 160 / 320 Watts @ 2  $\Omega$  (Subwoofer output)
  - + 1 x processed RCA / Cinch output

### Highlights

- Installation within a short time at the original mounting place
- Open DSP basic setup for quick configuration of the internal DSP available online
- Unique DSP features
- MEC Slot and RCA / Cinch output for individual extension of the system

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## Special DSP features

#### RealCenter

The "RealCenter" feature is an algorithm, developed by Audiotec Fischer, that emphasizes the music information that is present in both the left and right front channel. In contrast to common procedures, in which only the channels are summed up, the intensity of the center signal is also dynamically controlled by the stereophonic informational content of the left and right channel. Sounds complicated, but this effect is astonishing: that means, if solely the left or the right channel delivers an audio signal, the center channel will not reproduce a signal. In the case of common algorithms, the volume level of the center channel is only reduced by 6 dB (= half volume level). Audiotec Fischer's "RealCenter" thus allows a unique, broadened sound staging for both driver and co-driver at the same time! Therefore, the disadvantages of a conventional center channel, such as an intrusive, small sound stage, are things of the past.

#### **Augmented Bass Processing**

Audiotec Fischer's proprietary "Augmented Bass Processing", consisting of the two revolutionary sound features "Dynamic Bass Enhancement" and "SubXpander", has been especially developed to dramatically improve the bass reproduction of OE subwoofers. The "Dynamic Bass Enhancement" ensures that the under-seat subwoofers of the BMW always play in their optimum conditions - regardless of the music style or the factory tone controls in the head unit. Depending on the input signal, the "Dynamic Bass Enhancement" gains the lower frequency range and varies the cut-off frequency of the subsonic filter.

The clou - the parameters of the algorithm are precisely adapted to the installed loudspeakers. The result is a significantly more powerful and deeper bass response at low and medium volume levels without the risk of overloading the subwoofers neither mechanically nor electrically at high volume levels. This despite the considerably higher power output at the amplifiers subwoofer outputs compared to the original system. It is simply fascinating which bass performance is suddenly possible with the original speaker systems.

If you want an even lower and "darker" bass reproduction, the "SubXpander" can be additionally activated. Therefore, subharmonic tones are added to the fundamental tones in the frequency range between 50 and 100 Hz.

#### StageXpander

Depending on the speaker arrangement in the vehicle, a more or less wide stereo sound stage can be created on the front seats. A center speaker may limit the spatial reproduction of the music additionally. This is where Audiotec Fischer's new StageXpander comes into play - a sound feature which seems to break the acoustic limitations and thus allows to create a way broader stereo base without negatively affecting the precision of the localization of voices or instruments!

The effect can be adjusted according to your personal preferences in four steps.

#### ClarityXpander

You are looking for more transparency and substance in the treble reproduction? With the "ClarityXpander" Audiotec Fischer is now offering the right tool.

Properly adjusted (and therefore selectable in three steps) the feature adds additional harmonics in the upper frequency range - this is especially useful if the original speakers lack some brilliance in the treble response. The extra treble-kick is not only available for the two front channels, but also separately adjustable for the center channel. Even better - the center channel allows to activate an automatic and dynamic control so that music with "loads" of treble doesn't fatigue your hearing.

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#### **Technical Data**

Output power RMS / max.		DSP type	Audio signal processor
- @ 4 Ohms	5 x 65 / 130 Watts (Front / Rear / Center channels)	Signal converters	A/D: BurrBrown D/A: BurrBrown
- Subwoofer output @ 2 Ohms	2 x 160 / 320 Watts	Signal-to-noise ratio digital input	105 dB (A-weighted)
Amplifier technology	Class HD	Signal-to-noise ratio analog input	103 dB (A-weighted)
Inputs	4 x Highlevel speaker input 1 x Optical SPDIF (12 - 96 kHz) 1 x MEC 1 x Remote In	Distortion (THD)	< 0.03 %
Input sensitivity	Highlevel 2.0 - 8.3 Volts	Damping factor	> 100
Input impedance highlevel	13 Ohms	Operating voltage	10.5 - 16 Volts (max. 5 sec. down to 6 Volts)
Outputs	7 x Speaker output 1 x RCA / Cinch 2 x Remote Out	Current draw	450 mA
Output voltage RCA / Cinch	3 Volts RMS	Max. remote output current	500 mA
Frequency response	20 Hz - 22,000 Hz	Fuse	2 x 25 A LP-Mini-fuse (APS)
DSP resolution	64 Bit	Additional features	Class HD technology with dynamically controlled power supply, ADEP.3 circuit, Start-Stop capability, Control Input, USB, MEC slot, Auto Remote switch, galvanically isolated Line Out
DSP power	295 MHz (1.2 billion MAC operations/ second)	Dimensions (H x W x D)	46 x 130 x 153 mm / 1.81 x 5.12 x 6.02"
Sampling rate	48 kHz	Delivery content	1 x Amplifier UP 7BMW 1 x Plug & Play connection cable 1 x Mounting plate & material 1 x USB cable

































