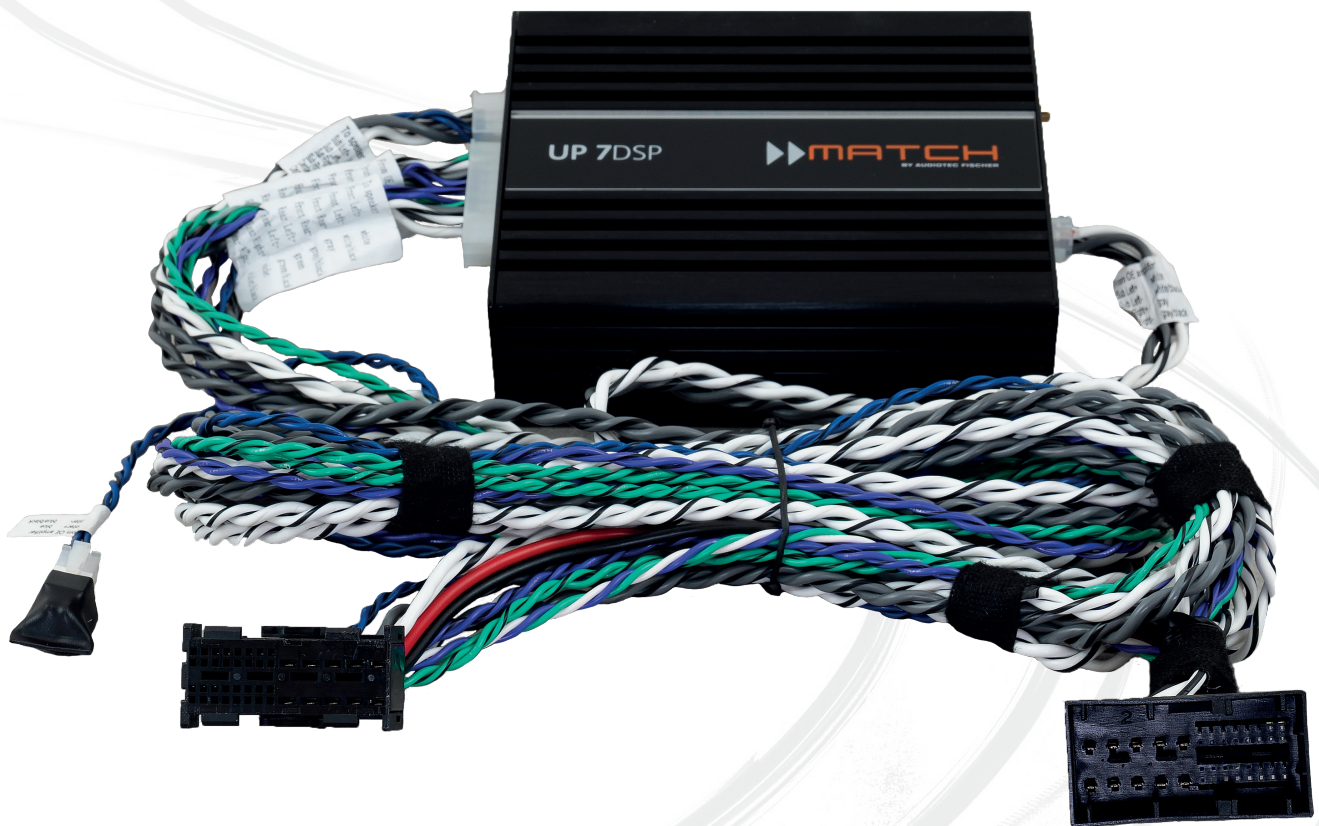


contains of:

**MATCH UP 7DSP with MEC ANALOG IN**  
Article No.: M117002



**PP-BMW 1.7RAM**  
Article No.: M171308



## Plug and Play UPGRADE amplifier

for BMW Standard & HIFI sound systems (option 676) Model < mid 2019  
contains of **MATCH UP 7DSP with MEC ANALOG IN & PP-BMW 1.7RAM**

- 7-channel DSP amplifier with integrated 6-channel highlevel input
- Plug & Play cable harness PP-BMW 1.7RAM incl. ADEP termination modul for OEM center channel diagnostics.



# BMW RAM UPGRADE KIT

BMW's RAM (Receiver Audio Module) sound concept was introduced for various vehicle models in the production year 2019. Both, the STANDARD and the HIFI sound system upgrade require at least 6 x high-level inputs on the DSP amplifier. This makes the MATCH UP 7DSP with an integrated MEC ANALOG IN module the perfect upgrade amplifier for these sound systems.

If the car is equipped with a HIFI sound system, the OEM center channel signal is not being used as an input as the UPGRADE amplifier offers only 6 highlevel inputs.

But due to the 7 integrated amplifier channels of the UP 7DSP the OEM or replacement center speaker gets supplied by an own generated center speaker signal based on our proprietary RealCenter Algorithm which enhances the staging by far.

In addition the unused OEM center signal coming from the head unit gets terminated by an ADEP module which is included in the PP-BMW 1.7RAM cable harness.

Please note that the original RAM module must not be de-installed. Therefore the factory power wiring is not sufficient to supply the RAM module and UP 7DSP with power so it is mandatory to connect the UP 7DSP directly to the battery. As the RAM module and the UP 7DSP both are installed in the trunk close to the battery this can be done quite easily.

## Technical Data - MATCH UP 7DSP with MEC ANALOG IN

<b>Output power RMS / max.</b>		<b>DSP type</b>	Audio signal processor
- @ 4 Ohm	5 x 65 / 130 Watts (Front/Rear/Center channels)	<b>Signal converters</b>	A/D: BurrBrown D/A: BurrBrown
- Subwoofer output @ 2 Ohms	2 x 160 / 320 Watts	<b>Signal-to-noise ratio digital input</b>	105 dB (A-weighted)
<b>Amplifier technology</b>	Class HD	<b>Signal-to-noise ratio analog input</b>	103 dB (A-weighted)
<b>Inputs</b>	6 x Highlevel speaker input (with MEC ANALOG IN) 1 x Optical SPDIF (12 - 96 kHz) 1 x Remote In	<b>Distortion (THD)</b>	< 0,03 %
<b>Input sensitivity</b>	Highlevel 5 - 11 Volts	<b>Damping factor</b>	> 100
<b>Input impedance highlevel</b>	13 Ohms	<b>Operating voltage</b>	10.5 - 16 Volts (max. 5 sec. down to 6 Volts)
<b>Outputs</b>	7 x Speaker output 1 x RCA / Cinch 2 x Remote Out	<b>Idle current</b>	450 mA
<b>Output voltage RCA / Cinch</b>	3 Volt RMS	<b>Max. remote output current</b>	500 mA
<b>Frequency response</b>	20 Hz - 22.000 Hz	<b>Fuse</b>	2 x 25 A LP-Mini-fuse (APS)
<b>DSP resolution</b>	64 Bit	<b>Additional features</b>	Class HD technology with dynamically controlled power supply, ADEP.3 circuit, Start-Stop capability, Control Input, USB, Auto Remote switch, galvanically isolated Line Out
<b>DSP power</b>	295 MHz (1.2 billion MAC operations/ second)	<b>Dimensions (H x W x D)</b>	46 x 130 x 153 mm
<b>Sampling rate</b>	48 kHz	<b>Delivery content</b>	1 x MEC ANALOG IN MODULE 3 x Connection cable 1 x Mounting plates & material 1 x USB cable

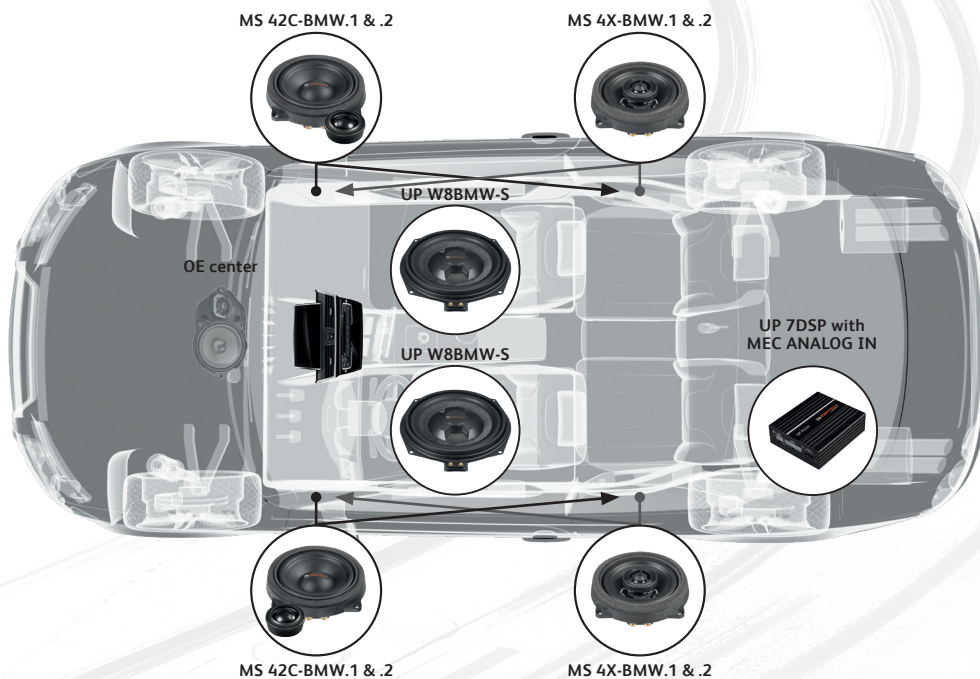
## Compatibility chart for BMW HIFI or STANDARD Stereo sound system upgrades in combination with the MATCH amplifiers

### MATCH Amplifier recommendation

manufacturing year > Mid 2019	STANDARD Stereo & HIFI System (Option 676)	<b>UP 7DSP with MEC ANALOG IN + PP-BMW 1.7RAM</b>
manufacturing year < Mid 2019	HIFI System (Option 676)	<b>UP 7BMW</b>
manufacturing year < Mid 2019	STANDARD Stereo System	<b>M 5DSP / PP 62DSP / PP 86DSP</b>

### Compatibility for BMWs with STANDARD Stereo or HIFI sound system (manufacturing year > mid 2019)

The **UP 7DSP with MEC ANALOG IN amplifier** and **PP-BMW 1.7RAM cable** should always be combined with the **UP W8BMW-S** under seat subwoofers to achieve maximum performance. This concept allows to drive an optional center speaker due to the proprietary RealCenter algorithm

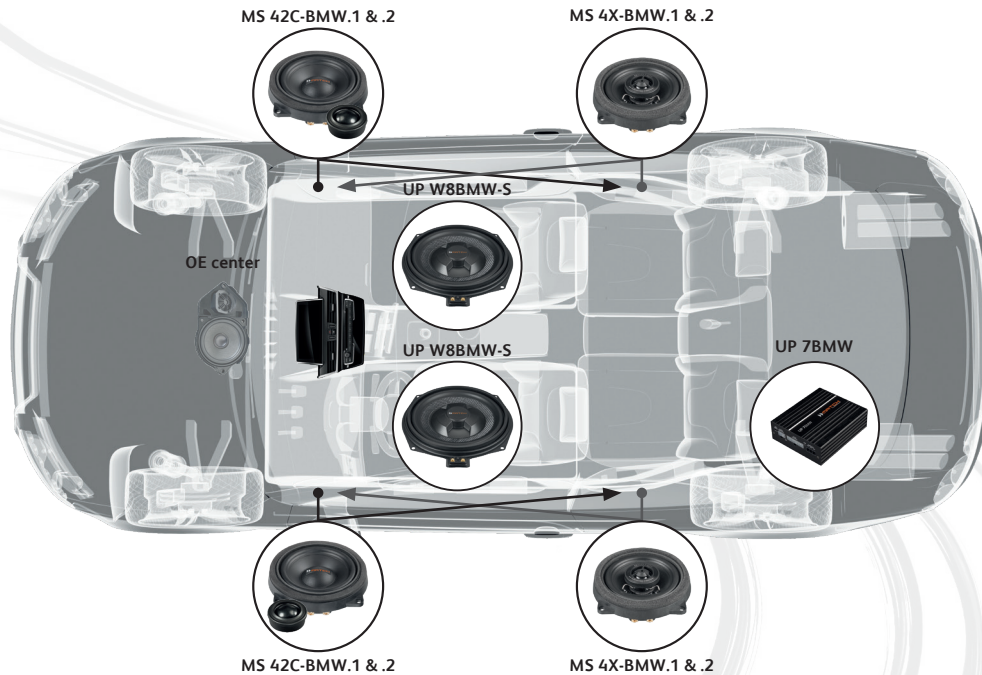


# FULL BMW COMPATIBILITY CHART

## Compatibility for BMWs with HIFI sound system (manufacturing year < mid 2019)

The **UP 7BMW amplifier** should always be combined with the **UP W8BMW-S** under seat subwoofers to achieve maximum performance.

This concept allows to drive an optional center speaker due to the proprietary RealCenter algorithm.



## Compatibility for BMWs with STANDARD Stereo sound system (manufacturing year < mid 2019)

The **M 5DSP MK2, PP 62DSP or PP 86DSP amplifier** should be combined with the **MW 8BMW-D** under seat subwoofers to achieve maximum performance.

