

BMW RAM UPGRADE KIT

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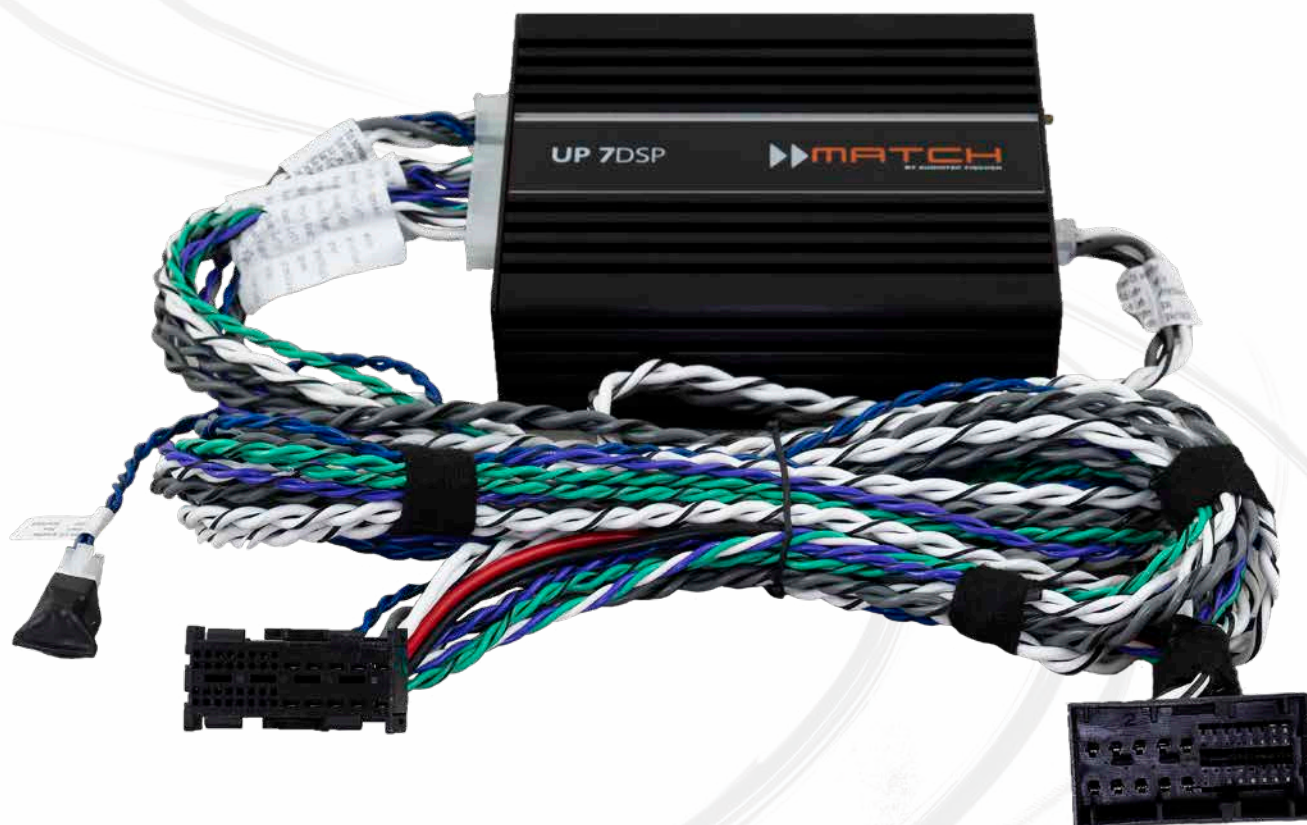
MATCH UP 7DSP with MEC ANALOG IN

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 Algorithym 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

Output power RMS / max.		DSP type	Audio signal processor
- @ 4 Ohm	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	6 x Highlevel speaker input (with MEC ANALOG IN) 1 x Optical SPDIF (12 - 96 kHz) 1 x Remote In	Distortion (THD)	< 0,03 %
Input sensitivity	Highlevel 5 - 11 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	Idle current	450 mA
Output voltage RCA / Cinch	3 Volt 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, 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
Sampling rate	48 kHz	Delivery content	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

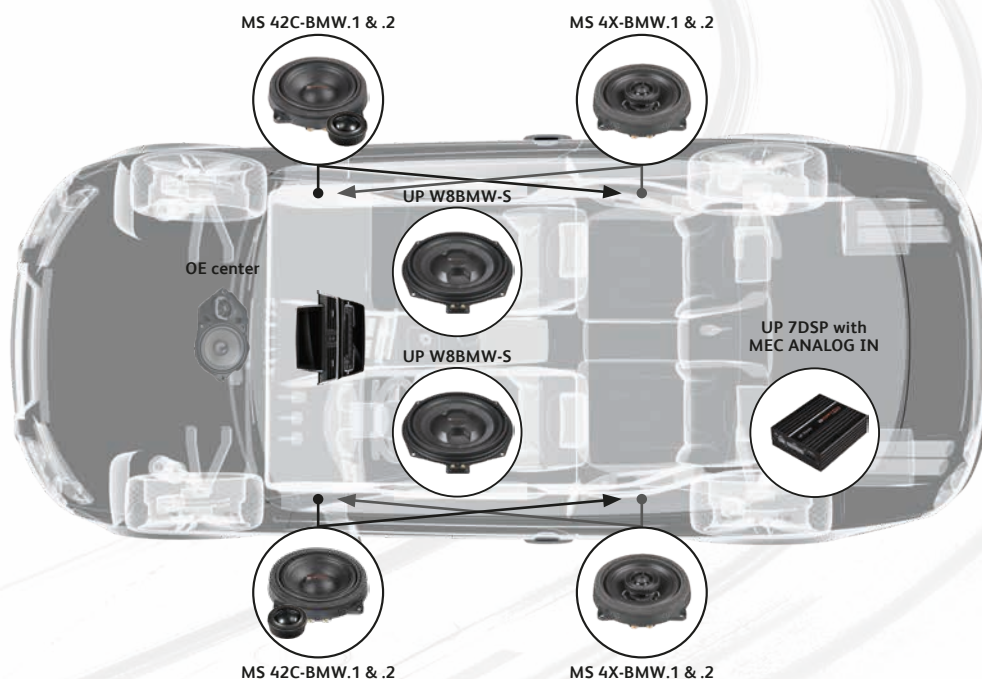
MATCH Amplifier recommendation

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

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.

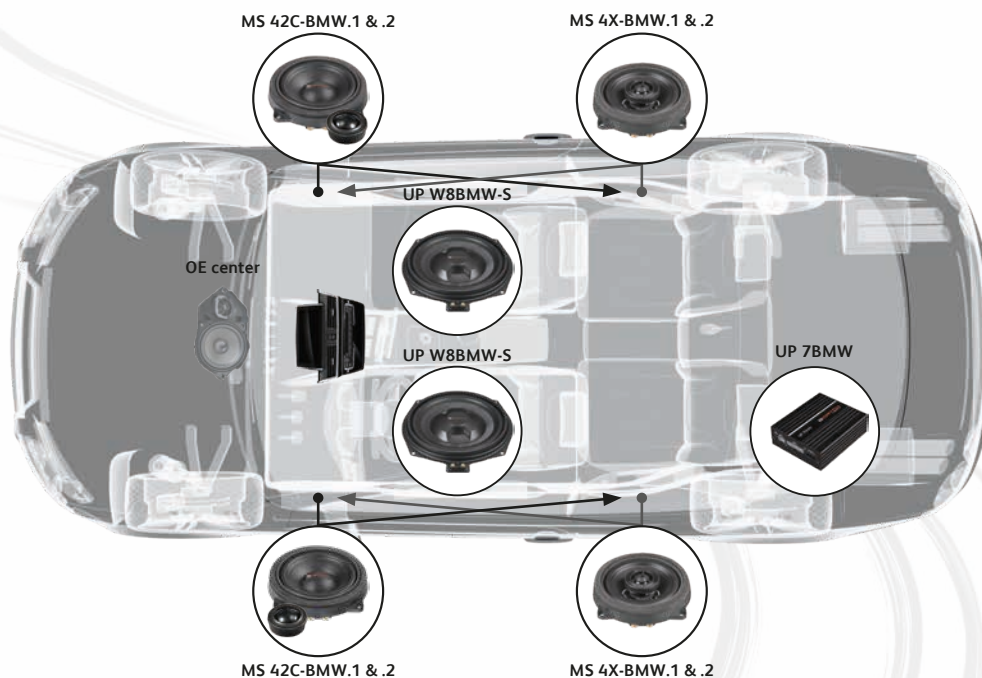
This concept allows to drive an optional center speaker due to the proprietary RealCenter algorithm



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

