

▶ **UPGRADE**
Your Audio System ◀



► MUSIC

A new experience ◀

MATCH Plug & Play

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Music is pure emotion and should be a feast for the senses. Most of the OE sound systems, however, seem hardly capable of arousing emotions, much less setting off waves of audiophile enthusiasm. The most beautiful music means nothing without that spark of excitement!

Audiotec Fischer now offers several ideal solutions for turning the dream of audio excellence into reality. It is up to you to decide what effort you like to make converting your OE sound system – the significantly extended range of MATCH products offers the right solution for every purpose and every individual demand. Our intelligent Plug & Play compo-

ponents are the right choice if minimum installation effort is a must to get the maximum in sound excellence out of an original audio system. In doing so, our overriding credo is:

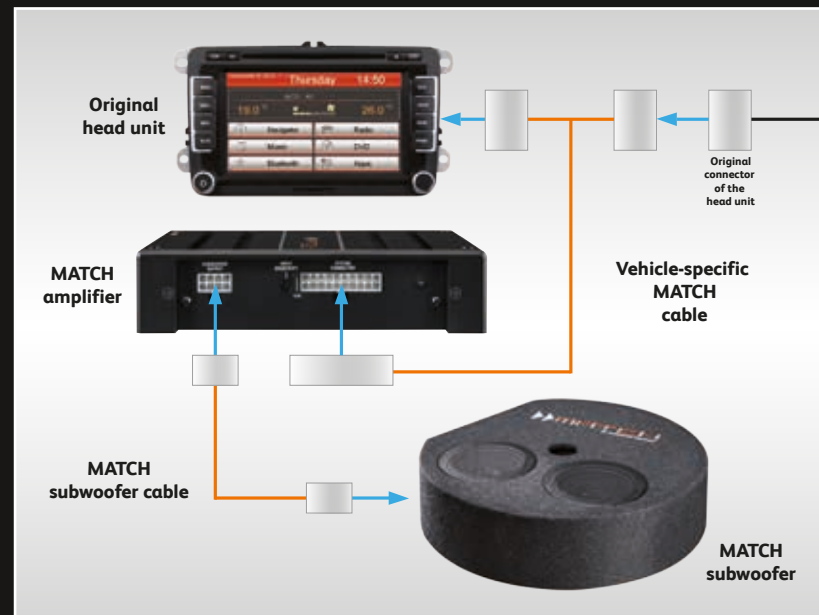
Your car should stay the way it is. Not one single cable has to be cut or modified to install our MATCH Plug & Play systems. Everything can be removed without leaving traces when the vehicle shall be sold – an important aspect not only for leasing cars. For those who don't care about some more installation effort and like to choose from a wider range of components the all new MATCH Universal series will be the favourite. Here you find everything

to turn almost every car into a rolling concert hall. No matter what you finally decide for - all MATCH products are pure enjoyment with no regrets – combined with a sound experience in a new dimension. Let yourself be seduced by us!



Why replace equipment when you can complement them - a mere two additional components provide for a dramatic improvement in sound reproduction and a significant increase in the dynamics themselves in connection with the original radio and the standard speaker installation. The following graphic illustrates the simple Plug & Play concept for which not one single cable needs to be cut in your vehicle. Everything is pre-assembled and

can be plugged together in ways protecting it against polarity reversal. Particularly important for leasing vehicles - all components can be removed again without leaving a trace!



▶ INGENIOUS Simple ◀



An overview of the advantages of MATCH Plug & Play systems:

- No need to change car radio or speakers
- No changes in the vehicles electric
- No interference with existing CAN/MOST bus systems
- All cables come pre-assembled for true "Plug & Play"
- Easy and fast installation, usually not longer than 1 hour
- Without any interference of the car's daily use
- Easy to return to standard configuration without leaving any traces

Loading of setups via MicroSD card

Convenient, fast and simple – car-specific setups can be transferred via MicroSD-card to devices with integrated sound processor in the blink of an eye. Meanwhile we offer for our amplifiers PP 52DSP and PP 62DSP hundreds of different car-specific settings which can be downloaded from the Audiotec Fischer website. In all other products the card reader can be used to transfer own setups (created with our DSP PC-Tool software) to the DSP device without the need to connect a PC first.

The whole thing couldn't be any easier than this:

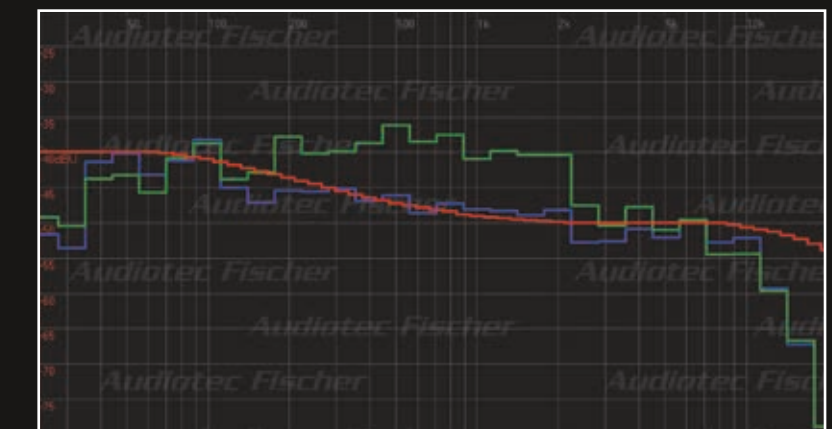
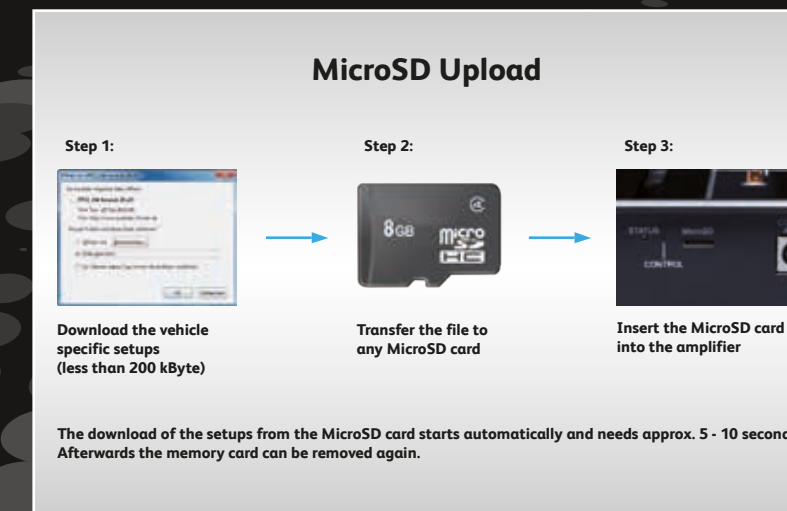
- Copy the desired setup onto any MicroSD or MicroSDHC memory card (memory requirement approx. 200 kB only).
- Insert the memory card into the amplifier / signal processor and switch it on. After approx. 5 to 10 sec., the download will be finished and the card can be removed.
- You're done!

We dazzle – You marvel!

It really is fascinating how much sound potential you can coax out of OE-speakers. But just getting an additional power is only half the story. Because these days an amplifier has to offer much more. The intelligence is revealed in the digital processors in our MATCH amplifiers, whose incredible processing power can compensate for virtually all the inadequacies of the original speakers as well as the individual vehicle acoustics. Per channel there are up to 30 equalizer bands available. Add to this variable highpass and lowpass filters, along with a for the driver's seat optimized time-alignment ensure to experience the music precisely from the front and not diffused "from the side".

The figure shows three curves:

- red = reference curve
- green = measurement of a standard sound system
- blue = measurement after the MATCH installation and DSP correction



▶ COMPACT Pure and simple ◀

Simple, simpler, PP 41DSP - a sound upgrade of original sound systems has never been easier. The PP 41DSP is specified by vehicle manufacturer, comes already completely configured, and in most editions is offered with the matching vehicle-specific connection cable. The internal memory contains up to 16 different setups for the digital signal processor in the amplifier. Simply adjust the number to the right setup for your own vehicle using two buttons, and your original speakers will be vaulting to new audio peaks in no time.

Perhaps no need to say that the included cable set enables a connection that require not even a single modification to the vehicle wiring harness.

That is Plug & Play in its purest form.

	PP 41DSP
RMS / max. power	
- at 4 Ohms	4 x 35 / 70 Watts
- at 2 Ohms	4 x 50 / 100 Watts
Frequency range	20 Hz – 22,000 Hz
Number of inputs	4 x Highlevel
DSP resolution	56 Bit
DSP processing power	50 MHz
Total harmonic distortion (THD)	< 0.03 %
Signal-to-noise ratio	> 100 dB
Damping factor	> 100
Input impedance	30 Ohms
Dimensions (H x W x D)	44 x 185 x 124 mm; 1.73 x 7.28 x 4.88"



PP 41DSP is a perfect example of how easy it can be to embrace state-of-the-art technology. Foolproof connections and only two buttons for the right configuration in a matter of seconds – that's all there is to it. What's more, the compact design enables effortless installation - you'll be enjoying this audio boost all the more quickly.



It's all here

Up to 16 different sound setups are already pre-programmed and can be called up using the two buttons. The display on the top side indicates the selected memory slot.



Need more bass?

The PP 41DSP is configured to enable a rich bass sound with your original speakers. For even more bass, we recommend the PP 1SUB subwoofer amplifier. This is connected using only a single cable and drives any type of MATCH Plug & Play subwoofer.



Uncompromisingly stable

The PP 41DSP is totally oblivious to fluctuations in battery voltage. Its highly efficient MCM power supply technology keeps the internal supply voltage of the output stage 100 % stable – even when starting the engine. This "start/stop capability" is one of the many unique features of all MATCH amplifiers.



Finest sound engineering

A digital signal processor with 56 Bit resolution and high-end converters by the manufacturer Asahi Kasei, a company renowned for its studio equipment, provide for superb sound characteristics.

Features PP 41DSP

- Effortless Plug & Play connection to the original sound systems using vehicle-specific adapter cables
- Up to 16 different DSP setups that are pre-programmed can be called up at the touch of a button
- Indication of the selected setup via a 7-segment display
- Lowlevel sub out for a separate PP 1SUB subwoofer amplifier
- 56 Bit DSP technology and 24 Bit AD/DA converter
- Start/stop capability, all the way down to 6V supply voltage
- MCM power supply technology with "ECO mode"

- Connection for optional cable remote control
- State-of-the-art SMD technology for a smaller footprint and maximum reliability
- Printed circuit boards in fourfold multilayer technology for optimal power and signal transmission

▶ MORE Sounds deep ◀

Sometimes, only more is enough – PP 1SUB is an ideal complement to the PP 41DSP, when you like to feel the bass. This extremely compact subwoofer amplifier drives our MATCH Plug & Play subwoofers to acoustic peaks of performance. The proper setting of key parameters such as crossover frequency, level and phase can be really tricky; good thing you don't have to worry about this at all. We've already handled it for you and provided for vehicle-specific pre-

programming in the PP 41DSP setups. This demonstrates that the PP 1SUB thus not only benefits from the sophisticated DSP technology of the PP 41DSP, it also is combined exclusively with it and was not designed as a stand-alone amplifier.



	PP 1SUB
RMS / max. power	
- at 2 Ohms	1 x 160 / 320 Watts (4 channels each 40 / 80 Watts)
Total harmonic distortion (THD)	< 0.03 %
Signal-to-noise ratio	> 100 dB
Damping factor	> 100
Input impedance	30 Ohms
Dimensions (H x W x D)	44 x 185 x 64 mm; 1.73 x 7.28 x 2.52"

For all its robust power of 160 Watts, the PP 1SUB is extraordinarily compact, which means it fits easily anywhere inside the car. Depending upon space available, it can even be installed next to the PP 41DSP or near the respective MATCH subwoofer. Because the connection cables (1 m length and included in the delivery of the PP 1SUB, 4.8 m length and included in delivery with the MATCH Plug & Play enclosure subwoofers) are bidirectional and interchangeable for effortless installation.



The connection becomes child's play
The PP 1SUB receives all its signals, including supply voltage, through the PP 41DSP MATCH amplifier. One single pre-assembled cable (included in delivery) provides the necessary connection. Even the MATCH Plug & Play subwoofers are connected to the PP 1SUB with a single cable (included in the delivery of the subwoofers).



Always impeccably configured
Nothing could be simpler - the PP 1SUB receives its input signal via the PP 41DSP. All pre-adjustments for optimal adaptation to the other speakers in the vehicle are already included in each vehicle specific setup. The subwoofer level can be adapted to your personal tastes via the included cable remote control.



The suitable MATCH subwoofer
The PP 1SUB is exclusively designed to be combined with subwoofers of the MATCH Plug & Play series (see label on the PP 41DSP packaging). It is not suitable with subwoofers of other manufacturers. There are the following MATCH subwoofers to choose from: PP 7E-D, PP 7S-D, PP 8E-Q and PP 10E-D.

Features PP 1SUB

- The ideal complement to the MATCH PP 41DSP amplifier
- Effortless Plug & Play connection using a total of just two cables
- Optimally pre-configured through the PP 41DSP sound setup
- Easily combined with the MATCH subwoofers PP 7E-D, PP 7S-D, PP 8E-Q and PP 10E-D
- Cable remote control for the subwoofer levels is included in delivery

▶ MULTI-TALENT Maximum flexibility ◀

Easy installation and maximum flexibility - the new PP 62DSP provides everything an up-to-date Plug & Play amplifier needs. Thanks to state-of-the-art amplifier and DSP technology the MATCH novelty not only has extremely compact dimensions and provides high efficiency. Besides that the MATCH Extension Card (MEC) slot allows to extend the functionality by inserting an optional MEC module - for example a *Bluetooth*® Audio Streaming module. For all those who like things quick and simple the huge Audiotec Fischer

online sound setup database offers the appropriate car-specific setup which can be loaded into the amplifier via MicroSD card. Sound enthusiasts get their money's worth as well – due to the professional and user-friendly DSP PC-Tool software it becomes amazingly easy to create individual sound setups. Plug & Play has never been as flexible as nowadays.

	PP 62DSP
RMS / max. power	
- at 4 Ohms	4 x 35 / 70 Watts
- at 2 Ohms	4 x 50 / 100 Watts
- Match Subwoofer at 2 Ohms	1 x 160 / 320 Watts (4 channels each 40 / 80 Watts)
Frequency range	20 Hz - 22,000 Hz
Number of inputs	4 x Highlevel, 1x MEC
DSP resolution	56 Bit
DSP processing power	172 MHz
Total harmonic distortion (THD)	< 0.01 %
Signal-to-noise ratio	> 103 dB
Damping factor	> 100
Input impedance	13 Ohms
Input sensitivity	5 - 11 Volts
Dimensions (H x W x D)	44 x 185 x 139 mm; 1.73 x 7.28 x 5.47"



Furthermore the PP 62DSP is optionally configurable as a 6-channel amplifier with a total of 8 DSP channels and offers the option of hooking up additional amplifiers using the two channel pre-amp output. Due to the numerous adjustment options it leaves nothing to be desired.



MATCH Extension Card slot

It is possible to extend the functionality of the PP 62DSP by inserting an optional MATCH Extension Card (MEC) - for example a *Bluetooth*® Audio Streaming module, an optical digital input or an AUX input module.



Smart highlevel input

The latest generation of OE car radios incorporate sophisticated possibilities of diagnosing the connected speakers. If an usual amplifier will be hooked up failure messages and loss of specific features (e.g. fader function) are often the result - but not with the PP 62DSP! The new ADEP circuit (Advanced Diagnostics Error Protection) avoids all these problems without loading the speaker outputs of the OE radio during high volumes unnecessarily.



Everything under control

With the optional available remote controls it is possible to comfortably manage several functions of the integrated processor from the drivers seat - for example the volume control of an external source, the subwoofer level or turning on/off the optimized car-specific DSP sound setup.



Self-made sound setup

With the Audiotec Fischer DSP PC-Tool you can easily create your own sound setup. This professional and user-friendly software with its numerous adjustment options leaves nothing to be desired. Due to the revolutionary Autoset function of the real-time analyzer a perfect sound adjustment becomes a child's play - even under unfavorable conditions.

Features PP 62DSP

- Effortless Plug & Play connection to the original sound systems using vehicle-specific adapter cables
- MATCH Extension Card (MEC) slot for additional input modules like *Bluetooth*® Audio Streaming
- Extremely powerful "fixed point" Audio DSP with 56 Bit resolution
- Large database of car-specific setups online available
- Optionally configurable as 6-channel amplifier with a total of 8 DSP channels
- Freely configurable 2-channel PreOut for the connection of additional amplifiers
- Adjustable input sensitivity from 11V to 5V

- Automatic Remote switch
- Smart highlevel input with ADEP circuit
- Highlevel input EQs
- Plug jack for optional cable remote control
- State-of-the-art SMD technology for a more compact design and maximum reliability
- Four-layer printed circuit boards for best possible power and signal transmission

▶ PERFORMANCE The powerhouse ◀

The crowning achievement of this Plug & Play amplifier series – the PP 82DSP, with its incredible performance on a small footprint – outshines all the previous models that came before it. With its enormous range of functions, thanks to Audiotec Fischer's unique Class HD technology, it is setting a whole new standard in terms of efficiency. The combination of state-of-the-art digital amplifier technology and a dynamically-controlled switched-mode power supply

reduces heat generation and power consumption to an absolute minimum. But that's not all – no less than eight separate and freely-configurable amplifier channels with incredible power enable even sophisticated system configurations with one single amplifier.



	PP 82DSP
RMS / max. power	
- at 4 Ohms	8 x 55 / 110 Watts
- at 2 Ohms	8 x 70 / 140 Watts
Frequency range	20 Hz - 22,000 Hz
Number of inputs	4 x Highlevel, 1x AUX, 1x optical
DSP resolution	56 Bit
DSP processing power	172 MHz
Total harmonic distortion (THD)	< 0.02 %
Signal-to-noise ratio	> 100 dB
Damping factor	> 100
Input impedance	30 Ohms
Dimensions (H x W x D)	44 x 185 x 164 mm; 1.73 x 7.28 x 6.46"

Fireworks of cutting-edge technologies for sound enjoyment at the highest level – never before has so much ingenuity been put into offering half a kilowatt of power on such a small footprint. With all the focus on the technical features, it's easy to forget that the PP 82DSP with its phenomenal design is also enticing to look at and to touch.



The secret of maximum efficiency

The unique P3S power pack of the PP 82DSP controls the internal supply voltage of the Class-D output stages, depending upon the audio signals of all eight channels. This combination guarantees unparalleled overall efficiency at minimal heat generation.



An Interface in any case

Whether it be the AUX input for an iPod / iPhone, optical input for digital sources with virtually any scanning sampling rate from 6 – 192 kHz or a preamplifier output for the connection of additional output stages – PP 82DSP leaves nothing to be desired.



Functionality on request

The optional cable remote control is just as flexible as the PP 82DSP – both controllers and the selector switch are freely assignable via our DSP PC-Tool software. You can decide whether you want to use it for controlling the overall volume, subwoofer level or the AUX input, for example. Various functions can also be assigned to the switch.



“Eight” in one fell swoop

This is truly remarkable for an amplifier in this performance class – all eight channels of the PP 82DSP are configurable with DSP functions via the PC software. Four of these channels can even be mixed through a signal matrix consisting of arbitrary input signals.

Features PP 82DSP

- Proprietary Class HD technology for unparalleled efficiency at minimal heat generation
- Eight independently configurable amplifier channels for maximum flexibility
- Extremely high performance DSP with virtually boundless sound engineering opportunities; freely configurable via PC software
- 56 Bit DSP technology and 24 Bit AD/DA converter from Burr-Brown
- Optical S/PDIF input 6 – 96 kHz with integrated sampling converter
- USB-on-board for direct connection to a PC
- Freely configurable to two-channel pre-out for the connection of additional amplifiers

- AUX input with automatic or manual changeover
- Start/stop capability, all the way down to 6V supply voltage
- The latest D/A converter-controlled P3S power supply technology with “ECO Mode”
- Connection for optional cable remote control, functionality configurable using PC software
- State-of-the-art SMD technology for a smaller footprint and maximum reliability
- Printed circuit boards in sixfold multilayer technology for optimal power and signal transmission

► SPECIFIC Simply perfect ◀

The perfect synthesis of easy installation and optimum sound performance – the car-specific speakers for BMW and Volkswagen are designed for a direct fitment into the original mounting locations.

Besides the mechanical construction the sound has been optimized for the respective cars.

Both speakers and crossover network are exactly laid out for the specific

application, therefore allowing a spectacular sound improvement together with significantly increased power handling.

Especially in combination with powerful amplifiers like PP 82DSP or MA 10FX / MA 40FX this speaker series is really a must.



Component systems - 1" / 25 mm silk-dome tweeter

The 1" / 25 mm tweeter with highly efficient neodymium magnet and silk dome for natural, uncoloured sound reproduction can be easily exchanged for the original tweeter in the mirror triangle without the need of any mechanical modifications.



It depends on the damping

Cones made from paper unify high rigidity with very low weight which has a positive impact on the speaker's efficiency. An additional coating not only improves immunity to moisture but also increases the inner damping of the cone. The result: A smooth frequency response and excellent clarity in combination with minimum sound colouration.



Component systems - crossover

The crossover network, equipped with highgrade components only, is designed to achieve an ideal frequency response which comes as close as possible to the generally-accepted reference curve. Its compact size allows easy placement inside the doors.

MS 62C-VW.1



2-way component system with car-specific Volkswagen upgrade speakers; 6.5" / 165 mm midwoofer and 1" / 25 mm silk dome tweeter for the original mounting positions, separate crossover with reference curve setup and car-specific wiring harness

Features car-specific speakers

- Easiest installation due to car-specific baskets and ready-for-use wires
- High power handling and efficiency
- High-end crossover with reference curve setup (component systems)
- 1" / 25 mm silk dome tweeter (component systems)
- 0.75" / 20 mm silk dome tweeter (coaxial systems)
- 8" / 200 mm subwoofer with enormous power handling thanks to 1.5" / 38 mm voice coil – ideal for sound upgrades with additional power amplifiers (subwoofer MS 8B-BMW.2)

	MS 62C-VW.1
RMS / max. power	80 / 160 Watts
Frequency range	40 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter woofer / tweeter	165 mm / 25 mm; 6.5" / 1"
Crossover	Separate, 6 dB / 12 dB slope
Compatibility*	Polo (Polo V - Typ 6R); Golf (Golf VI - Typ 1K, Golf VII - Typ AU); Scirocco (Scirocco III - Typ 13)

* Status: January 2016

MS 83C-BMW.1

3-way component system with car-specific BMW upgrade speakers; 8" / 200 mm under-seat subwoofer, 4" / 100 mm midrange and 1" / 25 mm silk dome tweeter for the original mounting positions, separate crossover with reference curve setup

MS 42C-BMW.1

2-way component system with car-specific BMW upgrade speakers; 4" / 100 mm midrange and 1" / 25 mm silk dome tweeter for the original mounting positions, separate crossover with reference curve setup

MS 8B-BMW.1

8" / 200 mm subwoofer with neodymium magnet system for the under-seat installation in BMWs, fits in the original mounting position

MS 4X-BMW.1

2-way coaxial system, 4" / 100 mm midrange with 0.75" / 20 mm silk dome tweeter

	MS 83C-BMW.1
RMS / max. power	100 / 200 Watts
Frequency range	30 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter subwoofer / midrange / tweeter	200 mm / 100 mm / 25 mm; 8" / 4" / 1"
Crossover	Separate, 6 dB / 12 dB slope with bandstop filter

	MS 42C-BMW.1
RMS / max. power	60 / 120 Watts
Frequency range	100 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter midrange / tweeter	100 mm / 25 mm; 4" / 1"
Crossover	Separate, 6 dB / 12 dB slope with bandstop filter

	MS 8B-BMW.1
RMS / max. power	100 / 200 Watts
Frequency range	30 Hz - 140 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter subwoofer	200 mm; 8"

	MS 4X-BMW.1
RMS / max. power	60 / 120 Watts
Frequency range	100 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter midrange / tweeter	100 mm / 20 mm; 4" / 0.75"
Crossover	Separate, 6 dB slope

Compatibility*	
Speakers	Model range
MS 83C-BMW.1	1-series (E81/82/87/88), 3-series (E90/91/92/93), 5-series (E60**/61**, F10/11), X1 (E84)
MS 42C-BMW.1	1-series (E81/82/87/88), 3-series (E90/91/92/93), 5-series (E60**/61**, F10/11), X1 (E84)
MS 8B-BMW.1	1-series (E81/82/87/88), 3-series (E90/91/92/93), 5-series (E60/61, F10/11), 7-series (F01), X1 (E84), X3 (E83)
MS 4X-BMW.1	1-series (E81/82/87/88), 3-series (E90/91/92/93), 5-series (E60**/61**, F10/11), X1 (E84)

* Status: January 2016
** Slight modifications of the installation place necessary

MS 83C-BMW.2



3-way component system with car-specific BMW upgrade speakers, 8" / 200 mm under-seat subwoofer, 4" / 100 mm midrange and 1" / 25 mm silk dome tweeter for the original mounting positions, separate crossover with reference curve setup

MS 42C-BMW.2



2-way component system with car-specific BMW upgrade speakers, 4" / 100 mm midrange and 1" / 25 mm silk dome tweeter for the original mounting positions, separate crossover with reference curve setup

MS 8B-BMW.2



8" / 200 mm subwoofer with neodymium magnet system for the under-seat installation in BMWs, fits in the original mounting position

MS 4X-BMW.2



2-way coaxial system with car-specific upgrade speakers for BMW, 4" / 100 mm midrange with 0,75" / 20 mm silk dome tweeter for original mounting positions, separate crossover

Compatibility*	
Speakers	Model range
MS 83C-BMW.2	1-series (F20/21), 2-series (F22/23), 3-series (F30/31/34/35), 4-series (F32/33), 6-series (F12/13), X3 (F25), X4 (F26)
MS 42C-BMW.2	1-series (F20/21), 2-series (F22/23), 3-series (F30/31/34/35), 4-series (F32/33), 6-series (F12/13), X3 (F25), X4 (F26)
MS 8B-BMW.2	1-series (E81/82/87/88, F20/21), 2-series (F23/23), 3-series (E90/91/92/93, F30/31/34/35), 4-series (F32/33), 5-series (E60/61, F10/11), 6-series (F12/13), 7-series (F01), X1 (E84), X3 (E83, F25), X4 (F26), X5 (E70), X6 (E71)
MS 4X-BMW.2	1-series (F20/21), 2-series (F22/23), 3-series (F30/31/34/35), 4-series (F32/33), 6-series (F12/13), X3 (F25), X4 (F26)

* Status: January 2016

	MS 83C-BMW.2
RMS / max. power	150 / 300 Watts
Frequency range	30 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter subwoofer / midrange / tweeter	200 mm / 100 mm / 25 mm; 8" / 4" / 1"
Crossover	Separate, 6 dB / 12 dB slope with bandstop filter

	MS 42C-BMW.2
RMS / max. power	60 / 120 Watts
Frequency range	100 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter midrange / tweeter	100 mm / 25 mm; 4" / 1"
Crossover	Separate, 6 dB / 12 dB slope with bandstop filter

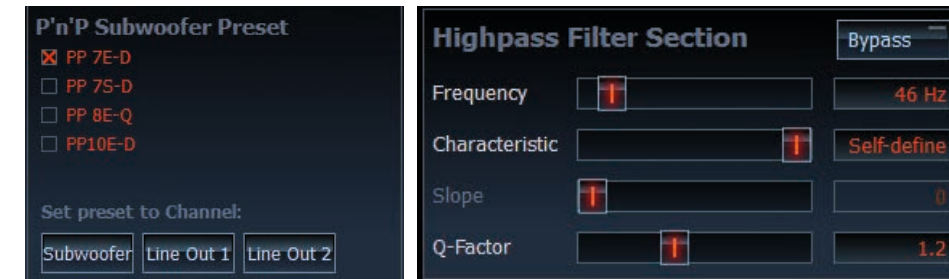
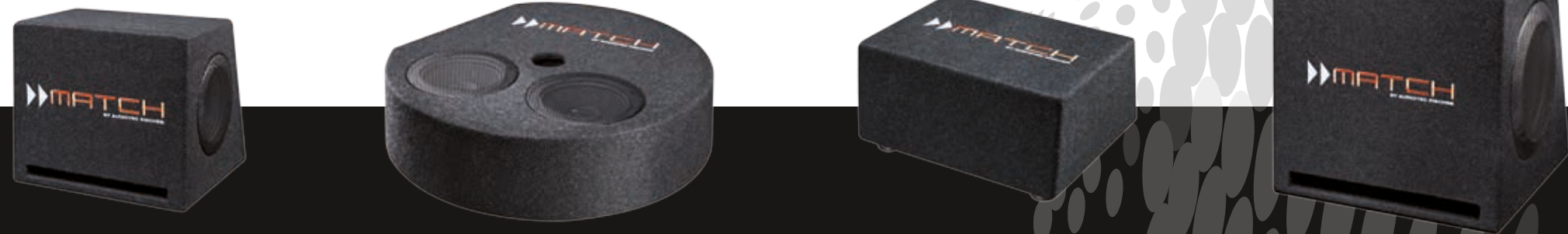
	MS 8B-BMW.2
RMS / max. power	150 / 300 Watts
Frequency range	30 Hz - 140 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter subwoofer	200 mm; 8"

	MS 4X-BMW.2
RMS / max. power	60 / 120 Watts
Frequency range	100 Hz - 25,000 Hz
Sensitivity	90 dB 1 W / 1 m
Impedance	4 Ohms
Diameter midrange / tweeter	100 mm / 20 mm; 4" / 0.75"
Crossover	Separate, 6 dB slope

The right bass for every purpose – the subwoofers are the ideal complement to the MATCH Plug & Play amplifiers. Choose your dream combination based on available space in your trunk and your personal demand not only to hear the music but to feel it. These subs are the best example of how an intelligent teamwork of amplifier and speakers, thanks to sophisticated DSP technology, can create intense bass you can feel inside the vehicle, even

with extremely small dimensions. The secret is the meticulous matching of components – together with the MATCH Plug & Play amplifiers can these subwoofers ascend to the heights of audio brilliance.

▶ FEEL THE POWER The space savers ◀



A MATCH made in heaven

All MATCH Plug & Play enclosure subwoofers are designed as so-called “highpass filtered vented systems”. This means that a suitable highpass filter in DSP must be configured, so that these subwoofers can deliver the right performance. In the latest PC-Tool software, the appropriate settings are already saved and can be retrieved at the “push of a button”.



The simple connection

A pre-assembled connection cable (4.8 m long) is included with all MATCH Plug & Play enclosure subwoofers. Thanks to the coded plug connectors, it is impossible to hook up the wrong connection by accident. This means that the connection to the MATCH Plug & Play amplifiers is a snap.



A great bass without loss of space

The PP 7S-D fits inside the spare wheel compartment on most vehicles in place of the spare wheel. This means that not one liter of precious trunk capacity is lost. The woofer is attached to the central bolt which normally holds the spare wheel into place. This means you can derive maximum bass enjoyment with a minimum space requirement.

Features enclosure subwoofers

- Optimized for MATCH Plug & Play amplifiers
- Extremely easy connection of pre-assembled subwoofer wiring assemblies (in the delivery)
- Incredibly stiff, scooped paper membranes
- High-endurance voice coils with large layer widths
- Double-vented voice coils for minimized compression effects
- Sturdy metal grille offers optimal protection for your woofers

PP 7E-D



Compact bass-reflex subwoofer, equipped with two 6.5" / 165 mm woofers with dual voice coil, impedance 4 x 2 Ohms

PP 7S-D



Round bass-reflex subwoofer, equipped with two 6.5" / 165 mm woofers with dual voice coil, impedance 4 x 2 Ohms, fits into many spare wheel recesses instead of the spare wheel.

PP 8E-Q



Extremely compact "downfiring" bass reflex subwoofer with only 9 liters net volume, 8" / 200 mm woofer with fourfold (quad coil) voice coil, impedance 4 x 3 Ohms

PP 10E-D



Particularly high-performance bass reflex subwoofer with two 10" / 250 mm woofers with dual voice coil and impedance of 4 x 2 Ohms

	PP 7E-D
RMS / max. power	200 / 400 Watts
Sensitivity	90 dB 1W / 1 m
Impedance	4 x 2 Ohms
Linear cone excursion	+/- 5 mm
Dimensions (H x W x D)	280 x 318 x 310 mm; 11.0 x 12.5 x 12.2"

	PP 7S-D
RMS / max. power	200 / 400 Watts
Sensitivity	90 dB 1W / 1 m
Impedance	4 x 2 Ohms
Linear cone excursion	+/- 5 mm
Dimensions (H x W x D)	500 x 120 mm; 19.7 x 4.8"

	PP 8E-Q
RMS / max. power	200 / 400 Watts
Sensitivity	87 dB 1W / 1 m
Impedance	4 x 3 Ohms
Linear cone excursion	+/- 6.5 mm
Dimensions (H x W x D)	189 x 340 x 310 mm; 7.5 x 13.4 x 12.2"

	PP 10E-D
RMS / max. power	300 / 600 Watts
Sensitivity	91 dB 1W / 1 m
Impedance	4 x 2 Ohms
Linear cone excursion	+/- 5.5 mm
Dimensions (H x W x D)	375 x 400 x 415 mm; 14.8 x 15.8 x 16.4"

▶ SELF-MADE Bass Power ◀

You didn't find the right type of product? In case none of the four MATCH Plug & Play enclosure subwoofers fit the optimal styling in your vehicle, then the PP72 W-D and PP8 W-Q woofers offer the opportunity for customizing your own subwoofer. These single chassis are exactly identical to the systems fitted in the various enclosure models. As long as your customized cabinet conforms to our

specifications with respect to the net volume and the matching of the bass reflex port, identical sound performance is guaranteed.

PP 72W-D



1 pair of 165 mm subwoofers with 2 x 2 Ohms dual voice coil for compact bass reflex enclosures (approx. 15 liters of net volume), connection terminal included in delivery

PP 8W-Q



200 mm subwoofer with 4 x 3 Ohms quad voice coil for extremely compact bass reflex housings (approx. 9 liters of net volume), connection terminal included in delivery



Peak of Professionalism

In order to make your life as easy as possible when designing your own enclosure, the MATCH Plug & Play single subwoofers already contain the appropriate connection terminal with pre-assembled plug connectors. This means you won't even need a soldering iron to connect it to the woofer.



You decide the length

Those building their own enclosure also require an adequate connection cable to the MATCH Plug & Play amplifier. These are available individually – allowing you to choose among three different lengths (1 m, 3.3 m or 4.8 m).

	PP 72W-D (per subwoofer)
RMS / max. power	100 / 200 Watts
Sensitivity	87 dB 1W / 1 m
Impedance	2 x 2 Ohms
Resonance frequency	53 Hz
Qms	3.3

Qes	0.41
Qts	0.37
VAS	7.9 liters
Linear cone excursion	+/- 5 mm
Installation depth	80 mm / 3.2"
Installation diameter	134 mm / 5.3"

	PP 8W-Q
RMS / max. power	200 / 200 Watts
Sensitivity	87 dB 1W / 1 m
Impedanz	4 x 3 Ohms
Resonance frequency	37 Hz
Qms	5.4

Qes	0.57
Qts	0.51
VAS	23 liters
Linear cone excursion	+/- 6.5 mm
Installation depth	105 mm / 4.1"
Installation diameter	183 mm / 7.2"

Features subwoofer chassis

- Incredibly stiff, scooped paper membranes
- High-endurance voice coils with large layer widths
- Double-vented voice coils for minimized compression effects
- Powerful magnets for compact bass reflex enclosure
- Connection terminal for MATCH subwoofer cables included in delivery

Each person is individual with different taste and needs - not everybody is satisfied with given solutions. The demand to realize own ideas is not only a matter of the financial budget - it is the ambition to achieve the personal goal. MATCH Universal series offers the right products to build up a sound system according to your personal taste.

Even if the MATCH Universal components require a little more installation effort than our Plug & Play products, they doubtlessly still follow the same approach of easy fitting in the best sense.

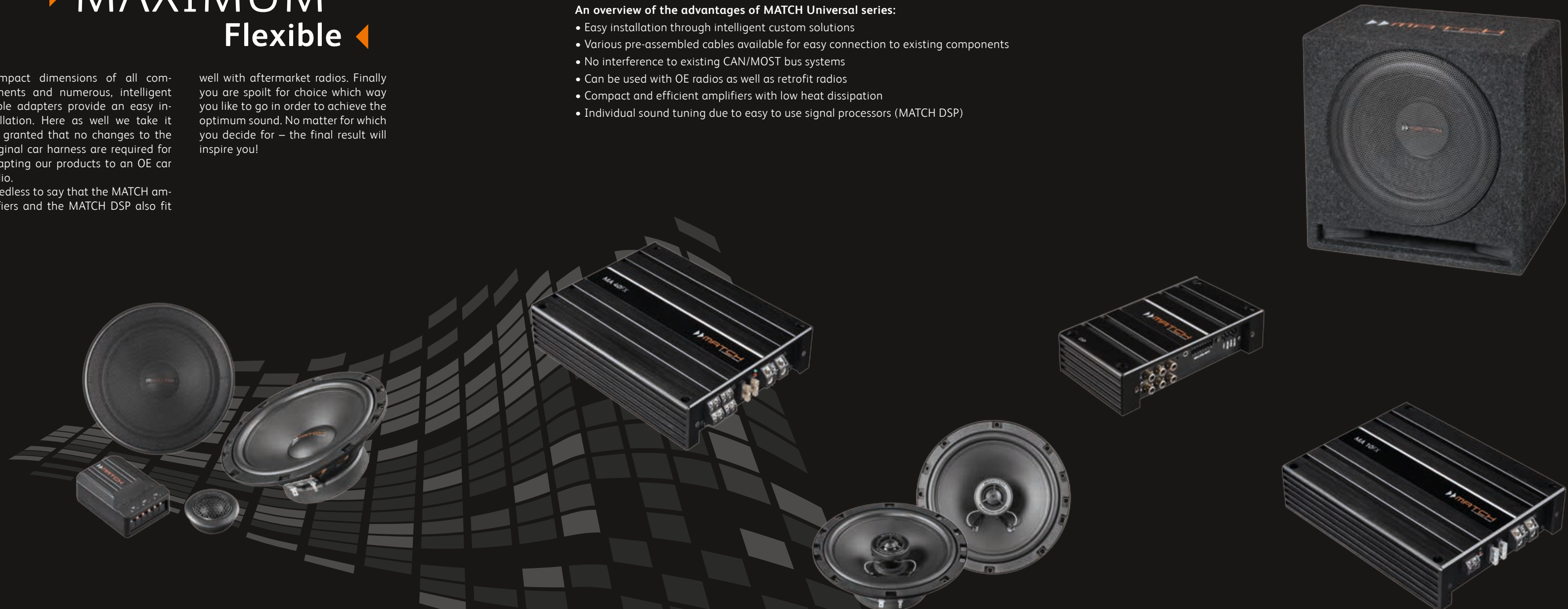
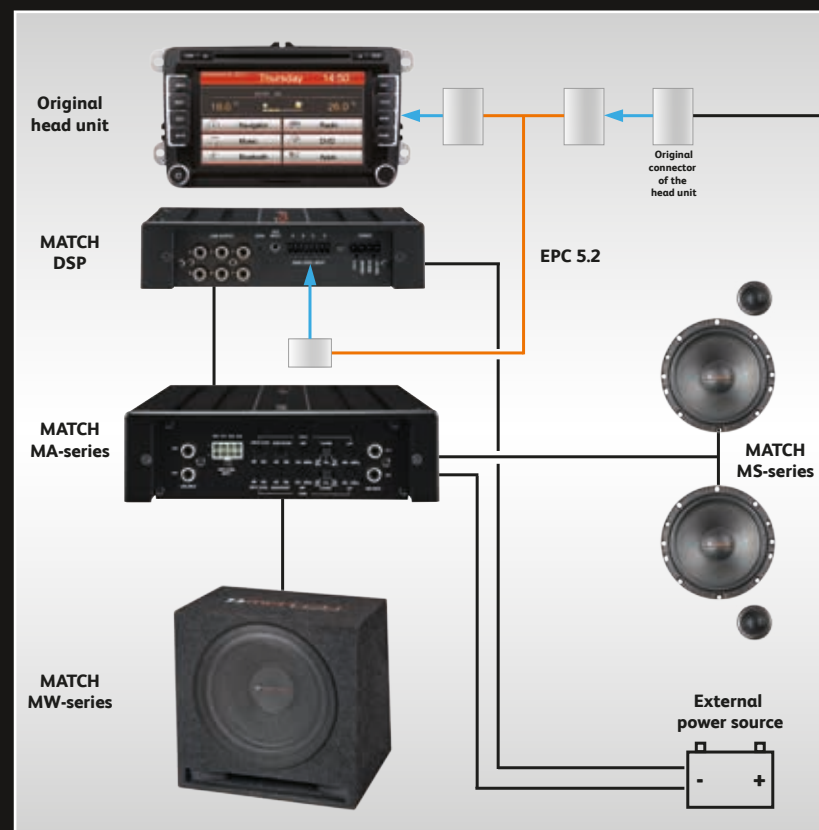
▶ MAXIMUM Flexible ◀

Compact dimensions of all components and numerous, intelligent cable adapters provide an easy installation. Here as well we take it for granted that no changes to the original car harness are required for adapting our products to an OE car radio. Needless to say that the MATCH amplifiers and the MATCH DSP also fit

well with aftermarket radios. Finally you are spoilt for choice which way you like to go in order to achieve the optimum sound. No matter for which you decide for – the final result will inspire you!

An overview of the advantages of MATCH Universal series:

- Easy installation through intelligent custom solutions
- Various pre-assembled cables available for easy connection to existing components
- No interference to existing CAN/MOST bus systems
- Can be used with OE radios as well as retrofit radios
- Compact and efficient amplifiers with low heat dissipation
- Individual sound tuning due to easy to use signal processors (MATCH DSP)



Easy to install, easy to adjust – the MATCH DSP is the perfect solution for smaller sound systems which are driven by the original car radio. Its layout allows common configurations (front L/R, rear L/R + subwoofer) as well as full active front systems including subwoofer and center speaker. The versatile AUX input manages additional sources. Nevertheless the reduction to the basics is only limited to the number of channels – the wellknown PC software and the technology inside this stunning device is as perfect as every

other product from Audiotec Fischer. 56 Bit signal processing, top-notch converters from Asahi Kasei and an uncompromising internal power supply care for outstanding measuring results and exceptional sound quality, both redefining the standards not only in this segment.

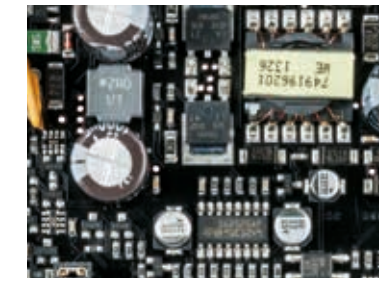
	DSP
Inputs	4 x Highlevel speaker input, 1x AUX stereo phone jack 3.5 mm, 1 x Remote In
Input sensitivity	Highlevel 10 V, lowlevel 2.5 V, AUX 100 mV
Outputs	6 x RCA/Cinch, 1 x Remote Out
Output voltage	4 Volts
Frequency range	10 - 22,000 Hz
DSP resolution	56 Bit
DSP processing power	172 MHz
Signal converter	A/D: Asahi Kasei D/A: Asahi Kasei
Signal-to-noise ratio	105 dB
Total harmonic distortion (THD+N)	< 0.004 %
Crosstalk	> 90 dB
Operating voltage	9.6 - 18 Volts (5 sec. down to 6 Volts)
Dimensions (H x W x D)	44 x 185 x 100 mm; 1.73 x 7.28 x 3.93"



Also available as version with Plug & Play cable harness EPC 5.2

▶ SOUND DESIGN Easily done ◀

The MATCH DSP is consistently continuing the philosophy of all MATCH products - it couldn't be easier to handle a signal processor with a range of features like this one. It represents the essence of our decades of experience in the development of devices including DSP technology and riddled with details and functions which pursues only one crucial target: Perfect sound. Exquisite components and ingeniously-devised circuit board layouts are responsible for a redefined quality standard in this segment.



Extremely complex power supply
A lot of care has been taken on the internal power supply of the MATCH DSP. Numerous controllers and regulators provide utmost voltage stability even when the battery voltage drops down to 6 Volts during engine start. So this processor is well prepared for cars with start-/stop feature.



Six in a row
The DSP PC-Tool software allows to freely configure each of the six channels. You have directly access to high-, low- and bandpass, phase- and time alignment as well as to many EQ bands. The MATCH DSP provides everything for the ultimate sound in your car.



Everything under control
The optional cable remote control also offers something new - both knobs and the switch can be freely defined via software. You can decide for example whether they are used to adjust the overall volume, the level of the subwoofer or the AUX input. You can also assign different functions to the switch.



Optionally included - the EPC 5.2
The MATCH DSP is also available as a version which includes the cable harness EPC 5.2. In combination with an optional car-specific "PP-AC" adapter the connection to an OE car radio couldn't be easier.

Features DSP

- Windows interface – communication via USB 2.0
- MicroSD slot to upload DSP settings without connecting the DSP to a PC
- Special audio DSP with a resolution of 56 Bit – optimized for highest sound quality
- Freely configurable inputs and outputs
- The highlevel inputs can also be used as lowlevel inputs (RCA adapter PP-RCA optionally available)
- Separate AUX input with intelligent, signal-dependent activation, e.g. for mobile devices like smartphones
- Prepared for optional remote control

- Graphical 30-band EQ per channel with "fine adjustment" of the individual bands in 1/24 octave steps, all established filter characteristics are available and much more
- Time alignment adjustment in narrow 7 mm steps
- All major characteristics for highpass and lowpass filters are separately selectable
- "Power Save Mode" for the remote output
- "Diagnostics Error Protection" circuit for the highlevel input
- Very compact size
- Also available as version with Plug & Play cable harness EPC 5.2

DIGITAL Compact and universal

Plenty of power in a small size - latest, integrated Class D circuitry together with reliable SMD technology inside the MA amplifiers makes it possible. Choose from two universal power packs that make even low-efficiency speakers getting off the ground. The extremely versatile MA 40FX cannot only be configured as 4- / 3- or 2-channel amplifier, but also cares for the right setup thanks to its integrated crossover with numerous adjustment possibilities.

MA 10FX in contrast is a powerful mono block for subwoofer applications which can easily deliver up to 500 Watts at 2 Ohms. Its output power is well suited for the all-purpose MATCH subwoofers of the MW series. Both MA amps are a good example for ease of integration – they are of course not solely equipped with RCA inputs but as well with specially designed highlevel inputs for a direct connection to the speaker outputs of OE radios.

	MA 40FX
RMS / max. power	
- at 4 Ohms	4 x 75 Watts / 150 Watts
- at 2 Ohms	4 x 140 Watts / 280 Watts
Bridged at 4 Ohms	2 x 280 Watts / 560 Watts
Frequency range	10 Hz - 30,000 Hz
Inputs	4 x RCA/Cinch, 4 x Highlevel
Total harmonic distortion (THD)	< 0.05 %

MA 40FX

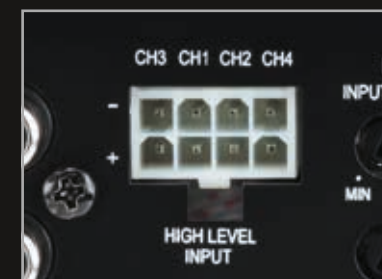


Signal-to-noise ratio	> 91 dB
Damping factor	> 60
Input sensitivity RCA/Cinch / Highlevel	0.4 - 6 Volts / 1 - 15 Volts
Highpass / lowpass	10 Hz - 4,000 Hz / 50 Hz - 4,000 Hz
Bandpass	10 Hz - 4,000 Hz
Bass boost	0 - 12 dB @ 45 Hz
Dimensions (H x W x D)	53 x 184 x 235 mm / 2.1 x 7.25 x 9.25"

MA 10FX



	MA 10 FX
RMS / max. power	
- at 4 Ohms	1 x 300 Watts / 600 Watts
- at 2 Ohms	1 x 500 Watts / 1000 Watts
Frequency range	10 Hz - 250 Hz
Inputs	2 x RCA/Cinch, 2 x Highlevel
Total harmonic distortion (THD)	< 0.3 %
Signal-to-noise ratio	> 85 dB
Damping factor	> 100
Input sensitivity RCA/Cinch / Highlevel	0.4 - 6 Volts / 1- 15 Volts
Subsonic (highpass) / lowpass	10 Hz - 50 Hz / 30 Hz - 250 Hz
Bass boost	0 - 12 dB @ 45 Hz
Phase adjustment	0° - 180°
Dimensions (H x W x D)	53 x 184 x 235 mm / 2.1 x 7.25 x 9.25"



The intelligent highlevel input
The fully-differential highlevel input of the MA-series is equipped with Audiotech Fischer's unique DEP circuit (Diagnostics Error Protection), means that OE car radios with speaker diagnosis function will not generate any undesired error logs if this amplifier is connected.



Crossover network on-board
The MA amplifiers have a crossover for fully-active speaker configurations already implemented. The cut-off frequencies for the highpass and lowpass filters can be adjusted individually, allowing to adapting the amplifier to almost every practical application.



Cable remote control MA 10FX

Features MA amplifiers

- Compact, powerful Class D amplifiers
- Very high efficiency, low heat dissipation
- Very compact design
- Lowlevel RCA inputs
- Differential speaker inputs with automatic turn-on detection and "Diagnostics Error Protection" circuit
- Fully active crossover with highpass filter, lowpass filter and bass boost
- Cable remote control for subwoofer level included in delivery (MA 10FX only)
- SMD (Surface Mounted Device) manufacturing technology combines minimum space requirement with maximum reliability

MS 42C



MS 52C



MS 62C



MS 4X



MS 5X



MS 6X



It depends on the damping
 Cones made from paper unify high rigidity with very low weight which has a positive impact on the speaker's efficiency. An additional coating not only improves immunity to moisture but also increases the inner damping of the cone. The result: A smooth frequency response and excellent clarity in combination with minimum sound colouration.

▶ SIMPLE More sound ◀

2-way component system with reduced mounting depth, woofer with high damping coated paper cone, 25 mm / 1" silk dome tweeter with neodymium magnet, separate crossover with high-grade components and tweeter protection, grille included

2-way coaxial system with reduced mounting depth, woofer with high damping coated paper cone, integrated tweeter with polymer dome and neodymium magnet, grille included

Even if cutting-edge DSP technology is able to significantly improve the sound of OE speakers, it will never be possible to eliminate all acoustical flaws – in some cases you have to replace them. Especially if you plan to add powerful amplifiers to your sound system, you will notice that the OE speakers will easily reach their limits, means that they are not able to transform the extra power into sound pressure. This is where the new MATCH Universal speakers come into play – a line-up of speakers in all

common sizes and two different configurations. Both the coaxial drivers and the component systems warrant for a massive sound improvement. Thanks to the easy and quick installation you can improve your sound performance within shortest time.

	MS 42C	MS 52C	MS 62C
RMS / max. power	35 / 105 Watts	40 / 120 Watts	50 / 150 Watts
Frequency range	90 Hz - 22,000 Hz	65 Hz - 22,000 Hz	55 Hz - 22,000 Hz
Sensitivity	89 dB 1 W / 1 m	90 dB 1 W / 1 m	91 dB 1 W / 1 m
Impedance	4 Ohms	4 Ohms	4 Ohms
Diameter woofer / tweeter	100 mm / 25 mm; 4" / 1"	130 mm / 25 mm; 5.25" / 1"	165 mm / 25 mm; 6.5" / 1"
Installation depth	44.5 mm / 1.75"	47.5 mm / 1.87"	58 mm / 2.28"
Crossover	Separate, 6 dB / 12 dB slope	Separate, 6 dB / 12 dB slope	Separate, 6 dB / 12 dB slope

	MS 4X	MS 5X	MS 6X
RMS / max. power	30 / 90 Watts	40 / 120 Watts	45 / 135 Watts
Frequency range	100 Hz - 22,000 Hz	70 Hz - 22,000 Hz	60 Hz - 22,000 Hz
Sensitivity	89 dB 1 W / 1 m	90 dB 1 W / 1 m	91 dB 1 W / 1 m
Impedance	4 Ohms	4 Ohms	4 Ohms
Diameter woofer / tweeter	100 mm / 20 mm; 4" / 0.75"	130 mm / 20 mm; 5.25" / 0.75"	165 mm / 20 mm; 6.5" / 0.75"
Installation depth	44.5 mm / 1.75"	47.5 mm / 1.87"	58 mm / 2.28"
Crossover	6 dB slope	6 dB slope	6 dB slope

Features Universal speakers

- Reduced mounting depth for easy installation
- Woofer with high damping coated paper cone
- 25 mm / 1" silk dome tweeter with neodymium magnet (component systems)
- Integrated tweeter with polymer dome and neodymium magnet (coaxial systems)
- Separate, compact crossover with high-grade components and tweeter protection (component systems)
- Grille and installation materials are included in all sets

▶ ELEMENTAL FORCE ◀

Feel the bass ◀

That will rock your car – the new enclosure subwoofers MW 10E-D and MW 12E-D together with the mono amplifier MA 10FX will be the right combination for everybody who wants to let it blast. With these subs maximum punch is guaranteed. The particularly long-throw woofers with their stiff cones and high loadable voice coils are designed to convert the power of the amplifier into enormous sound pressure without any compression effects.

Nevertheless the parameters have been cleverly chosen to please sound-pressure-fanatics as well as the sound-quality enthusiasts. Who thinks that this technical “balancing act” requires large enclosures, will be pleasantly surprised how compact the dimensions of the MW 10E-D and MW 12E-D actually are - because trunk-filling subwoofers are not justified in the MATCH philosophy.

MW 10E-D



Powerful subwoofer equipped with 10" / 250 mm driver and variable impedance of 2 x 2 Ohms or 1 x 4 Ohms in an optimized vented enclosure

	MW 10E-D
RMS / max. power	300 / 600 Watts
Sensitivity	89 dB 1 W / 1 m
Impedance	2 x 2 Ohms / 1 x 4 Ohms
Linear cone excursion	+/- 8 mm
Dimensions (H x W x D)	365 x 350 x 290 mm; 14,4 x 13,8 x 11,4"

MW 12E-D



Powerful subwoofer equipped with 12" / 300 mm driver and variable impedance of 2 x 2 Ohms or 1 x 4 Ohms in an optimized vented enclosure

	MW 12E-D
RMS / max. power	300 / 600 Watts
Sensitivity	89 dB 1 W / 1 m
Impedance	2 x 2 Ohms / 1 x 4 Ohms
Linear cone excursion	+/- 8 mm
Dimensions (H x W x D)	400 x 400 x 345 mm; 15,8 x 15,8 x 13,6"



Switch it parallel

The speaker connector with its massive, gold-plated screw terminals allows two different configurations. If the metal bracket is mounted, the woofer has an impedance of 1 x 4 Ohms (which is ideal if used in combination with the MA 10FX amplifier). Without the metal bracket each voice coil can be driven separately (impedance in this case 2 x 2 Ohms).



A perfect flow

In order to keep the air flow noise almost inaudible even at high sound pressure levels, the port has been shaped exponentially. It is tuned to a deep and precise bass response without any undesired booming effects.

Features enclosure subwoofers

- Compact, space-saving enclosure design
- Long excursion woofer with extremely stiff, hand-scooped paper cone
- Double ventilated voice coil for minimum compression effects and high power handling
- Lead wires woven into spider
- Voice coil impedance configurable via connection terminal – 2 x 2 Ohms or 1 x 4 Ohms
- Rugged metal grille for perfect woofer protection
- Exponentially shaped port minimizes air flow noise

▶ DEPTH EFFECT For Big hitter ◀

MW 10W-D



10" / 25 cm subwoofer with dual voice coil, well suited for compact vented enclosures with approx. 19 liters net volume

MW 12W-D



12" / 30 cm subwoofer with dual voice coil, well suited for compact vented enclosures with approx. 30 liters net volume

If you prefer a different form factor for the sub enclosures you have the chance to easily build your "personalized" version by yourself. If you want to use your trunk volume you can design your car-specific shaped enclosure. As with the Plug & Play-subwoofers the single chassis are 100% identical to the drivers that are used in the pre-loaded variants. Therefore a simple rule takes effect in this case - as long as your customized box conforms to our specifica-

tions with respect to the net volume and the matching of the bass reflex channel, identical sound performance is guaranteed. Trust in your handcraft skills and build the perfect subwoofer enclosure for your car.



Rock-solid

A stiff cone that is resistant to bending even at very high cone excursions is essential for precise bass response. Almost no other material meets this requirement combined with low weight as good as hand-scooped paper fibres. No wonder that the cones of all MATCH subwoofers have been designed that way. The concave shape of the dust cap with its stabilizing center nose-piece improves these characteristics even further.



Ideally woven

The large linear and maximum cone excursion of the MATCH subwoofers requires a careful design of the lead wires from the push terminals to the voice coil. That's why Audiotec Fischer has decided for the best solution, means that the wires are woven into the spider. So they can permanently handle even extreme cone excursions without fatigue.

	MW 10W-D
RMS / max. power	300 / 600 Watts
Sensitivity	88 dB 1W / 1 m
Impedance	2 x 2 Ohms
Resonance frequency	36 Hz
Qms	4.5

Qes	0.43
Qts	0.39
VAS	34 liters
Linear cone excursion	+/- 8 mm
Mounting depth	128.5 mm / 5.1"
Mounting diameter	232 mm / 9.2"

	MW 12W-D
RMS / max. power	300 / 600 Watts
Sensitivity	90 dB 1W / 1 m
Impedance	2 x 2 Ohms
Resonance frequency	32 Hz
Qms	3.7

Qes	0.46
Qts	0.41
VAS	66 liters
Linear cone excursion	+/- 8 mm
Mounting depth	144 mm / 5.7"
Mounting diameter	281 mm / 11.1"

Features subwoofer chassis

- Extremely stiff, hand-scooped paper cone
- Temperature-resistant 50 mm voice coil, lead wires woven into spider
- Very long linear excursion (+/- 8mm) and maximum excursion (+/- 16 mm)
- Double ventilated voice coil for minimum compression effects and high power handling
- Powerful magnet system for compact vented enclosures
- Solid push terminals for solderless cable connection



DIRECTOR / URC 2A

These remote controls for PP 52DSP, PP 62DSP, PP 82DSP and Match DSP offer the option to comfortably manage several functions of the integrated processor from the drivers seat - for example the volume control of an external source, the subwoofer level or turning on/off the optimized car-specific DSP sound setup.

PP-ISO

The ready-made PP-ISO cable harnesses for all Plug & Play amplifiers are intended for the easy connection of the amplifiers to radios with ISO-connectors. The PP-ISO is available in lengths of 1.00, 2.20, and 5.00 m.

EPC 5.2

The ideal cable harness that dramatically simplifies the connection of additional devices to factory car radios. The Easy Plug Cable (EPC 5.2) feeds our digital signal processors like MATCH DSP, HELIX DSP or HELIX DSP PRO with supply voltage from the car radio and the highlevel signals. An added benefit: Not even a remote signal is required for activating.

PP-UC 1

You would like to upgrade your already existing Plug & Play system, for example by adding a MATCH DSP and MATCH Universal amplifiers? No problem! The upgrade cable PP-UC 1 makes it possible without cutting any wires.

PP-EC

You can not realize the desired mounting position for your new devices because the cable is too short? In that case the Plug & Play extension cable (PP-EC) promises remedy. It allows extending all Plug & Play cable harnesses that are equipped with a 20-pole MOLEX connector. The PP-EC is available in lengths of 1.10, 2.50 and 4.00 m.

PP-SC

Plug & Play subwoofer cable - for connecting all Plug & Play subwoofers to the PP-amplifiers (PP 1SUB, PP 52DSP, PP 62DSP, PP 82DSP) and for the connection between PP 41DSP and PP 1SUB. The PP-SC is available in 1.00, 3.30 and 4.80 m length.

PP-AC

40 different adapters for about 2,500 different vehicles are available and enable connection of the MATCH amplifiers to the original cable harness of the vehicle without cutting any single wire. These adapters are combined with ISO connection cables that come along with the PP 52DSP, PP 62DSP and PP 82DSP amplifiers. Only the car-specific PP 41DSP Editions do not need an additional adapter because everything is included in delivery.

PP-RCA

Adaptor cable which allows to use the highlevel inputs of the MATCH DSP as lowlevel inputs so that they can be connected to the pre-amplifier / lowlevel / RCA outputs of car radios.

MATCH Extension Card

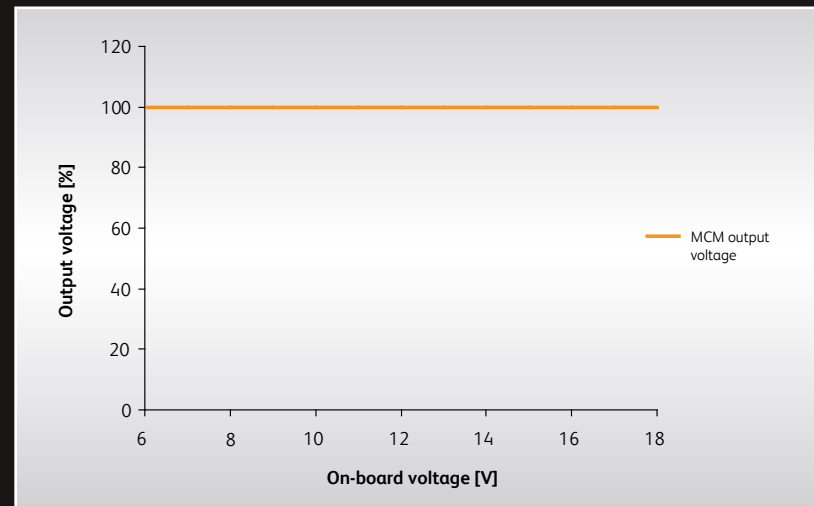
The MATCH Extension Card (MEC) makes it possible to extend the features of your device - for example with *Bluetooth*® Audio Streaming with aptX® Codec (MEC BT), an optical digital input (MEC OPTICAL IN) or an AUX input (MEC AUX IN). The modules come with device specific side panels and accessories.

MTK Measurement Tool Kit

The correct adjustment of a signal processor with all its possibilities is almost impossible by solely using your hearing - here a proper measuring equipment is necessary. The DSP PC-Tool already includes a real-time audio analyzer but nevertheless, it requires a suitable measuring microphone. Here again Audiotec Fischer offers the appropriate solution so that you can optimize your sound system fast and comfortably.

Extremely compact, efficient and unconditionally stable:

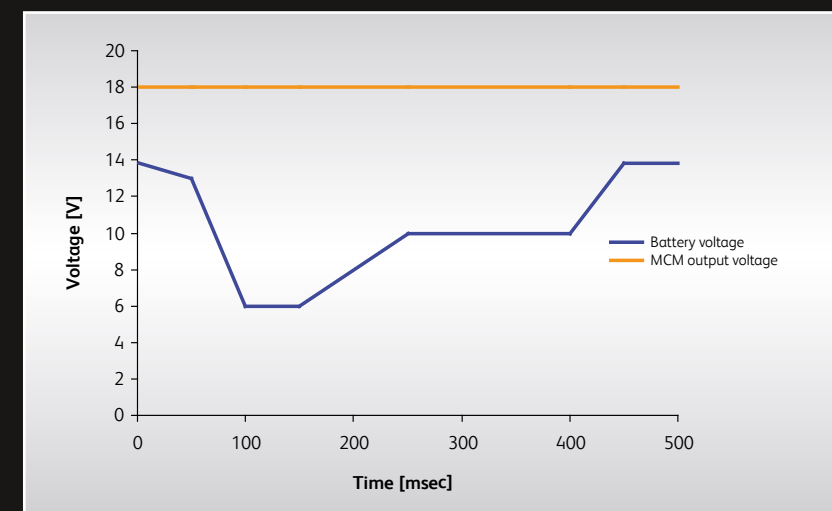
The basis for an optimum sound is a stable power supply. Therefore Audiotec Fischer uses state-of-the-art DC-/DC-converters, which provide stable output voltage under all conceivable operating conditions. But that's not all - the MCM and P³S circuit concepts in the Plug & Play amplifiers achieve sensational efficiencies with minimum space requirements.



Internal amplifier voltage in dependency on on-board supply voltage

Ready for start / stop

Even if the input voltage drops to 6 Volts the power supply assures a constant internal supply voltage. An ideal precondition for using our amps in cars with start / stop technology.



Amplifier supply voltage during engine start

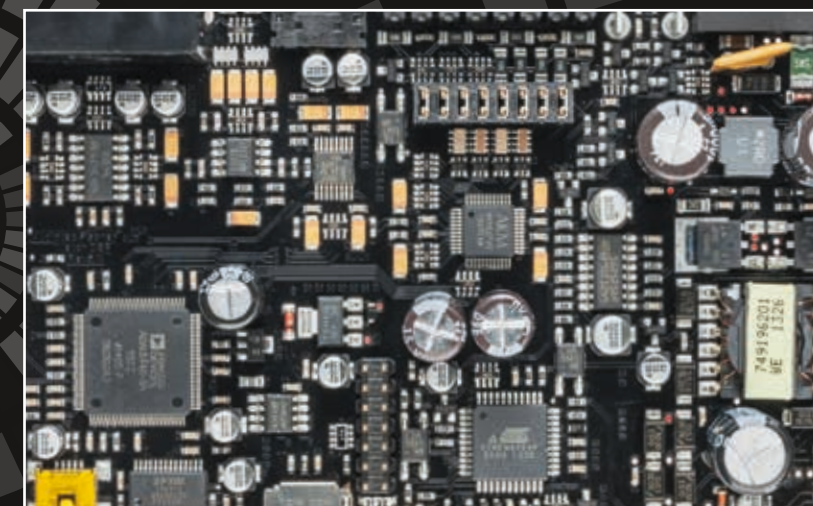
Advantages of the MCM- and P³S-power supply technology:

- 100% constant, internal power supply independent of the on-board voltage and the load
- Extremely high efficiency of approx. 96 % – thus the power supply components don't require any cooling
- Switching frequency (350 - 450 kHz) considerably further away from the audio frequency band in comparison with conventional switched power supplies (30 - 40 kHz)
- Full start/stop capability (down to 6 Volts supply voltage)
- Drastically reduced footprint on the PCB enables particularly compact designs

The overall concept makes the difference

To achieve the perfect sound quality is not easy to realize. It is the optimization of every single detail without any compromise. Choosing the right main components inside an amplifier is certainly of high importance but often the tiny technical details differentiate Audiotec Fischer products from the competitors.

- Sophisticated, low-noise power supplies with independent regulators for the analog and digital stages. For example a MATCH DSP contains not less than six regulators for all different internal supply voltages
- All internal voltages operate independently of the on-board voltage within the range of 6 - 17 Volts
- Complex additional filtering of all power and signal lines with EMI-filters
- Low-impedance PCB designs in 4-layer or even 6-layer technology with at least one separate ground layer
- Strict separation of analog and digital signals on separate layers of the circuit board
- Shortest possible signal routing with direct "Input-to-Output" signal flow
- Separate micro controllers for all "non-audio" processes



Development and production quality at the highest level

Being a supplier for the automotive industry means to comply with different benchmarks in terms of electric design and manufacturing processes. Therefore all Audiotec Fischer products are developed and manufactured according to the very high demanding standards and guidelines of leading automotive manufacturers. Every single product is not just undergoing a 100% final test, it can be traced back to virtually every individual component in its entire production process. As a result you will acquire the quality you expect from an Audiotec Fischer product.



DIN EN ISO 9001:2008 certified since 2005



DIN EN ISO 14001:2009 certified since 2014

"State-of-the-art" digital signal processing

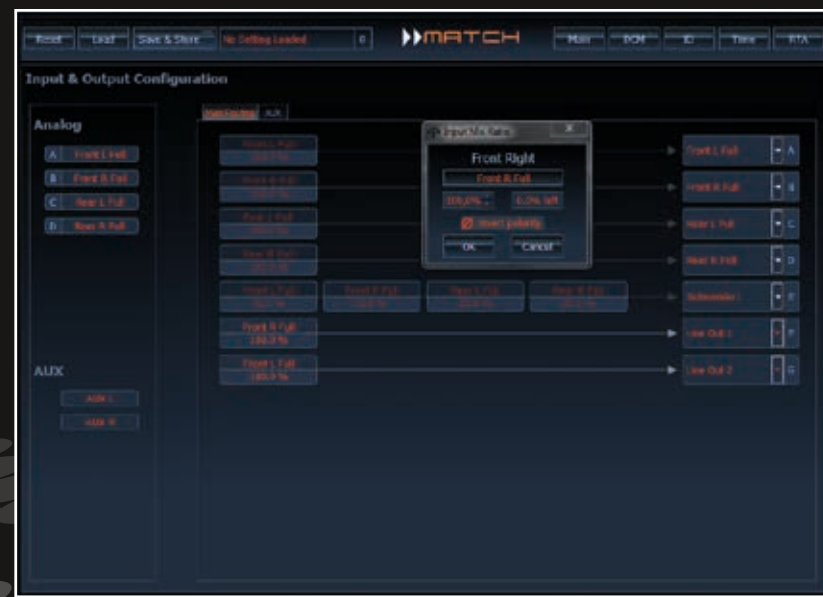
Every DSP is not the same – the quality of a signal processor depends on a large extent on the precision of the audio handling. The more complex the sound manipulation options are, the higher the signal processing resolution has to be. Without this precision you end up with lots of noises and distortions. That's why Audiotec Fischer solely uses pure Audio DSPs with at least 56 Bit resolution. Furthermore we swear by the fixed-point arithmetic which outperformed floating-point arithmetic with 32 Bit word length (as used in typical multimedia DSPs) in numerous listening sessions.

Entirely new but still familiar
Our DSP PC-Tool for controlling all products with integrated digital signal processor was continuously matured over the last three years - its extremely easy handling which is unrivalled in the competitive environment, is the reason for the enormous popularity. But now it was time to raise the bar and extend the range of functions with the next generation of our DSP PC-Tool software. This applies not only the new devices - most of the older products will benefit from the update as well.

However, in one important aspect everything will remain unaffected - the version 3 continues its principle of easy handling. On the contrary - in spite of the additional features it is even more intuitive to use as ever before.
Look forward to it!



▶ EVERYTHING Under Control ◀



Everything at a glance
All input masks have been completely revised and the illustration is been optimized. Now for example, it is possible to display the frequency response of individual channels simultaneously in the main screen.

You determine the direction
The allocation of the inputs to the outputs has been significantly simplified. By means of "drag & drop" the signal path is exactly defined in no time at all. Now it is even possible to handle the routing for different sources individually like line/highlevel, AUX or other digital inputs. Maximum flexibility is guaranteed!

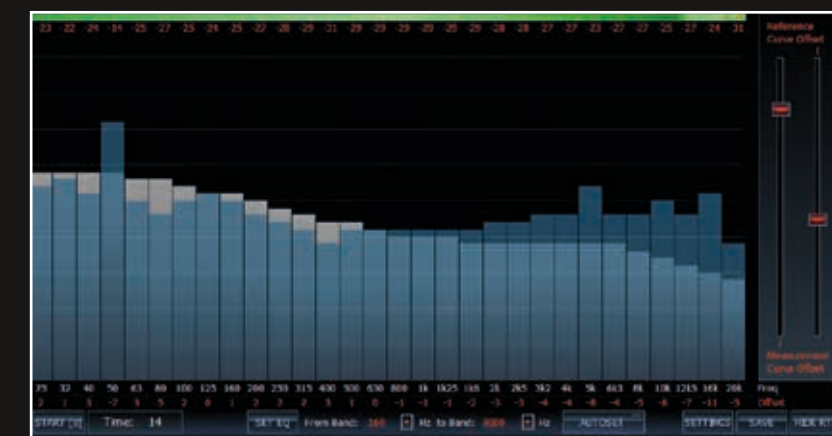


Time alignment via "mouse"
What previously has been done in a simple manner with the input "Time" and "Distance" becomes now a child's play for 4-channel systems including subwoofer. Move the red dot with the PC mouse in the graphic to that point at which the sound

stage matches your expectations. Of course the previous two modes are still available as these are, for example, necessary for fully active systems.

Sensationally simple, simply sensational - the "Autoset" function
We don't make a secret of the fact that we are very sceptical towards fully self-adjusting filter and EQ algorithms. Even if some existing systems operate quite reasonable the achieved sound quality is still a game of luck. With the new "Autoset" function Audiotec Fischer strikes the right balance between the manual setting and fully automatic adjustment. "Autoset" transfers the correction values of the integrated real-time analyzer

to the EQ setting but the main difference is that you can define the frequency range for the correction. So useless and probably even speaker damaging EQ adjustments, as often provided by fully automatic systems, will be avoided. Now you can make several measurements consecutively and modify each time the frequency range for the optimization. Never before it was easier and faster to achieve the perfect sound.





AUDIOTEC FISCHER

AUDIOTEC FISCHER GmbH

Hünegräben 26

57392 Schmallenberg

Germany

Phone: +49 2972 9788 0

Fax: +49 2972 9788 88

E-mail: match@audiotec-fischer.com

Internet: www.audiotec-fischer.com