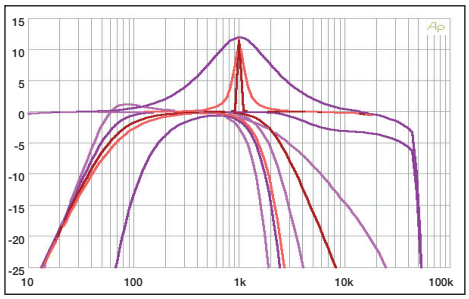
Mosconi Gladen DSP 6to8 Aerospace – 8-Channel Top-Class Processor

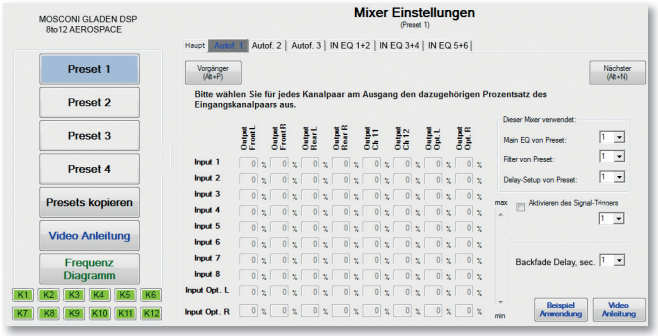
The Noble DSP

After Mosconi presented its flagship, the DSP 8to12 Aerospace, the somewhat smaller model is now waiting in the wings. Behold the DSP 6to8 Aerospace!

Mosconis DSP 6to8 has been a successful model for installers and sound freaks for years. Presented in 2012, it was more or less the first sound processor that, in addition to extensive signal processing, also offered smart solutions for integration into factory-integrated sound systems. After four years it is now time to present a successor and to update the 6to8 to the latest technical state. Like its recently reviewed big brother 8to12, the 6to8 also carries the name Aerospace, which points to Mosconi Gladen's top series. The additional naming also suggests that in the future there may be even more stripped-down variants of the DSPs, in order to play along in the cheaper price segment. Our 6to8 Aerospace DSP in any case differs very little from the old 6to8 on the outside; the housing is the same size and it kept the same design. Reliable identification marks for the new one are the illuminated Mosconi logo and the different arrangement of the sockets. Of course there are six inputs and eight outputs, we also find the Bluetooth port for expansion with the in-house modules for smartphone operation or audio streaming, as well as the RCD port for the in-house cable remote controls is available. Now as standard on the Aerospace there are two digital inputs (optical and electrical coax) and an optical output. After opening the casing, the 6to8 Aerospace reveals itself as completely different from the old 6to8 – as expected. While the 6to8 was expandable to up to three levels, the new layout presents itself rationally designed on a single board. Not only the color reminds strongly of the brand new big brother 8to12 Aerospace, there is also a plethora of similar components and even same modules for the inputs and outputs. While the previous 6to8 was still using a long-known DSP from Texas Instruments, there is a new chip on the board now, of course. With its high-quality hardware, the new 6to8 Aerospace catapults itself into the top group of the sound processors. Like the 8to12, the small one relies on Analog Devices' currently very hip DSP ADAU1452, a 295 MHz (very fast!) 32-bit chip. The converters are not identical



Each channel has 10 freely configurable filters with which high-and low pass filters, additional EQs, notch and shelf filters and all-passes can be built.



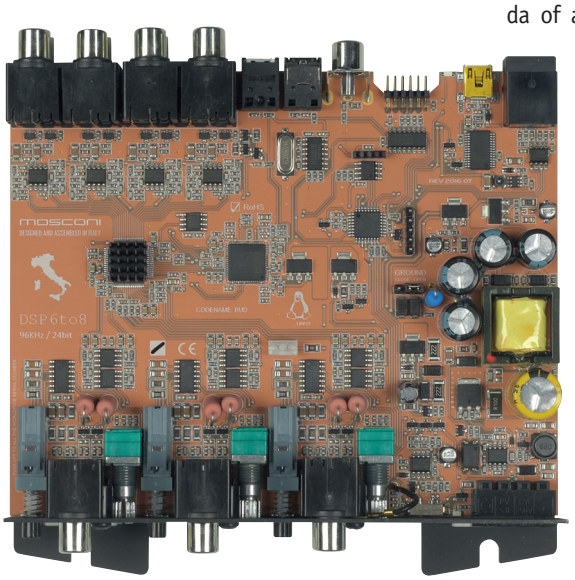
The new input mixer offers, amongst other things, four freely configurable auto fade channels for arbitrary cross-fading.

though: The 8to12 sports distinct A/D and D/A converters, while the 6to8 manages with a combined A/D - D/A chip because of the smaller number of channels. The latter is the PCM3168A from Texas Instruments' upscale brand Burr Brown, and it has exactly six inputs and eight outputs, which is why it can also be found in Mosconi's ONE 60.8 DSP, for example. And there's another thing: The 6to8 Aerospace runs at 96 kHz and is thus ranging itself in between the old 6to8 (48k) and the 8to12 Aerospace (192k). This results in an audio frequency response of up to 48 kHz for the new 6to8 and a step-length of the runtime correction of 3.5 mm. The 6to8 Aerospace belongs to the top group of processors; it is HiRes audio capable and offers a particularly fine-grained runtime correction. As far as the software is concerned, Mosconi is currently working on a completely new interface, which will then offer the final functional range. The features are already agreed upon, but they're not yet fully implemented in our test software, which still features the familiar version. In short, the 6to8 Aerospace is capable of everything the top model 8to12 Aerospace can do – without restriction. The only exceptions, of course, are the number of channels and the still outstandingly fine step size of the runtime correction. The extremely flexible input mixer with the auto fade sources that will be freely configurable in the future and which are switched automatically is implemented, as are the ten filter modules for up to 120 dB/Oct. crossovers in all characteristics. As introduced with the 8to12, the equalizers are divided into front, rear and channel pairs 7/8, with front and rear being customizable. The dynamic sound setup, with which individual presets of EQ, crossovers and runtimes can be assigned to each auto fade, is the same as in the 8to12. With this equipment, not only active systems can be controlled perfectly, it also offers a wide range of possibilities for integration into existing systems and of additional sources such as hands-free, audio-streaming, etc. But of course we're already used to first-class integrations from Mosconi. For example, high-level capability and two independent car sensor modes for switching on and off have been part of every Mosconi DSP already for years.

Conclusion

The Mosconi Gladen DSP 6to8 Aerospace is a sophisticated top class processor with the finest ingredients that sports a full agenda of audio and integration features. Those who don't need 12 channels will find first-class processing power and HiRes audio capabilities with the 6to8 Aerospace.

Elmar Michels



The best op-amps and the most capable 32-Bit-DSP from Analog Devices make the 6to8 Aerospace one of the top processors on the market.

HIGHLIGHT
Soundprocessor
CAR&HiFi 1/2017

Mosconi Gladen DSP 6to8 Aerospace

Price	around 700 Euro
Distributor	Gladen Europe, Walddorfhäslach
Phone.	+49 (0)7127 810282-0
www.gladen.de	

Specifications

- Measurements 150 x 122 x 41 mm

Inputs
- 6 x RCA (Cinch), switchable Hi/Lo with Autosense (DC-Offset, Audio)
- 1 x S/PDIF optical or coax
- 1 x Bluetooth slot
- 4 freely selectable analog channels, the digital ones can be switched to prioritized AUX

Outputs
- 8 x RCA
- 1 x S/PDIF optical 96 kHz (freely routable, volume-controlled)
- Remote out

Equalizer
- fully parametrical bands, can be used graphically +12 - -12 dB, Q: 0,5 – 40
- channels Front (1-4/6): 30 bands
- channels Rear (5-6): 30 bands
- channels 7-8: 30 bands

Filter
- 10 per channel, freely configurable
- high-pass, low-pass, Shelf, Notch, Allpass1, Allpass2, Peak-EQ
- Transition steepness 6 - 120 dB/Oct., variable Q

Time and volume
- In-time correction 0.01 - 15 ms (0 – 514.5 cm), 3.5-mm steps
- Input delay (channels 1-6) for run-time-delayed factory-installed systems
- Phase shift 0, 180°
- Level adjustment outputs 0,5-dB steps, muting function

Additional equipment
- Display operation: RCD volume, subwoofer level, balance, fader, presets, mute
- Operating unit: RC Mini volume, subwoofer level, presets, mute
- RTC-HUB: Adapter for up to 4 analog controllers (RTC and MOS_Switch) at a digital RCD interface
- MOS_BT 3.0 Bluetooth module for the android app control
- MOS_BTS Bluetooth module for audio streaming (aptX)
- Plug'n'play cable harnesses

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„First-class noble DSP – if 8 channels are sufficient."