

MAGAZIN FÜR ANALOGES HiFi & VINYL-KULTUR

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Special Print Manger MSSp1

VENTURE INTO PASSIVITY



The legendary Manger Sound Transducer is polarizing the loudspeaker scene like no other product – it is both passionately revered and rigorously rejected. Despite these opposing opinions the manufacturer keeps doing the only right thing: Steadily developing excellent loudspeakers.



If you followed our magazine closely, you will have seen a loudspeaker very similar to the current test model last year already – in fact it is even the same loudspeaker, but this time in a passive version. The first good thing about it: As the elaborate electronics are missing, the price is much lower. A pair of Manger MSSp1 in any RAL color costs about 7800 Euros. Veneer and high gloss versions are available at a reasonable surcharge – see below.

For the curious and uninitiated: The development of the Manger Sound Transducer started with nylon stockings, lasted several decades and became one of the most exciting pieces of technology in the realm of driver construction.

The main difference to a conventional driver chassis lies in the generation of vibrations: Normally the ideal driver is supposed to move like a piston – and that's what most of them do in a certain frequency range. However, above this range the membranes break up into partial oscillations in a more or less controlled fashion. Although this effect is desirable with fullrange speakers, it almost always leads to unpredictable behavior and phase problems.

Josef Manger chose a completely different approach: For decades he searched for an electromagnetic sound transducer, which behaves exactly like a natural sound source, meaning pulse-accurate. For elucidation: The human ear localizes the source of a sound by means of the first arriving wavefront – that's where the sonic event originally comes from, all artefacts which arrive later are simply reflections. A conventional loudspeaker transforms the impulse it has to reproduce into a sequence of multiple transient pulses (with 2-way or 3-way loudspeakers) and a rather long decay time – although both characteristics are blurring the spatial image.

After Josef Manger had gained many promising experiences with different prototypes, the Manger MSW in its present-day form finally went into serial production in 1990: From the start the chassis with its characteristic star-shaped membrane was designed as a mere bending-wave transducer. Sound is produced solely by a membrane, which is firmly clamped to the outer edge and set into vibration. This type of driver had existed before, although its transmission range had been very limited and it had not claimed to exhibit a flat frequency response over an extremely wide range. Josef Manger and his daughter Daniela, who succeeded him as managing director, reached this goal by steadily refining every detail of the production process. The design of the magnetic field has the same importance as the controlled damping of the membrane at the outer edge. (This led to the characteristic nine-pointed star.)

The reward for their efforts is a chassis which exhibits not only a flat frequency response over the range of 300 Hz to 30 kHz but an almost perfect pulse and phase behavior as well. In the range below 300 Hz the MSW is being supported by a woofer, which relieves it from excessive excursions. Great care must be tak-

Teammates

Turntable:

- Transrotor Zet-1 with SME512 and Transrotor Merlo
- Rega RP40

Phono Preamp

- Quad Twentyfour P

Amplifier

- Dartzel NHB-18NS and NHB-108
- Accoustic Arts Power ES

Accessories

- Power Strips from PS-Audio and Supra
- NF Cables: Van den Hul, Silent Wire
- Loudspeaker Cables: Silent Wire
- Racks and Bases: SSC, Liedtke, Thixar, bFly
- Pucks and Mats: Harmonix, bFly, Acoustic Solid

Opponents

Loudspeaker

- Audio Physic Avantera
- Gamut S9

The woofer made by Scan-Speak disappears behind an unobtrusive grille cloth.





Audio Material

Robert Coyne/Jaki Liebezzeit
The Obscure Department

Ludwig van Beethoven
Sonaten 17 & 18
Clara Haskil

Joseph Haydn
Die Schöpfung
Vienna Philharmonic Orchestra,
Karl Münchinger

Pink Floyd
The Wall

Dire Straits
Communiqué

Wolfgang Amadeus Mozart
Waisenhausmesse, Claudio Abbado

Oscar Peterson Trio
We Get Requests

Jazz at the Pawnshop

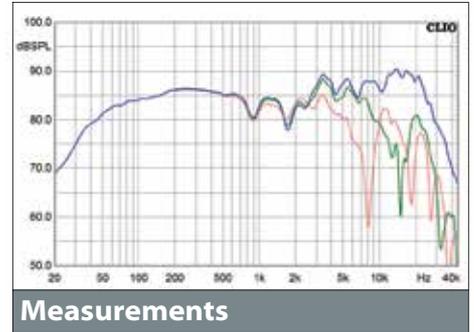
en at this point not to set the crossover frequency too low as this would increase the THD of the MSW – and not to set it too high either as this would degrade the impulse behavior of the loudspeaker.

With the passive version of the large 2-way loudspeaker a crossover frequency of 350 Hz has been chosen as an optimum compromise. Compared with the active version it's about 20 Hz higher. Then again the crossover's filters exhibit a rather shallow slope of 6 dB, which additionally enhances the phase behavior.

Let's take a short look at the MSSp1's appearance: It is pretty tall, pretty wide, but not so deep. It has closed chambers for the MSW and the Scan-Speak woofer of nominally identical size. This approach is consistent and makes sense, as a bass reflex design would lead to inverted phases and impair the overall impression. If desired, the low frequency level in the room can be increased by positioning the loudspeaker closer to a wall – although I preferred the free-standing MSSp1 which already produced extremely clean and very deep bass frequencies.

The star of the ensemble is the MSW, of course: In the beginning it sounded a bit too loud and dominant to me compared to the rather neutral bass – but this impression soon disappeared in the course of our listening session. I caught myself sitting there with eyes constantly closed to increase my concentration on this

The Manger MSW covers almost the entire audible frequency range.



Comments on the Measuring Technique

Balanced frequency response with slight emphasis on the high frequency range. Flat bass response with a very gentle slope below 200 Hz which facilitates fine tuning relative to walls. For such a large full-range driver the omni-directional radiation is good. The waterfall chart doesn't exhibit any spurious resonances. Impedance measurements exhibit an extremely flat response. With respect to THD the MSSp1 is not really suited for the sound reinforcement of parties – significantly more than 98 dB RMS are not advisable.



Manger MSSp1

- Price per pair: 7800 €
- Surcharge veneer: 400 €
- Surcharge high-gloss lacquer: 1600 €
- Distributor: Manger MSW, Mellrichstadt
- Phone: ++49 9776 9816
- Email: info@manger-msw.de
- Internet: www.manger-msw.de
- Warranty: 3 years
- Dimensions (H x W x D): 44.9 x 10.6 x 8.7"
- Weight: 92.5 lbs
- Efficiency factor: 86 dB
- Finish: lacquer, veneer, high-gloss lacquer

Bottom Line ...

» The listener needs a few moments to settle in – but then the Manger MSSp1 like its sister models offers you exquisite musical enjoyment with unrivaled authenticity and immediacy.





Once again the elaborately manufactured MSW in all its splendor

awesome loudspeaker. Like a geologist the MSW meticulously carves out the different layers of a recording, positions them precisely side by side and one after another and gives rise to an as yet unheard total picture of a recording.

Although this normally is really fascinating there are also annoying side effects from time to time: When listening to pop music productions through the Manger loudspeakers I could hear some sort of “reverb bubbles” – single instruments in the stereo panorama, which had been blown up with the aid of artificial reverb, but had not been embedded organically into the overall mix. Such things are easily detected with a MSW. I’m starting to understand why many audio engineers are using a Manger Zerobox for evaluating mixdowns. With direct recordings using only a single stereo mic the MSSp1 demonstrates its mastery: Never has an orchestra from disc been differentiated more precisely and realistically.

Thomas Schmidt



The extremely solid terminal allows bi-wiring operation as well.