

MANGER AUDIO W1 SPEAKERS REVIEW



»In my view a sound transducer should be capable of reproducing all types of acoustic sensations equally well, irrespective of whether this is a concert or a discussion. It is just as important to be able to reproduce natural sounds such as a birdsong and the wind in the trees where the only human contribution is the sound of a distant church bell. The loud- speaker itself should not be perceptible in this listening experience. No natural resonance or changes in the sound field should betray its presence.«

Great review introductory paragraph by Josef Manger - Acoustic researcher/inventor of the Manger Sound Transducer and father of Daniela Manger (Manger CEO), that sadly passed away in October 2016. He holds 40 patents worldwide and was awarded the Diesel medal in 1982, one of Germany's highest awards for engineering excellence.



In high end audio, we're always striving for balanced act, that can equally serve any kind of music where technology meets the actual performance. Let it be "simple" vocal record or complex classical music composition.



More or less, we've all learned over the year, how there are no easy solutions, that can properly address the ultimate high-end audio illusory experience. Without R & D, prolonged

testing and actual listening part, no-one can really expect profound sonic results.

Taking in consideration, that it took over forty years of research before the Manger Sound Transducer was manufactured in 1985, puts the Manger Audio on quite different plane, then most of the high-end audio speaker manufacturers.

Manger double voice-coil sound transducer might look simple, but comes from very complex approach. Actual manufacturing is utterly difficult. Extremely light driving coil, that is used for the ultra light wide-band transducer (0.4g) have a maximal displacement of ± 3.5 mm! Fifteen strong neodymium magnets with extremely strong magnetic field (1.32 Tesla) on an air gap of only 0.95 mm width supply the drive for the 70 mm coil.

Contrary to conventional membrane, the Manger Sound Transducer is much more flexible and much less stiff. This prevents the storage of energy and of introduction of transient noise. And, as you'll find later in the review, this particular membrane can render music with surprising realism.

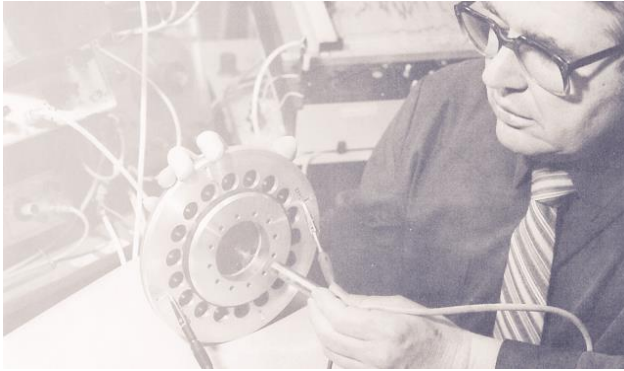
REALISM

Manger Audio deeply researched the phenomena of the human ears and concluded, that sound reproduction of traditional loudspeakers creates a different kind of reality. A non convincing one.



They've found how along with incorrect spatial imaging, standard loudspeakers constantly pushes the listener in state of awareness of both speakers position and presence due to transient flaws and noise. These are crucial to disaster in the listening act by de-masking quark like nuances of the recorded music.

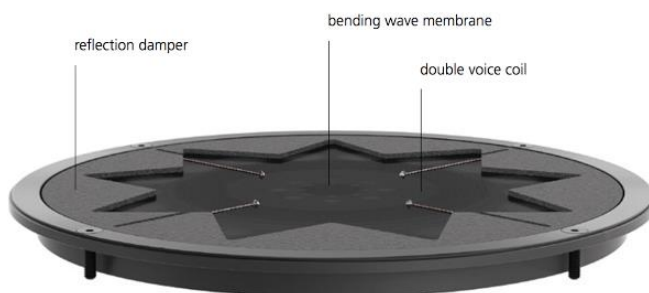
Manger Sound Transducer differs in many way, most evidently with an instant, dramatical and authoritative spatial sound reproduction, that is possible due to bending wave design. This peculiar approach reflects how nature itself formed the basilar membrane of our hearing organ.



After years and decades of Josef Manger systematical R & D an idea of the natural resonance-free radiation principle morphed into the reality.

What was objectified and formed Manger Audio calls “one of the most elegant concepts on the loudspeaker market and a masterpiece of precision mechanics.”

The landmark and break thought move forward was the logical rejection of the hundred year-old transducer principle used in conventional loudspeakers, where the absence of the piston like movements and faulty overshoots normally produces something different then the Josef Manger’s principle of bending waves. It starts from the center of a plate-like diaphragm and then wave spreads across the surface, similar the waves acting, when a stone is thrown into water.



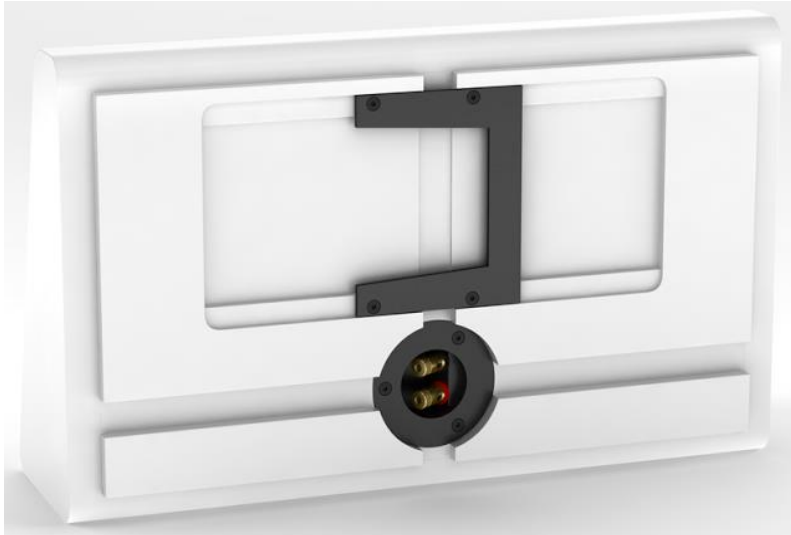
Side view of the Manger Sound Transducer®

The technological sum up and practical application resulted in 1974 patent. The break through approach lets high frequencies quickly attenuate in the inner area of the membrane, long waves (low frequencies) reach right to the edge of the star-shaped damper, where they’re absorbed and no reflections can enter from the outer radius.

Although Manger Sound Transducer’s ha wide frequency range (80 Hz and 40 kHz) and quite potent sensitivity (91 dB 1W/1m), the transducer allows lighting fast rise time of 13 μ s.

ACOUSTICAL LENS

Manger Audio W1 is a passive 1-Way On-Wall Speaker. Most similar speaker, that I've used to own was Sonus faber Auditor. Completely different driver principle, but the both shares similar mounting. W1 can be wall mounted very simply with the help of included fixing plate and drilling template.



Manger Audio W1 frequency range extends from 150 Hz – 40 kHz with Manger Sound Transducer bandwidth ranging from 80 Hz – 40 kHz and whopping 13 μ s rise time.

The problem with any speaker driver or loudspeakers is micro and macro dynamic response. The ability to combine needed-natural transparency while keeping the timbre, tone and color unattached is highly complex task. There are lot of high-end audio products (not only speakers), that can project timbre and tone very well, or even spot on, but they can seriously lack the constitutional spatial information.

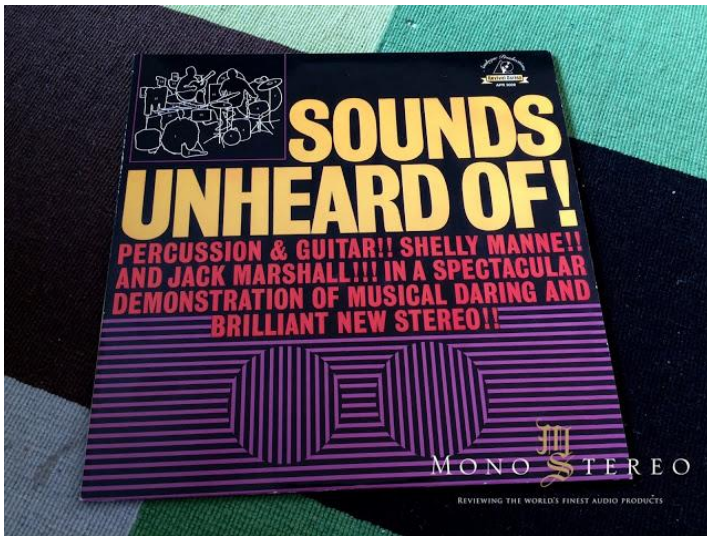


This is the advantage of Manger Sound Transducer. It can project natural, feather like lightens of details while keeping the real world, slightly dark sound nature. I cannot recall any other speaker driver, that can transcode the sonic canvas with such set of attributes.

MUSIC

Shelly Manne & Jack Marshall - Sounds Unheard Of! (Vinyl, LP) Analogue Productions, APR 3009

I've mention this particular record many times so far. Sounds Unheard Of! trajectory impact and density of acoustical cues truly remarkable and rare, prime example of both analogue and digital counter-parting worlds.



There are so many spatial cues hidden in these album ready to be discovered. The more refined, balanced and transparent system is, the more alive and realistically this album tracks forms itself into realistic audio experience.

Manger Audio W1 speakers acted dutifully charged with magnitude of smallest reconstruction points and nuances, that along with believable atmosphere managed to discharged hefty amount of emotional triggers.

Anne Bisson - September in Montreal

By now, this album and opening song is probably rock solid imprinted in my memory. What it seems a simple production, is much deeper sensory experience, then a casual listener may conclude. Album extends potentially across complete frequency range and challenges extensively both upper and lower ranges audio reproduction.

There are so many sonic virtues associated with September in Montreal, that are easy to use as a reference points. Extensions of piano notes and subtle percussive traits of hi-hat, ride, crash and other percussive metallic instruments were presented with ebullient micro and micro (detailed) dynamics. Forming enough spatial cues for a proper rendition of metallic instruments demands collective density, that can objectively gravitate toward needed/wanted audio realism.

Sudden attack changes and transformative dynamic shifts calls for the adjustable-speed induction ability of the speaker's driver and this is where Manger Audio W1 and proprietary transducer marveled.



The importance of time domain cannot be neglected. Especially with reverberation points and acoustical delays, that are projecting the realistic aural atmosphere.

Manger Audio Sound Transducer acted like prompter, filling the missing sonic data, that can be too often "lost in translation" with so many of the high-end audio speakers.

If you don't know, what you're missing, then its hard to talk about very different and upper plane audio realms. Once the audible trajectory has been changed, the hidden realism-add-on-attributes start making all the sense. Anne Bisson compositions embarked with the grander refreshment, that I would't dare to expect before the W1 evaluation started.

The effect and "phenomena" calls for the high end headphone segment analogy. Lot of people contemplates in one way or another, for example, about Stax SR-009 headphones, yet, many are just widely guessing what's happening in reality and how do they really sound like. Even fewer heads them driven properly. Once the mightier experience (with properly matched dedicated amplifier) took place, there is nothing similar to compare to, nor easily explainable.

In similar way, the natural lightness, feather like parts and particles floatation emerging with non usual (much faster) speeds and spatial details have portrayed September in Montreal with sobering effect making it a returning, reversing listening experience.

CONCLUSION

In 21st century audiophiles and music lovers demand much more from high end audio products then in past decades. The bar is way higher, then it used to be when it comes to the technical side. The transparency, detailing and speed is something that needs to be mandatory close connected with the product worthy of the high-end labeling.



There are two types of audiophiles. Those who're ready to explore new, out of the box products/approaches and those who're playing safe, trusting in established rules/ideas/designs.

Manger Sound Transducer will challenge many of firm beliefs and pushes the high-ender to experience new sort of transparency, density and drama.

With Manger Sound Transducer acoustical focus points grew exponential, translating into unexpected and very different sonic experience. With some utterly transparent components, like my recent addition to the reference system; The Bespoke Audio Company Ultimate Silver preamplifier, it might take some time for our brain logical centers to settle with such density. This is exactly something that happened with Manger W1 speakers. Yes, I'm not talking about subtle shift...

The more high-end audio preamplifiers, amplifiers and other components are progressing in terms of frequency response, speed and transparency, the more we're in search for the speakers, that can handle all the newly gained informations.



Beryllium, Ceramic, carbon fibre and other exotic material mixtures implemented for high end audio speakers driver's domes in some top tiers are getting more and more attention and praising, but I'm still not completely convinced these materials. Especially on the utmost plane.

By hearth, I'm still a grand believer of paper cones and ribbons (for tweeter), but I must openly admit, that Manger Sound Transducer seriously shifted my perspective and ignite my deeper interest for Manger principle...

There is something very special and different in a way, that Manger Audio Sound Transducer can handle the music's energy transfer. Anyone, who's frequently exposed to the live music might quickly cherish unique experience that Manger driver can bring.



In the search for the ultimate sonic experience and grandest audio illusion, we're always looking for something, that will fit better, open up new doors of reality and transport the musical message in a purer and more unaltered state.

Manger Audio W1 have opened up an intriguing path, that explores audio reality quite differently and challenge the typical norms.

Manger Audio Sound Transducer extends sonic depth in all dimensions and render complex spatial reality with refreshing lightness and in absence of many artefacts usually associated with most types of typical transducers.

While you cannot expect the magic wonders below 150Hz, solid wall behind W1 will help extends lower frequency and add some energy to the bass notes.

I've filled up my sensory tanks with enlightening and potent impressions. Manger Audio W1 speakers are more than just an introduction to the Manger speakers family. They share the same renowned DNA!

Now, you can call me highly interested about the Manger Audio's bigger, stand alone models. •

Matej Isak

PRICE

4400 EUR

TECHNICAL

Passive: 1-Way On-Wall Speaker

Impedance: 8 Ohms

Frequency Range: 150 Hz – 40 kHz

Crossover Frequency: 150 Hz

Sensitivity: 89 dB 1 W/1 m

Max SPL: 106 dB Peak

Dimensions: 10.4" x 17.2" x 2.8"/5.4" (264 x 436 x 71/136 mm)

Weight: 17.6 lbs (8 kg)

Connectors: Single-Wiring Terminal with 3 cable channels (Left/Right/Center)

Wall mounting: Wall fixing plate including drilling template

Finish: silk matt as per RAL, Nextel, veneer or Ultra High Gloss

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