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GOLD NOTE



PH-10



Purist Audio  
Design



Our Impresa Silver Headphone  
Cable features a mere 0.0213 Ω/m  
resistance, and a capacitance of  
pF/FT. Now that's impressive.



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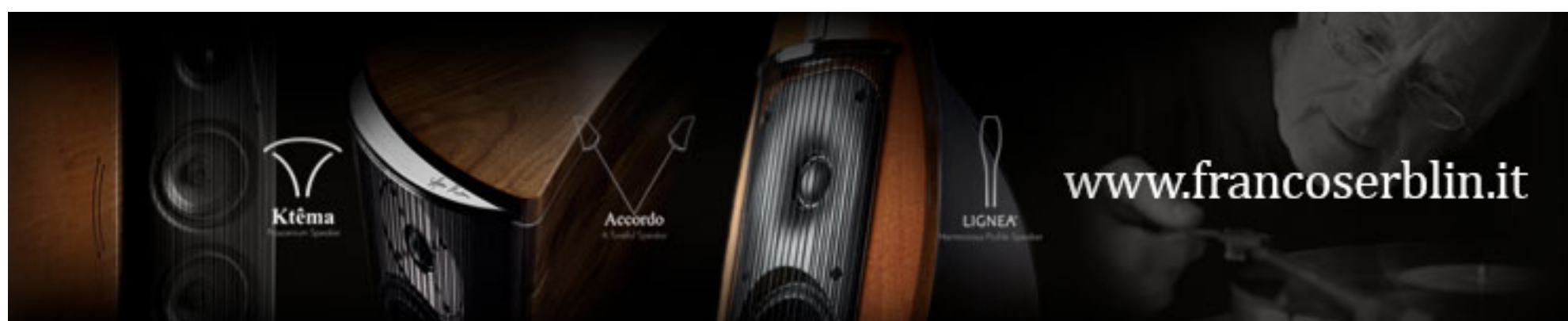
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Phono Preamplifier



## MANGER AUDIO P1 SPEAKERS REVIEW



I've already reviewed Manger Audio **W1 speakers** last year favorably. There is something very different and special about their speakers' driver, that can instantly engage you with the music.

There is a lot more going on than to this transducer, to call it ordinary as you'll read on. But there is no doubt... The ground stone of P1 and each and every Manger Audio loudspeakers is the proprietary Manger sound transducer developed by Daniel's father Josef W. Manger.





This unique driver is still hand build in the Manger Audio's own laboratories, far away from the lurking of the prying eyes. Intriguing-secret-recipe lies within the efficient material of the sandwich diaphragm. But, that's not all. A mighty circle of 15 (the highest energy density available) neodymium magnets bonds and forms a Manger sound transducer. This hand-built work of art can operate highly efficiently at the low level and act balanced at the really high sound pressure.

Unique drivers' baskets are made from a unibody Duralumin (resonance-damping), that comes with the highest quality of planeness and concentricity (tolerances of +/- 10  $\mu\text{m}$ ).

The top silk-matt finish is the result of turning on the highest grade diamond tools, followed by the state of the art anodizing process. Only a few, selected and specialized companies can do this and Manger Audio have managed to ensure top-tier qualities for their drivers.

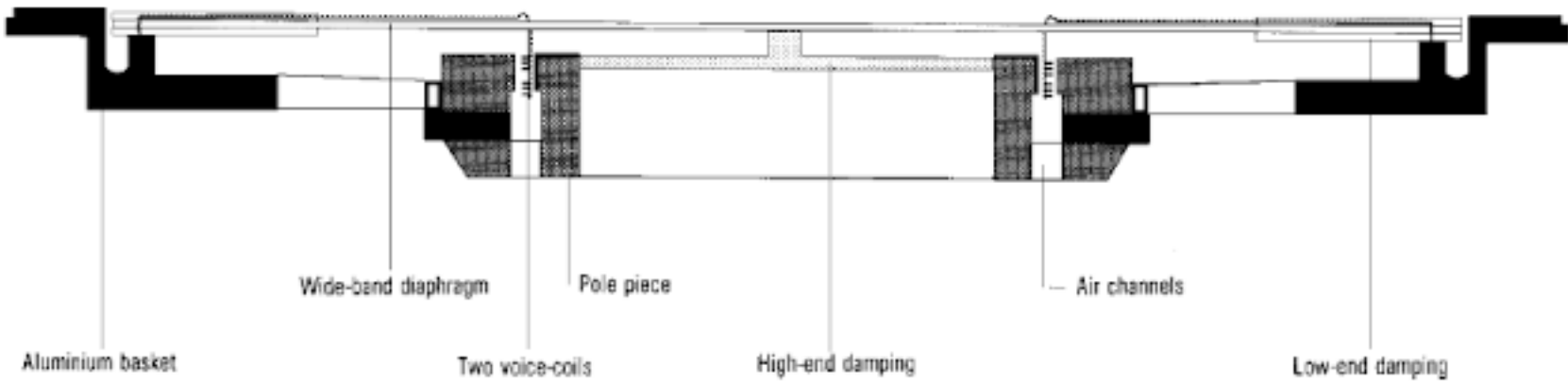
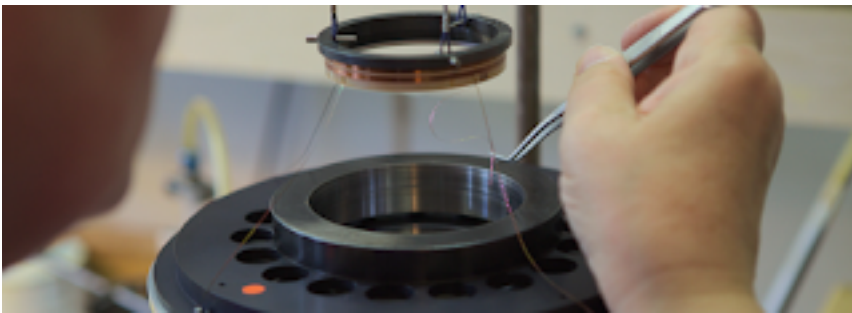


Fig. 6

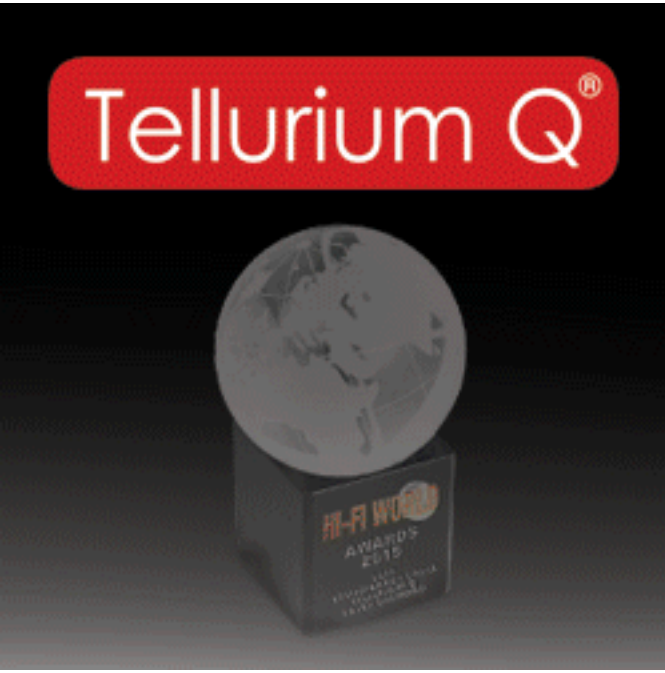
"Requirement for uniform frequency response. The Manger sound transducer has a magnet and coil assembly as shown in Fig. 6, but there the similarity to a conventional speaker ceases. The diaphragm is perfectly flat, but it is not rigid. Although the diaphragm is flexible, it is made of a specially developed three-layer material which allows traveling waves."

The utterly minuscular mechanical precision continues with the four pure copper electrical coil connecting leads. Painstaking hand assembly requires a fanatical precision (Manger developed their own process) to connect the 0.4-gram aluminum coil with the thickness of the human hair.



The Swiss *haute horology* like skills are needed to hand assemble all of the 32 components of the Manger transducer. This specific and special assembly cannot be rushed and it demands a proprietary





tool, that Manger Audio developed, especially for this manufacturing process. As you can read in the paragraph below, such technical expertise demands a sort of industrial culture to fulfill all the highly demanding manufacturing...

*"It is no coincidence that the Manger sound transducers are made in Mellrichstadt, as this oldest site of cultural interest in Franconia is not only located exactly at the center of Germany and Europe but is also directly adjacent to the Rhön biosphere reserve. This model region recognized by UNESCO is intended to set an example of how human economy and trade is possible in harmony with nature. Creativity and innovation, but also an awareness of traditional values form the motor driving the people in this region to achieve this. And the Manger sound transducer is a fine example of what can be achieved."*

## THE MANGER WAY

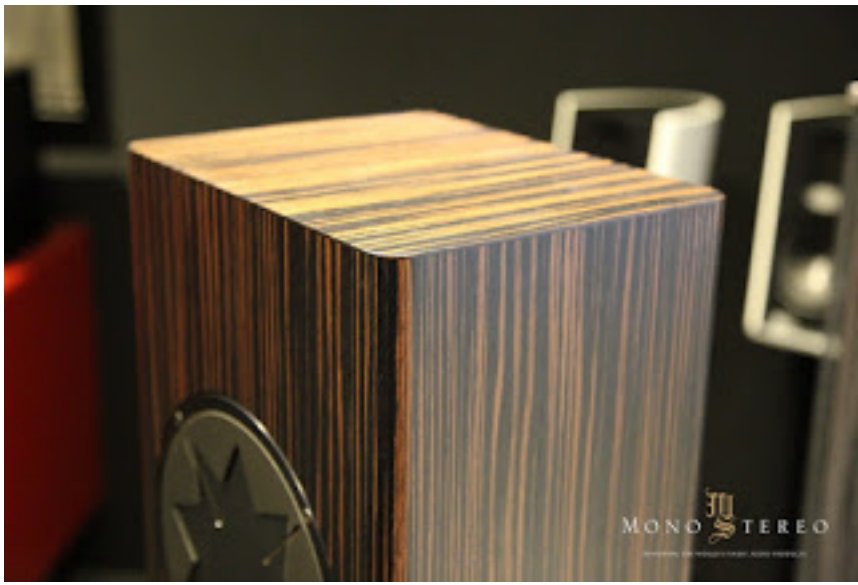
*»Human hearing evolved initially as a survival mechanism to locate a potential threat. Today our hearing still works by analyzing the first transient pressure change from a sound source. Unlike traditional speakers, the Manger sound transducer accurately reproduces transient pressure changes to give stunningly realistic sound. This booklet explains why a transient response is so important and how the unique Manger sound transducer works.«*  
*Josef W. Manger*

There is a deep study involved with the Josep W. Manger principles. He loudly addressed the question of the nonaccepting sonic differences among the loudspeakers. There are many underlying treats in this complex aural/acoustical matrix, but Mr. Manger pointed how the oversimplification of the basic speakers' and driver designs principles and their operational potency cannot be accepted. So what is this underlying and non-acceptable treat?!



The biggest question, we're not asking out loud often enough often is the believability! Any loudspeaker regardless of the price tag can convey the sound of some sort, but when it comes to the realism and drama most of them failed to deliver a being there-dramatical factor.

The traditional way fails to reveal proper transient response and high enough density of the spatial cues, leading to un-involving and un-satisfying music reproduction.



The importance of phase correctness can be too quickly neglected or not even taking into the consideration. This translates to the flat frequency responses designs and an introduction of phase errors with the multiple drivers, closely connected with the mistakes being done in the crossover network.





All in all... There are no easy solutions when it comes to the reference level of the high-end audio sound reproduction. A few high-end audio companies exalted in such particular approach over the past decade and the sonic benefits are instantly evident!

## MUSIC

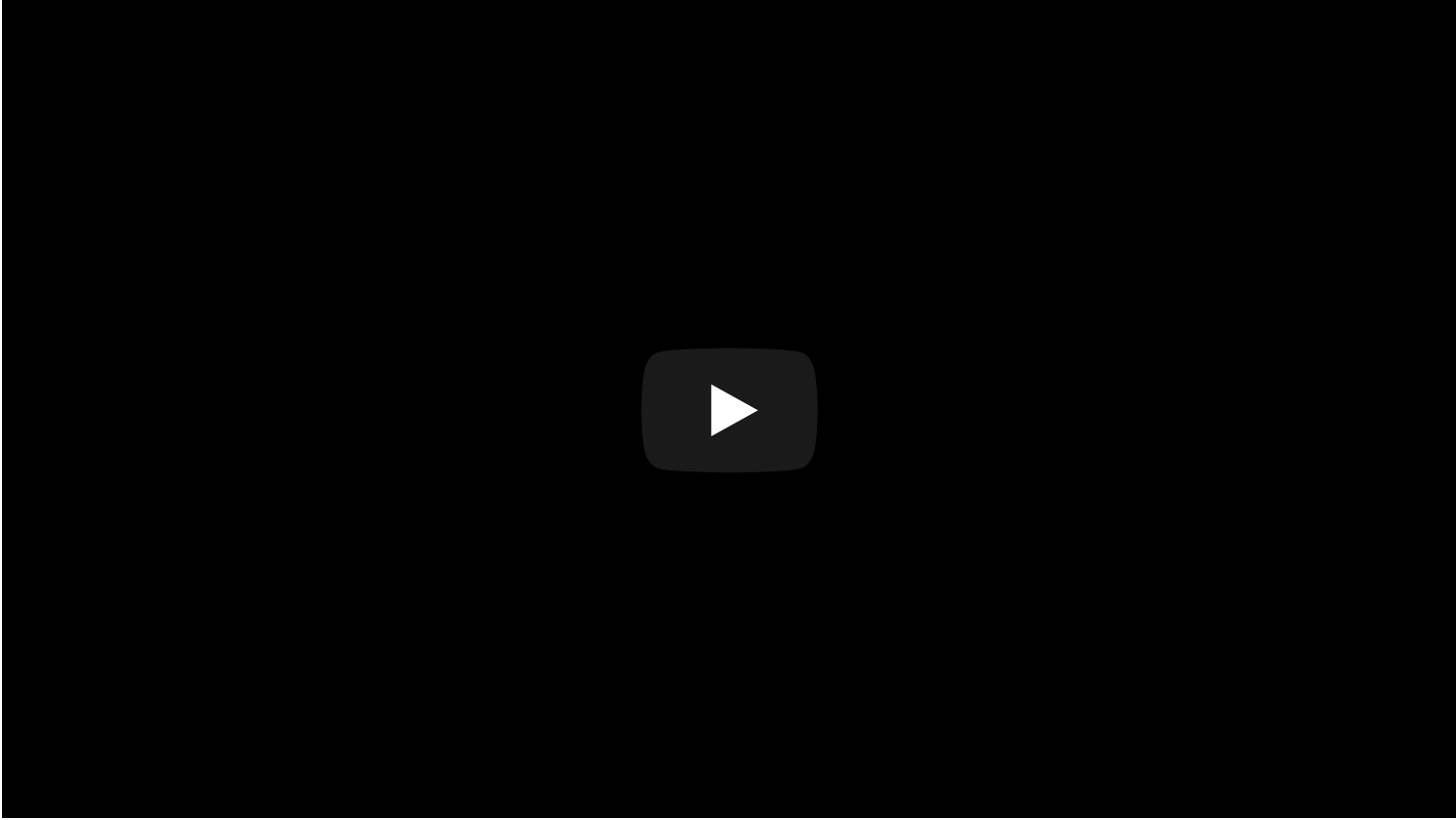
Manger transducer's unique sonic purity delivers quite a different impact, that most people are used to. While many drivers and speakers' concept relies heavily on the resonate chassis' chamber, Manger speaker operates in absence of such traits. In our conversation, Daniela has spoken strongly about THE Manger way and how she's continuing to "swim upstream" in our niche high-end audio industry, where marketing departments are trying by each year to introduce the audio norms and standards, that have little or nothing to do with the reference high-end audio reproduction...



When P1 speakers are engaged on the proper plane, the micro and macro dynamics are easily expanded without artificial attributes too often associated even with the exotic and sky-high priced loudspeakers. With P1 the smallest, quark like acoustical anchor points are formed in a very different way. They're allowing the reproduced music to project sonic illusion at goes beyond expected. The decays and delays exhibit their natural tails in absence of limiter like effect usually caused by the enclosure's resonances.

The P1 stand out qualities are quickly evident with the Boško Jović wonderful album Buđenje, released back in 2014. All of the album's tracks are great, but with the song Ah što ćemo ljubav kriti, when clarinet (and accordion) virtuoso Mustafa Šantić joins Boško Jović on the guitar the drama of sevdaha expands in its full majestic way. This calls for the non-ordinary qualities.





Manger Audio P1 speakers have quickly exhibited how they do stand in the league of their own. There is no easy way to escape the needed verisimilitude of the Buddenje, but P1 speakers nailed it with gran impact. People too often misunderstand the real meaning of transparency in connection with the loudspeakers and high-end audio reproduction in general. Real transparency opens up the aural-linguistically efficacy; the very core of timbre formation. This is the P1's exuberant point of operation and nothing can come close easily...

But, there is more. The Manger Audio P1 speakers have also expertly expanded the oblique modes with dominion nature, rarely seen in this price range and far above. Big thumbs up!

With the heavy artillery of the reference tracks, Manger Audio P1 speakers have always managed to step out of the way of the sound. Such ability is by no means usual or expected with the P1s price range or even above!

## CONCLUSION

Last year at the Poland High-End Audio show I've had a chance to spent a bit more time and discuss more in-depth many topics with Daniela Manger. She is vividly and proudly continuing the work of her late father and strives to exhibit the real qualities of high-end audio reproduction.



There are only a few audio designers, that dig deeper into an understanding of the human hearing mechanism complexity. Vladimir Lamm, Manuel Huber comes to mind on the electronic side of high-end audio, but among loudspeakers domain, Josphe W. Manger seems to stand out in that regard...

P1 speakers somehow brought back the memories of the iconic Quad ESL-63 speakers' positive attributes and qualities. Then again, time flies and there is much more going on with Manger Audio loudspeakers. P1 speakers can easily disappear into the space thanks to the proper distribution of spatial information and ability to project an impressive information density, that is crucial when it comes to intimately mirroring of the tone, timbre, and color of the instruments.





The real challenge of any transducer and speakers lays within the equal reproduction of everything related to the sound. This includes the orchestra, instruments, human voice, sounds from nature etc. Everything should sound great on properly designed speakers; as Joseph W. Manger has often remarked.

There are only a few loudspeakers on the market, that embraces the aural equality across the complete frequency spectrum, yet none of them can reveal the mysterious and mystical nature of the music like Manger speakers. Their ability to deliver the timbral and spatial accuracy is one of the kind.



I'm a big fan of sealed cabinet approach and once more the Manger Audio P1s have proven the hard facts of this particular design. P1 speakers reproduce the lower and lowest bass notes with the authority and with the refreshing believability. There was no sign of an artificial, overblowing bass across all the musical genres. Unlike many speakers on the market, P1's bass region reproduction is well defined, focused and authoritative to render potent and captivating bass.

Manger stands out and revelatory ability to deliver unprecedented clarity and transparency even at the low volume levels surely opens up the new horizons for many music lovers and audiophiles.

The P1's absence of narrow beaming doesn't force one to start the Sisyphus fanatical quest of the pin-pointed sweet spot. P1s do allow the loupe focus but in connection with the proper natural warmth. These qualities open up easily engaging and prolonged listening without fatigue!

Even more importantly, P1 allows the captivating and highly enjoyable listening at low-level volume, where the Manger transducer's mighty hearth forms the timbral accuracy at the way more ear-friendly volumes. With most of the speakers, one needs to use a way higher gain to match the level of timbral correctness, that our inner mechanisms recognize as properly distributed and believable.

P1 loudspeakers capture the music's essentials with ease and carry the original sonic DNA with the refreshing authority. They can act as the true acoustical lenses in the service of music lovers. Manger Audio P1 speakers embrace the best audiophile attributes and negate the fashionable sonic trends, subtly introduced in the last decade.

Manger P1 speakers are the epitome of sonic purity and realism. Mated with the proper and potent amplifier, they have the ability to instantly engage one into one of the kinds aural experience, where the main and only focus is the real world sonic realism.

For their stand out ability to deliver the music uncompromisingly and out-of-the-box technical uniqueness, I'm wholeheartedly awarding them with the Mono & Stereo Highly-Recommended-



Product Award.

*Matej Isak*

PRICE

*RAL or NCS satin finish: 4.600,00 (MSRP Per piece/€)*  
*Real wood veneer satin finish: 5.200,00 (MSRP Per piece/€)*  
*UltraHigh Gloss RAL or NCS: 5.800,00 (MSRP Per piece/€)*

## TECHNICAL

### SAM

*"To bring powerful technology to your passive Manger speaker, the p1 seamlessly works with both Linn's Exakt and Devialet's SAM Processing. In combination with Exakt, your passive speaker is enhanced with powerful software and performance features, becoming an upgradeable, intelligent speaker."*

*Type: Passive 2-Way Floorstanding Speaker*  
*Impedance: 4 Ohms*  
*Frequency Range: 40 Hz – 40 kHz*  
*Crossover Frequency: 360 Hz*  
*Sensitivity: 89 dB 1 W/1 m*  
*Max SPL: 106 dB Peak*  
*Dimensions: 44.8“ x 10.6“ x 8.4“ (1139 x 270 x 214 mm)*  
*Weight: 61.7 lbs (28 kg)*

*HF: Manger Sound Transducer, Bandwidth 80 Hz – 40 kHz, Rise Time 13μs*  
*LF: 8” (200 mm) Custom made Carbon Fiber-Paper Sandwich Design, 42mm Voice Coil Diameter*  
*Enclosure   closed*

*Rec. power handling: 50 – 200 watt*  
*Connectors: Bi-Wiring Terminal – WBT-Speaker sockets nextgen™ Cu*  
*SAM® Processing (Devialet) available*  
*Finish   silk matt as per RAL or NCS, veneer or UltraHigh Gloss*



### Color options

*We offer finishes in matte and high-end gloss as per RAL or Nextel. You can also choose from a broad selection of finest veneers to match your personal taste.*




# CONTACT

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Germany*


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Web: **www.mangeraudio.com**



**3 Easy Steps:**

- 1. Click 'Continue'
- 2. Run and Install
- 3. Open New Tab

**ZIPRAR**





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