



## A SIMPLE BOX

Slowly but surely Daniela Manger is completing her product line. This year a new flagship model has been added to the range of passive floorstanding loudspeakers. We set it up in our listening room.

Of course, it is easier to use spectacular news for the lead of a story about passive floorstanding speakers. That arouses interest, that's what we want. In this case, however, it's not so easy, as Manger's innovations tend to be rather unflashy up to the point of self-denial – at least in terms of looks. Consequently, the new floorstanding speaker in question is plainly called “p2.” With a lowercase “p”, needless to say – anything else would have been far too gonzo. And it's the bigger sister of the “p1”, of course – what else?

Although “bigger” does not exactly meet the point. Both models have the same dimensions right down to the millimeter. Actually, they are indistinguishable with regard to looks – as long as you don't examine their rear panels. Even insiders won't notice that the woofer is not identical with that of the p1 – normally both are hidden under a camouflaging fabric cover. But that's what it's all about: the most important difference between the p2 and the p1 is the new low frequency section.

Before we go into details, let's talk about pricing: A pair of p2 in the desired silk-matt color will cost 12,800 euros, various veneer variations will be available for 14,000 euros and the high gloss outfit of our test pair will amount to 14,600 euros.

Of course, the renowned Manger Sound Transducer still embodies the core of the system. A plate with a diameter of 20 centimeters, which promises an impulse fidelity unmatched by other systems. Here's one of the tricks of the trade: with low frequencies the entire membrane vibrates. The higher the frequencies, the smaller the vibrating parts of the membrane and the less masses have to move. And that's exactly what we need. This is a gross simplification of the principle, but it gets to the heart of the matter. It took inventor and company founder Josef Manger decades to perfect the technology and his daughter Daniela continues his mission to date – working on an even higher level of perfection in placid Franconia. For many years the Manger Sound Transducer has been playing a very successful part in sophisticated fully active studio setups as well – another business branch of the Manger Audio company.

Different versions of the p1 have been our guests before and each model enthused us with its uniquely straightforward and precise reproduction. How could the p2 top that? With the p1 the low frequency range up to 360 Hz is handled by a 20 cm woofer in a sealed enclosure. This fits very well together and ensures a more than sufficient bass performance in nearly all common living environments.

*The high gloss varnish of our test pair is the most precious of the available finishes.*

Nonetheless: There might be still room for improvement. After Daniela Manger had received various requests on this subject, she finally gave in and designed the p2, in order to offer a suitable solution in her portfolio.

A bigger enclosure was out of the question. The uniquely unobtrusive and slim look of the p1 had to be preserved by any means. So what to do, in view of the limited usable space? Switching to a bass reflex system would have been possible and would have expanded the bass range as desired, but impulse behavior and homogeneity of the loudspeaker would have suffered considerably. An absolute no-go for Daniela Manger.

The way out of the dilemma is a new woofer and two passive membranes with exactly defined weight on the rear panel. This actually forms a "bass loudspeaker without drive": the membranes are put into vibration by the air volume inside the enclosure, whereby they radiate sound. The design is similar to a bass reflex system, but offers critical advantages: especially the large surface of the two passive membranes provides for good phase fidelity of the radiated sound.



*A true specialty on the loudspeaker market for years: the Manger Bending Wave Transducer*

## Teammates

### Cartridge:

- [Transrotor Merlo](#)

### Tone Arm:

- [Transrotor SME 5009](#)

### Turntable System:

- [Transrotor Argo](#)

### Phono Preamplifiers:

- [EAR 324](#)
- [Accuphase C37](#)

### Preamplifiers:

- [Accuphase C2420](#)

### Power Amp:

- [Accuphase A47](#)

## Opponent

### Loudspeaker:

- [KLANG+TON Nada](#)
- [Audio Physic Avantera II](#)



## Audio Material

**Antonio Cuardos De Béjar  
& Latin Affairs**  
Studiokonzert

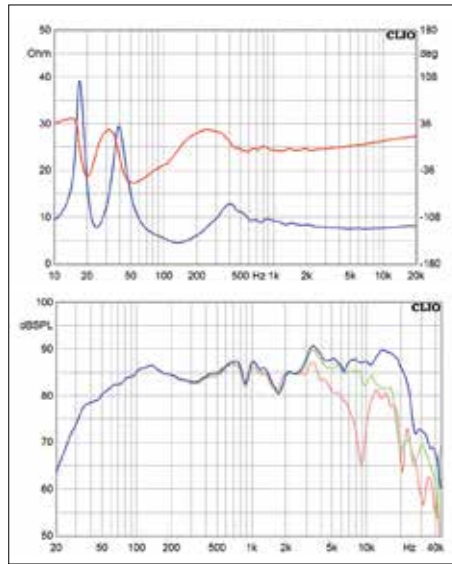
**Long Distance Calling**  
The Flood Inside

**Led Zeppelin**  
ST

**The Clouds Will Clear**  
Recollection of What Never Was



Only high-quality components have been used for the crossover.



## Measurements

### Comments on the Measurement Techniques

*The microphone doesn't detect any peculiarities. The behavior of the p2 is almost perfectly balanced. The overall pleasant tone color is caused by a slight dip around 300 Hz. Bass response drops early, but slowly – which perfectly fits. The efficiency factor is 87 dB at an average, the impedance measurement stays in the normal range. The dip at 25 Hz is an indication of the precise fine tuning of the cabinet. THD is excellent, as long as you avoid extreme volume levels: even at 95 dB distortion stays below 1 percent most of the time, with harmless even-numbered harmonics dominating.*

That alone doesn't do the trick, however, the air volume has to be excited accordingly. For this purpose, Manger Audio asked one of the few remaining local loudspeaker specialists to develop a real gem of a woofer. The 8" speaker possesses an ultra-modern hi-tech membrane: a layer of special foam is surrounded by two carbon fibre reinforced paper layers. This results in little weight, high rigidity and maximum damping. The membrane approaches higher frequencies in a very disciplined way, which facilitates the transition to the Manger Sound Transducer. Being a loudspeaker developer myself, I like the woofer very much – especially the combination of low free air resonance and low Qts (quality total speaker) at a moderate equivalent volume is very hard to find nowadays. OK, I'm zoning out and realize that this is not our "KLANG+TON Lautsprecherselbstbaumagazin."

Thanks to the new woofer, the p2 has also become a bit louder. For this reason the filtering of the bending wave transducer had to be modified somewhat by reducing it slightly in the highest frequency range. As a result you get a 8 ohm loudspeaker with an efficiency factor of ca. 87 dB und completely noncritical impedance, that can cope with virtually all situations. The frequency response in the bass range starts falling pretty early, but don't be fooled: the roll-off is smooth and the measurements did not consider any room characteristics. So it's absolutely possible that the p2 can achieve the promised 30 Hz low end in practice.

Let's start our routine with typical Manger material, that is to say a formidable 2-track recording from the Bauer Studios in Ludwigsburg. The studio concerts always delight the listener with their authenticity and unspectacular approach. The p2 reproduces the performance of Antonio Cuardos De Béjar & Latin Affairs in exactly the same way: extremely detailed, compact and not exaggerated at all. The precise representation of the cymbals strikes my ear – they sound not a bit artificial.



## Manger p2

- Price per pair 12,800 €
- Distributor Manger Audio, Mellrichstadt
- Phone ++49 9776 9816
- Internet [www.mangeraudio.com](http://www.mangeraudio.com)
- Warranty 2 years
- H x W x D 10.6 x 44.8 x 8.4"
- Weight: ca. 71 lbs

### Bottom Line ...

» The p2 is the most uncomplicated Manger speaker so far. It makes it extremely easy to immerse oneself into the bending wave transducer's unique cosmos of sound. Perfectly suited for intuitive listeners as well.





*The terminals on the connector panel come from WBT, of course.*

Up to here a sound impression that's comparable to a p1. Excellent and correct in an unspectacular way. Things change, as soon as the loudspeaker is challenged on different levels. Long Distance Calling from Münster approach their music very differently and follow completely different sound esthetics, but the Manger demonstrates its versatility:

The raw and a little bumpy post-rock sounds very punchy and fat. But that's not all: I'm impressed by the ultra wide panorama of the opener "Nucleus" from "The Flood Inside". Has it ever been like that before? I don't think so. "Babe I'm Gonna Leave You" from the Led Zeppelin debut album provides the evidence that the Manger p2 can rock – without neglecting its discipline and precision. Yes, it is fine tuned a bit differently than the other loudspeakers from Mellrichstadt: not quite as stringent and veracious, but with more guts and soul. You get a little less at the very top and a little more body at the bottom. Absolute precision fanatics might respond slightly reserved, but people who listen to music with a desire for harmony will enjoy the easier access to the fascinating Manger world of sound.

*Holger Barske*



*The cabinet rests on a metal base plate equipped with spikes.*



*Different frequencies set different parts of the membrane into vibration. That's the design principle of the Manger transducer.*