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Special Print

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Manger Z1:

**Made in Germany**



rapidly detecting the type and origin of sounds. Conventional chassis with piston membranes exhibit more or less slow transient effects, however, and produce sonic artefacts which impede the spacial localization of sounds considerably. Manger reached his goal by using a soft bending wave transducer. This chassis generates sound only by means of a membrane which is firmly clamped at the edge. The higher the frequency, the smaller the projecting surface of the MSW becomes, which makes for good omni-directional characteristics. Thanks to these properties the MSW is able to produce an almost distortion-free and phase-correct sonic image.

More than 30 years passed, before I could extensively listen to a loudspeaker equipped with such a transducer. I couldn't wait to find out whether this transducer, which had been constantly improved during the last decades, could live up to my expectations.

# Made in Germany

**M**uch has been written about Josef W. Manger during the last decades and I always read those reports with great interest. I found the first article about the "Manger Sound Transducer" (MSW) in a German high-end magazine during my school days – meaning more than 30 years ago. It was a compelling treatise on the basics of this transducer type which has been fascinating me ever since.

Manger wanted to design a transducer which behaves exactly like a natural sound source, i. e. impulse-true and phase-correct. Human hearing, which evolved as a tool for recognizing dangers, is trained for

**Designations of origin are becoming increasingly important in a globalized world and products don't always contain what is written on their label. However, Manger is different: They still offer loudspeakers which actually deserve the name "Made in Germany".**

The Manger Z1 is categorized as a shelf loudspeaker, but its dimensions and mainly its weight of 57 lbs

per unit don't fit into this category. The dimensions are geared to classic British monitors such as Spendor BC1 etc. which are between 20" and 24" high, about 12" wide and 15" deep.

Like these monitors the Z1 comes with an 8" woofer which in contrast to the English models does not function as a low mid speaker, since its upper range is limited at 360 Hertz. Moreover it is housed in a sealed enclosure, so that it cannot interfere with the impulse fidelity of the MSW, but exhibits a rapid transient response. This bass speaker is manufactured at ScanSpeak according to Daniela Manger's exact specifications.

With a frequency range of eight octaves the MSW can justifiably be called a fullrange transducer with bass support. This concept in combination with the characteristics of the MSW are optimum conditions for good spatial imaging and a crisp bass with rapid impulse response.

### Fine Architecture

The solid cabinet design ensures that the sonic concept works. By the way, the cabinet design of the new Manger series has mainly been developed by an architect, who also manages the Swiss distribution of Manger products and runs his own hi-fi store. Generously rounded edges and a smooth lacquer finish pay homage to Bauhaus architecture.

Talking about cabinets I would like to make a little excursion to the introduction of this review and the label "Made in Germany." Nowadays it has become fashionable or necessary for financial reasons to have the loudspeaker enclosures manufactured in Asia – almost every speaker manufacturer does so. At Manger the enclosures are still obtained from a qualified carpentry in Germany. The MSWs are handcrafted in Mellrichstadt at the Manger factory and the crossovers as well as the NextGen bi-wiring loudspeaker connections also come from renowned German manufacturers, namely Mundorf and WBT. Only the bass speaker is not "Made in Germany" – but at the

end of the day and according to the guidelines of the rules of origin every Manger loudspeaker is a thoroughly German product: Made in Germany in the truest sense of the word.

### Fundamental Questions

At a product presentation in Zurich I had an extensive talk with Daniela Manger and she recommended to put the Z1 on heavy speaker stands to fully enjoy its sonic strengths.

I followed her advice and used very heavy stands filled with sand, which fortunately had the right height for the Z1. Unfortunately these clunky "classic" stands did not match the elegant appearance of the Z1 at all. Hopefully Manger will soon provide a suitable speaker stand like they already did for the compact active C1. This would emphasize the elegant design of the Z1 much better.

After several placement tests, which I started close to the wall, I opted for a distance of 1 meter from the side walls and 1.6 meters from the back wall. Interestingly enough, the majority of the loudspeakers, which I tested in my living room, liked this location best.

This proves once again that the room is largely responsible for the reproduction quality of loudspeakers.

In addition the speakers must be exactly aligned to the listening position to avoid deficiencies in the high frequency range.

### Sound & Emotion

So how does the long-awaited Manger Sound Transducer sound? At first nothing strikes you, actually. Compared to many other loudspeakers, which readily show off their strengths – brilliant highs, ultra-low bass – the Z1 keeps a low profile. This loudspeaker wants to be experienced and appreciated by a music connoisseur. The deeper you dive into the Z1, the more you leave the hi-fi realm. The Z1 does not focus





## LOUDSPEAKER



*The WBT NextGen-terminals make their contribution to the audio experience provided by the Manger Z1.*

on resolution, three-dimensional spatiality or rapid, bouncy basses – all this is present on the highest level and goes without saying. The Manger rather focuses on transporting the immanent emotions of music.

As a hi-fi tester you always pick familiar music from the shelf to judge and verify the strengths and weaknesses of the loudspeaker to be reviewed. You listen to selected pieces of a record, then pull out the next one to check off your test program step by step. With the Manger loudspeakers you choose the records you currently like best. You put music on the turntable, which appeals emotionally and is really enjoyable. And you also listen to the records from beginning to end.

It was pretty amazing to hear that whatever music was being played the Z1 reproduced it effortlessly

and naturally. This is where the strengths of the MSW seem to manifest. The ultra-rapid rise time and the absence of non-linearities are clearly noticeable. In addition: no distortion means no stress for your ears. A good example for these virtues is the song “Gunfight At The OK Corral” on the album “Round Up” by the Cincinnati Pop Orchestra under Erich Kunzel. The song is about an old cowboy legend in which Doc Holiday and Wyatt Earp play the main parts and get involved into a wild revolver shooting near the song’s end. Although I know the song inside out, I was downright scared when the Z1 reproduced the shooting. The shots sounded so realistic that I felt like standing in the middle of the shooting scene. This is due to the absence of transient effects normally caused by the chassis. The MSW reproduced the revolver shots so naturally, that my ears were quite enchanted. The same goes for the sparkling piano playing on “Dick Hyman Plays Fats Waller” which is so extraordinarily light-footed and swinging and which is reproduced by the Z1 with highest authenticity – simply fantastic.

I always listen with eyes open, because my senses are much sharper und I can better concentrate on the musical performance. While listening to the Manger



Z1, however, it happened to me pretty often that I involuntarily closed my eyes and got carried away by the emotions of the music. Up to now this has happened to me only with electrostatics.

### A Word on the Bass Speaker

The concept of a sealed enclosure has enabled Daniela Manger to achieve a seamless transition between the ScanSpeak bass woofer and the MSW. The bass is resilient and smooth, sufficiently low and solid and does not lag behind at all. There are some trade-offs, however. The efficiency factor is not so brilliant and requires a powerful, rapid and sonically excellent amplifier which can showcase the qualities of the Z1.

## Test Result

The Manger Z1 is a loudspeaker for experienced music lovers. Those who expect natural and emotional music reproduction and don't care for the evaluation criteria of the hi-fi industry should take a close look at the Manger Z1. In combination with good, rapid and powerful electronics it will convey a pure music experience. In the future I will have the privilege to test and review many more loudspeakers for i-fidelity.net, but as soon as I quit my job as an audio critic I will go and get me a Manger loudspeaker forever.

*Stephan Schmid ifn*



**Sound Quality**

**superior**

**Lab**

**good**

**Finishing**

**very good**

**Overall Score**

**very good**

**i-fidelity.net**

**Manger Z1**

**Test Result: very good**

## Features

### Shelf Loudspeaker

Design: 2-way sealed

Configuration: 1 x 200 mm woofer,  
1 x Manger MSW

Crossover frequency: 360 Hz

Finish: RAL colors, high-gloss or matt, various veneers

**Dimensions** (W x H x D): 10.6" x 21.4" x 14.6"

**Weight:** 57 lbs

**Warranty:** 5 years

### Contact:

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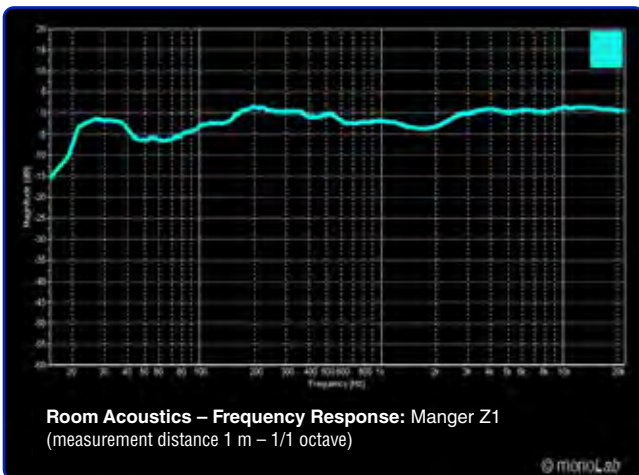
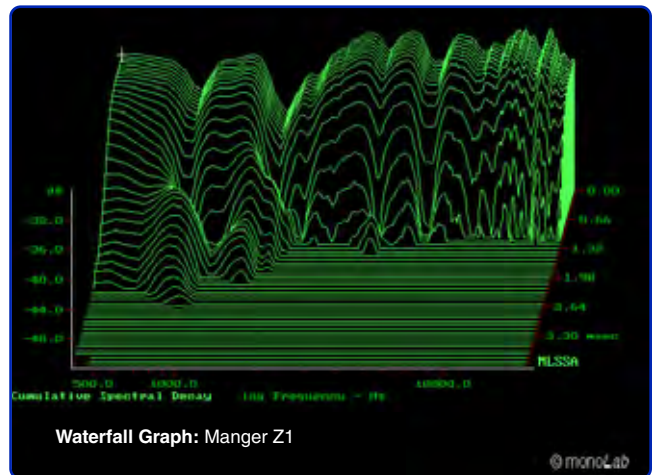
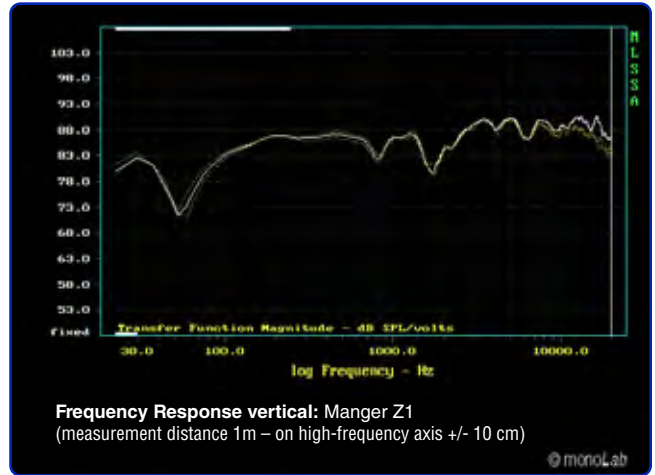
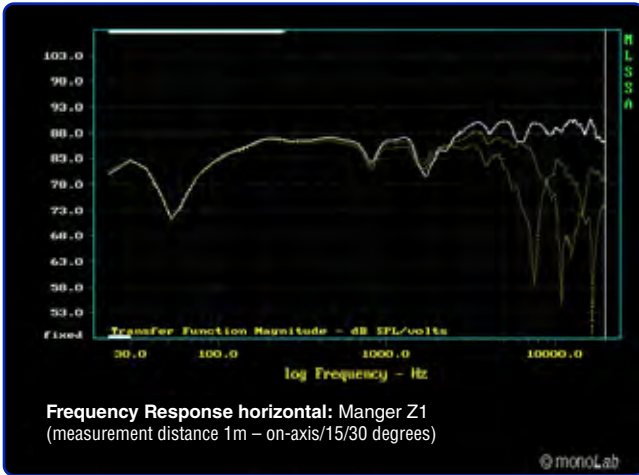
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# LOUDSPEAKER



## Lab Report

### Loudspeaker Manger Z1

- Minimum impedance: 2.9 Ohm @ 192 Hz
- Nominal impedance ( $\pm 20\%$  tolerance): 3 Ohm
- Sensitivity: 87.8 dB (2.83 V / 1m; 500 - 5,000 Hz)