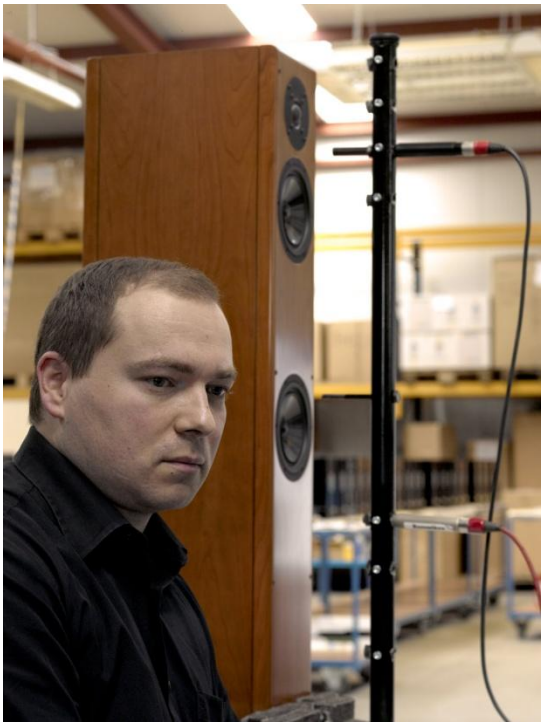
The Music Company - But what do you unpack?

Value - sound management



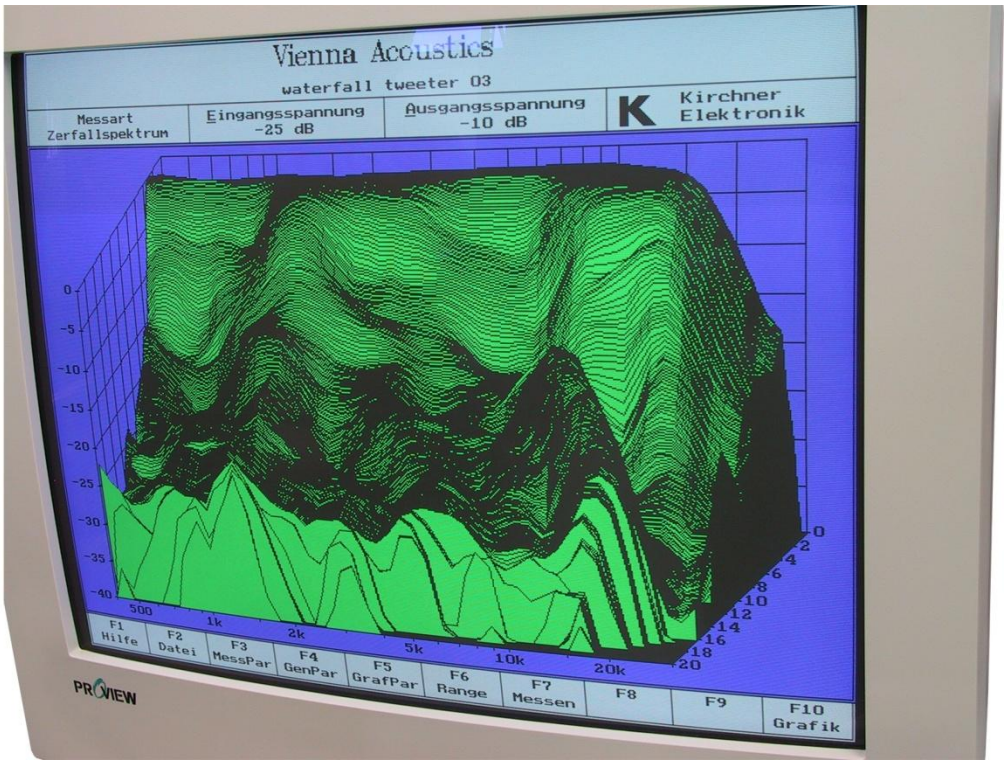
Despite all of the effort that goes into the development of a perfect prototype speaker, there remains a potential barrier to achieving great sound in the customer's living room: the way in which the individual loudspeaker is manufactured. During the design and development period, Peter Gansterer works with components – such as drivers, crossover parts, and cabinets – of the highest integrity, and these serve as a reference standard. For example, drivers: During actual production, we order large quantities of drivers. During sound development, Peter works with sound tuning in the low tenth of a dB on the frequency response level. Yet even though we use only the best suppliers and stringently demand the tightest of level-tolerances, the production drivers we receive can deviate as much as +/- 1.5 dB!

To tackle this challenge, we at Vienna Acoustics are making efforts that we believe to be unparalleled in the industry. After development of a new speaker is finalized, two things happen:

1. We analyze all significant parts that Peter used in the reference standard, and we find identical examples to keep as part-references. These part-references are the benchmark by which incoming part shipments are measured. Taking again the example of drivers: When we receive tweeters for production, all of them are measured against the reference tweeter and are subsequently assigned to appropriate categories. (An average number of categories would be four to seven.) One of these is the category of "tweeters to be sent back to supplier because drivers not within tolerance according to specification book." For each of the remaining categories of the drivers we retain, we build crossovers in our factory. These crossovers are modified in component values to match the drivers perfectly, thus attaining the same total result achieved in the reference speaker. It goes without saying that individual testing has been performed on the

components of the crossovers themselves.

2. In addition to using individual part-references, we manufacture a second complete reference speaker, which has absolutely the same measurements as Peter´s final reference speaker and so exactly replicates the intended sound. Each newly manufactured speaker must be identical to this second point of reference, down to tiny tolerances that have been defined by the designer through listening tests. Specially trained managers compare and study the levels of frequency response, impedance curves, and waterfall plots (to track down resonances). To avoid variations due to changes in temperature, humidity, and minor measuring equipment drift, the reference speaker is measured only minutes before the newly manufactured speaker is measured. As a result of our determinations, we make adjustments to optimize some of the speakers (typically 15%) with post-processing (e.g., complete driver replacement). Judging exactly which of the parts requires post-processing to achieve the perfect sound requires exacting skill and considerable experience.



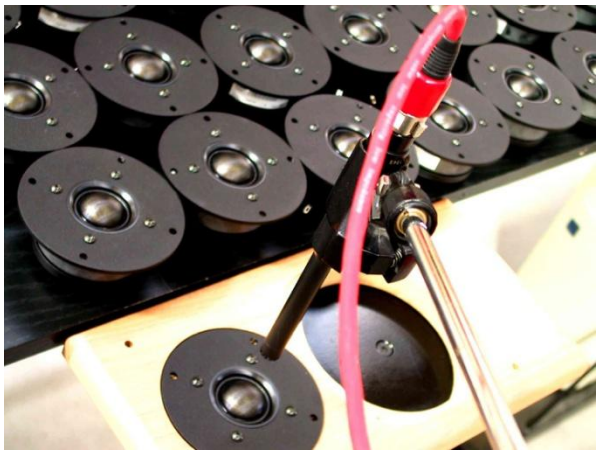
Such patience and precision is vital to the Vienna Acoustics sound, and we believe this is why we get so much enthusiastic feedback about its musicality. It all takes a lot of effort, but we're proud to know that each customer who unpacks a Vienna Acoustics speaker will get the masterpiece the designer intended.

Value – built quality

All of our efforts toward impeccable manufacturing and cabinet construction, which you can read about in the various pages of this site, are executed on such a high level that the quality is readily

apparent to experts and casual listeners alike. This is an important part of our success: our quality can be heard and seen clearly.

Through years of research and practical experience, we have found ways to manufacture high-end loudspeakers in such an efficient way that no compromise needs to be made, in any respect. Take our cabinets as an example: state-of-the-art joineries turn out our furniture-grade enclosures at a fraction of the normal price. How can this be done? The main secret is quality control: the cabinets pass through a large number of quality control stages on their way from creation to your home. It starts with our inspection of veneer purchases and continues through the checkpoints at the joineries, where our senior managers make a point of being on-site at critical dates. When the cabinets arrive in our manufacturing facility, we inspect each and every one in detail, referring scrupulously to the vast number of points in our specification book (which sets the specifications for the joineries in the first place). As it turns out, our joineries don't have it easy: our examination is so rigorous that almost invariably a part of each delivery (typically 7% to 10%) is sent back.



This same quality control is the standard on all of our speaker's individual components, and of course it's also imposed on the complete speaker itself. When the speakers have been manufactured and measured then the last – and for our customers most important – step before shipment takes place: each speaker is examined by two high-grade staff specialists with a detailed overall-quality checklist of more than forty points.

At Vienna Acoustics, we have a passion for music and a drive for perfection. These led us to refine the manufacturing and quality assurance process to be certain that each customer receives a speaker of unrivaled quality.

http://www.vienna-acoustics.com/index.php/the-music-company/but-what-do-you-unpack