



FRITZ FEY, Photo: MEG

Quite honestly

MEG RL 921K ACTIVE LOUDSPEAKER

Located in Geithain the loudspeaker manufacturer Musikelectronic Geithain around mastermind Joachim Kiesler is one of the companies that stood out from loud marketing.

Instead MEG wants to convince with power, precision, long-time stability and quality. This does not foreclose innovation in any way. Already in 2002 MEG developed the so called bass cardioid based on a controlled unbalancing of the sound field at low frequencies. It is achieved by mechanical means and led to a constant attenuation of the rearward radiated frequencies between 30 and 250 Hz from our test unit RL 921K by more than 10 dB. Over the time the K-technology (Kardioid, the German translation of cardioid) was introduced to many speakers and subwoofers out of the manufacturers portfolio and offers a huge advantage, we will take a closer look at this later on. Another innovation is the principle of the point source with the self developed coaxial technology (MCDS Coax = Minimum Coloration Directivity Steering Coax) used from the first speaker on. The design of a metal plate in front of the woofer carrying the mid range and tweeter gives the MEG speakers their distinctive face.

I did not expect the weight of roughly 40 kilograms per speaker, forcing delivery by a forwarding agency on a stillage, so a listening test in my small test and mastering studio immediately proved impossible. So I had to move again to my friend Klaus-Dieter Keusgen, presumably one of the most prominent persons in the orbit of the editorial staff by now due to often mentioning him. It was very hot this day and we old men bothered hauling these heavyweights on the stands. It does not need a lot of imagination to understand these massive MDF enclosures were not built to challenge us to top athletic performances but for stability and resonance suppression. Indeed the arduous hauling was worthwhile as we could see with satisfaction after the test – that much has to be mentioned in advance.

Overview

The RL 921K is already recognizable by the typical MEG driver design and can be considered as the tonally equal but smaller sibling of the almost legendary RL 901K. The enclosure is ash black veneered by default. Optionally there are many different wooden veneers or RAL colours available as well as a lateral mounting or handles.



Very early on MEG recognized the potential of the audiophile market and offered their speakers since then to both studio professionals and music enthusiasts. This decision was spot-on as today many producers of professional audio equipment think out of the box and try to place their products on the hi-fi market. The RL 921K was designed for middle listening distances and a base width between two and three metres (6'7" and 9'10") and is therefore useful when the RL 901K can not be used because of insufficient room size. The speaker chassis consists of a 300 mm (12") long-throw woofer in a bass cardioid enclosure, the front baffle houses the 100 mm (4") cone and the 25 mm (1") dome tweeter. Classically driven by three MOSFET amplifiers with 180 W, 100 W, and 100 W power and an electronic crossover at 650 Hz and 3 kHz. By the coaxial arrangement MEG achieves a homogeneously increasing directivity index from 4 to 10 dB in the range of 100 Hz and 10 kHz. A normally green lit LED is changing to red when the system is brought to the limits. If this happens the output level is decreased by 20 dB to protect the components. The back of the device is exceptionally simple with a XLR input and a level adjustment control for the input sensitivity that can be set with a screwdriver. The whole amplifier can be hinged out for servicing after releasing the screws. An analogue room equalization filter is located as a module in most of the active MEG speakers, so also within the RL 921K. It is not accessible from the outside but rather shows itself only after hinging out the electronics. This has the advantage that once adjusted, which should be the rule, it is protected from unauthorized access. The adjustment possibilities include a low shelf filter to compensate floor reflections or corner installations for example. In this case an examination with acoustic measurements is advisable as this does not concern personal taste. To influence the treble range an additional shelving filter above 10 kHz is available that could be categorized as personal taste. Basically this allows equalizing excessive reverb or overly attenuation in the treble range. Thereby the whole splendour is described as why we will dig further into some advantages of the cardioid radiation of low frequencies in the next paragraph.

Bass cardioid

It is tradition in the house of MEG to see speakers as a whole and to produce all used components by themselves, sort of the best quality control imaginable. This does not exclude the room acoustics as a speaker only plays as well as the surrounding room permits. A huge difficulty when positioning speakers are the reflections of the normally spherically radiated lower frequencies at adjacent walls leading to distance dependent cancellation at the listening position in this fre-

frequency range. With a rearward attenuation in the low frequency range by more than 10 dB this problem is successfully addressed and the room dependent frequency response is distinctly smoothed. A less elegant but cheaper solution to this issue is the positioning of “conventional” speakers close to the back wall to “disperse” the cancellation in the forward radiated range and readjusting the resulting low frequency increase electronically. The optimal solution is also the most expensive namely to counteract the low frequency reflections with powerful mechanical low frequency absorbers. Maybe this thematic excursion shows how sensationally innovative the bass cardioid really is. Suddenly it is easy to position the RL 921K in the room by the one fourth lambda rule without any disturbance. The manufacturer advises a minimum distance of 20 cm (7.9”) to rearward boundary surfaces. As the bass cardioid covers a relatively wide frequency range with maximum attenuation also greater distances to the wall are possible, as practice gives proof. Positioning in corners is not advisable as the increase of low frequencies by two boundary surfaces is unavoidable.

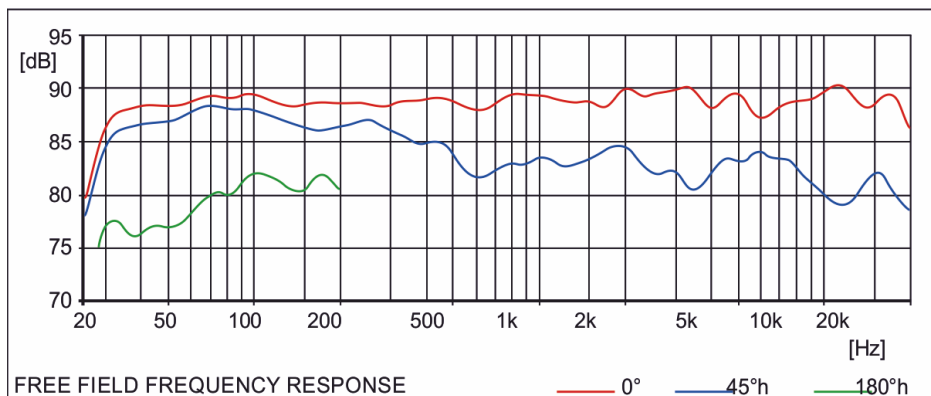
Listening

After work comes pleasure – that would describe the course of our listening session in the Keusgen studio. We positioned the speaker behind the console with about half a meter distance to the wall and enjoyed the homogeneous frequency response in the range of the low frequencies despite the acoustically stiff rear wall of the built-in Genelec 1039A. The low frequency range of the RL 921K seemed dry and fast but also musically. A peculiarity of all MEG speakers is a perfect embedding of the phantom center in the stereo image due to the fine tuned directivity index. This effect was also found in our test speakers and led to a precise evaluation of the vocal balance. “Other” speakers tend to an elevated position of the singing voices in the stereo image as well as an artificially induced nearness due to imbalance leading to quieter mixed

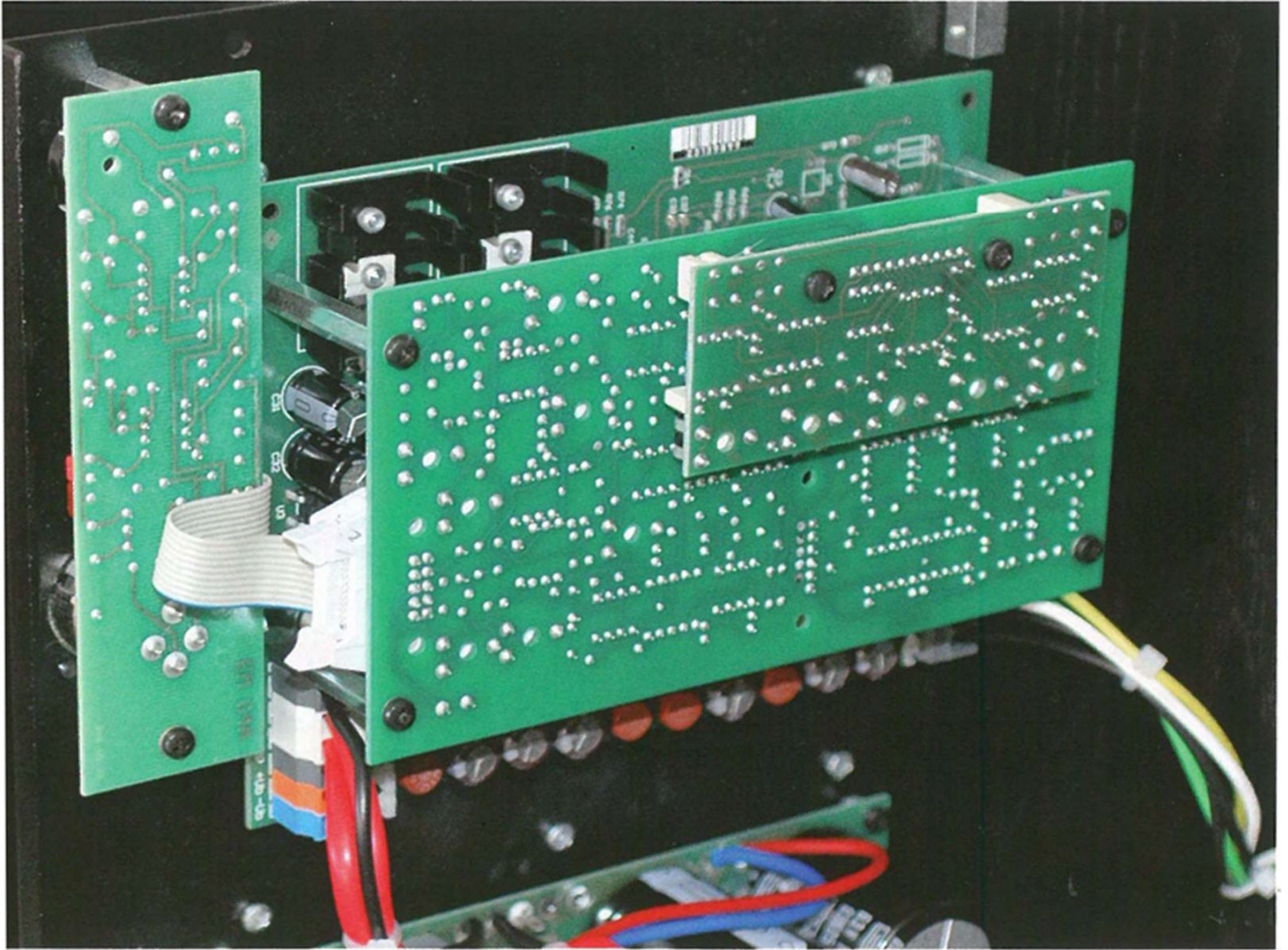


voices, often about 2 to 3 dB. The MEG point source showed itself to have very low coloration whereby reverberated and natural rooms could easily be evaluated and their decay could be precisely tracked down. Notable was also how voices with too much compression were exposed as flaws and how precise the speaker showed details. It is as it should be: Bad productions or mixing errors are relentlessly

exposed maybe with a slight tendency to “mercy”, good productions sound incredibly beautiful and “right”. The signals do not seem to stick to the speakers. You just listen to music and you know instantly what it is about. And what's to say about the highs? They are just there, effortlessly, and are just noticeable when the tonmeister in charge had a bad day. These speakers are really immaculate and presented to us the quality of the productions we listened to in a very finely graduated scale



On - and off axis SPL response measured in the in MEG's own anechoic chamber. You should take a look at the green graph(180 degrees) which documents the function of the cardioid system.



crossover with room equalization filter module

promising complete decision certainty. Direct quote from Klaus-Dieter Keusgen: “With these speakers I could mix immediately.” Despite the great base width of about 3.20 m (10’6”) that the spacious control room in the Keusgen studios “enforced” on us when positioning the speakers the RL 921K delivered high listening levels, that are only advisable for tracking, without problems. The reproduction was clear and precise with a powerful but still very well controlled low frequency range. Timbre and temporal imaging remain unchanged at all levels so you do not need to increase the level the hear better. Even with all this precision you do not have the feeling to sit in front of an analytical audio loupe. The decision certainty is there but the joy in listening does not come short as long as the recording is permitting it. Musicality and precision are well balanced here.

Conclusion

With the RL 921K Musikelectronic Geithain has put another component into its product range following the strategy to

choose a MEG speaker not by its timbre but only regarding the size of the room, the listening distance, and the lower cut-off frequency. Our test unit is truly covering the whole spectrum from 30 Hz up to 20 kHz. Its strengths are unproblematic positioning due to the bass cardioid, low coloration, time correct reproduction, precise imaging over the complete frequency range and the easy balance adjustment in the mix what is not as self-evident as you would expect. With a price tag of over 5.500 euros per piece the RL 921K is certainly not a bargain on the market of professional studio monitors but otherwise it has all the right, in contrast to others, to call itself so. Extremely accurate workmanship and manufacturing quality, imaging at the highest degree, innovative design and longevity our test candidate is faithful and reliable and will never talk trash. What did I say at this point once before? Straightforward design of a speaker without gimmickry of doubtful avail. To thematically come back to the headline: Its honestly but not quite. A salute to Geithain! From me, an imperative recommendation to buy and a grading into the top class!