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Photography: Dieter Kahlen

Lipinski L-707 main monitor and L-150 subwoofer



In the tangle of our small market where most manufacturers compete to develop market-ready products in the search for the appropriate relation between retail price, quality and functionality, one sometimes years for uncompromising contemporaries who would uphold the notion that only the best may be market-ready, independent of the development cost and retail price, which in the end turns out not to be very much higher, since enthusiasts are usually modest people. It is difficult to afford this kind of thinking, especially in a time when the user is compelled to put the purchase price of a product above all other considerations. Still, ultimately it turns out that it was worthwhile to have settled upon the better or even the best, and this thought is especially relevant to one of our most important tools, the loudspeaker. In numerous discussions, I continue tirelessly to explain that the loudspeaker and the acoustic characteristics of the room where it stands are the only really important requirements for a studio of any size or purpose. When I have laid down this basic rule, I have no further problems to let the ears decide any further investment, since I can hear differences in sound which become actually discernible in a very distinct manner. At the end, the choice of appliance made according to these rules will decisively influence the quality of a production, to the

extent that we are able to contribute to it from the technical side. After all, we live at a time when studio hardware may be acquired for a fraction of the order of magnitude of investment which was previously necessary. Thus, it is perfectly feasible that more money will be left over for a good studio monitor.

This is also the opinion of Andrew Lipinski, a successful sound engineer based in the United States, who has been responsible for hundreds of LP and CD recordings in the domain of classical music and jazz (www.tonmeisterrecording.com). He has an impressive collection of old microphones which are all still in operating condition, but he very early began to demand more than the existing market supply could offer him. It sounds rather commonplace and many tales begin this way, but Mr. Lipinski has in the meantime expressed his superior requirements in actual products. The task of development and manufacturing of loudspeakers and audio electronic equipment prompted him to found a company together with his son Lukas Lipinski. The company was launched in October 2003 and has since included in its product line i.a. independently developed studio monitor, subwoofers, amplifier stages and microphone pre-amplifiers. I saw Lipinski's loudspeakers for the first time at the AES in Berlin where they were presented by Andreas Balaskas and his 'mastering laboratory' Mastering-Studios as the German sales representative. Until the actual test, the loudspeakers have struck me only as "the ones with the funny sponge collar around the Tweeter". Indeed it seems to have taken quite some time until the Tweeter showed the radiation characteristics required by the developer, which led to this rather unorthodox construction and appearance. Andrew Lipinski represents the opinion that loudspeakers in a stereo or surround system must be absolutely identical, and he means "absolutely identical". The development philosophy includes also the persuasion that low frequency information of the bottom octave coming from the main loudspeakers may cause distinct phase problems and therefore should come from the subwoofer, especially since assembly problems are significantly reduced that way. Also not accidental was Lipinski's choice to design his studio monitors exclusively in a passive mode, since his own laboratory tests have shown that amplifiers built into the loudspeaker frame produce



*A view behind the grill cloth:
The monitor should not be used in this way since the
sponge collar is an inherent part of the covering frame*

up to 15 percent more harmonic distortion (K2 factor), a fact that has reportedly since been confirmed also by blind listening test. Now, I am telling you all that not in order



to put Mr. Lipinski on a pedestal, but simply to convey the impression that what we have here is a fanatic at work who has studied every aspect of sound transmission in great detail.

L-707

Our test kit consisted of two L-707 studio monitors, one L-150 subwoofer, one three-channel amplifier and a digital frequency divider which was used to correctly set the transmission range of the subwoofer. This is not exactly the kind of set that you could buy in a shop, since Lipinski supplies his own amplifier stages including a special stage for the subwoofer, but at the time of our test they were not yet commercially available. The L-707 is the larger of two hitherto offered monitors (the smaller one is called L-505). It includes a 1-inch Tweeter with neodymium magnets with a transmission range ending at ca. 40 kHz as well as two 7-inch mid/low chassis that have a glass-fiber membrane and operate within a tolerance limit of ± 1 dB down to 56 Hz and within ± 3 dB down to 31 Hz. The loudspeaker is arranged in a vertical setup, so that the two mid/low chassis are located above and below the Tweeter. The Tweeter is surrounded by a three-layered sponge collar which determines the radiation characteristics and prevents edge reflections. The L-707 has a closed housing design without reflection apertures, the housing is made of 25-millimeter-thick MDF with internal cross-bracing for optimal resonance (or rather "non-resonance") characteristics. The Tweeter is not covered with a grill cloth since it has been found that even the most air-permeable cloth causes comb filter effects in the upper frequency range. The chassis is placed on the time axis not by electronic, but mechanical means. The frequency divider is optimized for an optimal phase response and for perfect transient characteristics, above all by application of high-quality components. The fine tuning of corresponding loudspeakers in a stereo or surround system is performed not only in an electronic manner, but also mechanically, e.g. with the inter-

nal insulation material pieces being cut to absolutely identical size and weight. Lipinski's loudspeakers are magnetically shielded and during final inspection they are equalized with regard to all parameters in a sound-proof room.

L-150

The subwoofer is equipped with a 15-inch double voice coil chassis which is built into a sealed housing with a double wall design. The frequency curve is linear all the way down to 31 Hz, as long as the room is suitable. The internal housing is cylindrical in shape which is both physically more stable than a rectangular one and at the same time does not allow the emergence of standing waves. The outer casing is made of two-layered 20-millimeter-thick MDF and has a pyramid-shaped rear wall to inhibit any kind of housing resonance. The empty space between the external and internal housing may be filled e.g. with sand for ultimate protection against any possible resonance. The woofer is conspicuous by its high attenuation coefficient. The membrane is an extremely stiff design made of paper impregnated with Kevlar.

Listening and practice

With large monitor systems we willingly take advantage of the possibility to secure the help of the recording studio Tonstudio Keusgen and its owner Klaus-Dieter Keusgen. This was also the case with the present test, this time with resolute support from the studio assistant Philipp Kompch who not only helped with the construction but also took part in the listening test with "smart ears". This time we limited ourselves to pure monitoring of finished productions, since the Lipinski set made its class unequivocally clear already in the first minutes of the test. The L-707 pair together with subwoofer support supplied breathtakingly exact stereo image and a sensationally deep insight into all spatial information. The subwoofer itself with its closed design belongs to the best that my ears ever had the op-



portunity to experience; it is very dynamic with precise response to impulse-like input and it is extremely dry even down to the lowest frequency. What fascinated me the most, however, was the ability of the L-707s to reproduce the dynamics of a pro-

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gramme. We have found some finished productions in which it was possible without any effort to hear compressors working, both in solo voices and in the total stereo sum. It was indeed a rare experience which spread every kind of production in front of us as an open book independent of the musical style. I had silently put away the topic

"passive monitoring" some time ago on my personal sideline. What extraordinary things could possibly still happen there? Well, something has happened now, and in a quality that leaves me really beaming with pleasure. It is a fantastic monitor for the sound mastering engineer who receives with it an audio "magnifying glass" and a critical tool of the finest precision, which presents any production as it really is. To mix or to record? Definitely a strenuous task, since one is not quickly satisfied with what one is presently producing, but on the other side the goal is after all a monitor which would turn us into more critical evaluators, isn't it?

Conclusion

I take my hat off to Andrew Lipinski. With his L-707 in combination with the L-150 subwoofer he hit the proverbial nail right on the head. I have rarely been so well pleased with a monitor and with its precision. The listening session lasted thus correspondingly long, because it was difficult to tear us away from the Lipinski loudspeakers. Studio assistant Philipp brought incessantly some more material that we just had to listen to. We simply could not get enough. In my opinion, a nicer compliment for a loudspeaker cannot be formulated. Andreas Balaskas, who imports this outstanding product to Germany, quoted us prices which have agreeably surprised me: 2349 euros (incl. taxes) for a L-707, 2099 euros (incl. taxes) for the L-150 subwoofer. Altogether barely ca. 6800 euros for the whole set, of course excluding three amplifier stage channels. But honestly, don't you find this pretty affordable for a product at top world class level? Oh yes, and if you want something 'cheaper', you can apply the smaller L-505 for 1499 euros. I have not heard it, but one can surely expect for it the same quality and precision. Somebody like Andrew Lipinski would probably not settle for anything below this level. Anyway, to me this is another candidate for my personal list of all-time favorites... ■