

IN THE FIELD OF TENSION



As a music and hi-fi fan, do you always have choose between style and sound? Speaker company Piega thinks not, and has been applying this philosophy for about 30 years now: the new Coax 711 is another successful example of the Swiss company's way of doing things.

My first contact with Piega loudspeakers was a long time ago, somewhere back in the second half of the 1980s. I worked in a long-forgotten Cologne HiFi studio near a temple of musical high culture and, thanks to experienced and helpful colleagues, learned new things about hi-fi and music on a daily basis. My favorite equipment at that time was Thorens TD 126 turntable with AKG P8ES cartridge, Arcam Alpha amp and Rogers Studio 1 speakers: I'd had the Thorens for some time, but the rest of the system was the result of saving from my first salaries.

Then one of my colleagues introduced me to a shaggy-haired guy called Kurt Scheuch: a man with a very amusing Swiss accent, he was introduced to me as the developer of a small box, quite different from my beloved Rogers. It was very shapely, finished in glossy real piano varnish, and equipped with a ribbon tweeter and a tiny bass speaker tuned with a reflex port.

Its beautiful name was „Arlecchino“, and soon we retired to an underground listening studio, set up the Swiss beauties with the required precision and, if the memory doesn't deceive me, connected them to electronics from New Zealand –the presumably long gone down manufacturer McLaren – and a Thorens TD 521/Grado record player.

The result of this demonstration impressed me so deeply that I can still remember all these details with ease: though it wasn't quite enough for the Arlecchino

to displace my treasured Rogers speakers, it made the English quasi-monitor sound quite old in terms of resolution, speed and musicality. Only in the midband was it found wanting, not quite matching the qualities of the British rival.

That was a long time ago, and since then Scheuch and his partner Leo Greiner, who handles the industrial design, have won a firm following for Piega - Italian for fold - among demanding music lovers and aesthetes all over the world.

Generational change

Now the two of them have announced that they are handing over to younger people, and will only come to the company premises if they are bored. But before Retirement, they want to go out with a bang, the first part of which will be the subject of our reflections on these pages.

The Coax 711 sits at the top of a new series consisting of three models: the smaller floorstanding loudspeaker is the 511, and the rather large compact model Coax 311. There's also a matching center-channel speaker for use in multichannel systems, the Coax Center 111.

Why Coax? Well, at the beginning of the millennium, the company astounded experts and the public with the world's first coaxial ribbon system: while inventor Scheuch had previously refined his tweeters and developed a highly efficient midrange ribbon, he now took a significant step further on the way to the perfect point source of sound. This involved

TEST COMPONENTS

CD-PLAYER: Accuphase DP430, T+A MP3100HV, Audionet Planck

PRE/POWER AMPLIFIER: Accoustic Arts Tube PreampII MK2/AmplII-MK3

INTEGRATED AMPLIFIER: T+A 3100 HV, Octave V80SE SBB

REFERENCE SPEAKERS: B&W 802 D3, DALI Epicon 6

CABLE: Audioquest Wind; HMS Gran Finale Jubilee, In-Acoustics NF-2404, (NF)

combining the two into a single system able to achieve the same results in terms of speed, low distortion, frequency response and time-alignment.

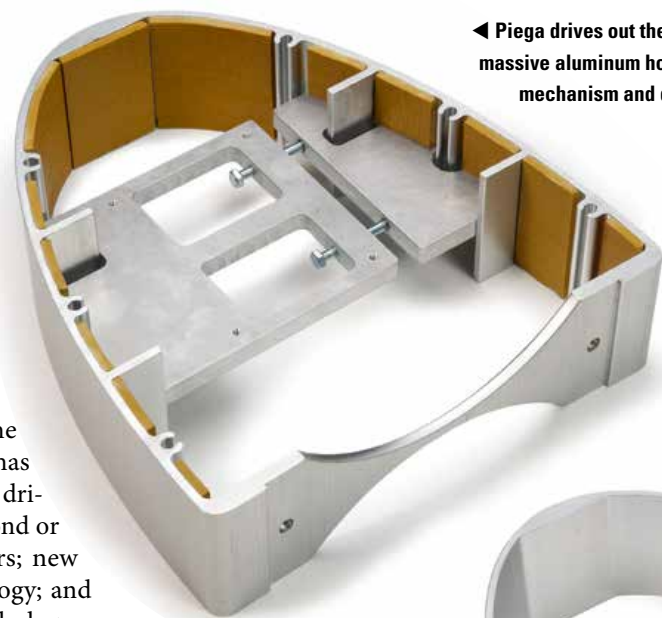
16 years is a long time in the high-fidelity world, and a lot has happened since then. The use of drivers made from ceramic, diamond or ultra-modern man-made fibers; new approaches in turnout technology; and ever-improving materials and shapes for cabinet bracing – these are just a few examples of the great progress made in the loudspeaker sector.

Of course, there have been developments in almost every other part of a loudspeaker and its individual parts, but it should be mentioned that, in the end, no one single construction detail decides the success or otherwise of a speaker design, but rather the skilful tuning of all parameters. This is a task in which experience, but nowadays also the computer, plays a major role, and it was with that in mind that Scheuch set himself the task of re-examining everything he had learned so far, and researching further possibilities for improvement.

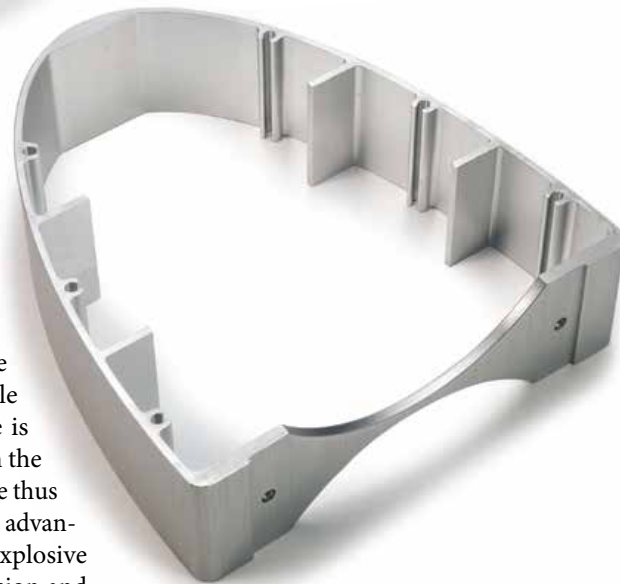
Aluminum advantages

Although the aluminum continuous casting enclosure here may seem familiar, along with the coaxial ribbon technology, the differences are clearly evident on closer inspection.

The C-shaped main 'shell' is inherently stable and offers little scope for resonance and standing waves, but for the new series, it has been set under controlled tension from the inside. For this purpose, several so-called „Tension Improve Modules“, which function similarly to clamping screws, have been built into the design: tuned individually by hand, these calm cabinet resonances. They are fixed with adhesive so that nothing clatters even in the event of temperature fluctuations, for example due to thermal expansion.



◀ Piega drives out the last resonances of the massive aluminum housing with its tensioning mechanism and damping mats.



▼ In its raw state, the aluminum enclosure is relatively undamped, which can be heard in the form of bell-like ringing

The final micro-resonances are prevented by means of viscoelastic damping films – the so-called idicell plates, which are now standard in Piega's upscale models. In addition, the baffle is also lined with MDF, into which the drivers are fixed. The housings are thus acoustically „dead“, the promised advantages of this great effort being explosive dynamics and the highest precision and accuracy in the reproduction of even the smallest and quietest details.

Talking of detail, let's look closer at the coaxial driver: the ring-shaped mid-range ribbon and the tweeter ribbon have been fitted with neodymium magnets of the latest design, stronger than ever before. These, in combination with newly developed, less resonant pole plates made of special steel with rubber buffers, increase the drive and boost efficiency. And the layout of the foils and their damping has also been further optimized: they are no longer attached to the moving film, but to the frame. The vibration behavior was improved with the use of new films benefiting from the most modern materials.

As a result of all these efforts, the cutoff frequencies of both drivers are now lower in the frequency range, so the bass drivers need only cover the lowest register: the midrange ribbon goes down to about 500 Hertz and the tweeter ribbon down

to 3500 Hertz, optimizing dispersion and uniform energy output.

The aluminum housing, which is 5mm thick on the sides and 10mm on the baffle, allows significantly more compact dimensions than the Classic 80.2 (tested in STEREO 1/15 and made of wood) – another obvious advantage of the 711 –, while the grille design, which is of course acoustically neutral, is also beautiful.

Tailored for performance

As a layman and a do-it-yourself builder, you might think that all you have to do is take the best and most expensive drivers you can get, install them, calculate the crossover and enclosure parameters, and you're done. But it's not like that: the bass drivers here are adapted to the requirements of the cabinet, the 711 using newly developed UHQD woofers with a ceramic-coated aluminum cone. It's very thin at the edge,

with a cleverly integrated stiffening ring, then become increasingly thicker towards the inner edge, where it meets a titanium voice coil former optimized in form, coating and stiffness for use in this speaker. The advantage is that, even at low volume, the bass sounds full, thanks to two driven woofers backed up with a pair of passive diaphragms, used instead of the bass reflex port often found in such loudspeakers. Scheuch says the benefit is a bone-dry, deep bass without the flow noises of a bass reflex port – not to mention fewer challenges when placing the speakers.

Yes, all this effort costs money, of course, especially when it comes to hand-made production in the high-wage country of Switzerland, and the insistence of the quality-minded Swiss on buying most of the components in Europe. The company also attaches great importance to ensuring that the working conditions are such that all employees feel comfortable and identify with the brand, and that everyone feels responsible not only for their actions but also for the success of the entire company. Another advantage of this corporate philosophy is that the vast majority of our employees hold the company in high esteem.

Time to listen

Finally, the time had come: the comparison of past impression of the Piega sound – refreshed again and again over the years and supplemented by multiple meetings with current models – with the current test candidate's abilities. A critical look at the details of the 711 showed that the Swiss have gone to town on this design, right up to specially-designed bi-wiring terminals. However, in the heat of the battle, they forgot to give their youngest offspring proper footwear, in this case spikes, on their way.

We then took care of that and let Claudio Arrau's performances of Chopin's farewell waltzes draw us into the action. And our view was that the sound image is extremely clean, with contours

sharply defined: not one hint of distortion or aggression assailed our ears, no matter at which frequency, and the presentation incorporated the finest dynamic shading and feeling for the music. We were also impressed by how sensitively and safely the Piegas were able to conjure up a wide variety of studios with their imaginary stages in all dimensions, coping as well with multi-microphone recordings they did as the piano and bass passages recorded with only two Schoeps microphones on Marten Design's „Supreme Sessions“.

Fabulously alive

The Piegas demonstrate pure joy in the playing, coupled with a deep understanding of the structure of the music, and a speed that wouldn't disgrace a Porsche 911. Male and female voices are delivered in textbook fashion, with the bonus of the fullest emotional power: listening to Lyn Stanley's mature voice on „Black Velvet“ via the Piegas, you can hear the care with which this recording was produced, with Stanley's excellent comrades-in-arms and the arrangement skillfully captured. This is one of the greatest sounds of the past few years, and the Piegas draw the listener deep into the musical process of the recording.

Come bluestime, they deliver all the drive and joy of Monty Alexander's „Lloyds Tone“ and Charly Antolini and Dick Morissy's „C-Jam-Blues“ – a delight.

Drive & relaxation

All the details were joined together again and again to form a harmonious, extremely detailed work of art. Impulses came clean and crisp, but always with juice, so that you could feel the breath of the music, never sounded sterile and lacking in blood. The 711 not only does everything right, it also sends exactly that amount of energy to the listener, which makes listening to music an experience.

It's all about less hi-fi, and more music – a terrific late work by Kurt Scheuch!

Michael Lang

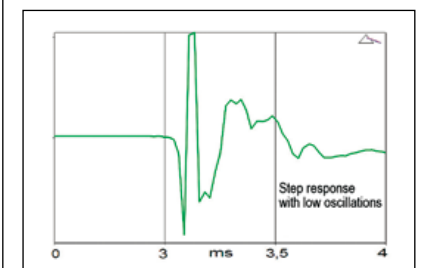
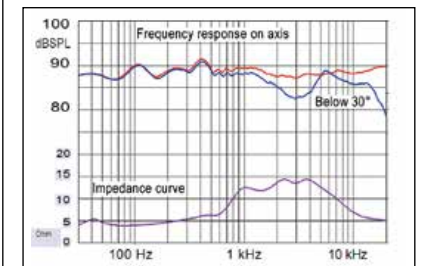
PIEGA COAX 711



from 18700
Dimensions: 28 x118 x33 cm (WxHxD)
Warranty: 6 years
Contact: in-akustik
Phone: +49 7634 56100,
www.in-akustik.de

An almost perfect all-round speaker of comparatively compact dimensions. Disappears effectively, creates space and enjoys playing. While it's not too demanding on amplifiers, it sounds best toed-in towards the listening position!

MEASUREMENT RESULTS



DC resistance	4 Ohm
Minimum impedance	3,8 Ohm bei 80 Hz
Maximum impedance	14 Ohm bei 3800 Hz
Power for 94 dB SPL	7,7 W
Low cut-off frequency (-3dB SPL)	24 Hz
Distortion factor at 63/3k/10k Hz	0,1/0,1/0,1 %

LABORATORY COMMENT: Uniformly excellent measurement values: the frequency response is almost linear and reaches very deep, the efficiency is high. The impedance curve should also not be a problem for an amplifier. Distortion is almost below measurement.

STEREO-TEST
SOUND QUALITY 97%
PREIS/LEISTUNG
★★★★☆
EXCELLENT