

## Saucer-full of Secrets

At last year's Audio/Video Show in Zagreb one of the rooms that won unreserved admiration belonged to Austrian firm AviTech, where PMC speakers in combination with Bryston Amplification were exhibited. During the show they were looking for a local distribution/dealer and when they found one we decided to test some of their components.

We took PMC model OB 1 speakers, Bryston integrated amplifier B 60 (used as a preamp) and Bryston 4B SST amplifier. This system, due to the limited time we had for listening was auditioned only in our own listening room. The original idea was to use these components in combination with other components, and review each of these components separately. But due to the lack of time, we were forced to limit our review to only this system as specified. We used the Exposé 3010 CD player as a source, WireWorld Polaris and Exquinox cables and Eclipse speakers.



### PMC OB 1

This speaker is a three-way transmission line (TL) design. The high frequency drive unit is 27mm Silk soft dome ferrofluid cooled. The mid-range is a doped, 75mm Fabric soft dome with a separate acoustical enclosure to prevent eventual negative effects from the massive 170mm low frequency unit. The crossover is Linkwitz Riley (24 dB/oct ) made of hand selected and matched components that are first tested before they are soldered by hand using silver loaded solder. According to PMC Designers, extra thick copper tracks are laid onto the board to ensure high current capabilities and reduce signal loss guarantying superlative performance. Sensitivity is very solid at 87db/W and as it has three pairs of Binding posts it is possible to try-amp or try-wire the system.



The cabinet is constructed using special panels called "Medite". Inside the speaker there is a 3.3m long transmission line which is braced by the internal labyrinth braces. This design, perfected by PMC designers with great success, is precisely tuned and damped with foam to absorb unwanted vibration. The secret of good TL design is actually in

absorption of unwanted vibrations, but with out effecting the flow of the air. This design in theory has a lot of advantages over Bass Reflex design but is used much less because of a need for very precise tuning and a need for an adequate enclosure and because the penalty for an unsuccessful implementation results in a very bad sound.

### **Bryston 4B SST**

Bryston 4B is a legendary amplifier which has been successfully used in home or studio application, for almost 30 years, and during that period has been changed and improved many times and stayed very well built, and very powerful in full dual mono configuration. From every aspect, the most changes and improvements until today are implemented in the newest SST version.

The power supply is fully independent, using a high power transformer for each channel and employing multiple filter capacitors per channel, rather than single pairs of larger filter cans, improving high frequency response and reducing overall losses in the supply. Only the finest selected components are used; metal-film resistors, polystyrene capacitors and hand matched transistors, top quality transformers. The chips are placed far away from the vital parts because of unwanted effects, and internal connection is implemented with very low impedance to reduce the distortion. New proprietary grounding protocol and “Quad-Complementary” output section technology, in which Bryston believes and the measurements prove, eliminates higher harmonic distortion and provides configuration close to class “A” amplifiers, and in some other parameters exceeds them- the very reason for SST creation. Output transistors are by Motorola and Toshiba, and as the amplifier is capable of drawing a large amount of power, it has a few mechanisms for protection which are needed to be able to compete on the professional market and a soft start circuit on power up. The chassis, as expected, is massive, very good looking and the quality is very high. There is only an on/off switch on the front and various types of connectors and speaker binding posts. In this test I used only RCA connectors. The quality is at the expected level, keeping in mind that Bryston is providing 20 years of transferable warranty.



### **Bryston B 60**

In this test the B-60 was used as a preamplifier and connected to its preamplifier-out connectors. Its specifications are like 4B SST specifications, with certainly much less power. According to the importer, the characteristics of the preamplifier section are similar to model BP-25 which is an excellent partner to the 4B SST. I would have preferred to have the BP-25 for this test, rather than the preamplifier section from an Integrated Amplifier. But, what you see is what you get. The B-60 is solidly made with selected parts, discrete technology on many signals, gold plated connectors on 4 inputs, additional tape-loop, headphone output, and quality steel housing. Certainly, it also has a 20 year warranty.

## **The Sound**

I started testing the sonic qualities with classical music and big orchestras so that I could immediately confirm or change my expectation of the system, which was based on the specifications or a few minor and short listening sessions of the equipment by the same manufacturer. Although Bryston is bursting with power, this power is not used to feed hungry membranes of speakers or to impress the listener with access of power. Its power is finely distributed to moving and controlling various drive units. This handling authority of 4B SST is very well suited for PMC. The instant movements of its membranes, and delicate handling, does not allow the system to become undisciplined in any part of the specter, resulting in excellent integration of all driving units, without any bad effects or any distortion. In this configuration, the system sounds lively, exhilarating and very involving. The high frequencies, using high quality drivers, are excellent and very detailed. The sound is exceptionally natural and finely woven with the most delicate details throughout the spectrum, with some detected sweetness in some parts of the spectrum.

So, hats off to the system and it's most important and vital qualities, which without any reserve, meet the highest criteria. At the end of this part of the dissection of the sonic characteristics of the system it should be noted that the midrange is clear, transparent, and also slightly sweet in a very positive way, and gently interacting with the listener and with the rest of the spectrum. It presented a very wide, deep and focused soundstage, and the listener can, without any effort, clearly feel the ambience of the recording events in both large venues as well as in studio recordings. Furthermore, it handles enormous dynamic demands with ease and clarity.

In the background of this dynamic and powerful sound there is excellent "air" and "space" and it is capable of realistically reproducing a live event. Not a single detail was missed in the material that I am fully familiar with. During the listening of big orchestral recordings, the width of the soundstage was almost unlimited, and as we listened more, the performers were getting closer to the listening position. I also had this feeling listening to rock music, which the system handled easily. In those moments, I had a feeling that the system was working at a half of its power, without any objections to the quality of the sound. Smaller ensembles and soloists were reproduced accurately, although there was some light emptiness in some parts of the sax solos. I felt that the sound of the sax got spread in a large space, and moved from its dedicated sweet spot. After the sax solo, and as soon as other instruments joined in, the sound returned to qualities described above. Interestingly, this is experienced only on studio recordings, while in live recordings this small feeling of emptiness was filled by ambience noise and the noise of never fully quiet spectators.

At the end of the test I was back to listening to classical music, which is a natural choice for this system. Masses of sound, space, powerful and dynamic bursts, and unlimited amount of space and air are the most appropriate descriptions of this system at its best. Ditto for reproducing the most difficult material. Interestingly, both, the soft passages on various vocal recordings, and the very different outbursts in dynamic and explosive recordings of classical music are equally well reproduced. It was a real surprise to listen

to voice of Jimmy Smith after the performances of large and difficult musical pieces. For a moment I had the impression that I was listening to another system. The ability and experience of designers, in designing and perfecting the system components of such a high quality, must be highlighted again. Let us not forget that this Amplifier is only the incarnation of a legendary design with the quality of the sound and construction that has been received with great enthusiasm by audiophiles for many years. Also the Pre Amp section that we used was an excellent partner to the Amplifier section.

PMC's OB1 design was based on their expertise and experience in designing and perfecting their other models for professional and home use. The sound of the system is defined not only by its Audiophile Qualities, but also by its effortless simplicity and lack of pretension. This reviewer was totally impressed. The system's characteristics and Audiophile Qualities, and its lack of pretension warranted the recommendation by themselves. This was proven to Croatian Audiophiles at this show. And, certainly, not for the last time.