

Bound Sound

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The Class of 2000

In many respects, as this survey winds down, we have saved some of the best for last. Very good speakers have preceded these, of which the Merlin VSM was exceptional, and there was the Genesis APM-1, and the Silverline Grandeur - no slackers there. It's with considerable pride then that I introduce to the vast audiophile society of America the next three speakers. Speakers that most of you have never heard of before, except in these pages, that are very competitive with the best speakers made in their respective price points... and then some. The survey is not quite over, I'm still after a few manufacturers to submit their best, but the end is in sight.

The Osborn Epitome Mk IV with Extra Woofers, \$8,300.
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The Epitome from Osborn comes in two configurations, one with extra woofers, and one without. I've never seen it done this way before, but I have to admit that it makes sense, and it does work. The standard Epitome is a large floorstanding 3-way with what is commonly referred to as a 10" woofer, though it actually measures closer to 9" (it's the "two by four" thing, but with drivers). With only the Epitome being used, there is a toggle on the back of the speaker that is placed in the "up" position. One can add another set of woofers in their own separate enclosures with identical 10" woofers in each. These are not subs, they are sonically identical to the woofers already being utilized in the main cabinets, right down to each woofer having identical cabinet measurements.

When the second set of woofers is added a couple of neat things happen. First of all, when the added woofer drivers are on line, the bass coupling of the drivers serves to extend bass response. Not by a whole lot mind you because the internal volume of the second set is the same as the first, but power in the sub 40 Hz range is subtly more substantial. Also, efficiency does go up 3 dB with the second set of woofers, and with that the impedance drops from about 6 Ohms to 4 Ohms.

When the second set of woofers is added, one moves the toggle on the back to the "down" position. This change of the toggle increases the efficiency of the midrange and tweeter section by 3 dB for a better match with the increased efficiency of the woofer section. This increase in efficiency with the Epitome bass units puts the speaker at about 93 dB, as opposed to around 90 dB without the addition woofs. The only real negative to this add on bass architecture is the requirement of three sets of speaker cables - a biwire set to the standard Epitome and another set to the extra bass units.

The increase in bass output and increased efficiency are not the only benefits to adding the extra woofers. Recall that when the extra woofers are added, the toggle controlling the midrange and tweeter drivers on each speaker is reset to a new position. What you are doing when the toggle is switched is bypass a series of resistors in line with the mid and tweet. These resistors must be in line when only one set of woofers are in place to step down the efficiency of the mid and tweet drivers so that they'll match the lower efficiency woofer in output. Increase the efficiency of the bass section by adding more woofers, and those resistors can be taken out of the circuit - that's what the flick of a switch does. I heard a definable improvement in sound quality from the mid and tweet drivers with the resistors out of the circuit - the stage blossomed and the dynamic content exhibited greater contrasts. Very nice. The final benefit that I can ascertain from adding the second set of woofers is the increased ability of the speaker to energize air at those frequencies that need it the most - the middle bass and upper bass. With two more woofers in place, each

individual woofer moves less to create the same bass sound pressure levels. It's a fact of physics that in the case of large diameter woofers, the less they travel, the less distortion they exhibit. Efficiency goes up, and distortion goes down, I'll take that trade off any day. Crossovers are second order at 125 Hz and 2100 Hz. When the second set of woofers are added they are low passed at 60 Hz.

Since I was in the cabinets a couple of times there were a few things to be observed. All the inductors are hand wound, no off the shelf products. The appearance is a little "home made" when the inductors are produced this way, but one has the assurance that the values chosen were not pre-set by some far off manufacturer who only makes pre-set values. In the case of the Osborn, the inductor values are set precisely by hand for each application. Ideally, this is the way you do it in spite of the extra time and patience it takes. Caps were various, but names like Solen were observed. Internal speaker wire is the excellent Megatwistlan data transfer cable; great internal cabling, but hard to solder and work on. Cabinets were well braced with heavy duty crossmembers. The front baffle is double thick (1.5"), and a rap on it produced a nice clean "clack". Connections for biwiring were via two sets of inexpensive posts set inside the ubiquitous "plastic cup." I didn't like this aspect of the design. The terminals used would have been more at home in a \$500 speaker, I don't care for them in a product as upscale as this. This is the high rent district for loudspeakers and I would like terminals more fitting - and dump the plastic cup. Each speaker has four screw in spikes for the base, they work well. Use and Sound. Over the last three years my understanding of loudspeakers has grown appreciably. Interactions between loudspeakers and power amplifiers are much better understood today than they were even a few years back. I therefore cherish a design as amplifier friendly as is this one.

Which doesn't mean that every amp will drive it optimally. With the extra woofers attached the impedance comes in at about 4 Ohms, and that's low enough that tube amps, even with the taps set at four ohms, have difficulty loosening up and getting down. Transistor amps, on the other hand, routinely drove the Epitome with ease, including some amps that had difficulty driving other four Ohm speakers in house such as the RBH. The Highs: All drivers are from Focal. The tweeter is an inverted dome, distinguished by its bright yellow color. This tweeter's dynamic range is legendary, as is its cantankerous nature and difficulty to tame. I admire Greg Osborn for having the will to take on a difficult driver, seeing not the difficulties of implementation, but the potential benefits instead. For the most part, I would say that he has won this round, and that the high frequency performance of this speaker is a success. In comparison, soft dome tweeters, even the finest, are somewhat forgiving in nature. After all, they are soft and they are less prone to ring at audible frequencies, they have a fair share of damping built directly into them. The Focal, on the other hand, sounds more immediate in its response, it can be a "ringer", and it has superior rendition of the harmonics that can stretch well into inaudibility.

With the Epitome care has been taken to implement the Focal tweeter in a manner that its resolving abilities and explosive dynamic characteristics are not spoiled by a driver out of control. Hence the highs of this speaker are not "soft" sounding, not are edges truncated in favour of a safer sound. Nasties added at prior locations in the playback chain remain nasties when they exit the Epitome, though I think it is safe to say that they are no nastier on account of the Epitome. On the other hand when playing a recording where care has been given the capture of accurate cymbal work, reeds and strings, a realism can result that is captivating in its imagery and presence.

I've mentioned elsewhere in this issue the enchanting yet explosive nature of the electronic harp when played by Andreas Vollenweider. A fair portion of the harp's range is within that of the Focal tweeter in the Epitome. And it is here that we are exposed to the coexisting strength and weakness of the tweeter in this design. Listen to the Vollenweider harp, it pierces the air almost like high-frequency rifle fire. As the harp ascends its scale, going from midrange driver to tweeter, one can notice a change in character to the instrument. During the transition from mid to tweet, and I don't want to exaggerate the experience, but it's almost like going from cruising to lightspeed in a Star Wars movie episode. The tweeter brings home the tension and percussive quality of each string struck, and powerfully so.

I suppose that Osborn could choose to use a less responsive tweeter so as to effect a smoother transition from mid to tweet, but then some of the excitement and energy would certainly be lost in the translation higher up in frequency.

The Midrange: From Focal again, the midrange driver is 6" in diameter, and employs a stationary phase plug at its center. The cone material is referred to as "poly glass." Whatever it is, it's grey in

appearance and has a positive weight to area ratio, it's a composite material. This driver covers approximately four octaves, but in many respects those octaves covered may be the most important of all. A good driver here is a must.

I can see why Greg chose this driver, even if it brought with it a minor transient mismatch with the tweeter. I think he knew a fast and responsive driver was needed, but I also think that he favors a driver with some surface area to cover the midrange. The ability to excite larger quantities of air becomes a factor once gets below 1000 Hz or so. For a long time it has been observed in BFS that small (3" - 4") midrange drivers miss something when it comes to delivering the expanse of a large ensemble. Moving smaller amounts of air adds to imaging precision, but it detracts from the power of a single voice to the majesty of the full symphonic work. Moving coil drivers are like that, though speakers such as the Pipedreams and Legacy's Whisper have found ways to address this conundrum while creating a few of their own in the process. Like Greg Osborn, I too feel the 6" moving coil driver to be a wise balance between too much driver area, and not enough for the midrange. As a result, with the Epitome one has a loudspeaker that images precisely, though without the laser-like exactness that some have come to feel is artificial; there is a Spondor-like flavour here. It will reproduce the immensity of a large orchestral work without sounding overblown, ah, therein lies the problem with too much driver area, the propensity to sound overblown and whitewashed. Not a problem with the Epitome, it feels appropriate in both worlds. Going down to 125 Hz before handing off to the woofer means that this midrange driver has been given responsibility for a fair portion of the upper bass. This lower portion of the midrange is largely responsible for the dimensionality that we hear in recordings, and it is the impact. Hear an explosion, a big bass wack, or earth shaking rumble. The leading edge and detailing is all in the midrange, even though we naturally think of it as bass. Another reason for a large midrange driver. This is an area where I feel the Epitome again excels; partially due to it not having too much lower midrange warmth. It's a temptation to load up on the range of 100 Hz to 400 Hz., and many speakers have build a reputation for fine sound by doing so. At first blush, it's the speaker that manages to tastefully overload the lower midrange that comes off as the more seductive, over time however, this bloat in the foundation range lends a continuous color to every recording played, texture is reduced also. The Epitome has struck up a tasteful balance in the lower midrange and upper mids that is satisfying and revealing at the same time. And ultimately it is extremely satisfying. A near perfect balance is struck between the stretched strings and the body of the cello and string bass. Where some speakers do the body of the instrument, and some do the strings - the Epitome integrates the two.

Which brings us to the Bass: The lone Epitome does the bass quite well with the 10" driver in a large enclosure. 30 Hz cranks, 25 Hz is there, and 20 Hz can be heard. Compared to the standard, generic loudspeaker, the Epitome is a great speaker for bass. Add the extra woofers, and the Epitome is a bass monster. Mind you, it doesn't go overboard and blubber things all up. But put on Shinjuku Thief's "Bloody Tourist" and listen to cut four. At around three minutes the sub-audible bass starts. On some, most, speakers the bass notes go by unheard, and unnoticed. Some speakers, even some subs that I've heard recently only hint at what is going on at the depths this recording possesses - they don't give you the twenty and under Hz, but they overemphasize the 30 Hz and above. The Epitome with extra woofers emphasizes nothing, nor does it downplay real bass. Shinjuku Thief, cut 4, you won't hear it, but if you have the amplifier, it will vibrate you right out of your chair. No room vibrations, no room buzzes, just this sensation that you and the chair you are in are going to move across the room.

I've heard some very expensive subs pale in comparison. Because of the solidarity of the enclosures, the savvy of the crossovers, the quality of the focal bass drivers, the bass of the Epitome, especially with extra woofers, tracks with speed and precision all the way up to the midrange drivers - a beautiful transition. As a result, that reverb and room decay that accompanies a great bass recording in a great system is all there with the Epitome. No excuses need be made here.

In the photo that accompanies this review you will see the extra woofers placed to the inside of the made tower. In the end, the best sound and the arrangement that I ended up with was with the extra woofers to the outside of the main towers, and all the cabinets closer to the rear wall than shown in the photo.

Intangibles: The Epitome with extra woofers is more speaker than an a study of its individual parts would indicate. Other than the Merlin VSM with BAM, the Epitome/woofers told me more than any other speaker in this survey about the components driving it. Change a power cord on the transport? I heard the difference. Change interconnects between the processor and preamp? I could immediately hear which was

better. Listen for directionality on high priced Toslinks? Not a problem with this speaker.

Some people say that power amplifiers all sound the same as long as certain specs are similar - wrongo o' deaf ones. Or maybe they just need to start listening with the Osborns. Using the SimAudio W3 on the Epitome/woofers allowed me to think I had the speakers pegged for sound. Nope. When I inserted the Stratos amp from Odyssey those characteristics I had pinned to the Osborns were gone. I had been hearing the W3. With the Stratos a whole new set of sonic characteristics arose. Using the Dual Sierra Denalis with the Epitome/woofers allowed me to hear and evaluate everything that exceptional amp did, and didn't do. I am of the strong opinion that this ability to see through a speaker is what an audiophile needs the most in a speaker.

Constant colorations can work in some situations, but eventually, the mask will cover more than blemishes. To a sometimes spectacular and stunning extent, the Epitome with Woofers reveals the heart of the music being played. **A Bound for Sound Reference.**

Conclusion.

After all is said and done, maybe the best thing about the Epitome/Woofers is the ease and unrestricted nature of the sound it reproduces. From a whisper to ear deafening levels the speaker always maintains its composure, I really couldn't upset it. I attribute much of the unflappable nature of the speaker to the expansive and unrestricted way it energizes a room - power flows from it enthusiastically, and that enthusiasm is contagious. And if you have the opportunity to listen to the Epitome, listen for imaging. Regardless of frequency, images retain a natural size and dimension. Remember the 6" midrange driver? It keeps the images in the midrange in tune with the power of the speaker in the bass. Power wise, the speaker is very linear in that it loads the room in a fashion that is not dominated by any one closely clumped set of frequencies. Hence, you never get the feeling that one aspect of the sound dominates all others to their detriment.

Which brings me back to the ease by which this speaker reproduces music. It's the opposite of stressful even when the music is tense and full of anxiety. For when small systems are pushed they tend to add to the presentation a nervous nature that may or not be present in the music. This, I feel, adds significantly to what is perceived as listener fatigue. With the Epitome, fatigue is not part of the listening equation, as even high strung music like that from the X-Files Soundtrack involves without burning one out. You can actually participate in the performance to the extent that you want to. After listening to more speakers than I can count over the last year or so, the Epitome Mk. IV with Extra Woofers is one of the few that continues to invite me to listening session after listening session, to recording after recording. With every new power amplifier, or preamp, or processor that comes in, I can't wait to put them in the Big Rig with the Epitome to discover how much further I can open up the window full range. This is a Component of Exceptional Merit. (By time you read this, the manufacturer will have incorporated several improvements into the design which should improve things even more.)

Bound for Sound Report
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