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HARMONIX RTA 78i Room Tuning Devices

A new face, a new set of ears

Though hardly a novice when it comes to audio journalism, today's writeup is Stephæn's first submission for 6moons.com. I'm pleased to welcome him as our first guest writer and hereby again extend the formal invitation, to those whose kindred passion for music and things audio compels them to pick up the pen - or rattle the keyboard, yank some chains, blaspheme certain sacred cows, proselytize, plagiarize (well no, not *that* one)... [Srajan]

A Rather Spatial Product

[My review samples were acquired for a write-up in TAS, which agreed to allow me to use the review elsewhere. I chose Listener, which - well, sadly went bye-bye recently. A set of Harmonix Tuning dots retails for \$670.]

Fixed ideas are prefabricated conclusions about how things are. If you continue to look through the lens of a fixed idea, you may be attempting to interact with something that really isn't there.

Devices. Indeed. Each of the four packages came with 16 quarter-sized wafers about 1.2 mm (as in metric measure) thick.

These are gonna tune my room?

The literature says the design is based on an idea in complete opposition to what conventional room tuning devices are based on. "Conventional tuning devices are designed either to absorb (sic?) the reflected sound or totally damp vibrations of walls and ceilings. But, these devices take away the delicate musical nuances of the sound. Contrary to conventional room tuning devices, RFA78 lets the sound reflect freely, without distorting or masking the original information that the sound is carrying."

Hyperbole? I thought so. They are very, very small. And you'll notice, they are heavy - for their size.

The literature further describes the devices as "offering a complex system of energy storage". I asked Mr. Kiuchi to elaborate. As his English is a bit rough, I opted to move some words around where there are no quotes (mostly reordering, but a bit of paraphrasing, too) to make it easier for the reader to understand what he seemed to be trying to communicate.

"These have been on the market for more than 10 years. Harmonix is a unique technology, which makes it difficult to understand." This is one reason why we all should keep experimenting with new approaches instead of "listening to Know-how".

"These are mechanical devices, so it is difficult for me to unveil this technology to the public. Here is some basic technical background: I have been engaged in the Musical Instrument business for 30 years. During this period, we studied many famous musical instruments like Stradivarius, Guaneri and Amati to discover why they sound so good."

"Finally, we came across one rule - that of controlling Negative and Positive relationship. It is a balance." We, as human beings, have decided that the Negative part is no good. We concentrate exclusively on bringing the Positive part into existence. But, the Negative and Positive relationship has to be equally balanced. "This is balancing technology."

"If you tap every side of a speaker enclosure, you can hear that the enclosure produces different tones. Imagine that every side of the enclosure produces the same tapping tone. RFA-78i would unify these tones to cancel them out. This is how RFA-78i works."

"You may know what every one in this industry does. They place absorbing materials around the room and conclude that the room has become more quiet. Yes, it helps the room to get more quiet because these materials completely soak up the higher frequency band. But, it is important to not soak high frequency because high frequencies make lifelike music. The same thing happens at lower frequencies."

"I hope this will help you a bit."

Did I mention how small these devices are?

Setup and such

My listening room at the time was not your basic box. It was L-shaped and had an open stairwell behind the listening chair and a narrow, floor-to-ceiling support to the right of the listening position. The 'basic' Harmonix setup uses 16 devices: Five units (in an X pattern) on the front wall, two on each of the side walls (one above the other), five on the ceiling (in an X pattern), two on the back wall (side by side).

In my case, I started with the basic setup and then moved on to a more elaborate treatment using a total of 43 devices (which was *not* necessary to hear an improvement). I wound up with a triangle of devices in the three corners (floor and ceiling) about six inches out from the point of the corner itself; a trio of devices on two faces of the floor-to-ceiling supports; and nine devices on the front and rear walls and ceiling (all of these figures included the devices already placed in the corners). Pictures of recommended placements (based on units available) can be found [here](#).

Truth be told

OK, let's get this out of the way up front. I was more than skeptical. I was downright *anxious* about reviewing this product. I'd heard that these discs can do implausible things in view of their size and long been curious about them - yet quite suspicious. Holding one in my hand didn't ease my concerns.

Round one

Saturday night, 11 p.m. Listening at a very low volume. I am fully immersed in the Dan Crary, Cephas and Wiggins track on the (then) recently released *Sounds of Wood & Steel 2* [Windham Hill 11042-2]. Besides the rich presentation of the harmonica, guitars and playful vocals (more humming than anything else, really), I'm mostly intrigued by a heightened sense of space. Not the space inherent in the recording itself (which is excellent), but the feeling that my listening room walls have migrated outward. The space behind the speakers is slightly illuminated, with some previously unrecognized energy.

On the last cut of Braheny & Clark's *Rain* [HOS 11052-2] I find myself drawn more deeply into the music. A subtle accentuation of transient snap combined with a slightly more fluid continuity between notes improves the sense of pace enough that I start tapping my toes and realize that I'd never really appreciated this piece on the CD before.

It makes me want to get up and move. So I do. I move right on down to the den and grab my laptop. I have to. A series of thoughts has managed to get into my head, and -- like a tape set to 'repeat' -- has gotten in the way of my enjoyment of the music one too many times. So I hammer away.

The voices in my head



Music lover: Hmmmm ... the sense of space, subtle dynamic shifts and inner detail you've been hearing is quite nice, no?



Skeptic: Sure, I have to admit I was curious about these devices ... but ... seriously ... are they really making a contribution to what I'm hearing? How could these damned-little dots possibly work?

The Marigo dot on my phono cartridge does not present any sort of intellectual quandary for me. After all, it is touching (and consequently) modulating the resonances of a moving electromechanical device. Other acoustical treatments (with their size and or mass) also present no (physical) improbabilities to this feeble mind. These dots, on the other hand, have little mass and don't touch any part of the electronics. Nor do they take up significant space in the room.



On the other hand - I *was* meticulous about laying out the room per the instructions AND identifying the points of early reflection to be treated. Besides, the devices are in the same space as the rest of the components. They're part of the whole. Basic systems theory says that no matter how small or passive, they *will* influence other aspects of the system.



(Dry and sarcastic) The couch is also part of the system. No one's asked *me* to review it.



Even though I've only put up one set so far, I'm *sure* I detected something.



(Yawns) The questions advance again: What's really going on? What's getting in my way here? Is it a precept about what is possible? A struggle to make room for the seemingly impossible?

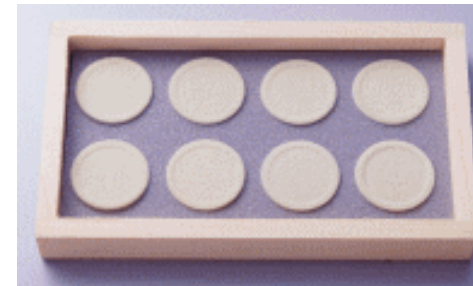
Perhaps the initial perceptions I had -- a sense of bigger space, improved articulation of voices, delicate shadings I hadn't noticed before -- *could* be attributed to the fact that I didn't get a full grasp of some new tubes I got for my preamp a few weeks earlier. As one who hates to change more than one variable in my system at a time, I've tried to ensure I understood the full measure of the new tubes' contributions before allowing myself to unpack the Harmonix.



Ouch. Too much intellectualization! This always gets me stuck. Time to get out of my head and back into just listening.

Did someone say subtle?

Yes. To retain an accurate sense of this review, insert the word subtle before each descriptor. 'cause that's the way it is. While that is a bit of a cautionary note (directed towards the expectations that some may hold about the magnitude of changes to anticipate) after extended listening, you can't help but get a sense of (yup, you guessed it) a subtle pervasiveness about the overall effect.



Round Two

After removing the devices from the walls. I quickly discerned what they were *not* doing. Interesting. Most readers know -- perhaps better than I? -- that listeners tend to 'key' in on certain characteristics of sound reproduction: Bass; Air, Soundstage; Timbre; Dynamic Range; and so on. I happen to immediately cue in to inner detail, transients, decay, pace and timbre.

This time around, I partially missed the boat. References I made to harmonics were inappropriately attributed to the dots. Even so, while the new tubes in my preamp were a serious improvement over the stock Sovteks, they did not diminish the contribution of the Harmonix in the realms of transient articulation, ambience, nuance and inner detail. They just got me momentarily mixed up.

Round Three

Several e-mails between myself and the designer led to a customized diagram indicating how the tuning devices should be placed in my room. Three sets of sixteen discs accomplished the layout recommended by Mr. Kiuchi. But take note - even my ever-tolerant bride could not go without commenting. She called the result 'the great chicken pox attack'. Unlike a single set, three sets were visually far from unobtrusive. But, they do take up zero floor space.

Extracts from my listening notes follow:

- Holly Cole's *Temptation* [Metro Blue 31653-2]- the recording venue strikes me as a bit larger. The space is deeper and marginally more ambient. I

note a clarity of vocal and piano lines that makes the songs slightly easier to follow than ever before.

- Daniel Lanois' *Acadie* [Opal 25969] has always offered abundant ambience. Now the portrayal is more 'atmospheric'. This says something for a production already jam-packed with layer upon layer of sound. There's something about the dots that just lets more of the subtleties 'breathe'.
- On Ring's *Soul to the Pleasure* [COTCD-010] I note more palpability and transient attack from the harp and percussion. Lyrics are also easier to understand.
- Ronn McFarlane's *Renaissance Lute* [DOR-90186] - his technical prowess and musical virtuosity are revealed when notes begin to emerge in a more individuated (yet still smoothly joined to the whole) manner than I recall from other listening sessions.
- Yep, that's it. Piano, guitar and bass lines require less effort to follow. To see what I mean, check out Mitsuko Uchida's *Schubert Impromptus, Op. 90 & Op. 142* [Philips 456 245-2]. The No. 4 in F minor with its swift scales best highlights the improved clarity I'm referring to.

The most immediate and obvious effect of these devices involved the soundstage moving back a bit (which is a good thing in my room). The other over-arching experience I had with these devices? The whole 'sense of space' thing. Can't say I have a handle on it. Honestly, I'm fumbling for descriptors here. You see, the *real* space between my speakers isn't any bigger. My room hasn't grown to twice its size. The wall behind the speakers is where it's always been. Yet, there *is* this sense of having moved my system to a bigger, sonically less intrusive room. Also -- and this may disappoint some folks -- images are not any more distinct than before. In fact, it's the opposite. Which is to say, more true - they manage to be a bit fuller but don't, in any way, crowd each other.

Final round

Taking the Harmonix dots out of the system once more confirmed what I had first detected in round three. Simply put, they are effective. To my ears, the effects are positive and worth experiencing.

How do they work? Well, no matter how small, they are resonance control devices (as is anything in your room, for better or worse until death do us part). I imagine (but don't care to try) that one could put enough tiddlywinks on the wall and achieve some effect. No?

From where I sit, that such small devices could influence such a large area of walls and ceiling is quite an accomplishment. Will they work for you? I can't say. In my book, it was a(n) (im)possibility worth exploring. Once I got out of my head and into the music, I was I glad I gave them a try. Never say never.

Stephaen

