

### **Paying Homage**

A common misconception is that speakers sporting big woofers produce deep bass. In fact, though they invariably sported wide baffles and large woofers, the vast majority of high sensitivity speakers that were dominant from the 1930s to the mid 1960s favored dynamic and articulate yet rich and well developed over deep bass. Nor did these designs extend into the frequency stratosphere. If truth be told, they were not particularly neutral in the modern sense either.

Why is it then that so many of these speakers continue to be admired by music lovers the world over? In a word, actually two: emotional involvement. The best of the breed emphasized tonal balance, accurate timbre, resolution and dynamic realism. Without exception, these speakers were extremely sensitive – some as high as 107dB efficient -- many were two-way horn loaded designs, featuring uncomplicated crossovers, resonating cabinets constructed from plywood with minimal bracing or internal damping.

Most contemporary speakers hardly bear a family resemblance to these among their ancestors. The contemporary speaker cuts a leaner figure – taller and thinner – punctuated by narrow front baffles. Often featuring multiple drivers of exotic materials, complex crossovers and cabinets built from MDF, they are typically heavily braced and damped, and aspire to be resonance free. The modern speaker is typically only modestly efficient as well.

The difference in speaker design was not evolutionary. Instead, it was quite abrupt and could be traced to the advent of the transistor. The transistor meant high power at low cost which led to ever more inefficient loudspeakers which in turn fed the high power transistor industry, which allowed speaker designers to build ever more complicated crossovers correcting for every impropriety in driver response, which made the speakers ever more demanding loads for amplifiers, which, you guessed it, required ever more powerful amplifiers.

One reason that many of the horn-loaded high efficiency designs fell out of favor – aside from their aesthetics – was the fact that they were being displayed with solid state designs which were becoming prevalent at the time, and the match was anything but synergistic. Early transistors may be have been inexpensive and powerful, but they were hardly nuanced or harmonically rich. They screeched and pierced the ear nearly as badly as the first few generations of digital playback. So it was out with the old and in with the new. Solid state won out and the more efficient, and extremely revealing, horn designs more or less disappeared from view.

Though this cycle has continued pretty much unabated to this day, the past decade or so has witnessed something of a modest but not insignificant counterrevolution in speaker design precipitated largely by a renaissance in low powered tube amplifiers. These amplifiers require very different speakers than the ubiquitous power and current hungry ones that have been in vogue. In time the popularity of lower powered tube amps fed the need for ever more 'tube friendly' speakers and even the occasional resonant cabinet has found its way into commercial products. Nowadays, there are also a number of horn designs of all varieties: many are multi driver affairs that are unified (?) by (of all things) digital crossovers (boo); others are rear loaded and housed in narrow, aesthetically pleasing cabinets. In one way or another, all of these speakers revisit time tested ideas – often without acknowledging their heritage – preferring to pass themselves off as novel, even occasionally as revolutionary though they are anything but.

#### **Enter the SoloVox**

Against this backdrop, Keith Aschenbrenner of Auditorium 23 located in Frankfurt, Germany, stands out as distinct if not unique. Keith early on discovered the magic and majesty of earlier designs which have left their mark on him both as a music lover and audio designer. Best known in Europe for his well reviewed Rondo loudspeaker, his modifications of the Verdier turntable, and

his step up transformers, his only product to have made a mark in the United States to this point is the terrific speaker cable that several reviewers, including me, use as a reference. My guess is that his relative anonymity is the U.S. is about to change with the introduction of the SoloVox loudspeaker, the first component in his newly minted and appropriately entitled 'Homage Series.'

The SoloVox is unlike any speaker you are likely to have come across. It is a stand mounted open baffle design. The stand is integral to the speaker, but unlike other similar designs, the stand is hollow and is not to be sand filled or deadened in any way. Whereas a conventional speaker has six exposed sides –



two sides, one front, one back, one bottom and one top, the SoloVox has fourteen exposed 'sides.'

The speaker sports not merely an open back (which allows you to look directly into the back of the driver), but beautifully curved side vents which channel (but do not amplify) part of the back wave to the sides of the speaker.

Unlike his earlier designs, including the Rondo, the SoloVox can be set up near the back wall. I found the speakers sounded their best in my room about 30" from the rear wall and about 7" apart from one another. Because of their design, the SoloVox are very sensitive to set up. Placed too close together, male voices will seem too chesty and reverberant. This effect also disappears with break-in. Placed too far from one another and the sound becomes a bit unfocused and ethereal. I've heard it with both an 8 watt 300B SET amplifier and a 13 watt EL84 push/pull amplifier – both to great effect.



The fit and finish is superb. The wood veneer is flawless (the speaker is available now only in a light oak finish); the wide front baffle features curved corners as do most of the wood pieces of which the remainder of the 'cabinet' is constructed.

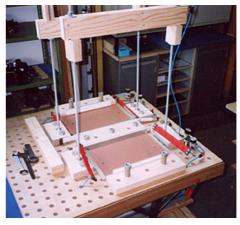
The SoloVox features a single PHY-HP driver that is proprietary to it and not otherwise available. As implemented in the SoloVox, the driver makes absolutely no attempt to cover the entire frequency range. Output falls off precipitously above 12KHz and there is little output below 40-50Hz. (Another widespread misconception is that full range drivers cover the full audible frequency range. They don't – certainly not with equal output top to bottom.)

The SoloVox is a 15 ohm speaker that is roughly 96dB sensitive. It is a very easy load for an amplifier to see.

With the exception of offerings from Fostex (and Radio Shack), full range drivers are very expensive. The PHY is no exception. In addition, full range drivers take a near eternity to break in. They hardly move when playing music which means that the surrounds rarely get a workout and so they have to be played nearly constantly for hundreds of hours before the drivers loosen up and relax. Again, the PHY is no exception

It is always difficult to sort the sound of the driver from the sound of the speaker in which it is implemented. After all, some designers are capable of turning water into vintage wine, while others can prepare sushi grade tuna as flavorful as rubber. Full range drivers are no exception to this rule either

My only experience with this PHY driver is in the SoloVox. I cannot attest to how it will sound implemented in different designs; nor do I have sufficient experience with PHY drivers more generally to hazard a guess as to the PHY house sound.



What I can say without qualification is this: The SoloVox is by a large margin the best full range driver speaker I have ever heard, a

is by a large margin the best full range driver speaker I have ever heard, and I have heard many -- some of them pretty damn good as well.

What makes the SoloVox so special? A number of things actually: above all else, however, is the SoloVox's natural, unforced way with music. Every other loudspeaker with which I have had extensive experience sounds (to varying degrees) forced and somewhat artificial by comparison to

it. In every other speaker system with which I am aware -- some of them truly exceptional, some of which even better the SoloVox in some respects -- the speaker makes its presence felt as an integral part of the music chain. In contrast, in the SoloVox the music comes across as completely unmediated by a speaker system.

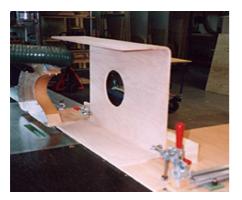
# The Grand Illusion

Many audiophiles and designers suggest that a good music reproduction system creates the illusion of being transported to the original event. For some this recreation is a largely visual event in which a quartet, chamber group, rock band or full orchestra appears before them, performing in their listening room.

When I want a visual experience, I watch movies or visit a museum. I have a big listening room but I cannot imagine the London Symphony fitting cozily within it.

For others, the recreation is largely auditory. Various sonic cues from the original venue – room reverberation, the subway passing below -- must be present.

Part of the time I live in Manhattan so when I want to hear the subway below, I walk along Broadway in the Village; I don't turn on my stereo system.



For others the re-creation is emotional. The aim is to connect to the music emotionally, to be engaged with it in a way that we suppose one would have been had one been present at the original venue. The problem here is that many records are recorded as fragments: the band playing in a New York studio, one singer in London, the back-up singers in Los Angeles. There is no original event one could have been emotionally connected to.

Still, the basic idea of emotional engagement rings true to my ears. But there needn't be an original event that an audio

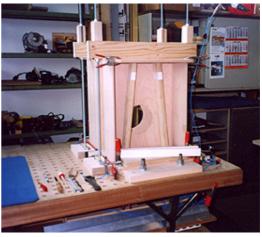
system reproduces or transports one to. The music being played through the system is the only event that matters, but a successful music reproduction system does involve some sort of illusion nonetheless, just not one calling for any sort of transportation back anywhere in time or place.

Let's face it. A music playback system is a lot of electronic and mechanical devices with wires, capacitors, transformers, cones, magnets and what have, taking an electronic signal at one end and producing sound waves at the other. Hearing through all this machinery and being able to interpret the sound waves not just as sound but as a musical whole is a real feat. Hearing it all as if it were a musical event more or less unmediated by all the machinery that produces it is a kind of illusion: a trick.

If this trick isn't pulled off reasonably well, it is impossible to be emotionally engaged with what you hear. You want to be able to say 'that's the sound of a tenor sax," rather than "that's the sound of an amplifier and speaker reproducing the sound of a tenor sax." You cannot become emotionally engaged with the sound of an amplifier and a speaker anything else for that matter.

This illusion is essential to the musical experience.

And once you hear music played back through the reproducing the sound of a tenor sax, or the sound of SoloVox, virtually every other speaker system's effort to pull off this trick will seem like a magic trick performed by Gob Bluth on the T.V. show, Arrested Development.



I am not saying that the SoloVox pulls this feat off completely or flawlessly, but it is much closer to pulling it off than I have experienced to this point from any other speaker. By comparison to other speakers I know, the SoloVox appears not to be in the chain at all. By that I don't mean that the speaker does not appear to be a source of the sound. Lots of speakers disappear as a locus of sound in that sense, none better perhaps than properly set up mini-monitors.

I have in mind a different experience. The SoloVox does not merely disappear as a distracting locus of sound; it appears as absent from the reproductive chain altogether.:

Other speakers have the character of being immediate, transparent and present. In the case of the SoloVox, it is the music which is immediate, transparent and present, not the speaker. The speaker behaves as if it is not there at all.

How is that possible? I don't know, but I think a confluence of factors is at work. In the first place, all full range driver speakers lack a crossover and there is no underestimating the advantages of such designs. The brain works harder when listening to speakers with crossovers. After all, it has to knit together as a coherent whole what the crossover has pulled apart.

But that wouldn't separate the SoloVox from other full range driver speakers all of which lack crossovers. On the other hand, many modern full range systems feature back loaded horns which can be the source of phase anomalies the brain isn't wild about either and must work to correct for. The SoloVox is not a horn. Its side vents distribute but do not amplify the back wave. There are some two way box speakers that have minimal or no crossovers, but then again they are boxes – often heavily damped ones – and the sound seems forced and anxious by comparison with the SoloVox which sounds entirely effortless.



So part of the magic must be that the SoloVox is a full

range crossover-less design. Another part is that there is no amplified back wave passing through a horn. And part of the magic is the open baffle, resonating 'cabinet.' Everything is designed to work synergistically with the music and not to be a roadblock that must be overcome.

Whatever the design strategy, there is no denying that it works – splendidly; I am inclined to say, effortlessly. No computer modeling, just trial and error and tons of listening and adjusting; and of course, the advantage of experience and great instincts.

The SoloVox is a very misleading looking speaker. There is 'so little' of it. No cabinet, no crossover, one driver per side. But it is designed like a fine musical instrument. It is in fact a very complex and difficult speaker to build. Every piece of wood has to be finished just right, curved in just the right way, distanced from every other piece in just the right way, and so on. If anything is off, the parts simply will not work synergistically together; and that makes it even more amazing that Aschenbrenner pulls it all off in a way that makes the end product look simple and uncomplicated. It is anything but.

### More Music, More Often

Music played through the SoloVox is not only natural, unforced and effortless; it is rich and fulsome on the one hand, yet detailed and resolute on the other. The speaker displays a tonal neutrality and accuracy of timbre that I have rarely experienced in other speakers, regardless of price; characteristics that were the hallmark of the designs to which it pays homage.

The effortlessness and openness is accompanied by a dynamic realism that is on first blush simply astonishing. The dynamic realism is invariably among the first things that visitors to my listening room comment upon. To my ears, the dynamic realism is just the flip side of the relaxed and unforced nature of the sound. There is literally nothing holding the sound back in any way, and the net result is dynamic realism.

The SoloVox is not designed to excel on large scale classical music or heavy metal. It is notthe ideal speaker for fans of Mahler or Metallica, It does not flatter such material, but it does them no injustice either.

The SoloVox does not create the majesty or energy of large scale classical music, but it does present it 'to scale,' and to use that term again 'in balance.' I don't feel cheated listening to large scale classical music on the SoloVox, but then again I am not riveted to my seat either by the performance.

One of my sons and my daughter have a rock band in NYC – my daughter is the drummer, my son the guitarist – and they are perfectly happy playing the music they love through the SoloVox; they do so not only without complaint, but my son finds the SoloVox's way with music as diverse as the New Pornographers, Portishead and Autechre completely persuasive. (Portishead is, at least to my ears, a bit of a stretch.)

The SoloVox is at its best on just about everything else. And its best is simply excellent.

# **Summing Up**

The key to the SoloVox is balance: balance by limiting its extension at both ends of the frequency range; tonal balance; dynamic balance – that is, dynamic consistency from top to bottom (within its audible range).

The SoloVox covers what it covers and doesn't attempt to do anything else. It aims to do the things it does extremely well and avoids doing too much. Its motto might as well be: it is far better to do some things right rather than a lot of things wrong.

I have one other observation to make that may be puzzling to some and controversial to others. The SoloVox sounds much better with vinyl than with digital – no matter the quality of the digital source. I am not the only person to have picked up on this disparity. Other reviewers and listeners who have heard the speaker with both digital and vinyl experienced the speaker the same way.

For what it's worth my interpretation is that the SoloVox displays digital as the incredibly processed medium that it is. Digital clashes with the SoloVox's essential nature. Analog, by comparison, fits the SoloVox like a glove. This is not to say that digital doesn't sound good or persuasive through the SoloVox. It does; it is just that digital sounds, well, digital. If you want to hear all that the SoloVox is capable of, you will need to spin some vinyl – which I would recommend under any circumstances.

Set up correctly, which is easier on the body than normal given how light the speakers are, the SoloVox are not only among the best speakers you will ever hear, they might well teach you how to listen to music and what to listen for. The SoloVox have changed how I listen to music, This is a speaker that not only pays Homage to the great speakers of the past, it does so in its own unique way; it doesn't so much attempt to relive or revive the past so much as it learns from the past and puts its own stamp on an approach to music making that should never go out of style.



Even at the somewhat princely sum of \$9,500.00/pair, it is a bargain, besting in nearly every musically important dimension speakers three and four times its price.

Final verdict: I bought the speaker.

#### **Jules Coleman**

## **AMERICAN WIRED EPISODE 1 FEB 2006**

**Specifications** 

NYC-System:

Analog Source Rega Planar 3 TT
Digital Source Revox CD player as transport and Reimyo DAP777 DAC
Preamplifier Shindo Monbrison
Amplifier Shindo Montille
Loudspeakers JBL Hartsfield (top loader)
Cable Stealth Indra and Shindo Interconnects, Auditorium 23 speaker cable

### **CT System Analog**

Source Shindo Garrard 301 Digital Source Audio Note CD 3.1 Preamplifier Shindo Catherine Amplifier Shindo Western Electric 300B Ltd Monoblock Loudspeakers DeVore Fidelity Silverback Reference Other Shindo Mr. T power conditioner