



Source: Manufacturer Loan  
Reviewer: Howard Ferstler

I reviewed the first version of the VTF-3 subwoofer (Hsu Research's first attempt at a super-duper "box-type" subwoofer) for *The Audiophile Voice* back in 2002 (issue 8/4), and thought it was an impressive piece of work.

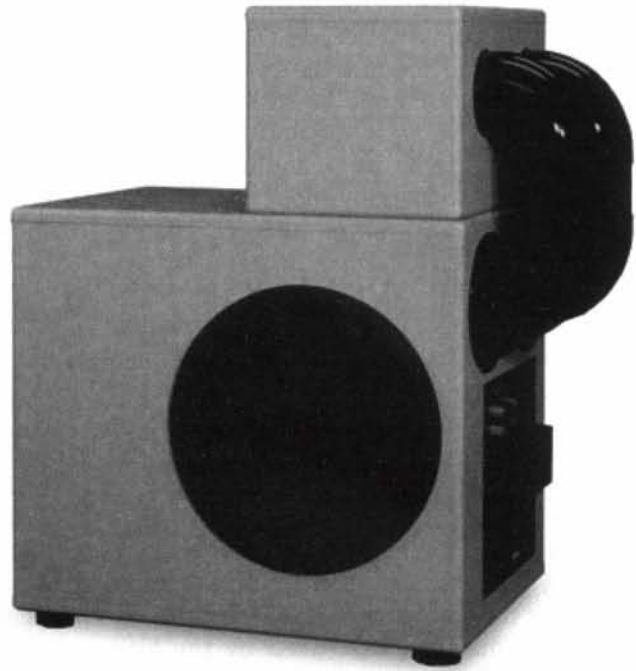
The design involved a large enclosure, a massive 12-inch driver (I do not use the word "massive" casually), a powerful built-in amplifier, and a tunable, ported configuration that allowed the subwoofer to strongly reach down to 20 Hz. This was an impressive package and could do its job with nearly the same authority as the Hsu TN1220 unit that I reviewed in issue 67. (I upgraded my own TN1220 a few months after I did my review by replacing the original driver with the same monster found in the first VTF-3.)

The VTF-3 design has gone through two evolutions since then. I am not familiar with the second, the MK-2, but I am now thoroughly familiar with the latest "MK-3" version and I must say that I am more impressed with Hsu Research engineering than ever.

The MK-1 version had a large enclosure, two "tunable" 3-inch ports, and a 250-watt, on-board amplifier. The MK-2 upgraded the earlier version by replacing the amp with a 350-watt job, changing the woofer driver slightly, and moving the driver from the front panel to the enclosure bottom. Doing the latter mandated standoff feet underneath to allow the driver to breathe, although the enclosure internal dimensions remained pretty much the same. The upgrades allowed for somewhat higher output, although the port diameters still did allow for some wind turbulence at higher low-frequency outputs.

Both of those subwoofers allowed the user to plug one port and flip a switch on the amplifier for extended low-bass reach, but at the expense of higher output at bass frequencies further up the spectrum. Opening both ports and flipping the amplifier switch to another setting allowed the systems to generate high outputs at those higher bass frequencies, but with reduced capabilities down really low.

The MK-3 version is a whole new ball game. First, the enclosure has been made even larger: 21.5 inches high, 17 inches wide, and 25 inches deep, with



a weight of 93 pounds. Second, the dual, rear-mounted 3-inch ports have been replaced by dual, rear-mounted 4-inch jobs that extend into the enclosure and then curve downward towards the bottom. With each being over two feet long, they allow the system to plumb the low-bass range strongly and play loudly, and do so without the port wind noise that was sometimes audible with the earlier versions.

The MK-1 version, with one port open, would generate so much turbulence down low at really high outputs that it could ruffle your pant legs from four feet away if you stood behind it. The MK-3 unit, with port exits almost 80% larger than the earlier versions, will generate equally high bass levels with nary a hit of obnoxious, focussed wind.

Because the long ports have to curve downward in order to fit into the enclosure, neither a front location, nor bottom one could be used for the massive 12-inch driver. Instead, it is now located on the side of the box. At first, I thought this kind of arrangement would be awkward, but after fooling with the subwoofer for some time I have discovered that the configuration works very well in most home-décor situations. For one thing, it can be located against a wall, with the woofer facing outward, and will not protrude obnoxiously into the room.

Like the earlier versions, as well as many competing subwoofers, the MK-3 has only a low-pass network for crossover work, although in most hookup situations the unit's crossover "bypass"





