The Audio Beat

VTL TL-6.5 Series II Signature Preamplifier

by Roy Gregory, April 30, 2018
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From time immemorial -- well, at least since Harry Pearson first discovered the Audio Research SP-10 -- it seems that the true imprimatur of high-end performance, the essential presence in any system with genuine state-of-the-art pretensions, has been the two- (or three-, or four-) box preamp. Extravagantly priced and demanding to accommodate, these multi-box behemoths do less and less in functional terms yet cost more and more money, making them a distant pipe dream for the vast majority of audiophiles.

So while the flagship product with its multiple chassis remains an illusory object of desire, the one-box derivative has always been a far more attainable goal. Back in the day, all those *TAS* readers might have *wanted* an SP-10, but they bought an SP-8. In the here and now, the multi-box topology retains its performance advantage for well-understood reasons, while commanding an even greater premium. Yet, increasingly, single-box siblings seem to be creeping ever closer, narrowing the performance gap as the chasm in price yawns wider.

VTL's flagship preamplifier is the two-box TL-7.5 Reference Series III, an impressively sophisticated and beautifully presented product that has carved out an enviable reputation and quite a market share (Marc Mickelson uses one as his reference) over the past decade and a half, its standing protected by thoughtful updates and revisions. Its clean aesthetics, operational versatility and imperturbable reliability are suggestive of solid-state designs, underlining the fact that VTL's "Making Tubes User Friendly" strapline really is more than just hot air.

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The TL-7.5 was updated to Series II after three years and then quickly (and not surprisingly) joined in the range by the TL-6.5, a single-box derivative that shared the '7.5's casework and aesthetics, operational versatility and many of its salient features. With a single chassis, the '6.5 was both more affordable to own and, requiring only a single shelf, cheaper and easier to accommodate.

So far so good. But the burning question remained, How much of the '7.5's stellar performance did the '6.5 deliver? Referring to the original '6.5, the short answer to that could be summed up as, *Not so much* -- a brutal judgment that doesn't reflect the quality of the '6.5 but its nature. The one-box unit lacked the awesome bottom-end extension, transparency and definition of the flagship, along with the overall dimensionality and sense of focussed stability that went with it. Instead, it offered a quicker, warmer, more driven sound, majoring on musical momentum rather than the neutrality, rhythmic articulation and subtle tempi of its big brother. It was a sound that certainly offered its own appeal, with plenty of toe-tapping involvement and the sort of midbass punch that really wakes up speakers with less-than-full-range response. But what it wasn't was a TL-7.5 on the cheap. Okay, that might have been expecting a little much, but the sonic and musical qualities of the two products were so distinct that they almost offered alternative perspectives, as opposed to adjacent rungs on a single performance ladder.

The TL-7.5 now enjoys Series III status, yet until recently the '6.5 remained unchanged, neglected due to the demands of elevating the various VTL power amps to Signature status. Along the way, VTL has learned even more about its circuits and componentry, adding not just the engineering knowledge that comes from totally revising topologies and layouts but the listening experience that comes with opening those windows in the system that much wider. The TL-6.5 Signature might have been waiting in line for a while to receive its Series II facelift, but that has just given VTL more opportunities to improve things.

From looks alone, it's almost impossible to tell the original and Series II versions of the TL-6.5 apart. Likewise, its physical and conceptual relationship to

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the TL-7.5 remains the same -- the '6.5 was originally conceived as and remains a one-box implementation of the circuit topology and hardware used in the flagship design. If anything, the technology gap has narrowed, with whole blocks of '7.5 Series III circuitry and hardware appearing in the latest '6.5. So the '6.5 Series II remains a fully balanced, fully differential design, that -- just like the '7.5 III -- uses what is perhaps more accurately described as a hybrid topology, mating a tube gain stage to a high-current-capable, low-impedance solid-state output stage. It also remains a seriously versatile and well-connected individual, with three inputs that are switchable between balanced and single ended, three more that are single ended only, two complete, single-ended tape loops and one pair of balanced outputs alongside two pairs of single-ended ones.

You also get an RS-232 port for centralized remote control and a pair of 12V trigger outputs to aid system integration. The unit's own remote control offers source select, volume, balance, mute, switches absolute phase and provides a fade function that allows you to drop the volume by 20dB in case the 'phone or doorbell is rude enough to interrupt your listening. That functionality (along with tape monitoring, though not fade) is also available on the '6.5's front panel, where an inset rotary control is coupled to the same large, legible volume readout used on the original as well as the '7.5. It's a model of clarity and common sense that manages to be comprehensive without appearing cluttered.

Not surprisingly, the changes from the original '6.5 to the Series II closely mirror the Series III mods for the '7.5. The latest iteration of the one-box design has swapped out its series regulator for a higher-current, wider-bandwidth, shunt-regulated supply, one that demands a second power transformer and increased power-supply capacitance but that delivers greater dynamic headroom, neutrality and speed of response. The quality of the current source has also been improved, which in turn improves single-ended operation. The left- and right-channel tube gain stages are now floated on isolation decks, originally developed for the '7.5 Series III. The output stage has been imported lock, stock and barrel from the flagship. Although it still uses MOSFETs, the circuit block is built around devices that more closely mimic the linearity and tubelike response of the lower-current-capability JFETs so often used in phono stages. Together, the new power supply and output stage have allowed the elimination of global feedback from the unit.

In turn, these changes to the circuitry have necessitated a complete revoicing along with rearranged internal screening, particularly of the power supply and transformers. Putting nonessential power supplies (startup logic and display) to sleep when not in use and using super-quiet latched (as opposed to multiplexing) displays helps reduce the critical circuit noise floor, especially important if a single-chassis design hopes to get close to the performance of its two-box sibling.

Which is where the '6.5 has always cheated just a little bit. All that circuitry demands a lot of internal real estate, and if you are going to benefit from the considerable cost benefits of a single box and the single packaging that goes with it, then that box is going to be big. The TL-6.5 II is built into a chassis derived directly from the '7.5, and the front-to-back depth is considerable, so VTL has increased the height, adding a basement, of sorts, in contrasting black on the otherwise silver review sample. It's the obvious solution in terms of space, less so aesthetically, but once you get used to it you realize that it works and that a single color case would look unacceptably blocky.

So what else remains the same? The beautiful execution of the casework, user interface and connectivity are all identical to those of the original model, although the Series II does add the useful ability to reduce input gain selectively by 6dB. The tubes are also still the same 12AU7s originally designed for audio applications and boasting superior linearity and bandwidth as a result. Likewise, the clever combined volume/balance, resistor/relay network remains. In other words, if it ain't broke, don't fix it. The TL-6.5 Series II is an object lesson in keeping the good points of a product and working on its weaknesses -- a fact that is reflected in the performance benefits that have resulted. Sit a '6.5 Series II next to the original and, looks aside, it's hard to credit that the two are related.

In musical terms, what always separated the original TL-6.5 from its bigger brother -- especially the later Series III -- was the TL-7.5's sense of absolute dynamic and temporal stability, as if it reached down deeper, to a seriously solid footing, allowing it to take a

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Who needs a line stage anyway?

The VTL TL-6.5 Series II reaches the market at a time when more and more systems are dispensing with the line stage altogether. So perhaps it's time to consider just what makes the line stage so critical to genuinely high-end musical performance.

At first glance, all a line-stage does is select between sources and set level for the system -- which is why the idea that a DAC with a variable output renders the extra (often expensive) box redundant. Shock, horror -- that argument has more to do with selling expensive DACs than it does with maximizing system performance. Increasingly, we forget, ignore or willfully sweep away the crucial role performed by a system's line stage. Ever greater reliance on digital sources has helped created a belief that simply tacking that variable output onto the back end of a DAC will do the same job. Much as your wallet might want to believe that, it simply isn't so. You don't need to take my word for it; just drop a decent line stage into any system that's being fed directly from a DAC and you'll be shocked by the improvement in dynamic range, timing integrity and musical authority. I only know two exceptions to that rule: the Jeff Rowland Aeris DAC and the Wadax Pre 1 Ultimate. One comes from a company that makes superb line stages in its own right and the other actually is a line stage, and also happens to be a DAC -- along with an A-to-D and a phono stage -- but that's a different story. Sadly, the companies that generally make the most noise about the variable outputs on their DACs have the least reason to do so.

Instead of concentrating on the basic functionality of the line stage, consider instead its electrical location in the system. Positioned between the sources and the power amp, the line stage represents a pair of electronic gates, one facing the sources, the other the power amp. If it does its job properly, then it should isolate the source components from each other and at the same time isolate the selected source from loading by the power amp. A properly designed input will thus buffer each source, offering it the ideal high-impedance termination. At the same time, the output needs to provide ample drive to the power amp via a low-impedance connection. Somewhere in between there will be a volume control and, absolutely crucially, a central signal ground for the system as a whole. If we look at those elements individually it soon becomes apparent that each is a significant engineering challenge in itself.

André Calnette of Jadis once suggested to me that 80% of the sound of any line stage was down to the volume control. It's an interesting and provocative statement -- not because it suggests that the volume control is the be-all and end-all of line-stage performance, but because it identifies it as a major *limiting* factor. In similar vein, it's fair to say that few if any of the really great line stages rely on anything other than discrete componentry and that they all, without exception, depend on large, generally sophisticated and heavily regulated power supplies. Now ask yourself, how many DACs contain output stages that tick those particular boxes?

A great line stage does more than simply pass the signal; it establishes and maintains the signal's dynamic and temporal integrity by protecting it at input and output and providing a stable reference, a fixed ground plane on which inputs can land and which underpins the output. And it has to do all this without imposing its own character or limitations on that signal. That's a pretty tall order. Look at the power supply elements alone in the TL-6.5 II and you can see why it might well drive a power amp with some serious dynamic headroom and control -- especially when you factor in the high-current capability and linearity of the output stage and the absence of overall global feedback. Now look at just how much effort has gone into the volume control, switching and display technology. What you get with a unit like the TL-6.5 II is not just the same functionality that is offered by a switchable-input/variable-output DAC but in a separate box. Nor are you simply getting that functionality done better. What you bring to the system is its key foundation stone done properly -- a foundation without which the entire edifice is built on sand. Thus, if you are serious about high-end sound, never, ever underestimate the importance of a properly engineered line stage.

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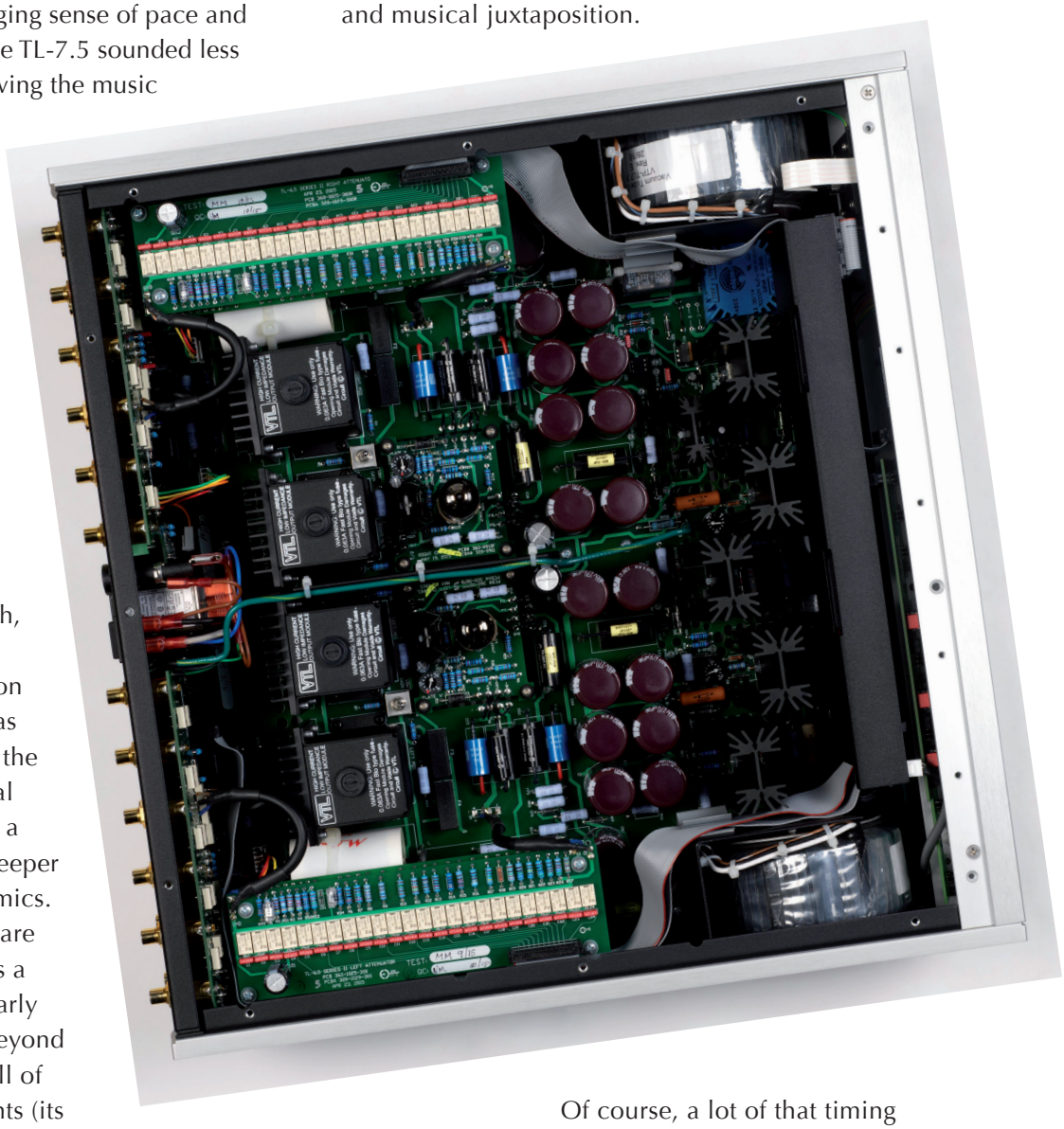
more relaxed stance yet hit harder. How is that reflected in the performance? The obvious differences are heard in terms of the transparency and dimensionality of the two-box unit, the clearly defined and super-stable acoustic space with which it encloses the players and the added ease with which bass notes and textures are defined and separated.

But there was a far more subtle mechanism at work in the time domain. Whereas the original TL-6.5 always succeeded in injecting an engaging sense of pace and energy into the performance, the TL-7.5 sounded less hurried and more relaxed, allowing the music to proceed at its own pace, rather than imposing rhythm and tempo on it. The result was a greater expressive range and more articulate playing -- benefits that became more and more obvious the longer you listened. The '6.5 might have sounded more upbeat, but the '7.5 was plenty upbeat when it needed to be.

With the arrival of the TL-6.5 Signature Series II, all that changed. This '6.5 sounds much, much more like the '7.5, its general tonality and presentation cut from the same sonic cloth as that of its two-box brother. Put the latest '6.5 alongside the original version and what you'll hear is a quieter, blacker background, deeper bass and crisper, quicker dynamics. Bottom-end pitch and textures are clearer, and the Series II throws a much more developed and clearly defined acoustic around and beyond the orchestra. It's almost as if all of the previous version's best points (its energy, presence and rich tonality) have been anchored more securely and brought into clearer musical focus. Instrumental separation is better (tonally and spatially), while melodic lines are clearer and more fluid, that newfound clarity in the bass bringing organization and purpose to the midband and treble.

Play something rhythmically challenging, like Martha Argerich performing the Chopin Piano Sonata No.3 (the 1965 recording, recently re-released on vinyl by Warner Classics [Warner Bros. 0825646372867]), and where the original TL-6.5 sounded wooden and clumsy, lacking shape and flow, the Series II allows Argerich's natural fluidity, phrasing and graceful lines to emerge. What sounds sputtering and hesitantly awkward on the original blossoms into a poised, considered and dramatic presentation, a master class in dramatic contrast and musical juxtaposition.



Of course, a lot of that timing integrity flows from the bottom-end security, with the rolling left-hand chords redolent with texture and complexity, adding weight, stature and depth to the instrument and the playing, anchoring both Argerich's pauses and her accelerations through the interlocking phrases.

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This air of unruffled calm and unobstructive eloquence is instantly recognizable to anybody who has lived with the TL-7.5 Series III. Okay, so the one-box unit can't match the two-box in absolute terms, but short of direct comparison, and if you've only heard the '6.5, you'll be wondering where the flagship is going to score its points. One of the reasons for this is that the TL-6.5 is (and always has been) a bit more than half of a '7.5. As already noted, in Series II guise, it incorporates major elements of circuitry and power-supply components imported directly from its big brother -- which helps explain the crowded insides of its substantial casework. It may sacrifice the physical distance and isolation of potential noise sources from fragile audio circuits, but the circuits themselves are certainly of stellar quality, and a lot of effort has gone into the internal shielding.

What works for solo piano is just as evident on works of a larger scale. Lisa Batiashvili's Beethoven Violin Concerto [Sony/BMG 88697334002] is presented with vivid color, presence and life that really spark the performance. Instrumental density and dynamic range are impressive, giving the carefully scaled orchestration its full expressive drama, but what makes this really compelling listening is both the immediacy, presence and focus on the soloist -- and the sense of control and direction she gives the orchestra. On this disc, some preamps allow the solo instrument to wander in terms of location and physical presence. With the TL-6.5 II, there's no doubt about Batiashvili's central stance, nothing ephemeral or fragile about her playing. This is a commanding performance, both as soloist and director -- something the TL-6.5 II reveals like few of its peers.

This sense of musical authority -- backed up by impressive presence and dynamic range -- is exactly what makes the '7.5 so musically impressive. Its DNA is now firmly embedded in the TL-6.5 too, embodied in the stability of the soundstage, the way the orchestra swells on demand but most of all in the clarity of the performance's pace and purpose. The elasticity of the tempi in Batiashvili's solo passages is gloriously fluid, the rigor of the Deutsche Kammerphilharmonie Bremen the perfect musical backdrop.

A big part of that tonal richness and presence comes from the TL-6.5 II's ability to unravel harmonic layers and textures. RCA has recently reissued the Starker/ Slatkin Elgar Cello Concerto, paired with the Walton and the Delius Caprice and Elegy as a bonus [BMG 09026-

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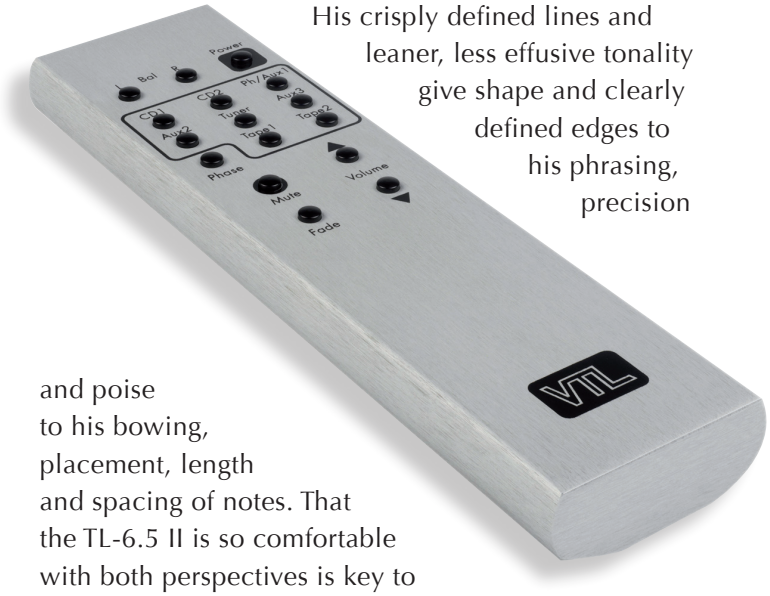
61695-2]. This 1997 performance of the Elgar might not compare with the benchmark Du Pré/Barbirolli version, but the Walton is quite another manner. The TL-6.5 II easily differentiates between Du Pré's energy and musical gusto, the pressing tempi imposed to match by Barbirolli and the more measured, tautly structured tonality of Starker, the slower evolution of Slatkin.

These two Elgars are worlds apart, but the very qualities that limit the emotional range and impact of Starker's Elgar come into their own on the more restrained, thoughtful and less emotive Walton. His crisply defined lines and leaner, less effusive tonality give shape and clearly defined edges to his phrasing, precision and poise to his bowing, placement, length and spacing of notes. That the TL-6.5 II is so comfortable with both perspectives is key to its ability to present the core virtues in a performance -- whether that's the florid, sweeping power of Du Pré or the sculpted elegance of Starker. It's this ability to stand behind the performance and the performers, rather than being a window onto them, that separates the TL-6.5 Series II from the original version, in many respects defining the impressive extent of its superiority. If allowing each recording its own voice is the hallmark of high-end performance, it's a box that the TL-6.5 Series II ticks in bold. It matters not whether that performance is large or small, classical or jazz, rock or pop; all are equally well served by the '6.5's newfound equanimity, the effortless way in which it cuts and responds to the musical chase.



The sonic character and strengths of the TL-6.5 II dictate more than just how it sounds. They also define how it can best be used. As I've already pointed out, in topological terms the TL-6.5 Series II is best thought of as a very successful hybrid. That's also the best way to consider its musical merits -- and the way it works with the equipment around it. Those lookingfor traditional tube sound, all blowsy warmth, overblown soundstage and soft, rounded edges, are going to be surprised and disconcerted by the TL-6.5 II's muscular grip and focussed presence. Likewise, those after the etched, spot-lit ultra-definition of the highest-tech solid-state devices will find the VTL lacking in absolute transparency, intra-instrumental space and the sort of skeletal dimensionality and visible sinews that make an orchestra appear like a scattered field of 10,000M runners.

Of course, what that really means is that the '6.5 sits firmly astride the middle ground, bending toward neither the romantic nor the lean and clean sides of reproduction. It's another reason that it manages to remain so musically even-handed. It offers enough color, enough definition, sufficient texture and adequate transparency grafted onto its ability to project presence and density, its dynamic range and temporal security. The result is both holistic and satisfyingly convincing. It might not transport you right to the front row, surrounded by the venue and the audience, but it gets you close enough -- and way closer than most of the competition. This shortening of the bridge, the closing of the gap between recording and reality, is crucial to system performance -- at least if that system is going to deliver convincing, long-term musical results. The '6.5 II will deliver the necessary pattern and structure and it won't mask discontinuities or fractures elsewhere in the setup, making it a sound foundation stone for system development.

The VTL TL-6.5 is a product that, in its latest guise, rises to two almost equally difficult challenges: Not only does it join the select group of great line stages -- a list that is short and in many cases involves products that are horribly expensive -- but in doing so it also aces its role as the more affordable one-box alternative to the two-box flagship. Is the TL-6.5 Series II a TL-7.5 Series III on the cheap? No, but it gets much closer than the original model, enjoys the same sonic and musical strengths as its bigger brother and delivers them with enough confidence and musical panache that, short of direct comparison, you'll be wondering whether the '7.5 III could possibly justify its extra cost. Make that comparison, especially on a really-wide-bandwidth system, and you'll soon discover that, yes, the TL-7.5

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Series III still deserves its Reference moniker. It goes deeper in the bass and throws a wider, deeper and more defined acoustic. It offers even greater textural and tonal subtlety and a sure-footed rhythmic agility, both of which escape even the '6.5 II. But that's not to diminish just what VTL has achieved in this latest version of their most ambitious single-box design. It gets close -- so close, and with such consistency, that, in many systems, there'll be higher priorities that demand attention elsewhere before you consider stepping up to the flagship unit.

That makes understanding just where the '6.5 II fits into the audio firmament a challenging prospect -- not because of the product but because of the reality it forces us to confront. On the one hand it delivers a genuine glimpse of the highest end; on the other, it can be as unforgiving of partnering equipment -- or more specifically, the failings of such -- as those high-end credentials suggest. Are you ready to meet that challenge, or to build and work with a system that can? This product is all about musical power and communication -- not about pretty pictures and a rose-tinted audio viewpoint. Its impressive dynamic range is based on a genuinely low noise floor, its rock-like stability and presence on seemingly unburstable reserves of power. It won't mask shortcomings elsewhere in the system, or draw a discrete veil over poor recordings. Instead it has that almost priceless ability to step aside, allowing each performer and performance its own voice, focussing not on the surface detail but their inner structure and musical integrity. It's a quality it will bring to your whole system if the partnering products are up to it.

This ability to cut to the musical core, to fasten on the expressive and emotive center in a recording -- whether the recording itself is of audiophile grade or not -- makes this a product for those with a genuine interest in and a system focussed firmly on music. If you want the *audio*, as opposed to the *musically spectacular*, then there are other products that may well be more impressive, but, for me, the VTL TL-6.5 Signature Series II delivers a near model performance to go with its clearly thought out and executed operational and functional elegance. Don't be fooled by the one-box format; this latest '6.5 will sit happily at the heart of a genuinely high-end (rather than simply high-priced) system. The Series II revision has taken what was already a good product and made it great -- in terms of performance and especially in terms of value. The VTL TL-6.5 Series II doesn't just *take*; it *commands* a place on the extremely short list of musically authoritative and satisfying one-box line stages

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Prices: $15,000.
Warranty: Five years parts and labor.

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Associated Equipment

Analog: Kuzma Stabi M turntable with 4Point tonearm, Grand Prix Audio Monaco v2.0 turntable with Kuzma 4Point 14 tonearm, AMG Giro turntable with 9W2 tonearm; Allnic Puritas and Puritas Mono, Clearaudio Accurate and Goldfinger Statement, EMT JSD P6.0, Fuuga, Kuzma CAR-50, Lyra Atlas, Etna, Dorian and Dorian Mono cartridges; DS Audio DS-W1 cartridge with matching equalizer; Stillpoints Ultra LP Isolator record weight; Connoisseur 4.2 PLE and VTL TP-6.5 Signature phono stages.

Digital: Wadia S7i and Neodeo Origine S2 CD players, CEC TL-3N CD transport and Wadax Pre 1 Ultimate DAC.

Preamplifiers: Connoisseur 4.2 LE, Tom Evans Audio Designs The Vibe, VTL TL-7.5 Series III Reference.

Power amplifiers: Berning Quadrature Z, Engström Lars, VTL Siegfried Series III Reference monoblocks; VTL S-400 Series II Signature stereo amp.

Integrated amplifier: Mark Levinson No.585.

Speakers: Wilson Audio Alexx and two Thor's Hammer subwoofers.

Cables: Complete looms of Nordost Odin or Valhalla 2, or Crystal Cable Absolute Dream from AC socket to speaker terminals. Power distribution was via Quantum Qb8s or Crystal Cable Power Strip Diamonds, with a mix of Quantum Qx2 and Qx4 power purifiers and Qv2 AC harmonizers.

Supports: Harmonic Resolution Systems RXR, Hutter Racktime or Quadraspire SVT Bamboo racks. These are used with Nordost SortKone or HRS Nimbus equipment couplers and damping plates. Cables are elevated on HECC Panda Feet.

Acoustic treatments: As well as the broadband absorption placed behind the listening seat, I employ a combination of RPG Skyline and LeadingEdge D Panel and Flat Panel microperforated acoustic devices.

Accessories: Essential accessories include the SmarTractor protractor, a USB microscope (so I can see what I'm doing, not for attempting to measure stylus rake angle) and Aesthetix cartridge demagnetizer, a precision spirit level and laser, a really long tape measure and plenty of low-tack masking tape. I also make extensive use of the Furutech anti-static and demagnetizing devices and the VPI Typhoon record-cleaning machine. The Dr. Feikert PlatterSpeed app has to be the best-ever case of digital aiding analog.