

# VTL TL-6.5 Series II Signature line-stage and S-200 Signature power amplifier

by Roy Gregory

“**M**aking tubes user-friendly”; so runs the VTL tag-line. For once it’s a sentiment that’s more than just marketing speak, one that’s embedded in the very form and substance of these amplifiers. Indeed, at first glance, you’d barely know that these amps used big glowing bottles or even bigger chunks of steel for their output transformers. The sleek, aluminium casework, sculpted, softly latched buttons and sheer range of control options are more akin to the best modern solid-state designs – and a world away from the likes of the ARC SP8 or D115, products which marched in the vanguard of the valve revival. Given that it’s over 35-years since those products helped define the nascent high-end, perhaps that should come as no surprise – except that in many cases, tube design seems to be regressing rather than the opposite. This commitment to maintaining the virtues of valve amplification, while applying modern engineering and technology to minimising its challenges is more than what makes VTL products so different; it’s what makes them so good.

When it comes to high-powered tube amps, today it is VTL that set the standard against which the competition are measured. Look a little closer at their products and it is not hard to understand why; listen and it becomes more obvious still. This pairing of the latest TL-6.5 line-stage with the new S-200 stereo amplifier is a classical UK



▶ combination, a one-box pre-amp teamed with a capable single-chassis power amp making the most of our smaller rooms and limited space. Yet despite the reduced real-estate, these products still embody everything that sets VTL so far apart.

Let's start with the latest version of the well-established TL-6.5. Wedging the full feature set and functionality of the company's two-box flagship line-stage into a single chassis was no easy feat, requiring a vertical extension to the established casework used for the TL-7.5's PSU and control section. The resulting box can be supplied in silver, black or two-tone mix, the latter making the most of the original's elegant design and front-panel proportions. On the inside it houses a fully balanced and differential circuit built around a single pair of ECC82 tubes, used for the critical voltage gain. Paired with a sophisticated FET-buffered, high-current output stage, you could argue that this should be more properly described as a hybrid design, but frankly, I'm more interested in the performance than the labels.

With its large and highly regulated power supply, what the 6.5 does is deliver the coherent dynamics and presence that make tube pre-amps so musically appealing, combined with an incredibly low noise floor and the ability to drive almost any load – both extremely unusual in a tube design. Even more unusual is the functional versatility, with a full suit of balanced and single-ended in and outputs, processor and tape loops, adjustable overall and individual input gain. Look inside and you find a mirror-imaged circuit, precision resistor ladders and more by-pass capacitors than you can shake a stick at. The package is topped off with a sensibly sized, full function remote and a display that you can actually see from across the room.

Turning to the power amp, you'd normally expect fewer features and rather less sophistication, but the S-200 is a seriously surprising package. Built around the ultra traditional line-up of four 6550 or KT88 push-pull output tubes per channel, the power amp once again offers a fully balanced topology from input to output, with differential input and driver stages. That's unusual enough, but the S-200 is only just getting started. To really extract the benefits of a higher-powered output stage, you need to use a fixed bias arrangement, which ironically means establishing the bias voltage for each tube individually. VTL has been working on precision regulated bias supplies for years now, first launching them in the flagship Siegfried mono-blocs. Along the way they also took advantage of the opportunity to create a genuinely automated and fuss free, auto-bias and tube-fault sensing system – an absolutely revolutionary step-change in the usability of high-powered tube-amps. That sophisticated technology has been filtering down the range and has finally reached the S-200, which also like its bigger brothers, offers switchable damping factor. Nor is the ▶



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► amplifier’s sophistication limited to the use of fancy software driven housekeeping. The all-important output transformers use complex interleavings to help extend bandwidth, there’s a J-FET constant current source for the single-ended inputs (rather than the far more usual transformers to handle balanced connections to a single-ended circuit) and fully regulated bias and screen supplies increase AC noise rejection, reduce the noise floor and improve resolution and, like the TL-6.5, the S-200 is also global-feedback free. All that regulation and precision setting of bias voltages allow the VTL amp to deliver a potent 200 WPC rated output, sensibly optimised for 5 Ohm loads. Alternatively, you can switch it to triode mode for around half that power, should your system demand it.

Like almost all true differential designs, the TL-6.5 and S-200 sound best hooked up with balanced connections. I used the VTL amps with a number of different speakers, but the most telling combination was with the latest Wilson Sasha DAW. Not so long ago I would have hesitated to use the S-200 with the Sasha 2, seeing the VTL MB-450 mono-blocs as that speaker’s natural partner. But the latest WATT/Puppy has shown a useful increase in volume and a rather more forgiving impedance characteristic, making it a more forgiving load, one that’s well within the compass of the S-200 – especially when coupled to the low-frequency drive and authority that characterise the latest version of the TL-6.5. The one-box line-stage was always quick and agile, but now it has added serious low-frequency extension and grip to the mix, moving it far closer to the flagship 7.5 in overall performance. If the 6.5/S-200 and DAWs might well be considered a middleweight rig in absolute terms, for many of us they represent an aspirational end-

game – the biggest system we might actually be able to accommodate or afford. As such it needs to deliver a compelling performance and do it on any kind of music. We already know and recognise the speakers’ talents, but the VTL amps are well up to the challenge too.

You might not think that a violin sonata would provide an acid test, but the combination of Vadim Repin and the indomitable Martha Argerich playing the *Kreutzer* [DGG 477 6596] will soon put you right. Not only have you got the dramatic contrasts in the score, underpinned by Martha’s mighty left hand, but the elongated phrases and sudden darting accelerations mean that both the players and the system doing the playing need a firm grip on relative weight, dynamic range and temporal authority. It’s crucial that with such a sparse score, everything happens at the right time, in the right place and carrying just the right degree of delicacy, attack or impact. The VTLs performance matches what is an expressive and dynamic *tour de force*. Repin and Argerich might lack the absolute instrumental control and technical precision of Martzy, but their playing is at once intimately conjoined and dramatically bold. The VTLs paint a richly vivid musical picture, full of body and presence, light and shade. The instruments are held separate in space, with a beautifully natural sense of differential height and scale, surrounded by a convincing acoustic space. The connection between the musicians is as tangible and articulate as the interlocking phrases of the piece, sure sign that the amps have got the timing spot on.

That convincing sense of instrumental weight and scale – large or small – is key to the VTL’s presentation. The relative balance between violin and piano, instruments that occupy opposite ends of this continuum, is perfectly maintained by their placement in the recording and by the amps presenting it. It’s this ability to get the right amount of energy in the right place at the right time that makes these amps such natural musical communicators and places them firmly ahead of the competition. It might sound like an obvious attribute but it’s one that precious few hi-fi systems possess and even fewer possess it across their entire bandwidth. As I’ve already observed, the TL-6.5 Series II Signature reaches deeper than previous versions and does so with greater dynamic range. But what really impresses is the way in which the S-200 deals with that input. Work your way down the VTL range and one of the sonic compromises you’ll be making comes in terms of low-frequency definition and transparency. The Siegfrieds set new standards for tube amps in this regard and, price for price it’s an area where the VTL power amps generally enjoy superior performance compared to the competition. But even so, sitting four models below the big monos, the S-200 is no Siegfried and, as we know, too much bass can be worse than too little. The S-200’s neat trick is to deliver a realistic impression of weight and scale, pitch and extension, even while the definition at the lowest registers is (in absolute terms) a little soft and rounded. Part of that is down to making sure that the lowest notes happen at the right ►



## TECHNICAL SPECIFICATIONS

### VTL TL-6.5 Series II Signature

**Type:** Fully-balanced vacuum tube line-stage

**Tube Complement:** 1pr 12AU7/ECC82

**Inputs:** 3prs balanced XLR/single-ended RCA, 5prs single-ended RCA

**Outputs:** 1pr balanced XLR, 1pr single-ended RCA (pre-out), 1pr single-ended RCA (tape out)

**Output Impedance:** 50 Ohms

**Dimensions (W×H×D):** 445 × 153 × 445mm

**Weight:** 21kg

**Price:** £19,800

### VTL S-200 Signature

**Type:** Fully-balanced vacuum tube power amplifier

**Tube Complement:** 1pr 12AT7;

1pr 12BH7; 4prs KT-88 or 6550

**Rated Output:** 200 W/Ch (pentode), 100 W/Ch (triode)

**Output Topology:** Push-pull

**Inputs:** 1pr balanced XLR, 1pr RCA

**Input Impedance:** 45 kOhms

**Dimensions (W×H×D):** 470 × 230 × 457mm

**Weight:** 47.6kg

**Price:** £16,500

**Manufactured by** VTL Inc

**URL:** vtl.com

**Distributed in the UK by:** Airt Audio

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**URL:** unavailable at publication date

► time, but it is also down to the quality of the mid-bass, the frequency band where so much musical presence and impact is based. Or, to paraphrase, grab the music by the mid-bass and the rest of the low-frequencies will follow...

Play Steve Earle's magnificently raised middle-finger to the country music establishment [*Copperhead Road*, MCA MCF 3246] and the propulsive drum work drives tracks along, even when the weight and density of the instrumentation threatens to drag them back. The title track demonstrates perfectly just what the VTLs are capable of, with a phenomenal display of energy, attitude and sheer musical momentum, filled out with rich, warm colours and an almost physical presence. The achingly poignant 'Even When I'm Blue' dials back the musical intensity, but ratchets up the emotional impact, showing the naturally communicative vocal qualities that result from the amps' clarity, diction and body. All that subtlety and the natural micro-dynamics that conjure the Kreutzer so vividly to life are present here too – but backed up by the scale and presence that these amps deliver so little apparent effort. It's an object lesson in musical budget management, doing just enough of everything to create a beautifully balanced and satisfying result, whether you are looking for intimacy and delicacy or simply to worry the neighbours.

Like all great middleweights, the TL-6.5 and S-200 combination majors on delivering its energy and impact, quickly and effectively enough that you don't miss what isn't there. Sure, the TI-7.5 III and Siegfrieds will show you exactly what's missing – at a not inconsiderable hike in price and demand for real estate. But without that frame of reference the junior, one-box alternatives deliver more than most of us ever expected to hear from an audio system – and do it with utterly fuss-free aplomb. Running the amps with speakers as varied as the Vienna Acoustics Liszt and Focal Kanta 1 demonstrated their ability to work with more modest partners while retaining the ability to grow convincingly with the system as a whole. Listening to them getting hold of the little two-way Focals was as enjoyable as it was musically amazing. When the US audio industry first started mapping out the high-end landscape, it was companies like ARC and Conrad-Johnson who staked their claims, but the intervening

decades have seen those brands at times eclipsed in terms of fit, finish, functionality and musical performance. Spending time with these VTL amplifiers, it is easy to understand how and why the company has quietly but confidently established itself as the go-to option for versatile, high-powered tube amps. The TL-6.5 and S-200 don't just tick the boxes – they own this turf! +