



EQUIPMENT REVIEW

he missing link



Siltech C1 preamplifier

by Alan Sircom

eviewers can wax lyrical and philosophical. Sometimes, as a method of padding out a review. Sometimes though the navel gazing is a vital part of defining the nature of the product. That's the thing about the Siltech C1 preamp.

Hang on a second... Siltech making a preamplifier? Isn't that like Nordost making a CD player, or Transparent making a record deck? Knowing the guy behind Siltech goes some way to explaining the appearance of a preamplifier among the well-respected cables. Edwin van der Kley could be an engineer straight out of central casting; when you speak to him, you expect him to pull out a slide rule, even if to calculate the correct angle of French fry placement. Like any good engineer, he's going to have an engineering solution on absolutely everything, and the place where engineers in audio feel there's a gap in the market is in the production of a really good preamp. In fact, the C1 is merely the first in the \$AGA line of audio electronics from the brand.

Edwin's take on the really good preamp is to build essentially a very traditional minimal hard-wired valve line preamp inside a very advanced logic controlled and battery powered chassis. It uses new old stock of a little-known valve that was only manufactured for a few years at the end of the golden age of tubes, point-to-point wired with monocrystal cables, and there is the absolute minimum of components in the signal path.

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The four valves are all ECC86 double triodes. The story behind these tubes is fascinating in its own right. The ECC86 was only manufactured between 1959 and 1962 and designed for a very specific purpose. Back in the mid 1950s, car manufacturers were keen on fitting in-car radios to the latest chrome fantasy machines. The car industry wanted to fit the then-new transistors to these incar systems, but those early solid-state devices weren't necessarily as reliable or as good sounding as their hollowstate equivalents (most commercially available transistors in the 1950s used pure germanium instead of silicon, alloys or compounds as their semiconductor material; in pro audio circles, one of the most visible uses for germanium transistors was in the manufacture of fuzz boxes for quitars... so perhaps they had a point). So, the car industry commissioned a new valve specifically for purpose, needing to be low distortion, low powered with attendant long lifespan and very low microphony. The ECC86 was born, but was sadly short-lived, because solid-state devices quickly caught up and by the time The Beatles hit the charts, car radios were all transistorised.

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Nevertheless, the ECC86 is perhaps the ideal preamp valve. It's got a 10,000 hour life expectancy, there's that low distortion and very low microphony, and the fact it was designed to work within the confines of a 6V or 12V car system means it doesn't come with crazy rail voltages. But somehow, it never got picked up; no-one makes them now, and every other preamp uses devices like the ECC82 or ECC83 instead. This has built legends around the valves – such as which brand of valve sounds best (as they were all built to the same spec off the same production line, variations are practically non-existent, but when did reality get in the way of a good story?). But the fact remains Siltech has spent the last few years buying up remaining stocks of the Telefunken ECC86, so the 50 C1 users will have spares for a long, long time. Let's face it, the chances of a new batch of ECC86 appearing are slim.

The preamp within a preamp part is that the power and logic control circuitry are all entirely separated from the ultra-minimalist audio signal path. Given the audio circuit is the sort of thing that could be understood by an amp engineer of half a century or more ago, the control and power chains are state of the art. Things like a counter on under the rightmost vent, that shows you elapsed valve life, and things like battery power. The C1 has two big blue power switches, the left one is the conventional power button, the right one is marked 'forced charge' and switches the preamp between running off mains while charging the 25v batteries and running on batteries alone. The good thing is these are off-the-shelf batteries, with a five-year plus lifespan; finding replacements should not be difficult, even if for some reason you chose not to send the preamp back to Siltech. Battery power in tube preamps is not unheard of, but the 6.3v heater voltage of the ECC86 makes battery life easier to contemplate.

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The logic circuit drives the five singleended and one balanced line inputs (all using Siltech connectors and using monocrystal wire throughout, naturally) and singleended and balanced outputs. It also drives the rotary volume controller. The preamp's medium-to-high input impedance and medium-to-low output impedance makes it good for highlighting differences between cables, but not so divorced from convention that the preamp threw up problems for other connected products. I would put a practical limit of about 5m from preamp to power amp (presuming single-ended connection and high input impedance on the part of the preamp... guaranteed in most cases). Naturally Siltech's own monocrystal cables seem an obvious match for the C1, although I couldn't help thinking I prefer Crystal Cable's Piccolo Diamond cables, despite being considerably cheaper. Still, given the connection (Crystal Cable is run by Edwin's wife, Gabi) we really aren't falling far from the tree. A Logitech remote is provided.

The preamp doesn't sound like a valve preamp, it sounds more like the best of solid-state. Now's the time for that philosophical aside. Does it matter? Will people buy a valve preamp that doesn't sound 'valvey'? And will someone wanting the best in solid-state preamps buy a valve preamp? I would hope that in reality that the physical devices used in a preamp are immaterial and that the sound is all, but I suspect that some people in the market for a top-end preamp have a pre-conceived set of notions of either tube or solid-state preamp sound, and the C1 challenges them to the very quick.

That's the thing about the C1. It's not valve-like. It's remarkably quiet in use (you could whack the gain up and put your ear to the speakers and hear almost no noise at all) and really, really accurate. Don't expect an easy ride for less than perfect sources or low-fi recordings, don't go hoping the C1

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TECHNICAL SPECIFICATIONS

Line inputs: 5x RCA phono, 1x XLR
Outputs: 1x phono, 1x XLR
Valve complement: 4x Telefunken
ECC86 (new old stock)
25v battery power, with forced
operation
Limited to 50 units worldwide
Price: £25,000

Manufactured by Siltech BV URL: www.siltechcables.com Tel: +31 (0) 26 353 9040

"A true window on the recording; play two different recordings and you'll immediately hear the different mixes."

acts as a Band-Aid to help improve a system that shuts in imagery or lacks depth or coherence. The C1 gives or expects no quarter.

This makes it a very difficult preamp to judge, because it is a chimera. You find yourself drawing attention to aspects of the sound that you then find attribute to other parts of the chain; the thinness of a source, the toppy power amp, even the puffy sound of a capacitive cable. But when the system works properly, the C1 simply vanishes. It's like a passive preamplifier with gain.

And when the system works like that, it's uncanny. You hear into the mix, the compression (musical, signal and data) and the layering and panning of the musical components in the mix are on display. A true window on the recording; play two different recordings and you'll immediately hear the different mixes, even to the point of playing a round of Spot the Producer. So, it's not just getting you closer to the music, it's placing you closer to the mastering and mixdown. And only absolute honesty can do that. It also exposes the idea that many attributes attributed to good systems (most notably timing) should be a function of the recording and not the electronics; when a recording has good timing, it comes through well here, and when it doesn't, it doesn't. No imposed beat or compromised timing. It just does what it's supposed to, nothing more, nothing less. What's surprising is how rare this seems by comparison.

I guess all of this could sound like it leaves the music cold and exposed. Stripped of any attractive artifice, the music played could be left on the slab. That doesn't happen here, although I would imagine those who run the valve preamp gamut from Conrad to Johnson might find this more intellectually stimulating than musically impassioned. But I suspect more will praise it for its integrity than dismiss it for lack of artificial tonal colour. Oddly, if you need a bit more tonal colour, use the C1 with the batteries on charge, rather than battery powered, which can sound a trifle undynamic in the wrong setting.

Perhaps of all audio electronics, the preamp is the easiest part to make and the easiest part to make wrong. There are a lot of mediocre preamps, which either add to or subtract from the sound of the source. This is different; it's almost the traditional goal of 'straight wire with gain', even though it uses valves at its heart. Just 50 of these pieces will be made and those 50 users will be getting the unvarnished truth. Can you handle the truth?