



# Peter Qvortrup: Back to the future

PETER QVORTRUP, FOUNDER OF BRITISH HIGH-END HI-FI SPECIALIST AUDIO NOTE, HAS JUST CELEBRATED HIS 70TH BIRTHDAY. CHRIS FRANKLAND TALKS TO HIM ABOUT SOME EXCITING NEW PRODUCTS IN THE PIPELINE, THE CHANGES HE HAS SEEN OVER HIS 40-PLUS YEARS IN THE HI-FI INDUSTRY – AND WHY HE BELIEVES MOST OF THEM HAVE BEEN FOR THE WORSE

**I first met Peter Qvortrup in 2015 for an interview that appeared in the Jan-Mar 2016 issue of this magazine. This time, I am back to talk to him again shortly after he celebrated his 70th birthday.**

I knew little of Audio Note before that first meeting, but what I have learnt subsequently has given me a great respect for Peter, and what he has achieved since he established the company in 1991.

Formidable intellect, historian, free thinker and lover of music and classic Mercedes cars, Qvortrup speaks his mind, refuses blindly to follow audio fashions, and does things his own way. As we meet over lunch, there are many exciting projects in the pipeline at Audio Note I am keen to discuss with him.

But first, we talk of why he believes knowledge of the history of hi-fi is so important, and how he thinks the industry has changed. Does he think it has changed for the better or for the worse?

“Oh, definitely for the worse,” he retorts without hesitation. “Look back, and you can see the period when things were looking promising but ended up not fulfilling that promise. In the early era of mono, and subsequently stereo from about 1956 onwards, what people bought made more sense. Then transistors came along and you could start making amplifiers with more power. Philips ran an advert against the output transformer with a picture of an ugly face superimposed on one: it was the evil thing that made it impossible to make a decent-sounding amplifier. When you listened 20 or 30 years later to the products they claimed were so much better, you realise what a complete load of bollocks that was.”

It was the same with CD, he says. "It was 'pure perfect sound forever', and they would demonstrate smearing jam on the CD, claiming that it would still play. Of course, it didn't. They were lying. Lying is nothing new, but now we have a name for it – fake news."

Qvortrup believes we have either conveniently forgotten our hi-fi history or do not know it at all and that this casts doubt on the direction hi-fi companies can take in the future.

"Nobody teaches history any more," he opines. "In order to know where you are going, you have to know where you came from. There is so much junk out there now that it is virtually impossible to get back [to what was good in the past]. You would need to shed pretty much everything you know, everything you've learnt. As my generation passes away, there will be a very small number of people to carry on the flame."

Qvortrup believes the hi-fi industry has lost its way. "Here we are, just over 120 years after the invention of sound recording, and how much further have we really got? [In quality terms] loudspeakers peaked in the 1930s. Amplifiers in the 1960s. LP reproduction only reached its peak around 1985."

### The darkest days

What does he see as the darkest milestones in this gradual stagnation of audio development?

He singles out his main culprits: "I think the first was when the transistor came in in the mid-to-late Sixties: by the 1970s people had abandoned valve amps completely. You have to give credit to Audio Research: they carried on the flame at a time when everybody else had abandoned it. I don't think that can have been very easy.

That allowed me to actually have a market when I came in with Audio Innovations in around 1984. And of course, the really big one was digital."

So what lies in the future for the hi-fi market? He ponders, then says: "I think the quality end of the market will move towards LP and analogue. At the top end, there will be two markets. One will be rich people buying showpiece systems essentially to show their other rich friends – but they aren't interested in music. And then a quality market for people who really want to listen to music properly."

What would he say to those in the industry who are worried that we have lost a generation of potential hi-fi buyers to iPods and streaming?

"People were saying the same in the 1970s with cassettes when the Walkman came out," he counters. "But they still ended up buying hi-fi. We address a very specific, relatively limited market. Trying to persuade people who are not that interested in music to buy our products is an uphill struggle.

As for commercialising specialist hi-fi, how can it be specialist and commercial at the same

time? Those two things are mutually exclusive, and those who are worrying about this have basically convinced themselves that there are more customers out there than there really are. But in every generation, there will be people prepared to sacrifice their holiday in the Maldives to buy a new CD transport or pair of speakers."

Picking up on his comments about hi-fi's history and its importance in shaping the future, I remark that he has many times adapted and updated technology from the past for Audio Note products – for example, the discrete (ladder) DAC, molybdenum anodes in the 211 and 300B valves and, most recently, field-coil loudspeakers.

"There is a lot of fashion in everything now," he explains. "Look at the number of clones that come out of best-selling speakers. If you are going to copy it, do it better: look at the central ideas and find ways to improve it. Being a talented copyist, which to some extent is what I am, is actually one of the best things you can be. There are so few new original ideas out there that it's very difficult, all the time.

"Using molybdenum [for the valve anodes] goes back to the 1930s. A lot of our other products are based on good ideas from the past – our three-motor turntable [TT3] for example.

"The main objective in hi-fi or music reproduction has really been driven by convenience, size (miniaturisation) and cost. And you can't make something with small components, small everything, and get a big sound. You get a small sound. There is a physical relationship in these things and once you understand that – and I would venture to say that we at Audio Note are probably the only people in the industry that do understand this in a way that allows us to apply it – it actually becomes fairly easy. Well, not necessarily that easy [laughs]!"

### The sound of materials

"Using molybdenum [in our 211/300B valves] was part of a much broader investigation we've been carrying out for years into materials and what they sound like. We are working with Rubycon on why different paper sounds different in capacitors, even though you can't measure any difference. Our new non-magnetic niobium resistors are a great example. Niobium has never been used in a resistor as far as we know. Why do they sound different? And they sound quite different from tantalum or nichrome. Unless you try it, you won't know."

I am particularly interested to find out more about the prototype field-coil speakers I heard in his system at home. These use electromagnets in the drive units in place of passive magnets and have a separate power supply...

"We've been talking about this for 20 years," he admits. "Quite a lot of people make field coils. But



*“We pay attention to absolutely everything – the choice of resistors and capacitors. We go to great lengths with the I2V interface and the analogue stages. We try to optimise every single thing to get the best possible sound at the price*

you have to do all of the drive units – tweeter and bass driver. We’ve made prototypes now with six different types of iron and there is a vast difference in their behaviour and sound. There is more to it than just getting the right gap flux. Different power supplies sound different on the same driver. All the measurement geeks will tell you there’s no difference, but we know there is. And it’s not subtle, either!”

So what does he see as the main advantages of using field-coil drivers?

“The sound, for a start – the difference is extraordinary. With a permanent magnet, when the voice coil moves in the air gap, the magnetic field sort of moves away – it is called hysteresis. The stiffer the magnetic field, the smaller that movement is and also the shorter the recovery time. As I understand it, when the music plays and the voice coil moves, the more movement there is, the more the field bends and the longer it takes to get back.

“What it sounds like, and of course you can’t measure this, is that all the small signals are not picked up because the field is busy doing other things. In a field coil, what appears to happen, and you can see this on the hysteresis curve, is that rather than the field moving, it just draws more power from the supply. The electromagnetic field is far stiffer than with the best Alnico magnets and as a result you suddenly hear things you haven’t heard before.”

Qvortrup doesn’t put a timescale on when they will go on sale, but he is aiming at a price tag of around £25,000.

**A smoother CD player**

I also ask about some new developments on the CD transports, where the laser and main motor drives are belt-driven.

“We worked for years on trying to reduce the work the error correction circuitry does,” Qvortrup confides. “Because one of the theories we had was that all this correction has a detrimental effect and it doesn’t matter where it happens or how. Over lockdown, [R&D engineer] Darko [Greguras], had a CNC machine of ours at home in his garage and he looked at the CD transport mechanisms and did some measurements. He realised it was not running at a constant speed – it was cogging like crazy. All of the work he did on the CD transport power supply came out of what he had done on the TT3 turntable. So he made a very crude belt-drive mechanism fitted in a CD-T3 transport using the standard motor and an improved power supply. He also worked out the exact mass of the clamp needed to stabilise the motor drive, because this is what we did on the TT3 with the weight of the platter.

“All of the parts are made of Permalloy [a heavily impregnated wood]. It is such a good material – it’s very durable, very hard – and when he brought it

in, it knocked the socks off the CD-T4. He wanted to try a stronger motor and this and that – I said ‘do it’. I tried the stage-two upgrade at home in a CD-T4 that also had belt-drive for the laser, and it comprehensively knocked the socks off a CD-T6!”

With backward nods to old technologies a key part of the Audio Note methodology, I ask Qvortrup if there are any new technologies that have interested him? The quick answer: “No.”

Oh well – so I ask him exactly why Audio Note CD players sound so good.

He smiles and says: “We pay attention to absolutely everything – the choice of resistors and capacitors – and we go to great lengths with the I/V interface and the analogue stages. We try to optimise every single thing to get the best possible sound at the price, and to keep error correction to a minimum. When there are high levels of error correction, you can hear that, and oversampling doesn’t work. If you have an A-D converter that has a very low resolution input, and then you multiply that low-resolution signal 512 times, that’s idiotic. It’s a disconnect in logic.”

As for modern chipsets, he says: “They may measure better, but they make for a very dead sound. I bought up around 2,000 of the [now discontinued] Analogue Devices AD1865. This older chip was much better, and probably the best-sounding of all the chips is the original TDA1541, which is a 14-bit chip. We use the TDA1543 in the smaller DACs, CD1 and CD2.

“None of the bitstream-based DACs work. It’s not like this is rocket science – It’s actually quite simple – but it’s almost like an ideological thing: if you question it, you are a heretic.”

I mention that I was intrigued to find a USB input and built-in DAC in the new Cobra integrated amp. Was it to attract a different kind of buyer?

**A matter of distribution**

Qvortrup explains: “This was more to do with the needs of our distributors. A lot of them were finding it difficult to get into the dealers, because we have these low-power amplifiers and funny-looking, very efficient speakers. We also felt that in order to reach a certain customer group out there, we would need to have products that meet them a bit down the road – not all the way, because then I’d make transistor amplifiers and that’s not happening!”

So we won’t be seeing an Audio Note streamer anytime soon? “In a word, no,” he tells me. “We could make a streamer that sounds better than anything else, but when you compare it to even a basic CD transport that we make, it’s nowhere near as good. The question I ask myself is whether I would expose myself to this and say to people that this is a good thing in which to invest? No.”



I remark that he seems to have a talent for gathering skilled and committed people around him, thinking particularly of senior design and R&D engineer Andy Grove and his assistant Darko Greguras. Grove joined Audio Note in 1994. Before that he had worked for a company that repaired and calibrated test equipment and also for magazine *Hi-Fi World*. Although he left to join Quad, he returned to Audio Note in 1998 and has been there every since. Greguras joined in 2014.

"They are absolutely essential," affirms Qvortrup. "Without them, all of this wouldn't be possible, but what's interesting is that people like this find me – I don't find them. Both Andy and Darko came to me. If you do something interesting, that looks challenging, then the people that subsequently find you know that this is challenging and they come to you. Darko was working in Croatia in a plant that recycled plastics. He is smart – in a very different way from Andy. Andy is more scientific. He looks at things from a very different angle.

"We had an advert on the website for a junior development engineer and assistant to Andy. We had a few applications and then we got one from Darko, supported in a separate email by a customer of ours in Croatia who had a Level 5 system that Darko had been servicing. So I sent Darko a return ticket and he came over and met with Andy and I joined them for coffee. His knowledge of what we do was amazing.

"He then told us his personal project was to make a discrete DAC. We told him we'd been working on one too, but he had got much further with his – so I gave him the job on the spot."

### Moving forward

Looking to the future, it is still Qvortrup's plan to retire at 75. Nine years ago, he brought in daughter Emily to help run the company: she's now a director, and son Daniel has recently joined.

"Daniel has the most formidable interest in music," he tells me, "but he has some way to go before he knows enough about the equipment and the history of things. You can never expect a new generation to have the same historical perspective as their parents, but Daniel has the interest and he is very people-oriented – he hasn't my sharp corners!"

When I visited Audio Note in 2015, turnover was around £4.5m. How is it holding up now as Covid stalks the land?

"If it hadn't been for Covid, it would have been between £5.5m and £6m – we have the order book, it's just that we can't produce it, partly because of interruption in the supply chain but also, although not so much, because we can't bring people into the factory because of social distancing. Covid has driven business but lowered capacity.

"We have more Level 5 products on order at the moment than for many years. We just took an order last week for three M10 Line Signatures preamps at £118,000 each. And I think Covid has accounted for that. People who are well-paid are now not taking a couple of holidays a year at £15,000 each, or eating out a couple of times a week at £300 a pop. Then they look at what they have saved and think, 'I have always dreamt of a DAC5'"

### The Brexit 'catastrophe'

I suggest Brexit isn't not going to help, and Qvortrup replies with some resignation. "I think Brexit will be catastrophic. We have expanded the factory in Lithuania enormously and it's up and running, bar some minor QC issues. It now employs 20 people. making the Cobra and all of the CD products. as well as the Level Zero system and the power supplies for the turntables. We'll be will be loading them up with a few more things in the coming months.

"The loudspeakers are made in Austria, and we're looking at expanding the factory there too as we are going to reintroduce the smaller speakers – the AX1 and AX2. If Brexit goes really, really badly, that will give us another foothold in Europe." (The majority of Audio Note's production is sold into export markets)

There are always new projects under way at Audio Note, so I ask Qvortrup what it is that motivates him, what keeps driving him forward?

He smiles and says: "I think seeking perfection is a very powerful motivator. I have this strong conviction that music is really very poorly served by the equipment people buy."

As we begin to wrap up the conversation, I ask what's in store over the next 10 years. With some enthusiasm, he tells me: "By the time I leave, the project will be done – the project I set out to do, which is to make the best equipment that can ever be made at pretty much any price. End of story."

"And then?" I ask, assuming Qvortrup won't go quietly into retirement. "I'd then like to start making recording equipment – microphones, microphone amplifiers, mixers, modified tape recorders. To see whether we can make recordings that will stand up against the best of what was made in the past."

Over a final espresso, Qvortrup reflects: "I started to realise probably around 20 years ago that I can instantly recognise when I think something is better and it is very rare that I am wrong. I think that has helped me enormously in doing what I do. I think without that, if you are going to go down the road that I have gone down, you would be up the creek without a paddle."

Yes, Peter Qvortrup appears still to have a firm grip on that paddle and – with the help of his strong R&D team – looks set to keep Audio Note on course for the foreseeable future.

### Peter Qvortrup Timeline

**1978** Sets up Audio Consult shop and import business in Copenhagen. Starts importing Hiroyasu Kondo's Audio Note amps from Japan.

**1984** Sets up Audio Innovations. First product is the 800 series pre/power.

**1989** Acquires rights to manufacture Kondo's Audio Note MC cartridges.

**1991** Sells Audio Innovations and starts Audio Note. First Audio Note UK product is the OTO PP integrated amplifier.