

## Constellation Audio Shoots for the Stars -- Part One

Audacious start-up assembles a veteran “dream team.”

by Michael Fremer | March 19, 2010

When the groundbreaking \$150,000 Caliburn turntable is your first venture into high-end-audio manufacturing, what do you do for an encore? This question must have crossed the minds of Continuum founders David Payes and Murali Murugasu even before the first Mark Doehmann-designed Caliburn sold.

The less expensive but no less ambitious Criterion turntable followed, but both Payes, an outgoing Australian businessman and attorney, and Murugasu, a Glasgow-trained physician who became an audio importer when Australian law prevented him from practicing medicine, saw greater opportunity in products with wider appeal among audiophiles.

So two years ago, with Continuum firmly established in the world audio marketplace, Payes, Murugasu and a third, unnamed partner established Constellation Audio to produce a “state of the art” line of high-performance electronics intended to be every bit as innovative and distinctive as the products from Continuum.

Had I never heard of Continuum and had I simply wandered into the Constellation room at the Consumer Electronics Show, I’m sure the products would have sufficiently impressed me to write about them in



*Pyxis controller and Altair line stage*

a show report, but I doubt I would have requested an interview with two of the company’s founders, just as I hadn’t after first encountering the Caliburn at the 2005 CES.

However, after reviewing and purchasing the Caliburn, I got to know the team behind the company and the products. The Caliburn is easily my favorite material possession. The musical information it pulls from record grooves never fails to astonish. Yes, there was some risk involved in the purchase. Continuum was a brand-new company. Would it survive? Who would support the product if the company folded? Would such a complex piece of machinery be reliable under normal consumer use, never mind in a reviewer’s system, where it would be used with far greater intensity and be subject to repeated abuse?

Five years later, the Caliburn has proved 100% reliable. Nothing has gone wrong with it – not even the O-ring drive belt that was changed after three years “just because.” The company survives and continues selling turntables around the world to satisfied, mostly wealthy customers. In America (and elsewhere), a qualified technician is on-call should a Continuum turntable require service.



*Hercules mono block amplifier*

In other words, these guys are for real and their products are too. Over the years I've become friendly with Payes, Murugasu and designer Doehmann, while maintaining a safe distance in the interest of dispassionate reviewing. My respect for them has grown because they've always kept their word. Every product claim made has been verified. Every promise has been kept. You will not meet nicer or more honest people in the audio business, or in any business.

However, prior to this past year's CES, Dr. Murugasu called from Australia and in a concerned, heavy tone asked if I might meet with him for breakfast the first day of the show. His tone was strangely ominous. "Is everything okay at Continuum?" I asked.

"No, don't worry, nothing like that. We just need to talk," he replied, not modulating his mysterious tone. What was he going to tell me, I wondered, that Continuum was switching to CD players?

CES couldn't come soon enough. Finally, there we were at breakfast: Dr. Murugasu, David Payes and me. We ordered and I awaited the news, good or bad.

Fortunately it was good. Continuum was not folding. In fact, Dr. Murugasu told me, the company was going to announce the first major Caliburn upgrade.

So then what was going on? "Well, Michael," he said in his very proper British accent, (and now I'm paraphrasing), "we have started a new company and today will introduce a complete line of high-performance electronics at the show, designed and built in America."

You cannot imagine my surprise. I have spoken with, shared meals with and spent a great deal of time with these folks, and they'd managed to keep Constellation Audio under wraps for more than two years. That takes some discipline, but not as much as is required to conceive, organize and fund a new company and an entire line of products. When Payes and Murugasu identified the design team behind these products, I almost fell off my chair! But I'm getting ahead of myself.

With that announcement, out came a brochure containing detailed one-sheets for the various products along with computer-simulated images.

“So when do you think you’ll have actual finished products to show?” I naively asked Murugasu and Payes, thinking they’d say “CES 2011.”

“They’re upstairs and playing,” they replied.

I would have bolted from breakfast and headed to the Venetian Towers were it not rude and were I not hungry.

Instead, I leafed through the one-sheets and read about (in far greater detail than it is possible to provide here):

The shapely, fully balanced Altair line stage (over 100 pounds, including the separate power supply) with full-color touchscreen remote panel that looks like a Frank Gehry design;

The 1000-watt (1.1kW into 8 ohms, 2kW into 2 ohms) Hercules monoblock amplifier, the design of which allows for “near class-A operation for a substantial portion of the total output power”;

The 500Wpc (600Wpc into 8 ohms, 1kWpc into 2 ohms) Pegasus stereo amplifier; and

The Sirius built-from-the-ground-up DAC (no op-amps, no “off the shelf” chips) and CD/SACD/DVD-A player, utilizing Esoteric’s NEO VRDS transport that outputs native DSD to the DAC, which can decode up to 192kHz/24-bit PCM via AES/EBU and S/PDIF inputs, up to 192kHz/24-bit via TosLink, and 48kKz/16-bit via USB. The two-box design features transport and power supplies in one chassis and DAC and audio circuitry in the other.

If you have to ask about price, you can’t afford these products. However, they are anything but off-the-shelf parts packed into pretty boxes. My experience with Continuum tells me that in all likelihood they will deliver performance, both sonic and measured, as promised.

The sound in the small room was promising, but there were channel-imbalance issues in these early pre-production prototypes, and the TAD Compact Reference speakers, while superb, were not full range. You can be sure most people considering these products will have larger rooms and full-range speakers. That said, the level of textural purity and tonal finesse marked these as exceptional performers, even in their pre-production form.

Though Payes and Murugasu co-founded both Continuum and Constellation, the two companies will remain independent. That much was clear when Continuum’s Mark Doehmann borrowed a Ypsilon VPS-100 phono stage from down the hall and, suitably impressed (as well he should have been!), declared he might use the entire Ypsilon electronics line at CES next year. That could very well change, especially if the Constellation phono stage is ready by then.

On the third day of the show, I sat down with Payes and Murugasu to talk about Constellation.

**Michael Fremer:** So this was a big surprise. You guys sat me down and explained that you’ve started a new company, and the goal was to produce what you considered to be the state of the art in two-channel electronics. That was the goal. And what was the gestation of this? When did you say to yourselves. “Let’s start an amplifier company, or let’s start an electronics company”?

**Murali Murugasu:** I think the gestation would go all the way back to when Continuum first came to light in the sense that, yes, it’s fantastic to have a turntable company, but you always figured you’ve got a niche market there. And in order to make a successful business out of it, it would be a good idea to think about it (an electronics company). So we always thought about it. Never quite did anything about it because we were too busy making sure the turntable was reaching its potential and sorting that out.

Then I think about two years ago, we started looking into it a bit more and thinking about who we could actually go to. Being from Australia, the first thing we did was look at people in Australia David knew.

**Fremer:** And there are people there. There’s companies like Plinius and a few other companies where –

**Murugasu:** Plinius is New Zealand.

**Fremer:** Oh, I’m sorry. [Major Mikey faux pas! Ask an Aussie.]

**David Payes:** Halcro is a very successful Australian electronics company.

**Fremer:** But you know that stuff.

**Payes:** We know that stuff very well. We know the designers.

**Fremer:** You know Bruce Candy?

**Murugasu:** I've met Bruce Candy. He's a fantastic guy. I have had Halcro at home; I think so has David. It's definitely a great product.

**Fremer:** Did you ask yourself what products you want to have? Let's do an amp, a preamp?

**Murugasu:** We decided when we discussed it, David and I discussed it, it was always a case of if you're going to do something do it properly or not at all. So we always thought if we're going to come with up with a range of electronics, you get a full set. You introduce the whole lot to the market so that people know that, one, you're a serious player and, two, the fact that you do have the capabilities of producing everything. And we went out looking in that way from scratch. So we look in Australia. Didn't really find the –

**Payes:** Leveraging off what Murali said, the idea some years ago was to develop an electronics company on the same basis as Continuum. Find the best designers we could find and basically motivate and control the design team, and fund it, obviously. We wanted to do that in a way that in no way deflected our commitment or passion for analog and Continuum, which will always remain and be developed and continue to develop as, we hope, one of the premier analog companies. And we still have a strong investment and financial commitment to develop and grow the company. So it's not a substitute – it's an addition.

**Fremer:** I don't know whether you will be willing to answer this question. Has Continuum made money or broken even or been financially successful?

**Payes:** Our original business plan was based actually on a ten-year business plan. Japanese look 20, 30 years. We look – Australians aren't – I mean ten years is as far as we can look! We had two plans. We had a three-, a five-, and a ten-year plan. We're now in our fifth year. And our aim was to establish principally the product as being – without boasting – if not the best, one of the best products out there. And the company was known for supporting and developing one of the best analog turntables in the world. And we've done that. We are financially secure in the sense that at this point in time,

until we get to the second five-year plan, our financial aim is based on a ten-year program, which we'll get to. We're on track. That's it. We're on track.

**Fremer:** You're on track?

**Payes:** And we've established now, and we have now announced the first major enhancements or evolution of the Caliburn with retrofittable upgrades, which we think for the first time will add an appreciable sonic improvement. Otherwise why do it?

**Murugasu:** Value to the customer.

**Payes:** And support the customer. We are still investing heavily in Continuum in relation to future – we can say we're looking at our future strategy in terms of analog to expand the company. We didn't want to defocus emphasis on Continuum, and therefore when Constellation was established, it was established independently of but alongside Continuum, and it's important to understand it's a separate company. We have another investor involved as well.

**Fremer:** Is he American or is he –

**Murugasu:** You know, for political reasons he just really wanted to remain anonymous for the time being, and I've got to just respect it. I did want to do it, but when the time comes –

**Payes:** A substantial personality or investor.

**Fremer:** [asked of Payes] Was Continuum a personal investment of yours?

**Payes:** Principally initially mine and also Murali's. And it's fair to say I'm the majority in this step.

**Fremer:** You're partners in that, and in Constellation there's three people?

**Murugasu:** Correct, because –

**Payes:** I'm sorry, Continuum is three people and Constellation is also three people.

**Murugasu:** Continuum is three people.

**Fremer:** Who's the –

**Payes:** Mark [Doehmann, chief designer].

**Fremer:** Oh, Mark is an investor as well?

**Murugasu:** No, not an investor but one of the directors. Investor in the sense of –

**Payes:** He's one of the owners. He's an owner.

**Murugasu:** Investor in that he's – he invested his designs and everything else that goes with that. But, if you're talking purely financial, yes. With Constellation it's different because I think that we recognize that with electronics, you know you'd require – well, we think it's going to require a much bigger amount of investment.

**Fremer:** Now, did the worldwide financial meltdown have any – it had some impact on your [laughs] stomachs, I'm sure. But did it have any impact on your plans or on proceeding with what you're doing?

**Payes:** Again, we worked on a ten-year plan for Continuum. Ten years in terms of forward planning, so it's always got a rolling ten-year plan. The GFC came along and it's probably the worst time to consider what most people would regard as a luxury, discretionary expenditure.

**Fremer:** GFC is the global financial –

**Murugasu:** Crisis.

**Fremer:** Crisis, okay.

**Payes:** I'm sorry, it's a term. So the global financial crisis, that's what we refer to it in Australia.

**Fremer:** The GFM, global financial meltdown.

**Payes:** Meltdown, yeah, the meltdown. They changed it from meltdown to crisis. Which Australia didn't actually suffer.

**Murugasu:** We had it better, actually.

**Fremer:** Right. Is that because you have a wealth of commodities?

**Payes:** Commodities are going to China, and China recovered reasonably quickly.

**Murugasu:** Plus all the banks were stable.

**Fremer:** Right, you didn't get involved in that.

**Payes:** And our real-estate market didn't fall like it did in the States for housing. So we believed that within 18 months to two years – and this is again from an Australian perspective, and we looked at the world a little bit more with rose-tinted glasses than if you were in the States – we believed that the world economy would slowly recover and consumers would come out of the closet again and start buying.

**Fremer:** Surely at the top end.

**Payes:** Yeah, the top end we thought – well, it wasn't insulated but we thought the top end, particularly if you're looking at the absolute top end, there's always going to be buyers out there.

**Fremer:** And that was your goal, was to produce what you think – again, like what you did with Continuum – it was to produce the best electronics, no holds barred.

**Murugasu:** But coming back to what you asked about, just to further that point in terms of what the GFC/GFM did to Constellation or the idea, I think the other thing we discussed and thought about was that a lot of people at times like this they actually hold back. It's normal, you know, and I read about a chap here in the US, a funds manager. What he did as soon as all the banks were downgraded, Citibank and all, he bought. He made on last count 3.6 billion.

**Payes:** Billion?

**Murugasu:** Billion.

**Fremer:** He bought what?

**Murugasu:** He bought shares. He bought the stocks when they were down. He went against the trend. I can't remember his name, he's one of the highest – his company, his hedge fund – is one of the highest-growing funds in the world, but his personal wealth went up by 2.4 to three billion dollars. And I think, putting him aside –

**Fremer:** He can buy at least two of your systems then!

**Murugasu:** Absolutely. We hope. And we thought, look, this would be a good time to actually show some-

thing new because it's a time – people look for something exciting and we hoped that it was going to be exciting. We hope that it will be something which, when people saw and heard it, they will think, okay, there's something in high-end audio. I kept getting the impression over the last few years, it's always the same thing. You ask, "Did you see anything new, anything that's exciting?" And we went into this thinking, okay, this is what we want to create. Something new and exciting, both functionally, aesthetically, as well as technically.

**Fremer:** There are a few companies making very, very expensive electronics, but it's very tweaky. There's a lot of the vacuum tubes, the giant cases. There's only a few companies making something that's even remotely similar to what you're doing. And we can name the names, but there's no point in naming names.

**Murugasu:** We respect all the existing companies, both vacuum tube and solid state.

**Fremer:** I found the two of you and Mark in this whole process of – you know, knowing you and meeting you – that you guys have never said anything bad about anybody, ever.

**Murugasu:** Because the other thing is that I think having more products in the market is actually a good thing for the industry on the whole. If you start assuming that you only have a particular pie and that pie has already been carved up and shared, I think that basically defeats all economic theory and there's no –

**Fremer:** Okay, so you say let's start a company and produce electronics. So how do you assemble a team? Do you hold interviews? Do you tell people to come to Australia? You came here? You literally came here and –

**Murugasu:** This is where it became interesting. Like I said, we started in Australia, we looked around, didn't find – they were great people, don't get me wrong, but we had particular requirements. I had a set idea. You know, we've been very fortunate in that we have between us, David and myself at least and the other chap, owned a lot of very wonderful gear – you know, audio gear. So you build an expectation of what you want –

**Fremer:** So both of you are not just businessmen. You're audiophiles – you're committed, passionate. And you come from other backgrounds. You [Murugasu] come from a medical background? You come [Payes]

from a computer software background?

**Payes:** My professional training was as a lawyer, an academic, but my business interest, we started off with computers in the early '80s. We sold a large PC software and distribution business in the late '80s, and my family business has always been real estate – here they call it – yes, real estate, which I still run. That's my principal wealth, one of my principal businesses. And music and high-end audio has been a passion. I don't like using the word "audiophile" so much but in terms of understanding music and what produces the right music. I've been a passionate consumer of fine audio equipment for 25 years.

**Fremer:** So the best part about this is you bring a combination of business acumen, experience, and an understanding and a passion for the hobby, so you're not like hobbyists with a dream – it's beyond that. You understand the structure that's required to create a company and build a product.

**Payes:** Absolutely.

**Fremer:** So let's get to the point because our readers are mostly audiophiles and not financial people – but I think they're interested to see how a company finds the people to –

**Murugasu:** Okay, I think that the one thing that I've been fortunate in these many years of being in this industry in one form or the other –

**Fremer:** How many years is that, by the way?

**Murugasu:** In terms of just listening to music or actually importing?

**Fremer:** In the business.

**Murugasu:** Eleven years now. I take into account importing as well as manufacturing.

**Fremer:** [joking] Given that you're only 22 you've actually done this –

**Murugasu:** I mean it's amazing – since I was about 11. No, at the end of the day –

**Fremer:** So you came here to look?

**Murugasu:** Not specifically. A few things happened in the genesis of this project. One of the other things was in terms of – Australia is a fantastic country, and you can do a lot of things there, but we also have our limitations in terms of manufacturing and so on. So we recognized that from scratch, and I had a lot of contacts because of the time in the audio industry. So you get to know people and –

**Fremer:** And you imported. You imported a range of products.

**Murugasu:** I imported a number of brands. Correct.

**Fremer:** So that's your connection.

**Murugasu:** That's my connection into it. And over the last few years with Continuum, you get to meet a lot of people, very nice people.

**Fremer:** At the upper echelons of the business because of the product that you're making.

**Murugasu:** Sure, sure. And it has been an excellent time. So I would say the best way to describe how this team came together was that it was fortunate meetings and introductions through a variety of people that said to me, "Okay, if you are looking for somebody amazing..." Now, the minute they had mentioned Peter Madnick's name –

**Fremer:** Let's talk about the team and then we can talk about how they came into connecting with you.

**Murugasu:** So it's a vast team of people we have. It's headed by Peter Madnick. Peter, as you know, made his name many, many years ago with a number of companies like Dennesen and Audio Alchemy. He's one of the old doyens of US audio.

**Fremer:** And I think most of the people who will be reading this know him from Audio Alchemy, where he designed very innovative equipment but at a price point, trying to keep things – he was the first one to implement I2S digital connectivity and that DTI Pro32, that up-converting outboard digital processor. I mean, all of these products were done at a reasonable price point and were very innovative.

**Murugasu:** We said to him that this was going to be a project where he'd be allowed to express himself with-

out concern, within reason, to the financial aspect of what he was doing, and he was immediately interested. I remember one of the first discussions I had with Peter. I was in New York and I'd called him and spoke to him and he said to me, "Gosh, I've had designs that I've never implemented. They've been in my head for years, and more importantly the parts that are required to make these successful and this could be something we could look at." He asked me then what we were looking for, so I gave him a rundown and he said, "Okay."

**Fremer:** In terms of people or in terms of products?

**Murugasu:** No, in terms of products. In terms of not just products, but what we expected out of those products, because we had very set ideas of how we thought those products should come across.

**Fremer:** Wait a minute, that's another question. You two sat down and made a list, or made lists, or had like sessions where you rammed heads and –

**Murugasu:** David and I had discussed various things. David calls me "a fine schmecker" ["schmecker" is Yiddish for "smeller" or "sniffer"].

**Payes:** It's a pejorative term [said with a sarcastic glint].

**Murugasu:** A pejorative term. He means it well. At least I take it that way. And he trusted me to apply that philosophy to this thing, because I've always been very particular about how something should be, whatever it is in life, I think. And we used that idea in terms of the product.

**Fremer:** Do you want to talk about the lines that you've been involved with in Australia? No? Okay.

**Murugasu:** I'd rather not because I think that from a –  
**Payes:** It's high quality.

**Murugasu:** Yes, very high.

**Payes:** Let me answer that, because when I sat down with Murali and discussed what our approach should be, we both leveraged not only our own knowledge in the industry but we also had experience with Continuum. We were able to meet through our travels some of the best people in the industry, and we recognized and supported other designers and manufacturers of

high-end equipment. So we had an understanding of what was available out there, what worked, what didn't, and what's required, and we thought at the end of the day that a lot of great products stem from the genius of one designer, usually. And that designer could be a brilliant engineer. It could be a hobbyist who tweaks and comes up with a great product, and it's a single product, single design and a business develops from there. And we took the approach we applied with Continuum. Let's search for the team, and again not an individual. It's all about the team. So we'll have Peter, maybe the initial lead designer; there was a whole team all contributing equal amounts or different amounts – different amounts of their talent.

**Fremer:** And did Peter procure the other people and bring the names to you?

**Payes:** He was the team leader.

**Murugasu:** Yes, in a sense. That's exactly right. There's always been a team approach, and it's the

background I come from, David comes from in other businesses, and that's how it is. So yes, what I asked Peter was, "What are your strengths, what are your weaknesses? What do you think you can do well? And the marvelous thing about that man was with everything that is achieved he is very forthright. He said to me, "I think we can do this, this, and this. I've got the guys to do the software, I've got the guys to do this part of it, but I think we need to look at that." And then he said, "What are you looking for?" and I told him. So we looked at the variety of people available. We looked at a DAC. When it came to a DAC, this is for the SACD player, David and I thought it would be great, and the other chap [investor number three], to have our own discreet DAC. Because we didn't want to buy something off the shelf –

**Fremer:** And stick it in a nice box.

**Murugasu:** No, exactly. We wanted this product to be something special from the bottom up, all the way.