

# 11 QUESTIONS WITH **Michele Noselli**

**Co-owner and Board Member, Director of Communications - Outline**

**Founded by Guido Noselli in 1973, Outline - Italian manufacturer of high-end Loudspeaker Systems for the Concert and Installation industry, continues to be a privately-owned company. Outline products are still 100% manufactured in Italy and sold via an international network of over 65 distributors. As Outline approaches 50 years in this business, PT caught up with **Michele Noselli**, Co-owner and Director of Communications at Outline to talk about the company philosophy, R&D process, products and more.**

## **Since its inception, what has been Outline's core management and production philosophy?**

A lot of people probably don't know that Outline was launched as a manufacturer of particularly ambitious electronic products. They therefore had to be really unusual. That was back in the early seventies. High-performance loudspeaker systems were introduced several years later and are now our core business. In fact, founder Guido Noselli intended the name "Outline" to mean precisely the conception, design and construction of "special" equipment. We're just a few years from the 50th anniversary of our foundation and it seems to us that the original mission has always been respected!

## **What are the advantages of being in a family owned business?**

That's an interesting question. More "experience" would be required to answer in detail: nobody's ever asked this before! One advantage consists in the very fact of feeling "one of the family", even at work. As well as my brother Stefano, I'd also include Giorgio (Biffi), our father's historical partner. This doesn't mean that it's always been plain sailing, but, as in the "best of families", we try to exploit our differences – which there are, and fortunately turn them into even better results for all concerned.

## **An important learning that has been passed on to you by your father Guido Noselli**

As happens with whoever forges his own



"creature", Guido was the 'mind' and 'soul' of Outline. From a human point of view, he represented an example of day-to-day passion, devotion and sacrifice; perseverance and tenacity in the difficult moments, when, in spite of the effort, results weren't forthcoming. How could we say he was wrong?

## **Are there any concrete changes in how the company is run today, after Mr. Noselli passed away?**

Making decisions now requires a more "collective" process, whereas Guido Noselli decided entirely on his own. Nowadays, several briefings between the management team and the R&D department are required to develop a new product or technology. The advantage is that the final decision passes through several "souls" with very different sensibility. Here again, this isn't necessarily always an advantage (it takes longer), but at the moment it seems the best possible system.

## **Tell us about the R&D process at Outline and how much would you say Outline employs "state-of-the art design" in its products?**

Every single Outline device is an expression of strictly Italian-made products, as well as our desire to study and apply the most avant-garde and, wherever possible, 'stylish' technical solutions. All this while always remaining true to our original mission.

## **Would you say that Superfly is a new improved version of Butterfly or GTO?**

According to our R&D intent, Superfly represents the evolution of the state of the

art. Perhaps this seems rather high-flown, but describing it as merely the evolution of the Butterfly is very reductive: it's not just a case of 'Butterfly 2 – the Revenge'. Superfly is the response to the current need to go beyond the state of the art with a product featuring a considerable series of 'extras'. More 'punch' (real LF extension below 50 Hz), more power, more lightness (compared with the objectively phenomenal performance), more saving (considering overall economy, i.e. with Superfly you travel with less weight and less bulk, but can do big events, as has already been demonstrated). There's a bigger return on investment...and very fast!

## **How is Newton superior or different from other multi-source audio processors? And who are your main target customers for Newton?**

Newton is the 'multi-tool' of audio processors. We often use this slogan to facilitate the understanding of this device and its characteristics (even for us non-engineers!). Its main merit is therefore that of being able to meet multiple requirements, even in contexts full of unexpected events, even the trickiest ones.

Backed by the support of several authoritative FOH and System Engineers who pooled their experiences and difficulties, Newton – our R&D team tells me - tried to respond to all the situations involving possible hitches: having to connect a console at the last minute, having to provide a clock for a video control set-up at very short notice, correcting equalization or replacing a digital console in an emergency.

All this was achieved without foregoing the fundamental requirements of reliability and quality, both top grade, as has been demonstrated technically in the field and with measurement instruments.

The various audio interfaces are always available simultaneously and don't require intermediate procedure and on-site pre-assembly or modification work which can sometimes be demanding from a logistic point of view.

All the clocks are always available and the backup strategies ensure worry-free signal availability.

The software required many hours of development work to ensure operating speed and reliability. In spite of the device's complexity and the multitude of signals to be handled, feedback from operators confirms it is an easy and fast device to use. The learning curve is so rapid that sometimes no explanations are necessary.

The measurements carried out by extremely authoritative third parties confirmed the device's quality and, to date, there is at present nothing on the market that compares with the resolution of the raised cosine filters (check out the dedicated Web site: [newton.outline.it](http://newton.outline.it)).

The fact that it is currently used at festivals with multi-consoles set-ups (e.g. Coachella in California) is proof of the product's reliability and the fact that it is recognized all round as a bridge between digital consoles and loudspeaker systems.

#### **Do you feel that Newton is a major milestone in the history of Outline, just like the Butterfly line array?**

It definitely is. As was the case with Butterfly, conceived in the early 2000s (it had several patents) and then given its 'baptism of fire' by legendary rental company Britannia Row Productions, Newton now sets new rules in the signal processing management world. For some time it has already had various top-grade users in the sector worldwide for some time (United States, UK, Europe and Australasia). Two international patent applications have been filed for Newton and on its exclusive on-board zero-latency WFIR (Warped Finite Impulse Response) EQ filters.

#### **What's next after Newton? I believe Outline showcased a raft of new products at ISE and PL+S 2019.**

The reply to this question implies in-depth technical info, so comes entirely from our R&D department.

Newton is, above all a technological platform, which features the FPGA (Field Programmable Gate Array) as the core element for everything regarding real-time activity and Linux as far as everything regarding its interfacing with the outside world is concerned. It is therefore part of its very nature the fact that it is ready for future developments, in all directions (and I'd like to stress 'all directions'). The market has already shown how FPGA has a greater margin for development than DSP, above all because it is able to integrate various functions that normally require dedicated physical components (and their

obsolescence therefore has to be taken into consideration).

At the same time, Linux is constantly developing and expanding (it is increasing used on the IoT market), to meet various control necessities.

The simultaneous presence of several interfaces (analogue, digital and distributed audio) has also enabled to develop the necessary know-how to handle each of them and thus potentially think of a series of 'baby' products compared to Newton. Newton has earned itself an exclusive role in audio management at festivals, when there are multi-console set-ups, but its sophisticated management of clocks and backup strategy is also ideally suited to fixed installation contexts, where reliability and quality are essential requisites.

The choice of control software development is also of great importance. The choice didn't fall on frameworks that are all the rage in the Web application world, but with greater awareness (In 2008, Outline's 'iMode' proprietary technology already had an integrated web application for control, so it was possible to monitor this technology's evolution through time), knowledge was acquired for using the native development environments that parent companies release.

This means ensuring the product's life cycle, not only for a couple of years (the average life

of some Web technology, due to the purchase of company takeovers and political strategies), but for a much longer period of time.

So Outline Dashboard, which is the control software of the system and not only of Newton, was developed with Xcode, the native instrument provided by Apple, which ensures performance unobtainable with other instruments and a guarantee regarding future developments.

In short, Newton is the "welcome" mat on a doorway, beyond which, as is the tradition with Outline, there's a whole world still to be discovered.

#### **In India, in which segment (fixed install or rental) have you seen**

#### **most potential for Outline products?**

After discussions with our distributor, Mr. Gaurav Malvai, Global Pro-Audio Management's Director, and considering the vast range of products in the Outline catalogue, we believe both sectors offer great potential on the Indian market.

#### **Do you think that India is a price sensitive market? And what are your short and long-term goals for the India market?**

According to our information, India has become a very price-sensitive market. We are working on a long-term goal by maintaining the brand's premium image and positioning it towards the right target audience. On a short-term basis we've just introduced the brand-new Ki-Series, an application-flexible compact loudspeaker concept designed for a broad range of installed applications. The price:quality ratio is excellent, despite the fact that the products are manufactured entirely in Italy. Both Ki-Series' models (Ki10 and Ki12) also feature another Outline first, a rotatable waveguide with a brand-new design. Many comparable loudspeakers offer this facility but Outline's Ki-series are the first to allow the installer to quickly and easily rotate the entire horn and HF section without any disassembly of the loudspeaker.