

SOUND REINFORCEMENT

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TENTH ANNIVERSARY MARKS SPEAKER PIONEER'S ACHIEVEMENT OF HARMONIOUS BALANCE - IN SOUND, BUSINESS AND LIFE

Saucerful of secrets



Resolution 5 is currently on tour with Jamiroquai

UK - Tony Andrews calls it "joining in" when he describes his first association with bands - The Pink Fairies and Hawkwind - at the Isle Of Wight Festival in 1970, and it's a suitably gleeful phrase. This was the 'free' festival, outside, the one protesting against actually paying to listen to live music, the one that disrupted the official festival considerably.

He's been defying convention ever since. Now in the midst of a major world tour by Jamiroquai - debuting the Res 9 speaker and showcasing what Andrews nominates as the next evolutionary step, after a 12-year gap, from Flashlight - Andrews and his 10-year old company Funktion One are shaking the earth once more.

Back in the late '60s, Andrews was immediately drawn to the speaker systems, "merely to find out how to get better, stronger, clearer sound," he says. "Some guys get off on tuning engines; I get off on tuning sound."

Wharfedale was a prominent speaker brand, to which Andrews would add enclosures and elec-

you could get from bass."

The standard of the day was set by Charlie Watkins' 4x 12 'WEM' columns, a default time-aligned line array system - by being, as Andrews points out, only one drive unit for the entire frequency range. Dispersion was around 90° x 50°, and it was common practice to have two or four columns per side.

Horn-loading was known from American brands such as JBL, but Andrews favoured Vitavox as a supplier of "pretty hefty compression drivers". His reputation was quickly established and the first cabinets constituted the inventory of his rental company, Peace Sounds - later to evolve into Sonic Trucking and, finally, Turbosound.

Prevailing cultural winds took Andrews to the first Glastonbury in 1971, where atoms, hearts and mothers mingled freely. "It was all going off and it was marvellous," he still recalls. "In fact, eight years later I persuaded Michael Eavis to bring it back as an annual event. The following year we built the Pyramid Stage."

This was a welcome upgrade

"Some guys get off on tuning engines; I get off on tuning sound." Tony Andrews

tronics. "Then we pointed one at the corner of the room and there was all this extra bass, so we became acquainted with horn-loading and that was the start of the whole thing.

"We decided to reverse the inside of the corner so that it actually looked at the speaker, and built a 2x 18-inch enclosure having discovered Goodmans 18-inch speakers by then. We tried it out with the bass player from The Graham Bond Organisation, and it took the plaster off the ceiling.

"I suppose that was my first understanding of how much power

from the previous year, when a balloon structure guided every down-pour onto each drummer's head with unerring accuracy. But by this time Turbosound had entered the PA premier league and Andrews began to consider manufacturing as the next logical step.

The Festival system duly evolved into the TMS3, a more integrated product with wider dispersion - used first by Iron Maiden. Meanwhile, a successful debut at The Savoy Club in New York established the brand in the US, and a serious manufacturing concern took off.

Turbosound itself had been formed in 1977 with Steve Hillage's engineer John Newsham and Tim Isaac, now at ATC. Isaac was BBC-standard, made amplifiers and was "good with accountants and lawyers," says Andrews. The 25-year partnership with Newsham thrives today at Funktion One.

"Tim and I had both been experimenting with cone mid-range, and we were both concerned with stereo image. After building the rig for Glastonbury '79, we divided it up and put several rigs on the road but they didn't sound good in confined spaces. It was enough to split up the team, although pretty soon after I was able to isolate and fix the problem.

"As it turned out, it hadn't been caused by my designs - although I took a lot of the blame at the time. But that's life, I know..."

As corporate biceps grew, Precision Devices was established and at the end of the decade, a new high-Q touring system,



Tony Andrews and Funktion One are shaking the earth once more

Flashlight, set standards soaring. But Andrews grew disenchanted, as greater control of the company passed to a new management consortium, Edge Technology.

"The company was eventually sold to AKG," he says, "and I thought more was to come so I decided to leave. Sure enough, the next thing was that Harman acquired the whole group!

"My motivation has always been that the better it sounded, the better I felt. In business I've always needed a partner, even though I trust my every instinct with the products, and that's where it has gone wrong. Then, of course, I met Ann."

Ann Andrews, as she became, was a lawyer who presided over several key legal transactions for Tony Andrews and his team. She now provides the business dimension that makes Funktion One, finally, the precise combination of acumen, trust and unity that had perhaps always been missing.

The company was set up in 1992, immediately capitalising on research close to Andrews' heart. It was during this era that he was gripped by a cultural revolution to match the one that had started it



Funktion One's system engineer
John Newsham

fly the enclosures."

Commissioned to supply loudspeakers for the Millennium Dome, Funktion One built on that experience by adapting these models for touring. They were lightweight, high intensity systems optimised for installation, but Andrews was keen to return to his roots in live sound.

"This meant making them as small and light as possible, with as much clean and accurate sound as possible, coupled to a fast and easy flying system," he says. The outcome was Resolution 5, the system currently on tour with Jamiroquai.

Today the infrastructure of Funktion One is expanding rapidly, with David Bruml joining as sales and marketing manager and the

piecing together of a worldwide distributor network. For all the changes, a fundamentally holistic approach has underpinned Andrews' work all along. And facts, from one era to another, have failed to impress.

"It's always been horn-loaded, for me. There's such a greater conversion of electrical input to actual acoustic pressure than with direct radiators. Direct radiators equate to 101dB per watt, which is about 5% efficiency. People don't think much of petrol engines at 30% efficiency..."

"Horn-loading averagely gives you 20%-30%. The 8-inch in our latest hi-mid averages at 111dB per watt, which is effectively 10 times louder for the same level of

signal. It's fundamental."

It also conforms to Funktion One's egalitarian ethics, in which conservation of energy figures prominently. There is also the complementary principle of maximising the resources you have – a natural trait in horns, according to Andrews.

"They transform the impedance mis-match between a moving diaphragm and the air – the air not usually paying any attention most of the time. A horn makes the speaker grip the air much tighter. As a natural result, the wave is stronger."

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PHIL WARD

SOUND REINFORCEMENT

German debut

Funktion One is exhibiting at ProLight & Sound in Frankfurt for the first time. As well as manning stand H22 in Hall 4.1, Andrews and his team are mounting regular presentations in the 'Goodwill' demo room, also Hall 4.1.

all, as dance music seized hold. For him, it was not just an outlet for superb bass response: the artistic prerogatives of a stage-less, starless arena for celebration in sound and light were perfect.

"I was well into funk, so dance music just fell into place completely. No band, no ego – just the speakers and the people. It was a fantastic era, and the best thing I'd felt since the late '60s."

An old friend of techno pioneers Underworld, Andrews developed with them Experimental

"My motivation has always been that the better it sounded, the better I felt."

Tony Andrews

Soundfield – a brief co-production exploring the bio-feedback possibilities of surround sound. But cutting through the party atmosphere there was, and is, an agenda at Funktion One of the utmost seriousness.

"There was me, John Newsham, Toby Hunt and Yann Favret," Andrews recalls, "and our objective was to exceed where we had been before with loudspeakers. Our initial focus was on developing a medium dispersion version of the Flashlight, which became the Floodlight, featuring the beginnings of our Axhead technology."

"We then went on to investigate in great depth, and without outside pressure, many avenues of speaker design and configuration, enclosure construction, crossover set-ups, amplifier technology and flying systems."

"After about four or five years – combined with a little windsurfing and house music now and then – we had the elements of an entire new range of products." Eventually, Resolution was suggested as the name of the product range. "We all liked it, because we're all into high resolution sound," says Andrews: "Furthermore, it also means the resolution of 30 years' work, and the addressing of all the earlier issues – right down to needing no tools or separate parts to

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