



"At which point, the Committee for Suitably Named Applications immediately bestowed its 2009 Blue Ribbon for the use of something called Constellation on a show about Star Wars."

MONITORING? USE THE FORCE

How very ironic. For years I've been an apologist for hi-tech music production, on stage and in the studio, in the face of frankly Luddite objections from those who think the only good sound wave is a naturally occurring acoustic sound wave. An electro-acoustic sound wave is - well, cheating.

Never mind computers. For them, electricity is a bad idea. It follows that all live performance should be acoustic, and sound reinforcement should at least be heavily taxed. By a strange double standard, all recorded music should be a live take with

Phil Ward's audio musings . . .

This month, sound reinforcement for *Star Wars: A Musical Journey* . . .

none of that overdubbing lark, played 'properly' with no sequencing, overlooking the inconvenient truth that the apparatus that brings the recording to their ears is as artificial as 'I Can't Believe It's Not Butter'.

In pointing out the existential difference between live and recorded music, I've frequently suggested that if there were a theatrical version of *Star Wars*, you wouldn't expect the original cast to leap around the stage faithfully reproducing every movement, tableau and sound effect just as it is in the films. They'd need some help, like today's pop and techno artists do, because audiences demand fidelity - not to some imaginary acoustic source, but to the whole electro-magnetic edifice of the product.

I even said, for that reason, *Star Wars* could never be done on stage. So when I discovered that, over Easter, the O2 Arena in London was to stage something called *Star Wars: A Musical Journey*, I realised I was in for a five-course, Michelin-starred banquet of my own words. Fortunately, the reality of it proved the same point in a different way: that a theatrical presentation of *Star Wars* would inevitably have to be something entirely different. And so it was: here was a production in which the Royal Philharmonic Orchestra light-sabred its way through a suite of John Williams' scores with a couple of multimedia accoutrements: a live narration by actor Anthony Daniels, who played chippy android C-3PO in the films, and an extraordinarily vivid screening of original scenes in gigantic arena style.

These had been cut into themed sections to accompany the music - not the other way round, note - creating an orchestral concert for the

masses in a cavernous venue. The notion of trying this without sound reinforcement is of course ridiculous, but sound designer Fred Vogler and his battery of kit from Meyer Sound, DiGiCo and several different microphone brands managed to fill the entire space - 30m straight up, at its highest - with an organic orchestral and choral sound sometimes approaching 114dB.

Vogler corralled 140 channels into a DiGiCo SD7, wherein every nuance of a symphony orchestra was particle-accelerated to two enormous Milo hangs with 700HP subs immediately behind them, plus in-fills. The dynamic presence of the musicians, sans click track and following conductor Dirk Brosse in the traditional way, was communicated entirely differently to, say, listening to the recorded soundtrack in a cinema, even with surround sound. Indeed, the occasional clips of genuine dialogue (most of the images are projected silently, a vision-only adjunct to the orchestra) sounded metallic and harsh by comparison.

Equally impressive was the satisfied reaction of the players, who arguably had a better sonic image of themselves than when playing acoustically in a hushed recital venue. This was thanks to a pioneering use of Meyer's Constellation Electroacoustic Architecture system in the stage 'monitoring' - I use inverted commas because John Pellowe, in his post-Pavarotti role at Meyer Sound Artist Relations, doesn't think of it as monitoring in the normal way at all. A multi-purpose reverberation and early reflection generator, Constellation had been adapted to tune the early reflections around each player using 10 overhead loudspeakers, 16 more surrounding the ensemble and eight subs.

The PA's mic sources were looped pre-fade into the Constellation DSP, which created what Meyer calls 'de-correlated' channels, that were then output to the 34 speakers. De-correlated is different from a 34-channel monitor mix: every single channel is discrete and independently calibrated, reducing low-frequency build up and other phase coherence issues. At which point, the Committee for Suitably Named Applications immediately bestowed its 2009 Blue Ribbon for the use of something called Constellation on a show about *Star Wars*.

Pellowe should know a thing or two about breaking down the barriers of orchestral sound reinforcement. During nearly 25 years with the legendary Italian tenor, he ushered in effective audio support at ever-bigger concerts, often in the face of purist opposition. Vogler has blazed a similar trail, and the meeting of minds at this gig may well have set a new standard for the future of what Meyer Sound's Technical Services engineer Miguel Lourtie calls 'Hollywood classical'.

***Star Wars* is a modern cult.** The audience whoops, cheers and sighs in recognition of specific characters and events, helping along a rather impressionistic narrative that would make little sense to the uninitiated, and adding to my impression that the screen was a bit like an electronic altarpiece. But that's the point. This is a 20,000 capacity venue that was about 75% to 80% full, for two nights. The plan is to tour the production around Europe, no doubt a testing ground for potential US promotions, and I can't see any reason why these rebel forces of hi-tech chamber music shouldn't gather plenty of support along the way.