



Photo: Nobby Clark

Rob Halliday looks at the production behind London's latest staging of Joan Littlewood's satirical First World War musical...

UK - I'm reasonably confident that if you dropped me blindfolded into any theatre sound-check, I could identify the sound designer just from the music being played. Each has a favourite test track, a sonic signature that, if you work with a particular designer a lot, you become intimately familiar with.

I've worked with sound designer Mike Walker a lot, and I've never heard his track sound quite like it did at the Theatre Royal Stratford East last month, played through his *Oh What A Lovely War* sound rig. There was somehow just more to it than before - more detail, more depth, more information. Or maybe just less missing information. Sure, the theatre was one I didn't know, but the speakers were the same, a selection from the ribbon-tweeter Opus range, and the setup was still clearly the same neutral, open balance the designer always strives for. The biggest difference was the heart of the system: the first theatrical appearance of Cadac's digital CDC-8 mixing desk.

This is quite a shift for Mike Walker, who has been resolutely holding out against the rise of digital for years now. Mike's never struck me as a technophobe - I think he genuinely believes that his job is to present an audience with the highest quality audio properly, and that the best tool for achieving that has been high quality analogue, as personified by the big old Cadac consoles.

The big grin on his face at Stratford suggests that belief has now changed, something he's happy to confirm. "What Cadac have achieved is remarkable. Until now none of the digital desks I've listened to has matched the openness of the big analogue Cadacs, but this is in an entirely different league. You start to hear things you've never heard before, things you

never though you could hear, like differences caused by running the desk from different types of mains cable. It is quite astonishing."

The naysayers will argue that numbers are numbers and so one digital desk should be the match of another, as they always do when the conversation turns to high-quality audio. But 'digital desk' really means 'software controlled audio', and not all software is the same. Mike attributes much of the success to the care Cadac has taken in the time domain: the desk's digital latency is consistent regardless of how hard its 128 channels (all stereo, if required) are working. Clearly, Cadac's software team have been busy since the company's near-death experience a few years ago.

It looks glorious, too - a makeover that is clearly digital while maintaining Cadac's traditional feel: there's still a wooden armrest in front of the faders! But instead of rows of tiny pots there are now 112 of them wrapped around two enormous 24" touchscreens. The interface this presents is extremely elegant, Cadac unafraid to leave the displays largely blank at times so the operator can focus on just the key information they need. When using the faders as VCAs, for example, the screen above a fader shows a mini-meter for each channel controlled by that VCA, making it easy to spot issues even without the traditional Cadac meter by each fader. There's also a touch of the iPad about things: to change channel pages you just swipe the screen rather than having to find a page button.

Though the sound team used local MADI interface racks and AES cards in the console frame itself front-of-house to bring in audio from the MADI-equipped QLab sound effect system and the Lexicon PM96 reverbs, the principal interface to the outside world is via an external I/O rack; in Stratford this is located backstage next to the radio mic racks. These were also digital - Sennheiser's 9000 series, with 12 active EM9046 receiver/SK9000

Oh What A Lovely War gets a digital makeover



Cadac's digital CDC-8 mixing desk.

transmitter pairs. Walker first used these last summer at the Royal Academy of Music and was impressed then. "The 9000s just sounded so much better than even the best analogue radios. I think this is partly because they're doing less work compressing and uncompressing the audio; they just sound much fuller, as if a veil had been removed. With the Cadac, which sounds like several veils have been removed, the result is that everything just sounds so much more natural."

Twin (main and backup) BNC cables link to the mix position, squeezed into the back row of the stalls in a space so tight the operator has to hug the console as the audience enters. For *Oh What A Lovely War* that operator was the theatre's head of electrics Kyle Macpherson. Both he and Walker admitted to having had quite a learning curve, the designer explaining that "the struggle is it's very obvious if you're not dead-on with your levels. You also have to be very gentle with what you're doing. It feels like there's less need to make fader movements, perhaps because you're no longer fighting the compressors in analogue radio mics. If the performer wants to build a dynamic, it feels like you can just let them do that and the system will deal with it cleanly."

Mike's ambition has always been to make shows sound completely natural, and this is clearly an exciting new set of tools to help deliver that goal. The irony being, of course, that when it all works well it can leave people questioning what all of this expensive technology is actually doing. Sitting in the show you could imagine there was no amplification at work at all. Fortunately, for Mike Walker there's really no higher complement.

> www.cadac-sound.com
> www.sennheiser.com

The Rest Of The Production

Oh What A Lovely War was first performed at the Theatre Royal Stratford East in 1963. Devised by Joan Littlewood and her Theatre Workshop company to tell the story of the First World War, the show became legendary for the way in which it simultaneously commemorated the countless thousands lost while skewering the establishment who'd profited from the conflict - all in a satirical show disguised as a gentle end-of-pier music-hall entertainment.

The new production brought the show back to its original home to mark both the centenary of Littlewood herself and the hundredth anniversary of the start of the War. The show has been done countless times in-between, of course, but bringing it home clearly added a little extra pressure, especially since one of the original cast, Murray Melvin, still works as the theatre's archivist. History and nostalgia also helped with some recruiting, though - production manager Richard Bullimore, for example, usually found on much bigger productions than this, started his career as an ASM at the theatre - though, he's quick to point out, after Joan Littlewood's time!

For 2013, director Terry Johnson recruited designer Lez Brotherston, lighting designer Paul Pyant, projection designer Ian William Galloway and sound designer Mike Walker. The first question all faced was whether to radically reinvent the show. They decided not; the pierrot performers seemed too deeply embedded in the script, and Brotherston's costumes and stripped-back design, complete with a news-ticker sign that conveys the gruesome facts of the War, are clearly an homage to John Bury's original - albeit, in the case of projection and sign, achieved with 21st century technology, video and LEDs, rather than the slide projectors and ticker-tape-driven mercury contacts and lightbulbs of the original.



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Brotherston has been unafraid to leave much of Stratford's enormously deep stage empty. At the front he has created skeletal metal proscenium arches within the theatre's own, reflecting that there is a show within the show; these pivot in when the action needs to be contained downstage.

A projection screen can fly in between them to seal off the upstage, and the LED sign, doing a good impersonation of the original, appears in front of that when needed. The cast are also unafraid to break through the proscenium into Stratford's tightly-focused auditorium.

Paul Pyant then brings the space to life using a selection of gear that just about spans the history of the show itself, from the tiny Martin MAC Aura LED washlights he fell in love with on *Charlie and the Chocolate Factory*, here again dotted around the pros area, to VL3500 Spots and Martin Atomic strobes, right back to the Strand Patt 264s that are still in Stratford's house stock; White Light supplied the modern gear. The transformations he conjures from this rig are astonishing, from bright music-hall colours to a crisp blue that transforms soldiers into corpses to a single enormous backlight from a VL3500 high in the grid, fitted with a wonderful leftover textured gobo from *The Woman in White* that creates the desolate wasteland on which the opposing soldiers meet on Christmas Day. Generous as always, Pyant credits in particular production electrician Liam Cleary, Eos programmer Jess Glaisher and DSM Alison Pottinger for their work alongside him.

Behind the theatrical stylisation of the performers, it is Galloway's projections which reveal the true horrors of the true war. Some of the material dates back to the original production, some has been newly sourced, all of it is shocking - Paul Pyant confessing that some of it was finally deemed too gruesome and cut from the show. Technology, supplied by XL Video, now allows moving images rather than just the slides of the original, but it is never over-used.

Oh What A Lovely War played to packed houses through its Stratford run; a West End transfer had been anticipated, though the untimely death of the show's co-producer Christopher Malcolm as the show's glowing reviews were appearing may now, sadly, have put that on hold.