



Jon Astley

His time in mastering has seen some of the most incredible classic albums pass through his hands, yet Jon Astley remains an enthusiast as well as a craftsman. **NIGEL JOPSON** quizzes him on his work on the 5.1 of The Who's Tommy.

JON ASTLEY IS A PRODUCTION pro with an impressive pedigree: joining Olympic Studios in the early 1970s, he worked as assistant to Glyn Johns with The Eagles, Eric Clapton and David Bowie. He went on to produce The Who's *Who Are You* and Clapton's live album *Just One Night*. In the 1980s Jon had two number 1 records in the US with Canadian artist Corey Hart, whose first two albums he co-produced. Astley went on to work with Michael Bolton, Roger Daltrey, Diesel Park West, Debbie Harry, Marilyn Martin, Paul Rogers, Pete Townshend and Teenage Fanclub. He even found time to become an artist himself releasing two albums on Atlantic (*Everyone Loves the Pilot* in 1987 and *Compleat Angler* in 1988).

Since 1996 Jon has concentrated on mastering work, specialising in remastering — winning an award for his work with Led Zeppelin — and has rapidly built a reputation as the man to visit for 5.1 and SACD. Jon works from his waterfront home in Twickenham, with the mastering equipment and PMC LB1 surround monitors laid out in a surprisingly compact, untreated room overlooking the river Thames.

What encouraged you to make the move from recording and producing to mastering?

I'd always been into machines, I bought Fairlights, I was doing a lot of programming, fixing vocals and so on. The Who came to me in 1995 — I'd been working with them on and off since 1978 — and asked me if I'd be interested in remastering all their catalogue on Polydor and MCA. I didn't have a mastering room then, but I was already mixing into SADiE, taking it with me to master projects from. When I was sitting next to Bob Ludwig (he mastered a lot of my 1980s productions) I'd always be asking technical questions, he let me hang around to see how he worked and what he was using. I wanted premises initially, but after I set up at home I was loathe to move out. My wife is a writer, so mastering 14 Judas Priest albums was pushing it a bit...

How did the project to remix The Who's Tommy in 5.1 take shape?

Pete Townshend has a 5.1 equipped room at Oceanic (Eel Pie) Studios. Pete mixed *The Overture* for surround, called in Elliot Mazer and myself and said



'What do you think?' We said it sounded fantastic so he mixed the whole of the album, I put it on a DVD-A here, we sent it to the label and some other people, got some input, then started all over again!

It was getting feedback about placement — was he being too extreme, putting guitars in the back speakers — that sort of thing. Elliot brought the Neal Young 5.1 with him to demonstrate. Pete was encouraged, we said: 'There are no rules, do what you think sounds good.' When he first put the 8-track 1-inch up, Pete couldn't believe how great the bass and drums sounded compared to the result on the LP, so initially he set it out to be a sort of tribute to Keith and John because the playing is just so great.

The Who were so late in delivering the original Tommy that Kit Lambert was left in the studio to finish mixing it while they went on the road. It's Kit's mix on the vinyl LP, and it was Kit's mix that Andy Macpherson and I emulated when we remixed it in stereo in 1995 — the reason we did that was because no one could find the masters.

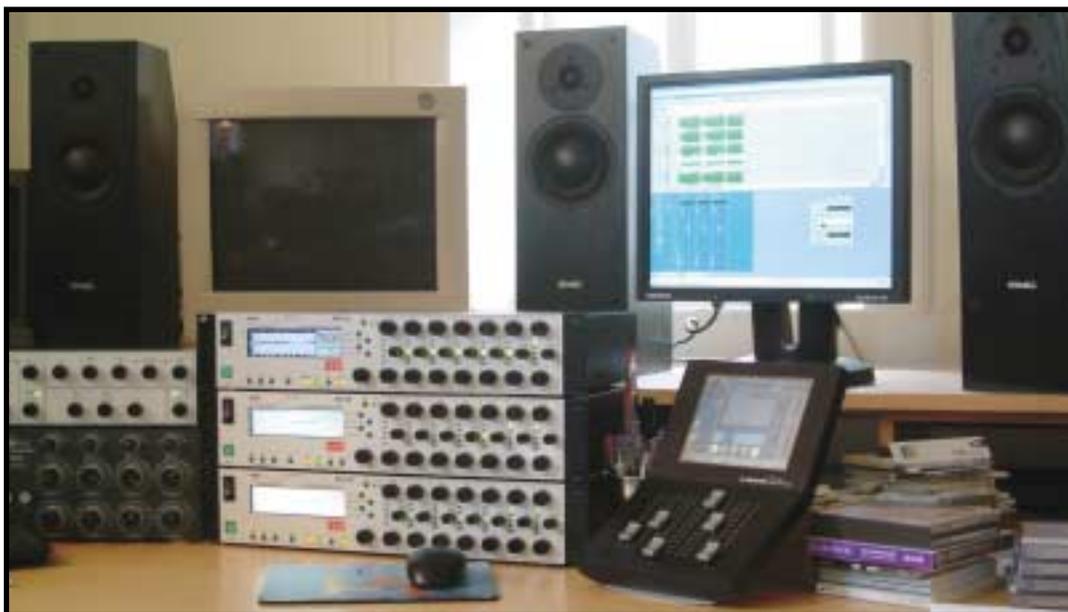
This must be the moment for you to reveal to Resolution readers the truth behind the long running rumours of missing Tommy master tapes!

When I was asked to remaster the Who catalogue, I couldn't find any Tommy masters at all in the MCA (Universal) vaults. I asked Pete if he had an idea where the tapes were and he said 'Oh, Kit Lambert burnt them. When he finished mastering it in LA in 1969, Kit set fire to it in a waste paper basket.' This was a story that has been elaborated on and blown up out of all proportion. More recently I was after a very good copy of *Pinball Wizard* for The Ultimate Who collection, I asked a different guy at the vault, and he sent me a DSD copy. It sounded fantastic so I asked where it came from and they said 'Um, er — we think it might be the master reel' ... so now I have them here with me!

Universal suggested we use the originals for the SACD stereo layer — I thought that would be nice. So the original master is heard in high resolution for the very first time. I used the new SADiE EQ to tweak it a bit, and I played the tape back on an analogue machine at Metropolis that I'm particularly fond of.

What system was used to mix Tommy for 5.1?

All the mixing was done by Pete Townshend in Pro Tools HD at 192k. I considered transferring the 192 files to my SADiE and then doing an internal conversion, then we thought about what we were listening to in the control room and Pete said 'What we are listening to now is the way I want it to sound.' He'd mixed everything to the sound of his D-A converters. So I went home, picked up the Prism, Genex recorder plus a hard drive, and did two sets of (analogue) transfers. I did one at 24/96, we played it back and Pete said he couldn't hear any difference — it seemed slightly warmer to me. I did a flat DSD copy



at the same time. We treated the project as two separate ideas, the first for DVD Audio (which is only for release in America) and the SACD. It was great to do a DVD-A because the record company hadn't heard it and that gave them something to reference.

How do you view Pro Tools as a high-end audio system?

I'm not a big fan of Pro Tools. I think it acts as a wonderful tape machine and editing tool but I don't like the internal processing, it's not floating point, it just destroys audio as far as I'm concerned. At the moment I'm remixing *Quadrophenia* in 5.1 with Andy Macpherson, just for Pete to listen to and decide where he wants to go with it. We took some stuff out, used analogue processing and then went back in. When we were making the 24/96 demo DVD-A of Tommy, Pete tried an internal Pro Tools 192 to 96 conversion, which should be quite an easy mathematical thing to do. But all the air, all the very, very high frequencies disappeared from the mix. The SADiE internal processing is much better, if you convert a small piece of audio from 96 to DSD you certainly have time for a few cups of tea, but it does a fantastic job.

When you prepared the two different surround masters, which tools did you use in the digital audio chain for each format?

I used the Genex as my 'tape' machine, then I had a Sonoma mix page open, with possibly a little bit of EQ and compression if necessary, as a through to the SADiE DSD. Steve Penn from SADiE was sending me new stuff to try

like the Sony Oxford EQ, so when I got to the second Tommy SACD disk (previously unreleased versions and demos) I used the compressors and EQs in SADiE.

I do quite like the compressor and EQ in the Sonoma — just for little touches — I never use the brick-wall limiter, it sounds horrible and just clips everything. For the DVD-A I went from the Genex to three stereo Weiss EQ1s, then through a TC6000 (barely doing anything, perhaps a few dBs of limiting) to the SADiE. If I'm working in stereo I can bring analogue gear in and out at the push of a button with a custom Crookwood controller. I don't use analogue processing for 5.1 mastering because I think you get a little bit of smearing, a tiny bit of phasing, between the channels. With all digital gear clocked from the DCS it's a much more solid image.

What's your view of the toolset available for producing SACD masters?

The Sony Oxford EQ on the Sadie is very good, and the company's response to user feedback is great. As soon as I'd plugged up a compressor I noticed it wasn't working quite as it should, so I phoned them and the next day I received a little upgrade. Software EQ for DSD is great: the first time I worked in DSD I got hold of the top end and whacked it up and thought, this isn't working! I was so used to hearing the horrible things that EQ does to music, I couldn't focus on what was happening — it was like doing a double take — you get this very smooth, big, beautiful top end that I'd never heard before (in PCM anyway). There has been a tendency to cut SACDs rather flat, but with

Tommy I wanted to make something that was as punchy as the record I love. I used the original analogue stereo master, transferred to DSD, as a constant reference.

Tommy was one of the first concept albums, were there any issues in moulding the tracks together as a consistent entity?

Pete worked on it in the running order so he was aware of certain incoming tracks not having impact. 1921 always comes in on the original master as if the tape machine had dirty heads or something, it's always sounded very dull, so I rectified that. Christmas is a composite of two different takes on the 8-track, and I realised that the first half is slow compared to the second. This was easy to fix when we mixed to PCM, but when I did the Tommy SACD I didn't have DSD varispeed. So I sent it to Steve Penn at SADiE and asked him to change the speed by 1.5%, I think that's the very first time it's ever been done within DSD.

There were some very small bits on the SACD where I did have to come out into PCM and then go back again, mostly just for CEDAR work, one or two tails that were very noisy, and there were a few clunks and clicks. Halfway through *Pinball Wizard* there's always been a big clunk where the multitrack edit was — *Pinball Wizard* used to go back to the intro at the halfway point — you can hear it on Pete's demo, which is track 17 on the second SACD. CEDAR Retouch was very handy for that. Within SADiE I did a conversion down to PCM, did the CEDAR work on a tiny piece of audio, and then converted back to DSD and pasted it in (1 microsecond crossfade).

I can recall from my schooldays that a full blast of the complete Tommy opus lasted considerably longer than an hour, was it tricky to fit on one SACD disk?

I had a problem because it's 75 minutes, and at the time the program for writing SACD cutting masters in the SADiE would only run to 70 minutes. So I sent one to Sony, and they said it couldn't be done. I also sent one to Petra Schmidt at Philips, who said she could do it but it would mean rolling off some high end. I was just on the point of phoning the label to tell them we had to split the album when I thought I'd ask for the AIT back, just to check it. Listening to it, I thought I could hear a midrange thing that was slightly different, but I couldn't hear any top end gone at all. I phoned her and she said 'I'm sorry I had to roll the top end off.' I asked where from, she said: 'at 75kHz!'

So is surround sound a growth industry for music production?

The act of listening to 5.1 is actually a load of bollocks! You need a captive audience, and 90% of the time most people are doing something: if you are doing the washing up you can still put a stereo on and hear it properly. With 5.1 you have to just sit there and look at the wall for the best effect, so maybe the future is DVD-A, at least you can look at a few visuals!

Unless you are a hi-fi enthusiast or they fit them as standard in cars, I can't see the majority of people ever going out to buy a dedicated audio 5.1 system. What I do love about SACD is the stereo — which nobody seems to praise — I think it's a big, big step forward from CD sound. Although when I delivered Torri Amos's album to Sony in SACD stereo they said they didn't want it... they were only interested in 5.1... but it sounded fantastic! ■

