

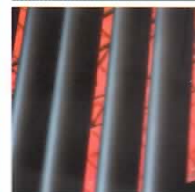
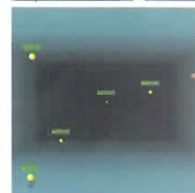
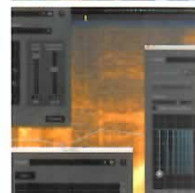
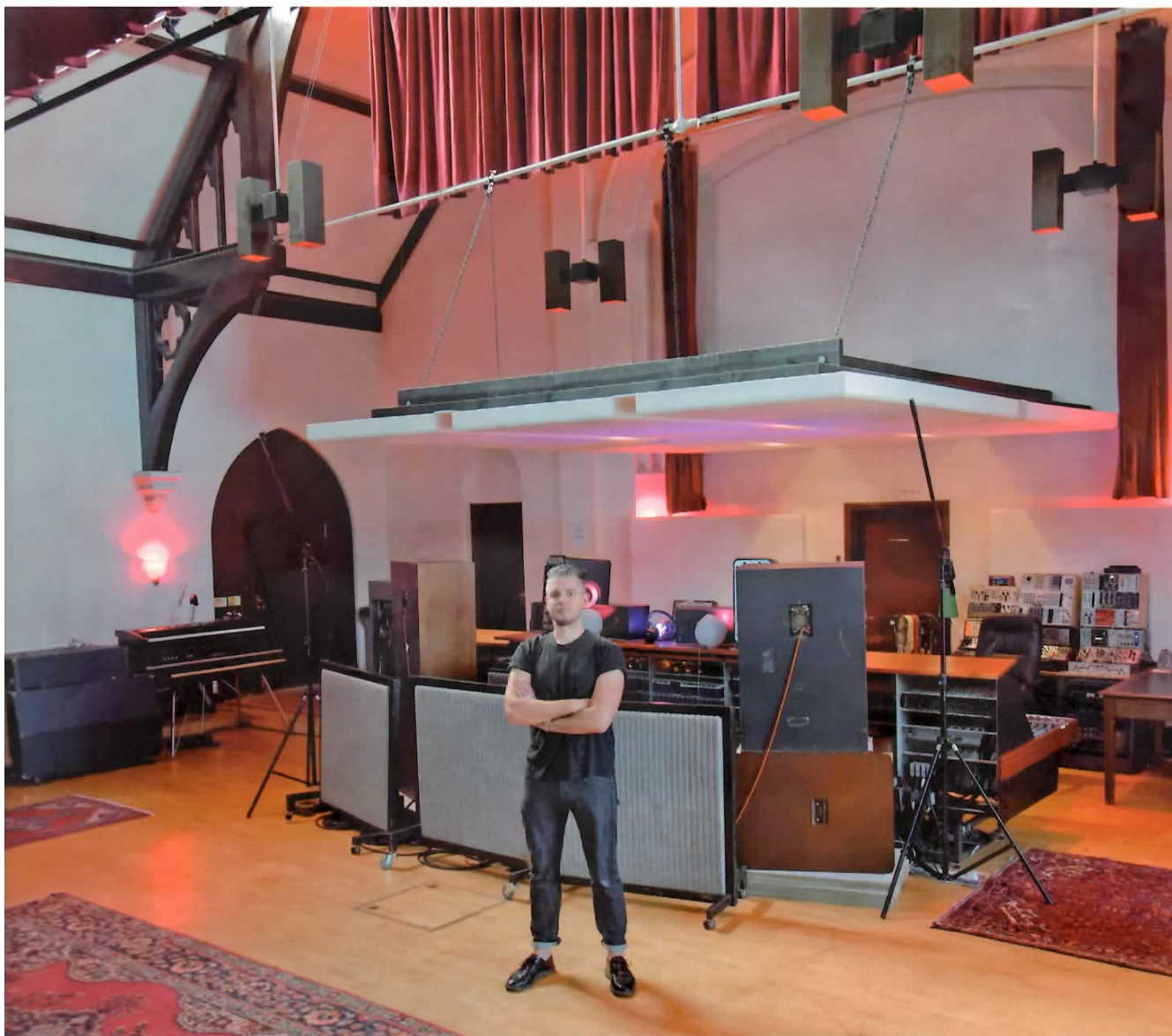
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**Behind Pink Floyd's Endless River • Recording Chopin and the LSO with two mics • Nuage in Hamburg post
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The unexpected but curiously moving sight of David Gilmour, Nick Mason, Richard Wright and a returning Roger Waters embracing at the end of their historic Live 8 set nine years ago might reasonably have been expected to be the last anyone saw of Pink Floyd in any incarnation. Waters subsequently embarked upon a spectacular four-year touring production of *The Wall*, while Gilmour — effectively the band's leader since the mid 80s — toured 2006 solo album *On An Island* and repeatedly stated his disinclination to working under the Pink Floyd name again.

This month's appearance, then, of *The Endless River* — the first new Pink Floyd album for 20 years — is undoubtedly a seismic surprise. Indeed, its initiation proved to be highly unexpected even to some of the band's closest associates. As Andy Jackson (*Resolution* V6.7), who has worked on the Floyd's engineering team since the movie version of *The Wall* and is also a co-producer on the new release, confirms: 'Oh, it was definitely a surprise. I would never have predicted that!'

It would be misleading, however, to describe *The Endless River* as an entirely 'new' work. At its foundations are previously unreleased recordings extracted from DAT tapes containing a lengthy series of jams that fed into the 1993/4 sessions for the last Floyd album, *The Division Bell*. During a lengthy selection and editing process beginning in late 2012, they divined that this new work could effectively be a tribute to keyboardist Wright, who died from cancer in 2008. Aided and abetted by co-producers Phil Manzanera and Youth (*Resolution* V3.7), Gilmour and Mason — Waters was not involved — returned to the studio in late 2013 to overdub many new performances, occasionally calling on guests including saxophonist Gilad Atzmon, vocalist Durga McBroom and bassist Guy Pratt. The resulting album is generally estimated to be approximately half new/half old recordings.

River men

Behind the release of the first new Pink Floyd album for two decades, *The Endless River*, is a story of epic digital restoration, countless recalls and a perfectionism that saw the team fine-tuning details until the very last moment. DAVID DAVIES

Whatever the precise demarcation, it certainly sounds authentically like a Pink Floyd album. Divided into four long 'sides', primarily instrumental but with one new full-blown song as its conclusion (*Louder Than Words*), it variously reminded *Resolution* of previous Floyd opuses *A Saucerful of Secrets*, *Meddle*, *Obscured by Clouds* and, inevitably, the spacier moments of *The Division Bell*. Considerably more evocative of the band's experimental roots than the spikier tone of the Waters-dominated late 70s/early 80s output, *The Endless River* is arguably the best case yet for the Floyd's perceived status as progenitors of ambient and 'chill-out' music.

Far more than a humble restoration project, the album's completion is a testament to the efforts of the entire team, including Jackson — onboard from the start — and Youth, who was enlisted by Gilmour in mid-2013 to provide a fresh perspective but who ultimately ended up rearranging parts of the album in frequently dramatic fashion. Shortly before the existence of *The Endless River* was confirmed to the global media with the unveiling of huge cover art displays in cities including London and New York, they spoke to *Resolution* about the project's technical challenges and the quiet majesty of Richard Wright — beginning with Jackson and the starting point for the new album...

ANDY JACKSON

What do you think made David want to return to the 1993 sessions?

I think it really goes back to when David toured On An Island and Rick played in his band. During that tour they rekindled their joy of playing together; for the first time in a long time, they were playing theatres, not the enormodomes, and they could actually see each other! Sadly that was taken away as Rick died not too long afterwards. I think there was a feeling that the next best thing [to them being able to play together again] was to return to those jams, and see what was there and what we could do with it.

How did the process get underway?

In October 2012, David asked myself and Phil to listen back through the jams. We spent a while going through the material and eventually Phil came up with the idea of making something resembling a classical piece in four movements of about 12 minutes each. That was the point when it first started to exist, but then it went into limbo for a while until David asked Youth to play around with a few pieces. When he came back with what he had done, there was a feeling that, yes, we had got a potential record there. At that point, in October 2013, work really started in earnest with overdubs from Nick, David and others.

How much of the recovered material was contained on DAT?

The vast majority, although there were two pieces that were multitrack analogue from the time; they were ideas for songs that simply did not go anywhere. In general, the spine of everything you hear is material from 1993 that has been overdubbed and expanded upon.

The album was built in Pro Tools and was ultimately very challenging in terms of the enormous numbers of tracks alone. To give you an example, we could be looking at 15-20 tracks for each piece, and that could be three minutes of a 15-minute 'side', so the logistics of running a Pro Tools session were vast. There were times where [assistant engineer] Damon Iddins and I had to spend a few hours just trying to make voices again because we wanted to do an overdub and had nowhere to put it, which seems extraordinary in the digital age.

Even though the album was in four 'sides', logically I had to deal with it as six because a few pieces had to be turned around and we did some swap-arounds. This approach was also informed by the decision to mix in the analogue domain, meaning that we had the question of running everything on an analogue board and having enough voices.



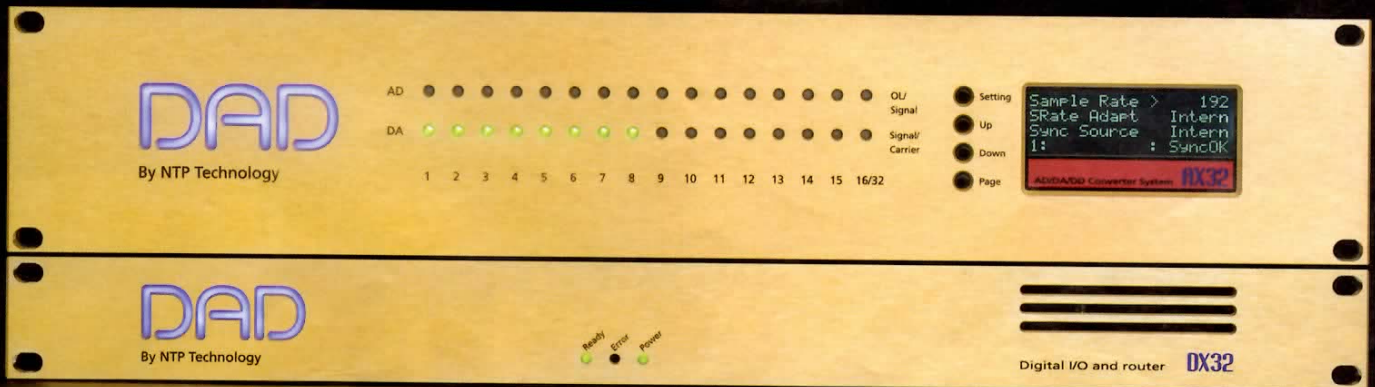
Where did the majority of the new recording take place?

At David's studio, Medina, in Sussex. While the original sessions were conducted at [Gilmour's houseboat studio] the Astoria we had already set up to record for David's next solo album at Medina, with Hammond organ, drums, etc. It would have been crazy to decamp all the instruments up to Astoria... much easier instead to grab a hard drive and go to Medina!

What he has there is essentially a deskless solution, with inputs into Pro Tools and in-the-box mixes for monitoring and foldback. However, he does have a small Amek, with a few inputs going via that, whilst we also got Tim De Paravicini at EAR to build a 24:12 board with no facilities. It is basically a line mixer, but it is really clean; the electronics are fabulous.

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Despite this set-up, you ultimately ended up mixing the album out-of-the-box on the Astoria's Neve 88R...

That was a really interesting process. One of the things I have always liked about working with the Floyd is that you have the luxury of time; the clock isn't ticking and no one is paying for commercial studio time. Initially, the sessions appeared so vast that there seemed to be no possibility of doing an analogue mix, and indeed the first round of mixing was done in-the-box. It was David who asked if we could try and do it analogue, firstly because he wanted to make sure it was as good, and secondly because of the physical interface factor; he does like to come in and ride the board a bit for his guitar solos.

So I picked the piece that was logistically the easiest and did it again in analogue with the idea of essentially matching the mix with the same balances, same amounts of reverb and same general EQs. We did a blind A-B test and, well, there was no competition... the analogue sounded much better.

Were there any particular items of outboard that saw heavy service during work on this album?

Once I started mixing, it was clear that it would be an album of endless recalls; it was always going to be 'tweaky-tweaky' with multiple rounds of overdubs. So as much as possible I never reused a piece of outboard; for example, if one outboard compressor was deployed on side one I would not use it on side two. Fortunately we have so much gear that that was possible!

There are a few things that are shared; the bass always came up the same channel and had the same Pye compressor on it. Elsewhere, we have got some terrific EAR 822Q and 825 EQs. The echo on this album is just one EMT plate and that is it, apart from one bit of room sound from a Lexicon. I am pretty old school, really!

Overdubs and mixing continued throughout most of this year, so when did you know that work was finally complete?

We literally carried on until the last minute and actually did a bit of extra remixing just a week ago! After playing it to the media, David said there was one thing that was really going to bug him if we didn't adjust it. It was literally a 'stop the presses' situation, where we went into the studio to fix the issue, then got everything to James [Guthrie, mastering engineer] over the following weekend so that we could be sure of still making the release date.

What are your feelings about the completed album?

We learned an important lesson with [1987 Floyd album] *A Momentary Lapse of Reason*, where we consciously tried to make it sound very up-to-date with the consequence that it now sounds dated. Since then we have always been mindful of trying to make the work sound timeless, and I think we have achieved that again with *The Endless River*.

It's great that there is so much of Rick on the finished album. He was always at his best when he was allowed to just play. It's a real shame that he is not around because there is someone for whom Pro Tools would be so good, allowing him to work without structure that could then be imposed afterwards.

Finally, the \$64m question... do you think *The Endless River* marks a final full-stop to the Floyd's recorded legacy?

I would imagine so, but you can never say never. There's certainly no intention of doing more, but then there was no intention of doing this until there was!

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YOUTH

Gilmour aficionados will know that the guitarist has worked with Killing Joke co-founder and in-demand producer Youth (aka Martin Glover) on several occasions before, notably on 2010's collaboration with The Orb, *Metallic Spheres*. Nonetheless, his participation in *The Endless River* will come as a surprise to many — not least because it entailed some dramatic rearrangements of existing material...

How did you come to work on the project?

I got a call from David in June 2013 asking me to come down and listen to this project he was working on. He said he was a bit stuck and would welcome some suggestions. I thought it would probably be related to his new solo work. I went down to his studio in East Sussex on a beautiful summer's day and he put the music on without telling me what I was hearing. It took me about four or five minutes to realise that it was Pink Floyd I was listening to and not David solo. It



Photo credit: Harry Borden

was very exciting, but I could also hear immediately what was not working and why he wanted some input.

What happened next was that I took those sessions to my studio in Spain and spent a few weeks radically rearranging them. Phil's approach during his previous work on the project had been to not mess with it too much, just arrange it, whereas I started taking two bars, four bars, copying those and then developing whole new sections... radically rearranging it. I basically dived in and took the risk

of the wrath of David not liking what I had done. Fortunately he was very enthusiastic! After that we started with the overdubs on the basis that David, Andy, Phil and myself were working as co-producers.

At times, the end-result almost feels like an encyclopaedia of past Floyds, not least the early 70s sound of *Meddle*...

No pun intended, but I think the huge success of *The Dark Side of the Moon* has eclipsed some of their more pioneering experimental work with [original bandleader] Syd Barrett, and the instrumental abstract music found on the early 70s releases. So yes, I think this album does have moments that are reminiscent of albums such as *Ummagumma*, *Meddle* and *Obscured by Clouds*.

The finished album is really a homage to Rick, and I am enormously proud of it. To be able to bring those two timelines together and create this new album out of it was really an amazing thing. When Nick and David pick up their instruments, they immediately sound like no one else... it was a joy to witness and be in the room at the same time! I really wanted it to be as true to the spirit of the Floyd I cherish and love as possible, and I believe that we have accomplished that — on both technical and emotional levels. ■



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The Church

The landmark North London studio has been bought and resurrected by producer Paul Epworth with assistance from WSDG and management by Miloco. **NIGEL JOPSON** enjoys the vibe.

In October 2013 multi-Grammy Award winning producer Paul Epworth (*Resolution* V7.5) purchased The Church Studio, saving the landmark Crouch End, London facility from redevelopment. Paul commissioned New York-based Walters-Storyk Design Group (WSDG) and Miloco Builds of London to completely redesign and reconfigure the SSL room installed by previous owner Andy Gray, to build a writing studio, and to give the new facility a striking visual facelift. The Church has a unique architectural look and a worthy history of creative endeavour. It was bought in the 1980s by animators Bob Bura and John Hardwick, renowned for their work on cartoons Captain Pugwash, Trumpton and Camberwick Green. Hardwick leased the upstairs former church hall to Dave Stewart and Annie Lennox of the Eurythmics, who completed their 1984 debut album *Sweet Dreams* there. As the Eurythmics commercial success grew, the duo purchased the building and converted it into a studio, recording the platinum-selling *Touch* album and many of Dave's eclectic solo projects there, as well as artists such as Bob Dylan, Radiohead, Elvis Costello and Depeche Mode. The studio was taken over by David Gray in 2003 when Stewart moved to Los Angeles.

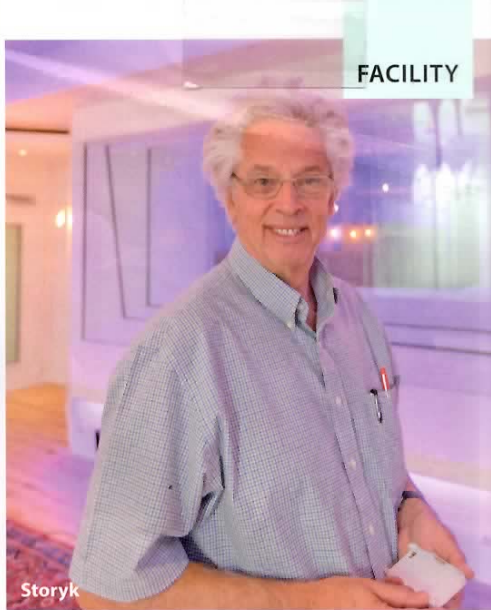
Epworth called architect John Storyk after experiencing good sonic results while working at Ann Mincieli's Jungle City Studios in New York, also designed by WSDG. Paul's initial idea was simply to install Augspurger monitors, built into a front control room wall similar to Jungle City. 'I think there's a difference between speaker culture in the UK and the US,' Paul told us. 'I'm not exactly sure why there should be such a difference, but I really enjoy working on big monitors, I find all those soft dome tweeters a bit tiring over long periods of time. There seems to be so much less harmonic distortion with compression drivers and horns at studio listening levels.' Variants of the Augspurger design are installed in many top North American music and movie studios, including Village Recorders, Germano, Silent Sound and the Record Plant. 'It's like mixing on a massive hi-fi system, you can hear half dB changes across the whole frequency spectrum, but nobody seems to have them in the UK.'

'There isn't really an off-the-shelf Augspurger monitor, it's basically a kit,' explains John Storyk. 'It uses a box which George designed and we modified in shape — he approved our enclosure — we have three different types of driver with a Beryllium HF transducer, but the trick is really in the processing. We've been using Lab Gruppen amplifiers for our recent installs.' Lab Gruppen are chosen because two full-featured Lake Processor modules (technology acquired from Dolby in 2009) are included in the LM 26 and PLM series amps. Bessel, Butterworth and Linkwitz-Riley crossovers are provided, selectable up to 48dB/octave. Filters use DSP, maintaining their symmetrical shape at high frequencies, allowing custom crossovers to be built by enabling or disabling high pass and low pass filters on any amp output channel. Linear phase features and

sum-flat graphic EQ are other benefits of the Lake system, which was being given a final tweak by WSDG room-tuners Dirk Noy and Renato Cipriano when *Resolution* visited.

The large first-floor Studio 1 has been preserved as a vast tracking room, featuring a fantastic 72-channel vintage EMI Neve console at one end, with acoustic treatments hung from the high ceiling on chains to cover mixer and monitoring areas. At the opposite end of the room, stairs lead to a minstrels' gallery — home to a cornucopia of guitar amps, effects pedals and vintage synths — below the gallery is a glass fronted booth, and there's an old church belfry that can be used as an echo chamber. The modest sized original control room has been retained as a 'B room', and was in use as a programming suite when we visited; in fact, Paul admitted he had recently had an express production project running simultaneously across all five rooms at the facility! Stairs and an elevator link to the ground floor, where there's a shared kitchen, offices and two other studios, The Church 2 (SSL control room and band-sized recording area) and The Church 3 (Shadow Hills Equinox, Yamaha piano plus recording booth). 'They all reflect the three types of studio I've most enjoyed working in,' says Epworth. 'The open-plan tracking room with no control room glass so everyone can communicate; the small writing studio where one person can work alone and everything is at arm's length; the mix room with big monitors — monitors you can sit there programming on and know what it's going to sound like in a club! They're all interchangeable, in terms of being able to take a project from one room to the other, and they all have different specialist purposes.'

As the initial brief had been to remove a dividing wall and install some monitors in Studio 2, we asked John Storyk how he'd ended up designing and rebuilding most of a facility. 'After we ran some tests, it quickly became apparent that there was no isolation whatsoever between the two music recording areas,' John revealed. 'By then, Paul had bought the building ... finally we realised that, in the past, the two studios had probably never been used for recording at the same time! I've rarely met a client as gutsy as Paul, everything had to be torn out, the rooms had to be gutted right down to the concrete. Not only did we have to demolish both ground floor rooms, but we had to do it with the SSL console frame inside the area, as it was not possible to remove it. All of the isolation walls have been rebuilt, and all of the acoustic treatment has been entirely re-done.' The result is audibly impressive and visually magnificent as well, with the all-white finish and variable colour LED lighting giving a unique vibe to all three ground floor rooms. The translucent RPG diffuser behind the SSL glows as LED colours change and adds extra depth to the room. 'Making things in white is not so easy, it's a very hard and unforgiving colour,' explained Storyk. The Topakustik panels and Binary Amplitude Diffusers were carefully painted



Storyk



WSDG partners Dirk Noy, Epworth and Renato Cipriano in Control Room 2.

by WSDG/Miloco installers, while the Augspurger monitors and 4 x 18-inch subs are finished with automotive paint. 'Paul's vision of the décor was a white pallet that changes colour — the irony is — 45 years ago this is exactly what I did for Jimi Hendrix!' laughed John. Electric Ladyland was Storyk's first major recording facility design. 'Fortunately it's much easier to do now, because for Jimi I had to use a complicated type of ceiling cloud and extremely hot theatrical light bulbs, which needed giant dimmers. It's so much easier to do nowadays with LED lighting.'

The studio had a blockbuster start, the first session was with U2, who recorded parts of their Songs of Innocence album with Paul's production guidance in the Neve-equipped studio 1. The Neve deserves a small sermon in itself, as it is a Frankenstein creation from two extremely rare EMI specification mixers, put together by Neve-guru Blake Devitt. One half of the desk formerly lived in Abbey Road, recording classic tracks such as Pink Floyd's Wish You Were Here, the other half of the desk came from EMI's Pathé Marconi studios in Paris, where the Rolling Stones famously recorded three albums. Each channel has a 1091 mic preamp, 1975 routing and a 1294 line module. Unusually for a Neve, there is a separate stepped gain knob with trim for the line in, allowing mic and line trim positions to be maintained when switching from one to the other. The 1975 routing module has left-right and separate front-back panning. It has a three position switch: Track sends to the 24 buses; Group sends to group buses 1 to 12; Mon sends directly to the 4 track bus, so a channel may be heard without going via the monitor section. 'I drove up to Milton Keynes where the Neve was in a room at the MK Dons Stadium — it was the only place they could find a room big enough to store it — the desk looked even more massive with the monitor section at one end!' explained Paul. 'When it was commissioned here I got Blake do a few tweaks to get the listening position in the centre of the board.' The console has also been improved considerably to lower noise levels, with the diameter of busing increased, and continuous summing buses installed

to eliminate the previous centre-section joins. Analogue equipment is available in abundance. 'There's a stock of floating mic pres, original 610 pres, V76s, loads of V72s, four EAR mic amps, we've also got a Tim Paravicini custom Studer J37 on the way,' Epworth tell us. 'We're set up to do analogue in a very purist way, but we're also set up for thousands of plug-ins and 256 track mixes.' Monitors in Studio 1 are Tannoy Super Red SRM 15X mains, and Barefoot MicroMain27 nearfields, which Paul regards as extremely accurate. An Apple Mac Pro 3.0GHz 8-core computer runs Avid Pro Tools HDX2, with a Studer A80 and Studer J37 tape machines on hand for tape enthusiasts, which can also be combined with Pro Tools using CLASP.

There's also plenty of great equipment installed in Church 3, the writing room. A Shadow Hills Industries The Equinox is central on the custom-built white table surface, with a 20-channel Neve Sidecar to the left and a collection of EQs, Mic pres and Compressors to the right — giving the studio something of a mastering room look. Avid HDX 2 runs Pro Tools 10 HD loaded with a large list of plug-ins. This is a brilliant setup for songwriters, and on top of the writing studio's permanent gear there's a huge collection of instruments available, a small vocal booth and Barefoot plus NS10 monitors. Stylish white surfaces and pine wood flooring echo the décor in the SSL room — the writing room also uses a state-of-the-art lighting system to set the mood with ambient shades although during the day clients can enjoy natural light through two floor-to-ceiling arch windows.

When a top producer builds a facility, it's tempting to think of the operation as a private studio, but Paul clearly intends to run The Church as a commercial operation. 'With the removal of the green tartan carpet that had been here since 1986, and the complete rebuild from Walters-Storyk Design Group, I thought The Church would be a nice new addition to the British recording scene,' Epworth affirmed. 'Miloco manage the studio commercially for me, including the writing room, they just don't book the rooms too far in advance. I certainly don't want to run the studio, Miloco take all that off my shoulders.' John Storyk is visibly enthused by the optical and audio results of his work in London: 'WSDG have built around 3,000 rooms, and The Church is certainly in the top 5 recording studios for quality.'