

Biffy Clyro:

Despite our best efforts (and partly due to my man flu) myself and Misty Buckley - whose stunning design underpins this show - were unable to hook up before this article went to print. So, if nothing else, let me extol here the virtues of the show. Fuller descriptions will come elsewhere, but the principle is a forced vanishing point upstage, defined by the sloping stage and square video portals of diminishing size that frame it. This is a tableau, but that is the stage designer's art - set out your stall, and then let others make of it what they will. Both video and lighting are not found wanting. If last month's BMTH set new standards in video content to define a show, then the Biffy show balances the books. Here they place IMAG squarely centre stage, and then do something far more interesting with it. Nothing could be further from the safe definition of IMAG: this was living, visceral anarchy.

Biffy's home-coming concert at Glasgow's SSE Hydro was an exercise in performance excellence over triumphalism. These guys work hard and, it's another rockin', rampant, testosteronecharged guitar band from the rebel heart of Scotland. Yet there's more to Biffy than jock-rock (pardon the expression). Like their tattoos, this is a band that wears its heart on its sleeve; broadcasting their ups and downs with sometimes touching sensitivity. A couple of risers and a screen just won't do.

PRODUCTION

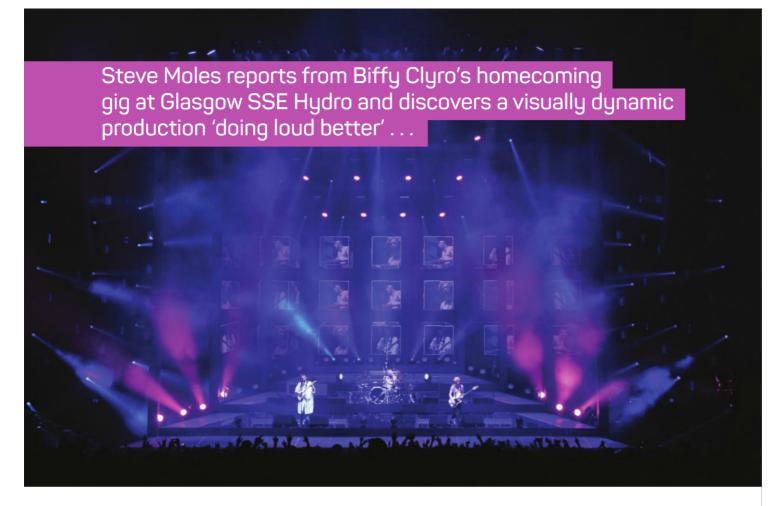
On the near anniversary of the Bataclan attack, I started by asking Chris Vaughan if he had noticed bands developing a 'quick escape plan in case of something similar'. "I think there are bands that have such protocols in place, but they're the kind of bands that would have them anyway. Some bands always have a van ready backstage, just in case, and I would recommend it as a default position. But generally, I haven't

noticed a strengthening of security; I haven't noticed metal detectors outside UK venues, or even pat-downs."

Biffy appear on the cusp of greatness here in the UK, and Europe not far behind, but how about the US? "They are the kind of act that has very strong songs, so it won't take more than getting people in to see them to build an audience. Personally, I think they are more accessible than Muse, so it won't be long. And they are a very down-to-earth band - I think audiences sense that authenticity.'

What are the challenges for this tour? "In effect, we're taking a festival show into arenas, so we're caught in a situation where we have a very large production statement to make, and have to do it in just 10 shows. That does make it tight in budget terms. This could have been 16 trucks, but we've squeezed it down to 12 by adding an extra bus full of crew. The vendors have all come to the party - Dave Ridgway at Negs, Alex Leinster at Video Design, Chris Fitch at Skan - they have all given us as much as they can afford to make this work. There is no cut in equipment compared to what we had for Leeds and Reading last summer. I think a lot of that is down to the band: a great band, a great show, and they [the vendors] are all happy to contribute. And they know in the future they will reap the rewards of that support."

Vaughan showed me the production, making special reference to a rolling thrust peninsula that emerges from downstage centre so that Simon Neil (lead guitar and vocals) can engage directly with the audience. "I had Total Fabrications make it and they've done a nice job." But I thought this was a Brilliant Stages/Litestructures set? "Yes, that's right - the rolling thrust is an add-on and Brilliant were just a little too busy at the time.



Vanishing Point

Both companies have their strengths and I'm more than happy to work with either."

"As to the staging, I've inherited all Paddy Hocken's good work from the summer shows, so it works. [Hocken was off managing another tour as Biffy commenced.] This is an ambitious show on a limited budget and it really is a testament to our UK suppliers."

STAGING

Paul English is stage manager; he has seven carpenters on the tour, led by Glen Binley. "We both do many of Chris's shows," said English. "The set sits upon a rolling stage from All Access, Brilliant built all the upper deck." Buckley's vanishing point is enhanced by the upper deck, a steeply sloped ramp from front to back - think Inca temple - with some limited horizontal surfaces for the drums.

"Brilliant also built the portals. A set of four square truss frames all clad in Winvision LED panels from Video Design. Of diminishing size, they begin downstage at approx. 13sq.m, to maybe 4m upstage, producing a startling forced perspective. The lower portal edge is part of the stage; the sides and tops, like goal posts, are flown. For the support-act we strike the foreword deck section, giving them 16ft of depth to play on." Support act Brand New, an arena act themselves in their native USA, were happy to play what they had, and put a good deal into their own mini production - not least some front projection which worked well with the lighting.

"We can re-install the front section in just ten minutes for the changeover, so it's well-made. For load-in and -out, we only need to wait for the FOH area to clear, then we roll out the stage onto

the arena floor and lower the goal post portals and lighting rig. The rolling stage is 88ft wide and 48ft deep; we added an extra 8ft to the rear to have somewhere to store the front deck when the support act is on. It will be tight when we get to gigs like Aberdeen and Leeds, but it works and it's fast."

Mojo Barriers supplied and installed 70m of stage barrier which was placed in a curved line in front of the stage and at FOH.

Let me state from the outset: Biffy's music is difficult for any LD or board operator in that they adopt unconventional and changing time signatures. This is hard rock with an intelligent edge. You need to think Frank Zappa meets Nirvana or something similar, to get even a hint of what they can do. I was delighted to discover Richard Larkum in charge of lighting: I'd not seen him since his days with the Kaiser Chiefs. Watching Larkum operate was an education. His manual cueing was astonishing; jazz hands doesn't even begin to describe it. But what of the design? I asked him to walk us through the lamp choices

"I have [Martin] MAC Aura XBs - I love them. I also have some [Claypaky] Mythos, Stormy CCs, [Martin] MAC Quantums and a few MAC Vipers [Performance] for some key, and loads of Moles. The XBs are just perfect for their size and weight. The Mythos are punchy and bright - against the screen they really cut. The Quantums are rigged along the downstage edge, trimmed at over 13m - again they need to punch.'

A sometimes overused adjective, 'punchy', yet in this case, entirely the thing. It is a very, very punchy show, full of stabs and flash - a joyous evocation of the band's own high-energy



Stage manager Paul English (right) with head carpenter Glen Binley (left)

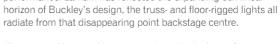
Lighting designer Richard Larkum





1 Luke Collins, d3 engineer, and video director Jack Banks

Dan Speed. monitor engineer



"I'm using a Hog4 and have been since the desk was first released. As it says on High End's marketing blurb, 'the desk is aggressively moving forward'." What on earth does that mean? "Aggressive? Well it's very stable for starters. And I've always liked the Hog architecture, it works for me and my thinking. I have used MAs many times - especially on support slots in the US - and I get into them, but each time you encounter one you have to learn how that particular person has laid out their show. So with the consistency of Hog, I've never felt the need to change. It does everything I need, and probably does a whole lot more that I don't need. The screen space is great, I do like to resize things - and it's easy to patch and programme."

This is a high-intensity performance - what of operating the show? "I do a mix of busk and tight programming. This is 100% not timecoded, but me and the band have a good connection and I'm fully in-tune with their off-kilter sense of timing. They do a lot of 7/8 and 5/4 stuff. Living is a good example, if you can find the cues for that song and follow them, and catch the stabs, then you'll be alright." Just to repeat, this was a masterclass in operation: 'a good connection with the band' is right. It is so rewarding to watch someone work like this.

"The concept came from Misty and, unlike the previous time, there is no reference to the album artwork. For me, her stage set is very open, so the question is 'where do I take it?' The portals came initially, then the rake came as part of the refinement. That really forces the perspective. What's here now actually solidified quite late, and when it did it became very apparent what the lighting needed to be.

"Under stage lighting is forceful - lots of Moles (24) and strobes. I need those sources close to them; the boys can't be lost in the mayhem of what I'm doing overhead." That's an acute observation. Larkum's operation of the board can appear frantic, random almost, such is the intensity of the music. Mayhem is how it seems, but Larkum never substitutes excitement for control.

"Song-to-song it's a bit of everything, a balance between lighting, video content - not too much of that video content actually - and a lot of affected IMAG. Jack [Banks, video director] does a lot of distressed effects in Notch, the new media server plug-in from 10bit FX [www.notch.one]. When the image is clean I tend not to use the portals." Larkum controls the 'how and when' of video from his desk.

"On the portals I might add a texture or a colour against the clean IMAG on the main screen. Or use the portals as light. All the Notch effects are pre-built - Jack does that, he made the content and cuts the cameras - so it's all there for me when I call upon it. This was all built over the summer. Before we even knew the portals would be there we had Notch. From festival to festival, most stages had some sort of screen so we could experiment and explore without too much risk. It meant we knew when we'd hit magic. Then it was a case of deciding when to use the portals structurally as part of the video."

So often we see touring acts try and present a facsimile of their arena show on a festival stage. Here Buckley, Banks and Larkum have turned that concept on its head and taken the festival show - as realised at Reading and Leeds last summer and pulled it into arenas.

"Essentially the band are playing 27 rock songs. When we looked at Notch and Misty's set, we could see there were many fantastic things that could be done, but you have to ask yourself, where would it fit? The key elements of the original band are still there, and you have to be sensitive to that. Something of what they do has to lead me to change the lighting - an accent, a time change - that's what I try to do. So despite the potential of the design, I won't just put things in for the sake of it."



- ER Productions' laser tech, Seth Griffiths
- Johnny Lucas, FOH sound engineer



"We all contributed to the way it looks - me, Misty and Jack all had input - and we've ended up in a great place. I've been amazed at how clean it looks. In that instance of clean lines, we had to drop a load of ER Productions' baton lasers because they made the stage look too untidy." That might sound a little unfair on ER: what he means is there is a limit to what you can strap to the sides of Buckley's ramp structure before it looks a mess. "We couldn't anticipate that, but as soon as we saw it in production rehearsals it was obvious. That's part of this show, it's about knowing when to take things away. I'm lucky in





Secondary Ticketing

During my chat with Chris Vaughan, Neil Anderson - the band's tour manager - came in and had a brief conversation about this being a ticketless show. I eavesdropped and discovered this was a method to combat secondary ticketing. Later, I was fortunate to speak directly to Anderson about this. To me, secondary ticketing is in danger of driving fans away and totally emasculating the UK production industry - something none of us can afford. It robs the fans without putting anything back into the industry except notoriety and frustration. To me, it's a disgusting sham. You might almost welcome back the old days when ticket touts stood outside gigs and bought and sold surplus tickets.

"The idea is simple enough," began Anderson. "You limit all advanced sales to a maximum of four tickets per purchaser. On the day the fans turn up and much as you would normally do, go to the 'will call' where they have to produce the original credit card that made the purchase, and some other form of ID to confirm it is in fact them. Then they have a locking wristband fitted and enter. There are problems - most notably when young fans use their mother's credit card to buy the tickets - but we have a resolution centre and these things are usually easily sorted."

Doesn't that require a lot more staff and present audiences with long waits outside, especially when you're trying to fill somewhere like the O2 in London? "Actually, it can be beneficial. At worst, it makes little difference to the fans. The important thing is to have the proactive support of the promoter. We have successfully done it on this tour here in Glasgow, Cardiff and Aberdeen. And for the O2 in London we have done it for the floor audience. The amount of secondary tickets we have seen on-sale for those venues has been tiny."

Presumably there is a cost involved? "It does give you a bit more grief and stress. You need more meetings ahead of the show - but to answer the implication of your question: there are always a significant number of fans who turn up very early, the ones that want to run down to the barrier the moment they get in and secure a stage front position. So we have a number staff turn up earlier and open the doors earlier to process this group. Once processed, they're allowed into the building and we have what you might call an early-bird queueing system at the interior entrances to the arena. Downstream, that eases the rush to the front when the inner doors are opened. The rest of the audience arrive as normal, in dribs and drabs across quite a long period before show-time. Experience has shown that if you keep the initial processing staff in place, you can easily manage these arrivals with little disruption."

How has this approach come about? "The band have always been against this sort of thing; to them and to us, the fans are being taken advantage of by very organised and tech-savvy people. It's not even the case that the market dictates such activity. What I mean is no concert gets the chance to even build a head of steam that might warrant such activity - these people are buying up large quantities of tickets within the first five minutes of them going on sale. The band have always been very good about keeping prices down, and their manager Paul Craig agrees. It does take commitment from management, your agent, and in this instance Ticketmaster, who have agreed to support us. We have seen bands choose to allocate tickets in a way that actually encourages secondary ticketing. That might be unintentional perhaps they just want an easy life - but my view is that you are not losing punters doing it this way, and it's a fair way to operate."

"Another slightly interesting aspect, on a more technical leaning - when the fans arrive, they show the credit card, it's scanned using a portable handset, which confirms the purchase and the name on the ticket.

"Our promoter, Dave McGeachan, mentioned that there are only a small number of scanners in the country. We were using well over half of them. So, whilst I think the project was a success, the ability to do this across the country is very much in its infancy. It went very well at our shows, and from a production/tour management perspective, as the dust settles it has provided an interesting insight as to the real cost of implementation. Something we can now accurately plan for when we do it in future. It also enables promoters to be able to accurately inform agents and artists who choose to ticket their shows in a similar manner."

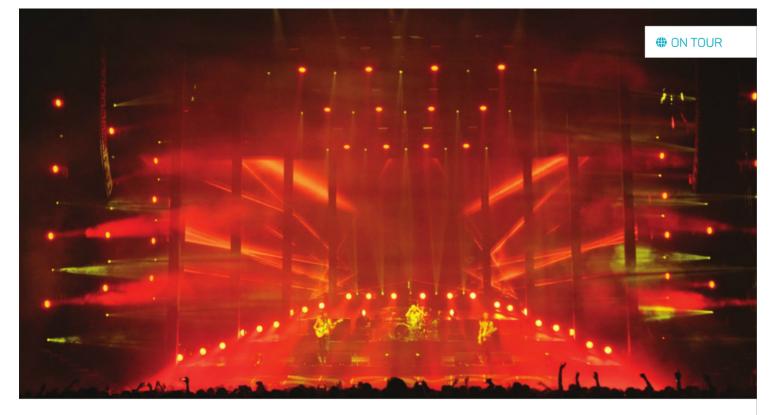
that I have a great team. Alex Peters is my right-hand man and travelling tech when it's just us for festivals. Then my crew from Negs are excellent. Seth [Griffiths] from ER does all the lasers, 10 RGB Beambursts, and four of the 6W Tripan scanning lasers. This was never designed to be a laser show, but they form a nice part of it. Seth and the whole crew all have a great attitude."

As we've seen, the use of video on stage defers ultimately to Larkum at the lighting desk, yet it simply wouldn't work without a system and a camera director with sensitivity to what is being done here. That person is Jack Banks. By his own admission, this is Banks' first job cutting cameras: "Certainly the first time I've been given free rein over a show, though previously I've covered other directors on guite a few things." So he's not without experience. "I've worked with the band for a while. I used to do all their Catalyst server programming. They wanted a camera director and it's something I've long wanted to do, so I went for it."

It is to the production team's credit they chose him; that prior experience with the band goes a long way to explaining the successful melding of light and video. And there's nothing wrong with his cutting, though you won't see it evidenced in the photos here simply because we were limited to the first three songs, and the amount of outward facing, high-intensity lighting that accompanied Banks' imagery, made photo capture random at best. One thing you will notice in the simpler photo compositions - the one of just the four portals framing the stage in white [the first number, Wolves of Winter] - highlights a specific aspect of this show's staging. It has the potential to present a very modernistic, arty face to the audience. In that context, much of what Banks produces - his cutting, the inclination to over exposure and to high contrast - made for striking, startling images entirely fitting for the medium.

It's also worth giving a brief description of the system, which comes from Video Design. A wide landscape screen (Winvision 9mm; not 16:9 but a less conventional 16:5.34) covers the back stage wall. The four portals central to Buckley's design are clad in Winvision 12mm mounted to 300mm square truss, the LED covering all faces except the rear. This combination produces a visual anomaly we were more accustomed to encountering in an earlier era. Remember when U2 first took out their enormo' screen on Pop Mart, where the LED pixel clusters were some 300mm apart? That huge gap between pixels worked because the eye-brain mechanism fills in the missing visual information - our mind paints a full image.

The same applies here; that vertically narrow slot of rear screen presents (on occasions) a defining IMAG image. Often that image is extended through the portals. Although in terms of surface area the portals are relatively thin framing devices, it can have the effect of making the totality of the image jump out to the full 13m vertical extent of the largest portal. It's illusory, of course - that's why you can't see it in the photos - and the eye-brain mechanism must be working overtime to fill such huge gaps. As such, and because of the staccato firing of Larkum's operation, the illusion is fleeting - subliminal in fact. Not only is that a pleasing experience, it can be absolutely mesmerising in the way it pushes the band out and right into your face. It really is band, Banks and Larkum operating in absolute harmony.



So where do the images come from? "I have eight cameras in total, four operated Sony HX C100, two in the pit, one handheld on stage, and a long lens out front. Then there are two lconic minicams on the kit, and a Bradley Robocam each side of stage on a tripod and each with a x30 zoom. I cut from a Ross Carbonite Black+, which is great to use; the Dashboard software for off-board programming is really useful. It's got 16 DVEs so it's very handy for PiP effects. For a first time out, I find it very friendly to use."

Of course, Banks' established proficiency with d3 programming is not neglected. "I created a whole bunch of custom effects in Notch," a live effects app for all compatible media servers. "The best thing about working for Biffy Clyro is that the band doesn't really need much production to have a blinding show - we are not carrying their performance in the slightest! This has allowed myself and Rich to take some risks over the summer trying out different effects and really playing with the show. That meant when the portal design was confirmed things came together very nicely. The effects are all light-based, Richard is the key, and even now, with just seven shows to go, we're still developing things."

"With Notch being so new, it was difficult to find out a lot about it at the start of the year. But through Caz Williamson at d3 I was fortunate to get onto the 'closed' beta programme back in April. It only went to a public beta about a month ago [this was November], and it's come on in leaps and bounds in that time. The guys at 10bit are working very hard! But for Biffy it's ideal and they were able to provide exactly the level of support we needed. Matt and Luke from 10Bit have been really helpful.

"As for all the equipment, I can't speak highly enough of Video Design. The crew is absolutely fantastic. To me, they really care about what they are doing, and from the onset Alex [Leinster] takes on board what you want to achieve and makes it happen. Specifically, I was interested in using the Carbonite system for this, so he bought one . . . Overall, I'm most concerned with reducing delay to the screen - of course, the less you have in line to enable that reduction, the more you're exposed when things go wrong - so Alex has invested to remove that vulnerability."

That's more important than it sounds at face value. As stated elsewhere, a lot of the lighting/video work is a blizzard of stab and staccato, cued to the band's complex time signatures.

In such a scenario, images on screen need to be as close to synchronous with what the band is actually playing as possible. That's the magic of this show - everything appears immediate and urgent, heightening the intensity of audience experience. Nice work Jack.

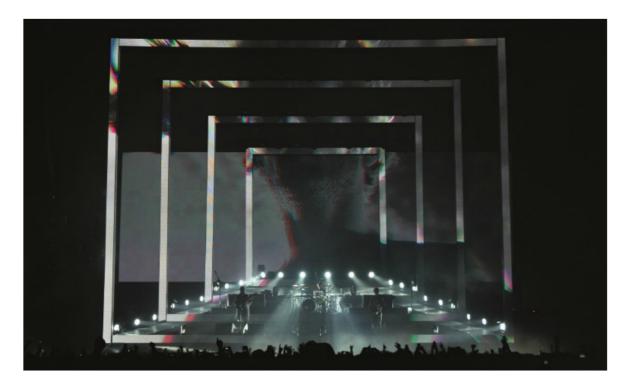
SOUND

Larkum had told me that Johnny Lucas at front-of-house had been with the band "since the beginning". "Well, not quite," said Lucas. "I've been with them since they signed with Warners, and they'd already done three albums by then. It was about eight years ago." Lucas has also mixed for Ben Howard, Fink and The Boxer Rebellion, so he's earned his stripes. "Last year I did some musical theatre, just for the experience." Now there's a swerve off-piste; what did you learn? "That I'll never do that again." We both laughed. That's a professional approach: he tried it, it's not for him.

Contrarily, in the experience of Lucas's mix for this show, he proved himself as dynamically effective as he was honest about his theatre experience.

The tour system is d&b J-Series L/R mains and sides supplied by Skan. "It's a system I like, and this is the first time we've taken a full production to Europe. The smallest venue was 2,000 people, the largest 9,000. The bigger gigs are in Germany and Scandinavia. In the smaller rooms we had no flown subs and used V-Series for the side hangs." For the Hydro it was all J-Series for mains and sides, flown J-Subs, and the low end sounded a lot better than the last time I was here. I believe some acoustic work has been done in the roof, though nothing obvious was visible.

"This is the first time I've toured with [d&b's] ArrayProcessing (AP). It has given me a new level of confidence; to know that everyone is hearing what I'm hearing at the desk is liberating. I'm not constantly feeling like I need to adjust... And I like the way AP treats the near field, you know you're not killing the people at the barrier because of what you need further back. I can be confident about how it will perform when the audience is in because I can see what the d&b ArrayCalc tells me it will do, so even though I can't walk around during the show, I have enough experience with ArrayCalc to be confident in what it tells me. Overall, I feel like there is more headroom in the system. I never see things going into gain reduction. We measure a 15-minute LEQ and it sits around 103/105dBA, with peaks



around 108dB. The band has some deep dynamic range in their material, so we're not bleaching out the quiet bits.'

With such a loud band, how's the stage environment when it comes to the vocals? "Pretty good really, though we do have a lot of subs up there on stage, but that's for a band that only relatively recently moved to IEMs. The subs are to give them the feel and a sense of energy. There are also some d&b M2 wedges, but you should speak to Dan Speed, our monitor engineer, about them. For Simon [Neil, lead guitar and vocals] I've recently started using a Shure KSM8 [Dualdyne, vocal microphone]. We have six positions for him on stage, all with the same mic." All are mic-stand mounted, so Neil never has to relinquish his guitar.

"He sings up top of the set, mid-stage, and down on the two platforms to left and right of the main stage. Ben [Johnston, drummer] has a Shure Beta 56m on one of those long overhead curved stands just because that was the way to get it in the right location on this steep raked stage. The off-axis rejection is great for drum vocals and it's nice and low profile visually. His brother James [bass guitar] uses a Sennheiser e-945. We tried the KSM on Simon for its dual dynamic cap', but as it happens it solved a much bigger problem for us: sweat and spit." If you've ever seen a photos of Biffy on the stage, the classic shot is of a bare chested, sweat soaked Simon Neil. "The eights not only minimise the proximity effect, they have what's called a hydrophobic materiel that rejects water. Previously, we'd been replacing Simon's mics maybe five or six times a show. These in contrast, last 90 minutes so we only change them once. The thing is, every time you change a mic it looks like something has gone wrong. Yes, you can say the mic definitely needs to be replaced, but not through a fault, it was just soaked. But from the crowd's perspective it looks like a fault the crew can't fix, and that's not good. So this mic solves a lot of problems. There are other things we do: there are no mic stands on the kit - again, if a mic stand falls a crew member has to run on stage, and with this rake mic stands are vulnerable. This is much neater. There is nothing unusual in terms of mics on the kit except for Røde NT4 stereo for overhead that's on an orchestral boom. A dual cap' condenser, it's just perfect. The one thing I really like is that I have Piezo triggers from Roland on the shells of the drum kit for the Gates; they're quick enough that there's no loss of attack."

"All the guitar cabs are in iso' cabinets. We've been heading that way for some time - guitars first at the start of the year, bass this September. We had been putting the backline under the stage, or away in a spare dressing room. But that always meant somebody was in danger of walking into a deafening din. The iso' cabs are ideal, and we can keep them much closer to stage."

As it happens, they sit right alongside Dan Speed at the monitor desk. He says he barely knows they're there. "The usual things, Avalon 747 [compressor] and Sans Amp, clean and dirty feeds. There are backline cabs on stage, but just for a little physical support to the monitoring. The benefit is we can now do a 'better' loud, we're not struggling with the fizz of guitars. That's a lot less tiring for the audience and they're getting to hear more of the system and less from the backline, so the sound is more consistent."

Lucas is using a DiGiCo SD10 at FOH, "and I've got the Waves server. I'm using the C6, I like it a lot, a bit of EQ. And Vitamin - a sonic enhancer type thing, for some multiband on the guitars - just a bit of sculpting, really. Inevitably, I have the 1176 compressor. We moved to DiGiCo at the start of the year. I already knew it was where I wanted to go because I wanted to use MADI, so now I have the Waves integration, and the recording - and now with the Stealth Core 2 I can even get this show onto an SD11 when we're on the smaller circuit elsewhere in the world. With the two session players on stage I have a total of 72 inputs - not bad for a three-piece rock band - but that, of course, includes stuff like tech talk."

For a band sound that could easily spin out of control, Lucas pulls off a remarkable feat, sacrificing none of the volume when it's warranted - as he said, 'a better loud'. When quiet, it's articulate, that says something about how little ear sensitivity is affected by the higher levels elsewhere. I haven't been so excited and pleased by a loud rock band since I first encountered Muse.

MONITORS

Dan Speed has been with the band for just four years, and in that time has helped them migrate to an IEM system. "But they still need their trousers to flap, so I have a d&b C7 in amongst the backline, d&b Q-Subs, and the M2 wedges - the wedges mainly for LF energy but with a bit of everything in them. Yes, I do have

spare packs and inserts instantly available for them all, but if it really came to having to switch to the wedges only, I'd just need to add maybe a bit more vocal. All of them have a bit of everyone in their IEM mix, and with everything panned accordingly. A nice, full mix and loud enough without deafening them."

Speed, like Lucas, has recently moved to a DiGiCo. "Yes, I have an SD10 as well - we moved at the same time, it was time for a change." Speed did express some initial reservations, but soon altered his opinion. "Looking back, I'm glad we made the jump. I don't run out of headroom like I used to and I like the way it sums in their IEM mixes. I'm even starting to use macros now for certain cues, so I've grown into it and it has made my life a lot easier. The wedges and subs on stage are enough to excite the deck; the guys still like some LF energy on top of what they hear from the house."

Speed is tucked away in a little bunker stage right with maybe a 1ft-tall letterbox of a viewing slot across stage. And what about that restricted view? "Generally, they are pretty good with their mics. I know Simon will always use a certain mic from his option of six, for a certain song or verse. But we don't want to kill their spontaneity, so I'm always ready if he decides to jump on James's mic. There are 14 vocal channels in total, so I have to be prepared. And it's not as nailed as you'd think - we've always had mics with 25m cables on them in case Simon wants to run around - and they're still here."

Speed made several references throughout this interview about not killing the band's spontaneity, an ethos I thought pretty sound in the context of Biffy Clyro. They are very different live on stage to their recordings, and that's encapsulated in one word: excitement. They are a great live act and wonderful to watch and listen to.❷





