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**With star-studded concerts solidifying their place in the fabric of regal festivities, the**

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**Coronation Concert emerged as a music extravaganza. Held at Windsor Castle on the 7<sup>th</sup> of May in celebration of the coronation of King Charles III and Queen Camilla, artists such as Lionel Richie, Katy Perry, Andrea Bocelli, and Take That were accompanied by performances from the Royal Opera, the Royal College of Music, and the Royal Ballet, captivating the 20,000 attendees while also being simultaneously broadcast to millions of viewers in over 100 countries. The audio was certainly fit for a King, with Ben Milton, Sound Designer for the event, working with the event organisers and audio engineers to design a bullet-proof sound system that featured seven DiGiCo Quantum 7 consoles and SD11, 14 SD-Racks, four MiNi-Racks, supplied by Terry Tew Sound & Light.**

Having been part of the audio team for the Queen's Platinum Jubilee last year, Milton was delighted to once again be part of such a historical occasion.

"We were fortunate to have the same tried and trusted creative team for this event," he says. "The continuity was invaluable and gave us a well - established methodology for this complex production," says Milton. "Under the direction of Julia Knowles and with Mark Sidaway as the Executive Producer for the BBC, Nigel Catmur as LD and Set design by Stufish, I had the privilege of reprising my role as Sound Designer. Returning for a second time was an incredible experience, one which I owe to the close collaboration with Kev Duff and Andy Deacon from Zen Broadcast Ltd. The three of us approached the project with a cohesive audio strategy, creating a harmonious blend for the entire show. With the concert being both live and televised, our aim was to make it sound good for television viewers, as well as sounding magnificent at the venue."

The circular stage featured two iconic motifs that highlighted the event's significance, with elements forming the Union Jack, and a halo-like screen suspended on four upright pillars, enveloping the roof and symbolising the Crown.

"I had a lengthy collaboration process with the immensely talented Zarya Vrabcheva Set Designer from Stufish, and Nigel [Catmur] LD to shape the stage design, striving to make it beautiful," continues Milton. "The backdrop of Windsor Castle made it all the more important to make it look and sound as special as we could."

Milton worked with Vrabcheva to conceal the main PA, seamlessly integrating the system within

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the pillars, which were clad in reflective mirrors, making it virtually invisible. This attention to detail created a masterful illusion, ensuring pristine audio while preserving the stage's visual integrity.

"The final stage design guaranteed that the audience would hear everything they needed without any difficulty in discerning the performers and presenters speaking from its farther reaches. It aimed to minimise sound spillage and colouration, ensuring the audience experienced synchronised audio across all aspects," he explains.

Milton further notes that the BBC's provision of an extensive pre-production period ensured the design aligned with the budget and catered to all performances, from Lionel Richie and Andrea Bocelli to Take That, as well as the presenters and various speakers, including HRH The Prince of Wales.

"From a technological standpoint, with 400 inputs and several hundred outputs, the consoles had to be DiGiCo Quantum 7s," Milton says also recalling how Take That's special rendition of Never Forget, performed alongside the choristers of St George's Chapel and hundreds of other singers and dancers, gave the show an uplifting finale. "At that point, we had 400 performers on stage including Take That, the choir, military drummers, and all other singers and dancers on the parapets - it was the absolute maximum we could have. To achieve that level of complexity was undoubtedly a technological feat, expertly managed with the Quantum 7 consoles," Milton adds.



"Being asked to supply all aspects of audio and RF was going to bring some unique challenges

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and opportunities," adds Terry Tew. "Having worked closely with Zen Broadcast and Ben Milton for many years gave all parties the confidence that we were in each other's capable hands. The consoles and racks were connected via 4.7km of Neutrik Opticon fibre. The Quantum 7s were invaluable and a genuine necessity, ensuring we could cater for the ever-evolving spectacle that we wanted to deliver."

Two Quantum 7s and five SD-Racks on an optical loop were dedicated to monitoring. One Quantum 7, manned by Toby Chester, handled the two 40-piece choirs, orchestra and the house band, while also sending sub-mixed orchestral stems to Seamus Fenton on the second Quantum 7, which was dedicated to the artists. A third Quantum 7 was in place as a backup.

"The orchestra was on one ring of Aviom mixers, the band were on another ring and the choirs were on IEM mixes. I took the band and several sub-mixes of the orchestra and choirs from Toby – a whopping 300-plus channels – and I gave him all the artist vocals, backing vocals and the Steinway," explains Fenton. "I sub-mixed the Steinway down to one stereo stem with reverb and had 15 in-ear monitor mixes, spread across the artists, as well as several mixes of floor monitors positioned all over the stage and up on the castle garden ramparts.

With tight change overs between artists and little time to do line checks, Fenton made good use of the Quantum 7's Snapshot feature. "I always try to have a reverb per artist for the entire show, but this show was too big to achieve that, so I had to Snapshot. I had a Snapshot for everything to allow me to share reverbs and make sure I could send Toby the right vocals so he could distribute them across all the musicians," Fenton notes. "It required a lot of housekeeping, so we set up a talkback buss on the consoles so Toby and I could talk to each other in our ears, and make sure that what we were doing was aligned."

Fenton is also a big fan of the Mustard Compressors, particularly the optical compressor. "It's like an audio iron and just takes the wrinkles out of things," he smiles. "The All Pass Filter also came into its own. I got a presenter mix from Chris at FOH, which is quite normal on televised shows. With the All Pass Filter engaged on the presenter mix from Chris there could safely be 'one fader to rule them all', so when a presenter came on stage, that channel came up everywhere as the presenter channel was routed to the matrix that was going to the on stage speakers. That allowed Chris to simply fade things up into the PA and on the stage, irrespective of what I was doing. Things like that are really handy."

FOH was a similar setup. There, three Quantum 7s, with FOH Orchestra Engineer Stefano Serpagli

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dealing with the orchestra and the choir on one. This was then sub-mixed into the second Quantum 7, managed by award-winning FOH Engineer Davide Lombardi, for the house band, direct instruments, and solo vocalists. "Both Stefano and Davide did a fantastic job, with the added bonus that they are both Andrea Bocelli's engineers," Milton states.

The third Quantum 7 looked after the presentation components and VTs, and was manned by Chris Vass, who was the final port call. "Effectively, Chris was the end mixer for the show, and had a stereo mix plus everything else," Milton explains.

The broadcast element benefitted from the same attention to detail, with Sound Supervisors Kevin Duff, Andy Deacon (of Zen Broadcast Ltd) and Howard Nock mixing in three OB trucks. Zen OB3 featured a further Quantum 7B forwarding an orchestra, house band and choir mix to Kevin Duff in Zen OB1. "Kev mixed all music components, which were passed on to Sound Supervisor and Engineer Howard Nock in one of the two Timeline OB facilities. Howie mixed live-to-air, ensuring the audio had a consistent flow through all areas of the show," says Milton.



With such an experienced team, Milton says the only real challenge was the sheer number of performers, who required a large amount of wireless equipment to ensure fluidity on stage.

"It was quite a traditional process, but the numbering of performers and the workflow between consoles needed carefully planning. We couldn't have done it without the Quantum 7s, and even they were maxed out," says Milton. "Mustard processing provided enhanced flexibility and options for precise control and creative adjustments within the mix, and the engineering team

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relied heavily on features like the All Pass Filter on the Mustard EQ, along with the general EQ and compression capabilities of the Quantum engine, as well as Nodal processing at monitors.”

Receiving resounding praise from all involved, Milton says he was privilege to have been part of such a remarkable event. “It felt like receiving the royal seal of approval,” he adds. “The entire team united to deliver an astonishing show, and it was an absolute honour to be a part of it.”

“We’re immensely proud to be a part of this historic event and thankful to Zen Broadcast and Ben for their expertise, support and trust in us to deliver,” adds Tew. “A special mention to our dedicated and hard-working team back at base who worked tirelessly for the weeks prior to the event.”

Milton acknowledges that the pre-production and onsite support provided by the DiGiCo team was invaluable.

“Right from the outset, Dave [Bigg, Production Specialist at DiGiCo] lent his technical expertise and keen eye to everything. I know my summer has started when Dave is next to me, and he and Mark [Saunders] are just lovely people to hang out with,” concludes Milton with a smile. “DiGiCo consoles once again demonstrated their exceptional value and unwavering reliability, reaffirming the company’s world class reputation.”