



NASHVILLE'S BLACKBIRD STUDIO MAKES NO SMALL PLANS: BUILDS OUT FOR DOLBY ATMOS MUSIC WITH 15 ATC MONITORS, 6 ATC SUBWOOFERS

Blackbird Studio in Nashville, Tennessee is not known for half-measures. "At Blackbird, the bar is extremely high," noted John McBride, Blackbird's founder, owner and visionary. "We do everything we can to create a setting where artists and engineers are equipped and inspired to create music that can change the world."



In that spirit, Blackbird is embracing Dolby Atmos Music, a fully-immersive, next-generation multi-channel playback system that has the backing of Universal, Netflix, Amazon, and other major content providers. Blackbird Studio C, a large control room with incredible diffusion designed by George Massenburg, now contains three ATC SCM300ASL Pro monitors in front, six ATC SCM100ASL Pro monitors on the sides and rear, six ATC SCM100ASL Pro monitors overhead, and six ATC SCM0.1/15ASL Pro subwoofers. With less than a month's notice, ATC built and delivered the speakers and subwoofers.

“Immersive audio is the future of the industry,” McBride continued. “It’s an incredible experience, and once you start listening in Dolby Atmos Music, it’s hard to go back to stereo! For artists and engineers, the format opens up a whole new world of creative possibilities. There are consumer electronics manufacturers building sound bars to give listeners Dolby Atmos in their living rooms, engineers are hard at work perfecting headphones that will deliver Dolby Atmos, Universal has already committed to mixing several thousand songs in Dolby Atmos Music, and content providers such as Netflix and Amazon are incorporating the format into their new material. Of course, the potential for gaming and virtual reality is astounding. All in all, the industry has a lot of momentum behind Dolby Atmos Music, and I’m thrilled to have Blackbird at the forefront of music creation for the format.”

Initially introduced in 2012, the Dolby Atmos specification accommodates traditional 7.1 surround sound speakers but then goes far beyond. It allows specific placement of sounds at precise locations along the sides and back, includes overhead loudspeakers, and permits flexible scaling of playback system size to include up to 128 discrete loudspeaker or subwoofer channels. “The first thing people notice about a Dolby Atmos system is the addition of the overhead speakers,” said Zach Winterfeld, western regional sales manager with TransAudio Group and part of the team that installed and tuned the new system at Blackbird. “Just as the experience of going from mono to stereo or from stereo to surround opens things up, the overhead speakers add a whole new dimension. Under the hood, the biggest difference is the use of ‘objects’ that allow the engineer to specify where in the room a sound should localize to. The Dolby Atmos playback engine decodes each object’s location and places it there given the particular arrangement of loudspeakers in a given room. Two rooms can have very different loudspeaker setups, and the Dolby Atmos processing will localize a given ‘object’ to the same place in both rooms.” Blackbird Studio C already had a stereo pair of ATC SCM300ASL Pro three-way monitors, and ATC mains and near-fields are a fixture in the other studios at Blackbird. “For me at least, the higher the quality of playback, the more emotional music becomes,” McBride said. “I’ve always loved ATC, and we’ve been using ATC

monitors at Blackbird since we opened up in 2002. I trust ATC monitors completely, and I love the people behind the product – they do incredible work with integrity and with a deep respect for music. Sitting in the middle of fifteen large-format ATC monitors and six ATC subwoofers is a life-changing experience!”

Ben Lilly, technical sales manager with ATC and another member of the team that installed and tuned the new system at Blackbird, added, “Our monitors offer very low listening fatigue. This is important in all types of monitoring environments, but I feel it is even more important with the high channel count and higher than average sound pressure levels that audio professionals will experience in an Atmos mix environment. Also, the wide, even dispersion pattern of ATC’s monitors help to achieve a larger ‘sweet spot’, a greater feeling of space, and solid imaging within the immersive mix environment.”

Lilly continued, “Blackbird Studio C was already equipped with stereo ATC SCM300ASL Pros so adding a matching center was a natural choice. The ‘base’ specification for Dolby Atmos music systems is 7.1.4 (7.1 plus four overhead ‘top’ speakers), but because Studio C is larger than average, the surround speaker count was increased by four to make the system 9.1.6. The choice of surrounds speaker model and the number of subs was based on the room size, listening distance, and target SPLs at the listening position. Dolby’s DART tool helped select suitable monitors based on the room and acoustic data input into the tool.” Four of the ATC SCM0.1/15ASL subwoofers are positioned along the front of the room and two are positioned on the side walls closer to the back, as determined by a judicious combination of measurement and expert opinion.

“John [McBride] called me to describe a full ATC Dolby Atmos room at Blackbird, and I was impressed by his vision and also by the amount of gear it would require,” recalled Brad Lunde, founder and president of TransAudio Group. “Then he said he wanted it all delivered in two weeks to allow a week of installation ahead of a critical deadline. I love John, but I said, ‘you’re out of your mind, there’s no way!’ But of course I called ATC’s UK manufacturing facility and asked if it would be possible to deliver six flyable SCMI00ASL Pros, six stand-mounted versions, a single center SCM300ASL Pro, and six subwoofers. They would have to work miracles to get them all built, but they made it happen!”

“Given how few Dolby Atmos mixing rooms exist in the world and given John’s very high standards, it was strategically important to do an outstanding job, with plenty of insurance against any conceivable problem,” Lunde noted. In addition to Zach Winterfeld, who has deep experience with precision measurement systems, TransAudio Group sent Tony Marra, who operates the TransAudio Group in-house repair shop, to Nashville for installation and tuning knowing that between the two, they had the wherewithal to diagnose and repair anything that might need it. ATC sent Ben Lilly, who worked closely with the TransAudio Group team. The team dug into the analog processing capabilities of the integrated ATC amplifiers to make subtle adjustments to Blackbird’s existing SCM300ASL Pros, which had been in continuous use for nearly a decade, to match the new centre channel SCM300ASL Pro. Ceri Thomas and Christine Thomas from Dolby saw to it that all of the Atmos specs were dialled in to perfection.

Following installation of the system, the studio has received a great deal of feedback on the format, room and the system. “Studio C was designed by George Massenburg and incorporates wonderful diffusion,” McBride said. “That makes the imaging, which is already amazing with ATC, all the more lifelike.” Aleks Bars, marketing manager at TransAudio Group, added, “With conventional surround sound technology, things are still focused in the front, and creative use of the rear channels kind of stands out. With Dolby Atmos, I felt like I was inside the track. I couldn’t hear gaps between the speakers; it was really cohesive. The vibe from other listeners overall was one of excitement. You could sense how different the experience was for people, and a lot of people told me they were looking forward to jumping into Dolby Atmos as soon as possible.”

A common refrain from the team of experts who installed and tuned the system, from John McBride, and from attendees at the listening party, was that it was fun to listen to remixes of classics but that they were most looking forward to new works created specifically for Dolby Atmos as the output format. “A good example of how the output format matters is the Beach Boys,” Winterfeld summarised. “They talked a lot about how they wrote and composed explicitly for mono. They would have made very different decisions if they had been creating for stereo. I would argue that so much of that older music that was done in mono is still best enjoyed that way. You get excited by different things and make different decisions when you’re mixing for stereo versus mono. The same thing is true moving to Dolby Atmos. Tracks have so much more room to exist and there are so many possibilities with movement, space, and location. It’s going to be exciting to hear what comes out of Blackbird Studio C!”