



SOUND FOR THE Grammy Awards

Meeting multiple
needs for the biggest
night in music.

by Keith Clark,
photos by John Shearer,
WireImage



Top/left, Bruno Mars performing at the 53rd Annual Grammys with an Audio-Technica AEW-T5400 condenser microphone/wireless transmitter (photo by Larry Busacca/Getty Images); top/center, the main platform with A and B stages; directly above, the year's big winners Lady Antebellum performing with Sennheiser SKM 2000 transmitters with MMD 935-1 capsules at the show.

Did you watch the Grammy Awards show this year? I did for the first time in several years, and it seems many others tuned in as well, with the mid-February live broadcast (including 5.1 surround sound) on CBS garnering about 27 million viewers and the highest average viewership since 2001.

To be honest, it wasn't the promise of a performance by Lady Gaga that drew me in, but rather, some added motivation in having the opportunity to check out the live and broadcast sound systems during a visit to rehearsals at the Staples Center in Los Angeles a couple of days prior to the show.

Still, the entertainment bill for this year's show proved a compelling mix of currently hot (and Grammy-nominated) pop/rock/country stars (Arcade Fire, Katy Perry, Justin Bieber, Lady Antebellum, the aforementioned Ms. Gaga, and so on) with some true legendary performers in what has thankfully become more of a concert than an awards show. One particular highlight had soon-to-be 68-year-old Mick Jagger in his first-ever Grammy performance, moving like a man less than half his age in stirring the crowd to its feet as front man for "Everybody Needs Somebody to Love," a tribute to soul legend Solomon Burke.

The sound crew working the Grammy Awards is veteran in terms of both overall experience and in service to the event. Shortly after entering the Staples Center, I was greeted by my friend and all-time great guy Andrew "Fletch" Fletcher, who serves as a live system manager/tech for the show, and he commenced with a first-rate tour of key points and people involved with the audio production for the 53rd annual Grammy Awards, which is presented by the National Academy of Recording Arts & Sciences (NARAS).

Well Organized

The show benefits from a winningly efficient formula for presenting an average of 20 live acts in the course of just three or so hours. There's an A and a B performance stage, side-by-side on the front platform, so while an act is appearing on one stage, the other stage is being prepared for the next performance. Every bit of audio equipment, as well as instruments and stage/set/production elements, are meticulously organized on rolling carts



Clockwise from top, a perspective of the Staples Center with the Grammy set in place; a look at two of the JBL VerTec line arrays providing main coverage; and Barbra Streisand performing with a hard-wired A-T AE5400 condenser microphone. (photo by Lester Cohen/WireImage)



THE CREW

Grammy Awards Audio Production Team

Michael Abbott, *audio coordinator*

ATK Audiotek, *live sound company*

Mike Stahl, *president, ATK Audiotek*

Scott Harmala, *CTO/VP engineering,
ATK Audiotek*

Ron Reaves & Mikael Stewart, *live front
of house mix*

Michael Parker & Tom Pesa, *live
monitor mix*

Andrew "Fletch" Fletcher & Jeff Peterson,
live system managers/techs

Dave Bellamy (Soundtronics),
RF frequency coordination

Bill Kappelman, *RF microphones manager*

Steve Anderson, *"split world" manager*

Leslie Ann Jones (The Recording

Academy), *house audio supervisor*

M3 (Music Mix Mobile), *broadcast music mix*

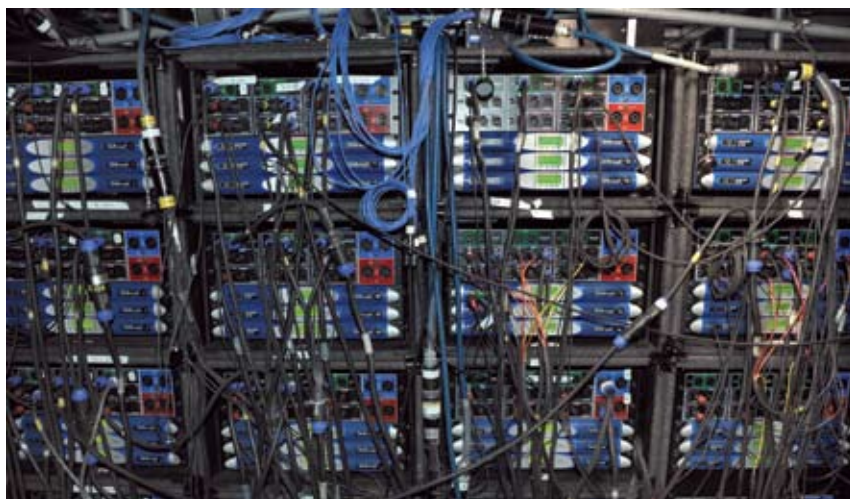
Joel Singer (M3), *engineer in charge,
Eclipse mix truck*

Mark Linett (M3), *engineer in charge,
Horizon remix truck*

John Harris & Eric Schilling, *broadcast
music mixers*

Tom Holmes, *overall broadcast mix*

Phil Ramone & Hank Neuberger,
broadcast audio supervisors



The system's Powersoft DIGAM K10 power amplifiers to drive all loudspeakers.

backstage in the days leading up to the show. When one act is done, their stage goes dark and everything is rolled off, replaced by the next act's gear.

The house sound system for the 16,000-plus attending the show at the Staples Center is designed and supplied by ATK Audiotek of Valencia, CA, which has made an art of serving awards shows and special events. While the system followed the same form of

the past several years, the ATK team consistently implements upgrades and also accounts for inevitable set and production changes from year to year.

The overall mantra driving the design is "the broadcast is the thing" – the system must stay out of camera sightlines as much as possible, and what's happening audio-wise in the house cannot impact the broadcast sound. Still, the house also has priority, with Jeff Peterson of ATK performing expert tuning and optimization of the main system.

Standing with Fletch at the house mix position, I could just barely make out the silhouettes of the JBL VerTec line arrays flown high above the front platform, and that's on purpose. Still, they're there, and do an excellent job in terms of fidelity and overall venue coverage. ATK deployed 70 VT4889 full-size line array elements in four main arrays, two for the central seating regions flanked by two more splayed outward for expansive areas on each long sides of the multi-level arena. The bottom of each array has curvature so steep that it pretty much handles the front rows. Three more flown VerTec arrays on delay bolster coverage further out in the audience.

"We've enjoyed tremendous success with VerTech line arrays for the Grammy Awards in the past and this year was no different," notes Scott Har-



House mixer Ron Reaves working during rehearsals.

mala, CTO/VP engineering for ATK. "They provided powerful and accurate sound throughout the arena."

VerTec subwoofers joined the arrays, flown centrally on a platform, with front fill supplied by VRX932LA compact loudspeakers. Placement of these were largely dictated by the stage/set design, so the sound team worked within the parameter of keeping them largely out-of-camera-sight while insuring coverage right up front. More VRX932LA loudspeakers on delay were distributed around the arena to bolster mid/high coverage to shadowed and other difficult seating areas.

Universal Package

New to the Grammy system this year were Powersoft DIGAM K10 power amplifiers to drive all loudspeakers. These were divided into a few groups and positioned with companion XTA digital processors relatively close to their loudspeaker groups. Harmala explains that ATK wanted a universal amp package that has all necessary flexibility and configuration capabilities to operate their loudspeaker packages.

"We've have been considering this one-amp-for-all approach for a number of years and we believe that the Powersoft amplifiers were the best choice for many reasons," he says.

As Fletch and I checked out a bank of the new amplifiers under stage left, he explained the approach. Loosely, the amp pack is comprised of blocks, with each block including three amplifiers. For a 3-way loudspeaker situation like the Grammys, the first amp in the block drives the low and mid of a loudspeaker, one channel of the second amp drives that loudspeakers highs as well as the lows of another loudspeaker, with the third amp then driving its mids and highs. Simple, elegant, and fast to configure and troubleshoot.

Fletch also pointed out that the K10



Co-monitor mixer Tom Pesa getting his PM1D console set.

amplifiers really cut the bulk and weight factor (1U and just over 25 pounds per unit), and he estimates that the footprint has been cut in half versus what was done previously. This also makes it much easier to fly the amplification package when desired. "These amps have worked out very well," he told me. "We're all quite happy with them here."

Harmala adds, "Our new approach is now standard for our systems and the feedback from our clients and road engineers are that they not only like the new universal amp packages and the system flexibility, but also the sound. It's a noticeable improvement over our previous amps. As we add the DSP cards and Powersoft's Armonia control software, our systems will be further streamlined and tuned to the VerTec and other loudspeakers in our inventory. This will save us time, headaches and money."

Yamaha PM1D digital consoles have been a staple of the Grammy Awards live system for a decade now, with

two at the house mix position for Ron Reaves and Mikael Stewart and two more for monitors for Tom Pesa and Michael Parker. That's just the way all of these veteran engineers like it, both for efficiency as well as familiarity.

Prep Pays Off

From the centrally located mix position on the main floor of the Staples Center, Reaves mixes every musical performance, one right after the other. Stewart handles all other house mixing duties, and this year, he also did a masterful job with a performance featuring Norah Jones joined by John Mayer and Keith Urban on acoustic guitar gathered around a single Shoeps microphone for a wonderful rendition of Dolly Parton's classic "Joleen."

This marks the ninth year that Reaves has provided the live music mix for the show, following a long stint as a touring engineer (primarily doing monitors) with Showco, as well as some work with

TASCO and as an independent. In the early 1990s, he began transitioning to TV/entertainment mixing, encouraged by Pat Baltzell and Bruce Burns, with Stewart also supporting his work and eventually bringing him over to provide the house mix for the Grammys.

His preparation process begins five days before the show, when audio coordinator Michael Abbott provides a detailed information set for the entire show in spreadsheet form. This includes settings for every artist to be set up as snapshots in the console, as well as input lists, configuration of the system, and whole host of other details. Armed with this information, his entire first day is spent programming every snapshot over the course of a 12-plus hour day. (It's the same story for the other live mixers on the gig.)

"My goal is to have the show 'pre-dialed up' in the PM1D, so to speak – snapshots and inputs entered, and then put where I need them," he explains. "I also set up channel libraries – kick drums, snare drums, overheads, whatever – that are pre-EQ'd and pre-bused. The goal is to be able to instantaneously raise the appropriate fader when its needed and go. You have to be pretty fast on the show, and the only way to guarantee that is preparation."

His board takes 56 inputs from stage A, another 56 from stage B, and then there's another 56 with all vocals as well as sources from the production trucks. While the 170 or so inputs aren't usually in use at the same time, they need to be constantly managed.

"As complex as this show has gotten because of the technology, the reason we can pull it off, and at a high level, is because we're on digital desks," he says. "When you're talking about some of the performances, such as three to four acts in a single medley, or two full bands with Bob Dylan, it would be almost impossible to do it on analog boards. Plus,



Co-monitor mixer Michael Parker on the opposite side of Pesa's location, overlooking the B stage.

there's not enough real estate available even if you wanted to try it."

The first big day of programming and preparation is followed by four days of rehearsals with every act on the bill, with dress rehearsal the last day. These 14-hour sessions include discussions with representatives for every artist, listening to their wishes and requests and then doing everything possible within the confines of the production to make them happen.

Unique Thing

One of the big differences in mixing a show like the Grammys versus a standard live show is that it's got more than one primary purpose, and all have to be met. The house mix is also provided to the broadcast team as the basis of their mix. "We're essentially mixing PA for television, which is kind of a unique thing," Reeves explains. "There's a specific set of parameters that we work within to keep it sounding good for the broadcast, because that's the 'money' mix for millions of people.

"Still, it has to be great in the house,

both because that's our responsibility to the audience and the fact that this is an extremely important night for the entire music industry," he adds. The goal is delivering a mix with dynamics faithful to each performance while keeping overall levels well under control.

There's a very good reason the responsibilities for mixing all music is put in the hands of one engineer, and that comes down to consistency. Each act needs to mixed faithfully to its unique performance, but the overall sonic picture must remain steady from one to the next, throughout the entire show.

"Every year, we're asked by management and engineers of numerous artists to make sure they're the loudest, and my reply in every case is 'you bet'," Reeves says. "And it's the absolute truth, because we treat them all equally, they are all truly the loudest."

I asked him if the enormity of the situation – rapid-fire mixing a roster of legendary artists for a diverse audience in the millions on the world stage – ever crosses his mind. "Certainly it's exciting,

but I don't get nervous," he told me. "Sure, it's pretty wild when, this year for example, you're mixing legends like Mick Jagger, Bob Dylan, Barbra Streisand along with all of the other top artists, but I stay focused on making every bit of music sound as good as it can sound. You can't do the job properly, and give it the concentration it deserves, if you let yourself get distracted."

Global Template

Fletcher also took me to Michael Parker's world, where he mixes monitors for the B stage artists from his PM1D positioned on an arena concourse above and to the side of the front platform. He and Tom Pesa, stationed directly across on the A stage side, seamlessly trade-off on monitor mix duties throughout the show.



Grant Greene (left) and Dave Bellamy of Soundtronics in wireless world.

Parker also specializes in TV work, arriving on the scene in the late 1990s after more than 15 years on the road, where he worked his way up from volunteering to do "anything and everything" to get his foot in the door at LA live clubs like the Troubadour in the early 1980s to mixing a wide range of top artists, includ-

ing a who's who of R&B legends such as Smokey Robinson, Dianna Ross, Whitney Houston and others.

For the Grammys, he and Pesa have developed and evolved a "global template" that serves as their monitor mix baseline, and then they merge in specific adjustments for each artist as well as the show's production elements to create specific scenes. Like his mix mates, Parker is also quite satisfied with the PM1D platform

for this show.

"From a monitor point of view, the PM1D is still one of the faster consoles out there," he says. "The way it's laid out with 24 outputs on one page and 56 inputs on one page is quite a bit. The trend now is to smaller consoles, but that means you have to scroll through

more to get where you need to go, so with the PM1D, it's all there and pretty accessible in a quick way."

This year, eight stereo RF IEM systems were available for artists, along with eight stereo hardwired IEM systems. These 16 stereo mixes for IEM cover almost everything needed, Parker notes, and then there are several floor monitors downstage that are concealed

in the stage for use by any artists wishing to do so. Parker and Pesa work with the stage manager to get these placed as optimally as possible, but again, it involves compromise because the TV picture drives the production.

"These days most of the artists are on IEM, but we usually have nine more mixes via the floor monitors available," Parker says. One unique aspect this year

was Bob Dylan, who preferred side fill only for monitoring. These cabinets were simply put into place and patched in for his performance only.

The Bigger Picture

Microphones are the choice of each individual artist, and there's a wide range of wired and wireless microphones from Shure, Audio-Technica, AKG, Sennheiser, Audix and many others on hand. Several of these companies have a representative on hand throughout rehearsals and the show to be sure all of their respective artists' needs are being served. The wireless microphone situation is managed by Dave Bellamy of Soundtronics of Burbank, CA, assisted by Grant Greene, posted with the system receivers in an area just outside the arena bowl.

Parker points out that one of the biggest aspects of his and Pesa's gig is fostering a comfort factor and rapport with all of the various engineers on site, working in the interest of their artists.

"Some of them haven't done TV work, so it's imperative that we take the time to explain to them how this all works, the setup and layout, to help bring them into the fold," Parker says. "We address their issues and concerns as much as possible within the format of the bigger picture so that they can relax, because if they're relaxed, then their artists are going to relax, and that's going to help result in the best performances. It's unseen, but is really one of the most important parts of the gig."

This year, artists such as Barbra Streisand, Arcade Fire, Eminem and several others were his responsibility, and it all went off very well. "There was nothing out of the ordinary, which is good news," he says. "The Aretha Franklin medley that kicked off the show really sounded good to me this year - those ladies really brought their A game - and that set the pace." ■

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