

Martin Audio WPC for Raleigh Memorial Auditorium



Dating back to 1932, Raleigh Memorial Auditorium at the Martin Marietta Center for the Performing Arts in North Carolina, is the principal performance location in a four-venue performing arts centre. This also includes Meymandi Concert Hall, A.J. Fletcher Opera Theatre, and Kennedy Theatre. Over the generations locally based rental partner RMB Audio has been a frequent visitor, providing cutting edge tech support for all spaces. But it is the 2,369 capacity Raleigh Memorial Auditorium, with its varied programme of musicals, comedy and dance shows, that is the crown jewel. And it is here that the sound contractor has upgraded an ancient public address system with Martin Audio's latest Wavefront Precision technology.

RMB Audio owner Cooper Cannady reports that it was way back in late 2020 - right in the middle of the COVID pandemic - that the request first went out for an entire new sound system, with the stipulation that it needed to be a line array. "We've been into this venue so many times in the past with [Martin Audio's] MLA-C, W8LC, W8LM - depending on the show - so we've collected a lot of room data; so it was a pretty easy snap to put things together [based around Martin Audio's latest technology]."

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Free from budget constraints, Cooper was able to recommend a system best fit for purpose - namely the small-format WPC line array - 14 boxes a side, driven in 2-box resolution. "We also recommended flown SXHF 218 cardioid subs behind the hangs on either side - three forward facing, one reverse - all powered from 11 [Martin Audio] iK42 amplifiers. However, in the event they determined they didn't want to fly them, but preferred to have them on carts." This provides extra flexibility.



R&R Cases in Chicago were duly commissioned to build a substantial cart to enable the subs to safely roll in and out, and be deployed to suit “These will come up from the pit as they determine whether they want to use three boxes - which stay at stage height - or whether they want a fourth box. It’s cabled and time-aligned in such a way to focus the bass up into the rear high part of the room.” These eight forward facing subs are complemented by a further pair of optional CDD-LIVE 12 that can be deployed depending on the seating arrangement.

Structurally, a minor adjustment of the proscenium walls is also to the benefit of the installation. “This has helped move the PA slightly more offstage and upstage ... so it has worked out really well.” Once the client had pre-cabled the venue, RMB Audio’s integration team were able to put the amp rack together on site. “We were given a window of two weeks to install the PA, but it only took us two days. It was fully operational by September 17.”

Reflecting on the work, Cooper Cannady says, “This was the first installation upgrade in 30 years, and using [Martin Audio DISPLAY software] we’ve essentially provided dimensional space, giving a slice of what the room looks like - telling the sound to avoid the ceiling and the stage. By doing that we have eliminated the early major room responses. “We also talked about whether we should go back and tune this room - as whether they are running Dante, analogue or AES there’s a slight difference. But we decided not to because it actually performs really well, and whatever material we are putting into it - whether I’m in the front row, mid-house or hard right - I’m actually hearing the same material coming directly at me, rather than from some reflective point around me. “We know this works because we’ve been providing MLA technology since 2012.” The new PA now goes straight into a seasonal production of A Christmas Carol, which Raleigh Memorial Auditorium stages annually.

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