SUMMARY

• LOCATION
  Melrose, MA

• FACILITY SCOPE
  600-seat performance art space

• OBJECTIVES
  A powerful, agile sound solution was required to combat the difficult acoustic issues presented by the performing arts center’s design that didn’t take away from the beauty of its construction.

• BIAMP SOLUTIONS
  Community™ and Tesira™

• OUTCOME
  By implementing Biamp’s Community loudspeakers and TesiraFORTÉ DSP, the performing arts center was finally equipped to provide the impactful sound reproduction its performances deserve.

• EQUIPMENT
  • Community IV6 modular vertical array system
  • Community IV6-118S subwoofer
  • TesiraFORTÉ DAN AI

Located within the Melrose Veterans’ Memorial Middle School in Melrose, Massachusetts, the Melrose Center for the Performing Arts hosts school events like plays and musical performances, as well as entertainment events for the wider community. But while aesthetically pleasing, the acoustics of the space have always been challenging. A new sound system was required to maintain the beauty of the space while delivering the powerful audio required by the performances it hosts.

The sound quality, SPL, and frequency response consistency are excellent throughout the audience area.
SOLUTION

The new system was designed in-house at Pro AV Systems by David Bishop and Mary Finn, with EASE® modeling used to verify the design. Flown with Community IV6 array frames, the system consists of left and right arrays, each comprising six Community IV6-1122 wide-dispersion 12-inch two-way array elements flown below a Community IV6-118S 18-inch subwoofer, which extends the low frequency and adds impressive bass impact. Bishop commented, “Given the infrastructure in the building, finding appropriate rigging points for speakers wasn’t easy, but we were able to find two good locations just to the side of the stage.”

Pro AV Systems chose Biamp’s TesiraFORTÉ DAN AI digital audio server to provide Dante digital audio networking and signal processing, with its intuitive software allowing configuration and control for signal routing, mixing, equalization, filtering, and delay. The loudspeakers are powered by Biamp’s Community ALC-3202D amplified loudspeaker controllers, each delivering two channels x 3200W.

CONCLUSION

In addition to the audio system with digital mixer and both wired and wireless mic systems, Pro AV Systems also designed and installed a large screen video system, with wireless tablet control of both video and audio systems to complete the center’s powerful new audiovisual set-up.

“The new system has given Melrose performing arts audio with the performance, flexibility, and ease of operation required for both school and community events,” Bishop said. “The sound quality, SPL, and frequency response consistency are excellent throughout the audience area.”