

PROJECT PROFILE

FreshGrass Music Festival

Designed and Installed by Klondike Sound LLC



The three day FreshGrass Festival, put on by MASS MoCA in North Adams, MA, featured music legends such as Mavis Staples to top contemporary players like Andrew Bird, Calexico, and Iron & Wine. Jason Raboin at Klondike Sound LLC. chose Fulcrum Acoustic for both stages at the festival.

Challenges

- Outdoor stages with a large crowd capacity need consistent pattern control across wide and deep seating sections.
- Audio needed to be contained to the audience areas to minimize leakage into adjacent performances.
- The smaller courtyard stage has historically had issues with intelligibility due to reflections from the surrounding brick buildings.

Solution

To meet the festival's needs, Raboin chose to deploy Fulcrum Acoustic FL283 cardioid line arrays at both stages, along with Fulcrum Acoustic cardioid stage monitors and cardioid subwoofers.

"Keeping the audio contained within the audience areas required a loudspeaker system with excellent pattern control over its entire bandwidth," says Raboin. "In previous years they had issues with bleed between stages but with the way we arrayed the FL283's it was no longer an issue. We were also able to use them to minimize the reflections at the courtyard stage.

"We then supplemented the FL283 cardioid line arrays with active and passive cardioid subwoofer systems to extend this control down to the lowest frequencies. By utilizing a subwoofer arc, we could contain the low end energy within the listening area and keep it off the walls. Fulcrum's CSP118 Passive Cardioid Subwoofers allowed us to achieve cardioid performance within the space limitations of the smaller stage. For the larger stage, we used our Fulcrum TS221 subwoofers in an active cardioid configuration. FW15 cardioid stage monitors and FA12 monitors helped us provide a superb stage experience for the performers."

In addition to the main arrays, Fulcrum FL283T were used in a ground-stack configuration to provide outfill coverage for the main stage. FA28 and FA12 were used for front fill to cover the near seats, and delayed FH1565 provided support for the seats in the back.

Project Details

Location North Adams, Massachusetts

Product Category Music Festival

Project Type

2 stages for live performance

Fulcrum Products

Main Stage

(24) FL283T Dual 8 inch Subcardioid Line Array Modules, 90° x 20°

(2) FH1566 Full Range Coaxial Horns, 60° x 60°

(2) FA28 Dual 8 inch Coaxial Loudspeakers, 90° x 60°

(2) FA22ac Self-Powered Dual 12 inch Coaxial Loudspeakers, 90° x 45°

(2) RX699 6.5 inch Coaxial Loudspeakers, 90° x 90°

(12) FW15 15 inch Coaxial Cardioid Stage Monitors

(6) TS221 Dual 21 inch Direct-Radiating Subwoofers

(1) TS215 Dual 15 inch Direct-Radiating Subwoofer

Courtyard Stage

(10) FL283 Dual 8 inch Subcardioid Line Array Modules, 90° x 20°

(10) FA12 12 inch Coaxial Loudspeakers, 90° x 45°

(2) FA28 Dual 8 inch Coaxial Loudspeakers, 90° x 60°

(8) CSP118 18 inch Subcardioid Subwoofers

(1) TS215 Dual 15 inch Direct-Radiating Subwoofer

Supporting Products

Linea 44M Series Amplifiers/DSP

