

PROJECT PROFILE

Q2 Stadium

Designed by Idibri Installed by Clair Global



Q2 Stadium opened in 2021 as the new home to Austin's Major League Soccer team. Idibri designed an audio system to deliver consistent, high-fidelity sound with high output capability for the 20,000+ capacity space.

Challenge

- Create a high-fidelity, full-range sound system capable of smooth coverage, high output, musicality, and good speech intelligibility.
- Create a consistent sonic profile between the stadium bowl and the adjacent stadium clubs.

Solution

Idibri designed a system around Fulcrum Acoustic's FH-Series Full Range Coaxial Horn loudspeakers for the main coverage of the stadium bowl. The FHs were installed by Clair Global in clusters mounted from the roof overhang. Clusters consist of two FH15 speakers to cover the full vertical profile of the seating sections. Sections with larger seating profiles featured a third FH15 to cover seats closest to the field.

The large horn of the FH15 maintains the strict pattern control required to concentrate sound on spectators. The FH's smooth pattern ensures uniformity when handing off a coverage zone to a neighboring loudspeaker. "Very few companies produce large horn loudspeakers that control sound as well as Fulcrum Acoustic," says Ben Boeshans, a Senior Consultant from Idribri.

For subwoofers, Idibri selected Fulcrum's Sub218L Dual 18" Direct Radiating Subwoofers which were also mounted from the roof overhang. "The low frequency extension of the FH works really well so we could deploy the subs strictly for low frequency effects rather than filling in the lower frequency portion of main speakers," Boeshans continues.

Project Details

Location

Austin, Texas

Product Category

Sports Stadiums and Arenas

Project Type

20,738 seating capacity

Fulcrum Products

Stadium

- (64) FH1596-WR Full Range Coaxial Horn Weather-Resistant 90° x 60°
- (35) FH1565-WR Full Range Coaxial Horn Weather-Resistant 60° x 45°
- (34) Sub218L-WR Dual 18" Direct-Radiating Subwoofer Weather-Resistant

Indoor Stadium Clubs

- (30) P 8" Coaxial Loudspeakers 100° x 100°
- (23) S Dual 8" Coaxial Loudspeakers 100° x 100°
- (11) RX599 5" Coaxial Loudspeakers 90° x 90°
- (8) DX896 Dual 8" Coaxial Loudspeakers 90° x 60° $\,$
- (2) CX896 Compact 8" Coaxial Loudspeakers 90° x 60°
- (11) US212 Dual 12" Direct-Radiating Subwoofers
- (4) US208 Dual 8" Direct-Radiating Subwoofers

Supporting Products

Powersoft and QSC Amplifiers

QSC Q-SYS DSP





PROJECT PROFILE

Q2 Stadium (Cont.)

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Solution (Cont.)

Stadium officials wanted consistent tonality when moving from the main bowl into the club at the field level. Luke Krogness from Idibri designed a system centered on Fulcrum Acoustic's Prophile S loudspeakers for the field club. "The Prophile speakers match the full range of the FHs remarkably well," says Krogness. "We only required four of Fulcrum's US212 subwoofers because the Prophiles have such great low frequency response on their own; better than most traditional trapezoidal products from other manufacturers." Krogness deployed two of Fulcrum's CX896 Compact Coaxial Loudspeakers for adjoining interview room.

The West Club on the concourse level features four US212 subwoofers and eight Fulcrum DX896 Dual 8" Coaxial Loudspeakers embedded into recessed wall niches. "The DX8 fits perfectly in the limited space available yet delivers the full range of sound we were seeking," says Krogness. "The fact that we could rotate their horns was very helpful in order to match the room's coverage requirements."

The Concourse Level East Club doubles as a hospitality space and facility owners wanted the fidelity to match comparably sized event spaces in Austin. Clair Global installed fourteen Prophile S loudspeakers at the ceiling and aimed straight down. The ceiling structure is also black so the speakers integrate quite well. "Their patterns are ideal for impactful sound without bleeding into each other," says Krogness. Prophile P 8" Coaxial Loudspeakers were installed in the North Club along with US212 Subwoofers.

A beer garden on the upper concourse is separate from the facility yet the Q2 staff wanted the same fidelity and energy as the rest of the system. Fulcrum Acoustic's compact RX599 5" Coaxial Loudspeakers were tucked between ceiling slats while additional Prophile loudspeakers were installed between duct work to remain out of sight. "The small size of these cabinets was great and fit appropriately despite the crowded electrical and plumbing elements," says Krogness. The US208 Dual 8" Direct-Radiating Subwoofers added low frequency extension in a -10" cabinet height to fit within the limited available space remaining. "Without the small enclosure from the US208s we would have had trouble fitting anything for low frequency support," says Krogness.

Fulcrum Acoustic's domestic manufacturing allows coordinated "just in time" deliveries to the site, reducing the need for on-site storage of loudspeakers during construction.



