

Busch Stadium - St. Louis, Mo

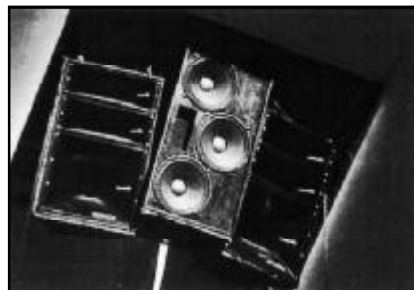
Busch Stadium is an excellent example of how the architecture of the space should drive the design of the loudspeaker arrays. A proprietary design was used for the circumferential loudspeaker system, allowing coverage of the under-roof and open-air seats from a single under-roof location.

In this innovative approach the M4 driver and horn are coaxially mounted with the low-frequency device, yielding the best approximation of a true full-range point-source possible.

Wading River High School Shoreham, NY

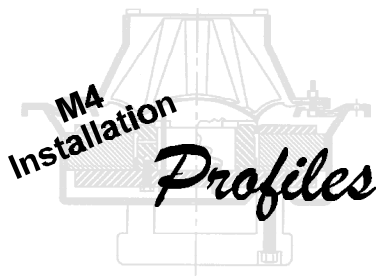
The Shoreham Wading River High School's 6,700 square-foot, 800 seat auditorium needed a new sound system that would provide coverage for the middle section of the seating area and improve intelligibility overall. For this application, the two M4 drivers are mounted on Community SH2064M midrange horns, providing a more compact array that could be recessed into the ceiling.

According to school officials, the sound system now offers low distortion and improved vocal clarity, as well as the ability to project over the entire seating area.



Kezar Municipal Stadium San Francisco, CA

Directivity for the seating area was optimized by using 18 Community horn/drivers distributed in groups of nine at promenade level on each side of the playing field from end zone to end zone. "The horns are PC1594Ms, while the drivers are M4s," explains project manager Jim Thielemann. "They are mounted atop 40-foot poles and aimed down at the stands. The resulting performance is strong, highly intelligible, and features tight pattern control, which is what was intended to keep sound out of the surrounding areas."

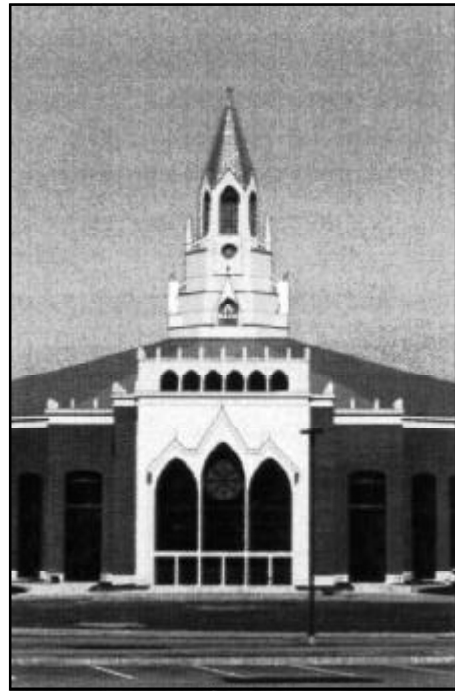


Chapel Hill Harvester Church

With a 200 member choir, 50-piece orchestra, and the Cathedral singers, the Chapel Hill Harvester Church required a sound system that would prove to be a prototype for the church of the nineties. The 7000 seat Cathedral of the Holy Spirit demanded a state-of-the-art system to meet its needs.

This was provided with the installation of a central cluster loudspeaker system built around the M4. The 3-way coaxial system has met all of the demands placed on it by the church.

According to the staff, "Even when sound pressure levels are hovering around 112dB during music programs, the system distortion is almost imperceptible."



Bellville Sport Complex Bellville, South Africa

The field, track and outer perimeter of this large, outdoors sports complex are covered by a three-way loudspeaker array. The roof-mount cluster is comprised of two CB594 bass horns, three PC1542 horns (M4 loaded) and three PC242 high-frequency horns.

To protect against the harsh South African sun, all of the Community fiberglass horns were coated with a white ultra-violet-reflecting topcoat resin.



The Target Center Minneapolis, MN

NBA games in the nineties are multimedia events, and demand massive audio and video systems to deliver the event to large, noisy crowds.

The home of the Minnesota Timberwolves has been served well by its 3-way loudspeaker system built around the M4 driver. The circumferential cluster circles the scoreboard, and provides speech and music reinforcement to crowds exceeding 18,000 people.

The combination of high fidelity and "acoustic muscle" is ideal for such venues, and makes the M4 the first choice of arena design consultants worldwide.



Bibliography

Sound System Engineering, Don and Carolyn Davis, Second Edition 1987 Howard W. Sams and Company

"Horns: Their Function, Measurement, Arraying and Alignment Workshop" Syn-Aud-Con Tech Topic supplement to Newsletter Vol. 20 No. 2, by Don and Carolyn Davis

A High-Efficiency, One-decade Midrange Loudspeaker, by Bruce Howze and Clifford Hendrickson

"The Revival of a Horn Within a Horn" by Don Davis, Sound and Communication Vol. 38 No. 2

"Cincinnati Music Hall's New Sound System" by Lisa J. Ford, InView Fall 1990

"Joe Robbie Stadium" by Allan R. Carlson, Sound and Video Contractor Nov. 1987

"No Second Chances at the Orange Bowl" by Gregory A. Detogne, Sound and Video Contractor April 1991

"School of the Arts Features Artistic Sound" by Gregory Detogne, Sound and Video Contractor Jan. 1991

"Chapel Hill Harvester Church" by Bob Ditzler, Sound and Communications March 1992

"The Target Center" by Henry Sanford, Sound and Video Contractor Nov. 1990

"The Bellville Sports Complex" by Greg Detogne, Sound and Video Contractor April 1990