Chesapeake Energy Arena
Anya Brings the Thunder
CASE STUDIES  
CHESAPEAKE ENERGY ARENA

EAW Anya tames arena acoustics

Oklahoma City’s downtown arena accommodates multiple uses, and reconfiguring the sound system for each is now just a button-push away.

Challenge
Opened in 2002, city-owned Chesapeake Energy Arena is an 18,000-seat multi-purpose venue in downtown Oklahoma City and is best known as the home to the NBA’s Oklahoma City Thunder. But when the Thunder are rolling on the road, the arena plays host to ice hockey, wrestling, rodeo, and live concert events.

CEA features retractable seating on the main floor to accommodate a variety of seating configurations, as well as drapes to close off upper deck seating for smaller events. Arena acoustics are usually tricky, and introducing variable seating made things even tougher. To stay competitive, CEA completed a video modernization in 2012 but the audio system was getting long in the tooth.

Consultants Marsh/PMK sought a sound system that could readily accommodate a spectrum of event types without burdening the operators. Fitted above the scoreboard, the system had to provide stellar performance and consistent coverage for any of the seating configurations.

Solution
Working with hometown system integrator Ford AV, Marsh/PMK specified 40 Anya modules, deployed in four arrays of two columns each. Anya is a high-powered device with a flexible dispersion pattern, which Stevens leveraged to get coverage of the whole venue with little need for fill or delay speakers. The system’s self-powered design was invaluable in speeding installation to meet the very aggressive schedule, as well as reducing space and cabling needs. Anya’s high output capability meant that the columns never needed to be longer than six modules to cover the entire venue. Anya’s 35 Hz to 18 kHz operating range is sufficient to meet the

Project Summary
When the Chesapeake Energy Arena decided to upgrade its 15 year old sound system, they brought in consultants Marsh/PMK. The arena serves 18,000 patrons and is multi-use, including full house sporting, concert, and rodeo events. It also has retractable floor seating and at times closes off the upper deck for smaller events.

Marsh PMK worked with integrator Ford AV to employ a central scoreboard system of 40 Anya modules in four arrays of two columns each. Another deciding factor to use Adaptive was its namesake benefit of adapting nearly instantaneously to various coverage requirements through presets recall for the CEA’s various event styles.

Anya’s peerless small columnar footprint and ability of its 6-high columns to fully cover the arena takes very little space, requires less motors and cabling, so installation takes less time than a conventional system.

Chesapeake Energy Arena Equipment List
- 40x Anya 3-Way Full-range Array Module
- 8x Anya Flybars
original specification, and the modules are run full-range at CEA, but the arena chose to add subwoofers for even deeper low-frequency extension.

The ability to recall presets for different configurations is crucial to supporting CEA’s variable seating operation, as it allows resources to be reallocated for different configurations, rather than simply shutting down equipment for sections that do not need coverage. This means the system’s full complement is always being used. Dual Dante™ networks on each module provide complete system redundancy.

Ford AV’s excellent installation meant that everything was configured and ready when EAW arrived to support Marsh/PMK in commissioning the system. After a shakedown cruise during a preseason Thunder game, venue and team staff declared themselves pleased with the result. Marsh/PMK felt that coverage levels were remarkably consistent all the way up the seating area.

CEA’s sound system upgrade is one of a number of successful investments the arena and the citizens of Oklahoma City have made to keep the Chesapeake Energy Arena current as a top venue in the region and the country.

**ABOUT MARSH/PMK**
For more than 30 years, Marsh/PMK has provided acoustical and AV design services for almost every kind of venue and edifice imaginable, from theme parks to elementary schools to hotels and, of course, arenas. Marsh/PMK is headed up by its president, David Marsh, whose history with the firm goes back to its earliest years.

Founded in 1984 by the late Gary Kinsella, the company started out in acoustical consulting, but soon expanded into audio/visual consulting, as well. With offices in Dallas-Fort Worth and Austin areas, Marsh/PMK continues to grow, including adding low-voltage/ELV system design to its services.

Marsh/PMK maintains its reputation for outstanding customer service by maintaining high principal involvement in each project and by being a pure consulting firm, with no financial ties to manufacturers or integrators for the equipment they specify.

**ABOUT FORD AV**
Claire and Jim Ford founded Ford Audio & Acoustics in early 1973. Within two years, the company was firmly established designing and installing church systems and large commercial systems.

Today, Ford AV has a half-dozen offices through the West and is part of projects all around the world.
EAW Anya is a complete, self-contained, high-power sound reinforcement system that adapts all performance parameters electronically, allowing it to be used in virtually any application. Columns of Anya modules hang straight, without any vertical splay, and EAW Resolution™ 2 software adapts total system performance to deliver consistent, full-range output across the entire coverage area as defined by the user. Extremely powerful and immensely scalable, Anya is suitable for anything from small venues to the largest stadiums. Otto is the companion subwoofer for this system.