

# TALLADEGA SUPERSPEEDWAY

## INTEGRATING SOUND AND RACETRACK ENTERTAINMENT

A COMMUNITY CASE STUDY - MAY 2010

### ABOUT THE FACILITY

The Talladega Superspeedway, located in Talladega County, Alabama, is one of America's most famous racetracks. Originally built in 1969, Talladega's grandstands can accommodate 143,231 fans, and the infield holds thousands more. The grandstand seating area on the track's west side is one mile long. The racetrack hosts two of NASCAR's Sprint Cup Series races annually, which take place in the spring and fall.

Talladega has seen some of NASCAR's most exciting races through the years. The track runs 2.66 miles long and four lanes wide. The backstretch is nearly 4,000 feet. Stock cars reach incredible speeds at Talladega. Bill Elliott set the record for the fastest qualifying speed at 212.809 miles per hour in April 1987.



### THE SOUND SYSTEM

NASCAR races have changed in recent years. Racetracks and their sound systems are changing along with them.

"Races have become events," said Chris Ogles of Sound Solutions in Oxford, Alabama. "It's not just about the race, it's about the pre-race entertainment. You have A-level national acts coming out now and doing pre-race concerts."

When Talladega Superspeedway replaced its wheel fence in 2009, it seized the opportunity to



install new loudspeakers on poles behind this barrier. The track had previously mounted horn speakers on the fence. The change improves sight lines for spectators, and eliminates a potential safety problem should a car crash into the fence. It also provided a chance to upgrade the pre-race fan experience.

Success at facilities like Michigan International Speedway and Atlanta Motor Speedway gave Community Professional Loudspeakers a proven track record in these applications. Ogles called Community's R-Series "the right speaker for the job" for several reasons. First of all, the three-way R.5HPT produces



### SOUND SYSTEM (CONTINUED)

tremendous output. The weather resistance of the R-Series was also important. While Alabama doesn't have harsh winters, it receives its share of severe thunderstorms, humid summers and extreme weather. Furthermore, the R.5HPT's compact size helped enhance Talladega's fan experience.

"When you put a 16x16 inch box on top of a 12-foot pole, sight lines aren't really impacted," said Ogles. "There are other manufacturers out there that make great loudspeakers, but the box is three times that size."

Ogles and his team encountered no major obstacles during the installation in October 2009. But the sheer size of the project – which included 101 R.5HPT's and 50 R.5SUB subwoofers – made the project challenging.

The new system has received rave reviews and made a night and day difference in sound quality, according to Ogles. There is a huge impact during pre-race concerts. "The fan is getting a true concert experience no matter where they're sitting on the lower level at Talladega."

### EQUIPMENT HIGHLIGHTS

- 101 Community R.5HPT loudspeakers
- 50 Community R.5SUB subwoofers
- dbx DriveRack 260 processor
- 13 QSC ISA 1350 amplifiers

### THE LOUDSPEAKERS

There is a Community R-Series for every installation. Highly weather resistant for outdoor applications, but very appropriate for indoor use as well, the R-Series offers exceptional voice clarity and sound projection capability. R-Series systems are found in the world's premier amusement parks, sports arenas, cruise ships and racetracks, as well as countless university and high school sports fields.



**R.5HP**

The R.5HP is a three-way horn loaded weather-resistant loudspeaker system engineered to provide maximum intelligibility from a compact enclosure. Community's well-known M200 midrange driver is coaxially mounted within the mouth of a 12-inch LF horn, while high frequencies are handled by Community's non-metallic diaphragm UC1 1-inch exit HF driver. The M200/UC1 combination creates effortless voice-power with HF sparkle, enabling the R.5HP to act simultaneously as both a musical entertainment loudspeaker and a voice PA loudspeaker. As a result, the R.5HP has been installed in numerous high profile racetracks worldwide including Talladega Superspeedway, Atlanta Motor Speedway and Dover International.



**R.5SUB**

Using the same size enclosure as full-range R.5 models, the R.5SUB system is engineered to provide quality low frequency reproduction in a variety of outdoor and indoor applications. Its compact size and weather-resistant properties allow for easy inclusion in a wide variety of installations.

*Community has been a leading supplier of professional loudspeaker systems since 1968. Headquartered in Chester, Pennsylvania, Community distributes its products to over fifty countries on six continents.*