

CASE STUDY

ESTADIO MINEIRAO: 2014 WORLD CUP
BELO HORIZONTE, BRAZIL

INTEGRATING SOUND AND SPORT

October 2014

About the Facility

Estádio Mineirão, a soccer stadium located in the city of Belo Horizonte, Brazil, holds 58,170 fans. It was one of 12 venues that hosted games during the 2014 FIFA World Cup. Soccer games will also take place there during the 2016 Summer Olympics.

Estádio Mineirão opened in 1965 and had a renovation to modernize the facility completed in December 2012. It hosted six 2014 World Cup matches, and is the home stadium for the Brazilian soccer team Cruzeiro. The stadium held over 132,000 fans for a match in 1997. However, capacity has been decreased steadily due to safety reasons.



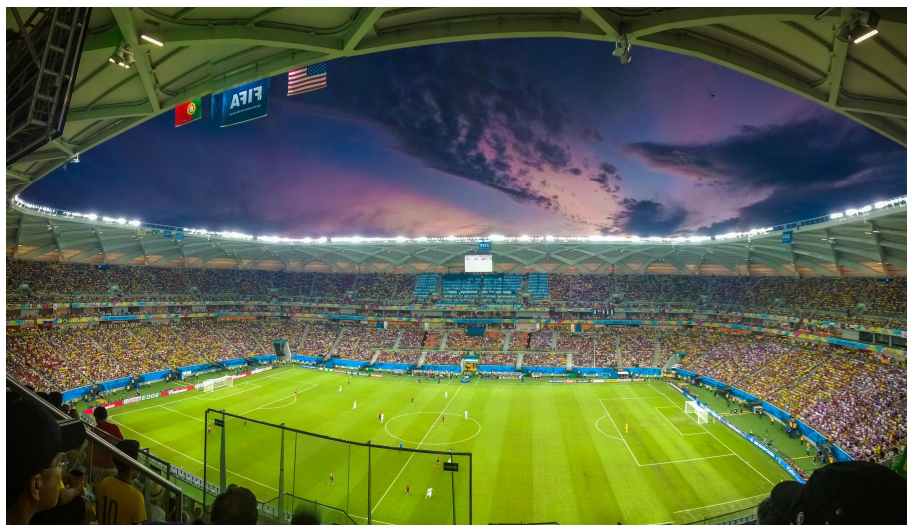
Estadio Mineirao

The Sound System

Johnson Controls Brazil selected Soundvision Engineering, an audio and video contract integrator in Brazil, to design and install the sound system for Estádio Mineirão.

When Soundvision started the project it faced significant challenges right away. The first issue was the size and scope of the control/monitoring system. The team designed a solution consisting of 16 racks with BSS Audio BLU-800 signal processors and Crown amplifiers. The loudspeakers are fed from five technical rooms through CobraNet with D-link redundancy.

The team also needed loudspeakers compliant with FIFA requirements for the World Cup that delivered well-defined coverage and high intelligibility for the massive crowds soon to fill the stadium. Since Belo Horizonte can see



Arena Manaus

The Sound System (CONTINUED)

temperatures close to 100 degrees, weather-resistance was also a key factor.

Soundvision ran EASE simulations to evaluate several different loudspeaker systems during project development. After thorough testing, they selected Community R2 loudspeakers.

A configuration featuring twenty-four clusters, each with four or five R2 loudspeakers, was chosen for the project. To overcome one additional challenge, they created customized brackets to safely secure the clusters.

After completing the installation, Fernando Gargantini, Systems Manager for Soundvision, tested the system and made performance analysis measurements. The results showed that it provides exceptional coverage, SPL, and intelligibility.

Two other stadiums used R SERIES loudspeakers during the World Cup in Brazil: Arena Corinthians in Sao Paulo and Arena Amazonia in Manaus.

Both stadiums opened in 2014, shortly before the World Cup started in June.

Arena Corinthians, which hosted the first game of World Cup 2014 between Brazil and Croatia, has 48 R2 loudspeakers. Based in Sao Paulo, Arena Corinthians has seating capacity for 46,116 fans. However, temporary seating enabled it to hold over 63,000 during the World Cup. Since the 40,549-seat Arena Amazonia is located in the Amazon rainforest, weather-resistance became even more important when selecting loudspeakers. That sound system has 64 R2 and 76 R.25 loudspeakers.



Arena Corinthians

The Loudspeakers

Community's R SERIES loudspeakers are the world's standard for great musical sound quality with high voice intelligibility in continuous outdoor exposure. R SERIES features high-power models like the R2s used in these World Cup venues. Mid-power models like the R1, R.5 and R.35-3896 are designed for arenas, gymnasiums and distributed systems. Compact models like the R.25 and R.15 offer R SERIES performance for smaller venues and distributed usage. Five "R MAX" models are ideal for venues that demand uncompromised music and voice quality at high output levels. Most R SERIES models are equipped with versatile U-brackets and many include 70V/100V transformers.



R SERIES R2-94



R SERIES compact and R-MAX models

Equipment Highlights

- 48 Community R2-474Z Loudspeakers
- 24 Community R2-694Z Loudspeakers
- 24 Community R2-52Z Loudspeakers
- 4 Community R2-77Z Loudspeakers
- 6 Community R2-94 loudspeakers
- Soundcraft CobraNet with D-Link Redundancy

Download our Individual Model Spec Sheets from www.communitypro.com