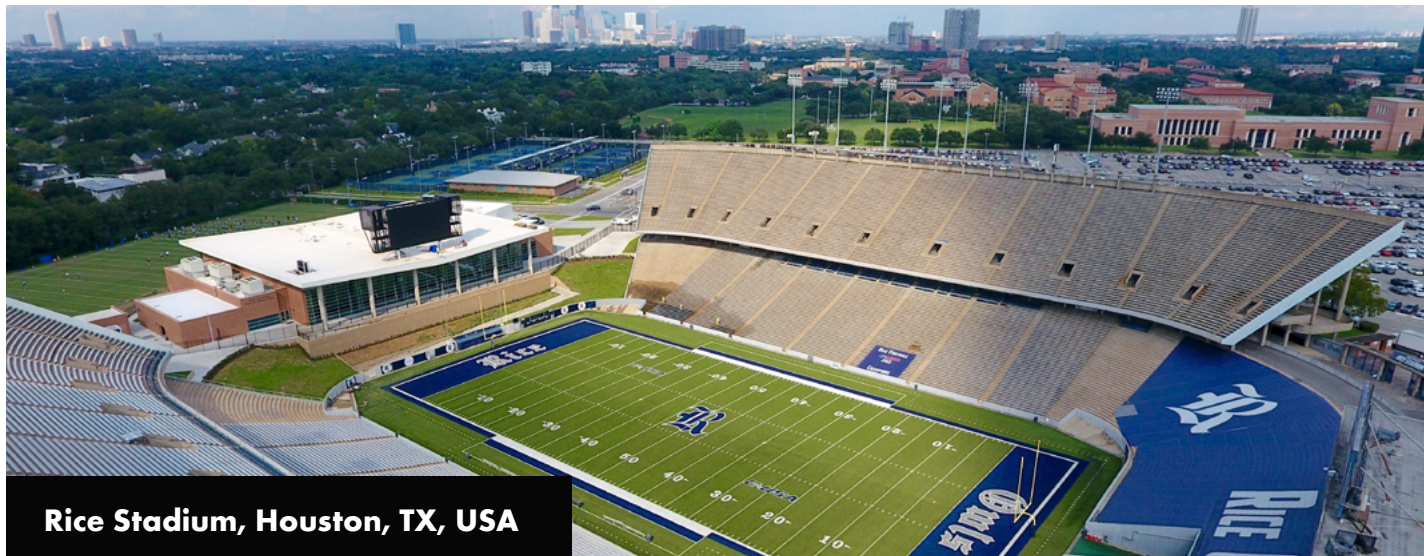


Q-SYS plug-in eases the way for integrated stadium sound.



Rice Stadium, Houston, TX, USA

“The fact that d&b released their Q-SYS module just as we entered into this project, made the selection ideal.”

Zach Richards, Big House Sound

Setting the scene

It was in Rice Stadium in Houston Texas, that President John F Kennedy announced that the US would go to the moon. Thanks to emerging satellite technology, this was one of the first statements modern media could broadcast to the world.

“That’s a legacy of time and technology,” says John Miller of Austin based Technical Design Group (TDG), engaged by Rice College to completely renew the 70,000 capacity stadium’s sound and vision systems.

Establishing objectives

“All sound systems inevitably date,” explains Miller, “but Rice are fortunate in that Ryan Bucher, their Associate Athletics Director, understands the quality and performance of modern audio systems and could clearly articulate what they wanted to achieve. They gave us a basic parameter for what they wanted to see and hear and we designed in the detail.”

Rice Stadium grandstands are all open without roofs, which presented TDG with a singular limitation. “We were mandated to produce a point source solution, not a distributed one,” explains Miller. “The nature of the stadium is such that locating and mounting a distributed system would have involved considerable costs.”

The solution

Following a strict bidding process, the system finally chosen comprised J-Series and V-Series.

d&b Installation Partner, Big House Sound, was charged with delivering the system to TDG’s specification. Big House Sound’s Zach Richards: “We have significant experience with J-Series, and in stadium environments. But not as an installation. In that respect it was an atypical choice - this is the first large stadium installation of J-Series in the US - but we knew it could deliver exactly what they wanted.”

Miller: “There is a big issue at the stadium with significant expanses of glass on the north, south and west sides. The pre-existing system saw the sound chase itself around the stadium giving very poor intelligibility.



"This is the first large stadium installation of J-Series in the US - but we knew it could deliver exactly what they wanted."

Zach Richards, Big House Sound

"Given the quality of the product chosen we could see in the ArrayCalc documentation that the idealized coverage, with minimal excitement of reflective surfaces, could be achieved."

"It's also the case that over the years we have learned that many clients have developing needs," adds Richards. "What works for them

when you first install may be subject to change in the future. A refurbished grandstand for example, can alter demands. So again we modelled for a factored variation in ArrayCalc and persuaded the contractor we needed a grid type structure that allowed for movement, with space around the hang for lateral shift.

"The grid also allowed us to add extra stability to overcome the influence of wind on a line array rigged effectively in the open and at considerable height; the bottom cabinet of the array is eighty feet above the field."

Q-SYS was specified by TDG to fully integrate audio to the new video system, and further to the commentary teams and visiting broadcasters.

"This is my 'go-to' digital signal processor," says Miller. "With that almost infinite number of inputs and outputs and its solid reliability it's the one."

The system is driven by d&b 30D amps. "They are perfectly suited to this type of installation," adds Richards. "Features such as GPIO, and of course the fact that d&b released their Q-SYS module just as we entered into this project, made the selection ideal. That allowed all the system monitoring, standby, and failsafe functionality, within Q-SYS.

"It handles the entire audio network over dual redundant 500i cores, with primary AES drive lines to the 30D amplifiers and analog backup lines. Additionally, there are Dante enabled areas to tie broadcast, local commentary, the field officials, and the Yamaha console into Q-SYS."

"We were pleased, in fact more than pleased," concludes Miller. "The listening experience is excellent and comparison with the documented model exceeded our expectations. We would not hesitate to use d&b products on future projects."

> System: Vi8, J8 and 30D