West Market Street United Methodist Church  
Greensboro, NC

**LOCATION:** 302 West Market Street, Greensboro, NC 27401

**SCOPE OF CONSULTING:** Speech-reinforcement sound system design

**COMPLETION DATE:** Designed 1999 / Installed 2003

**ARCHITECT:** Eason & Farlow Design (interior renovation architect & liturgical designer)

**ASSOCIATED ACOUSTIC CONSULTANT:** Marshall/kmk Acoustics, Chappaqua, NY

**REFERENCES:** Rick Hollowell, church member & owner’s representative (Com-Spec Corp.: 336-370-1456)  
Rev. Scott Nowlin, administrative minister (church office: 336-275-4587)  
Terry Byrd Eason, project designer (919-968-0445)

**DESCRIPTION:** Renovation of the late-19th century church sanctuary, in the Richardson-Romanesque style, including some enhancement of natural room acoustics to support a new pipe organ by Dobson/Rosales (1999) and the church’s excellent music program, plus a new speech-reinforcement sound system.

Digitally-controlled, steerable line-array loudspeakers were recommended as the only realistic and affordable loudspeaker design for this Akron-plan sanctuary with original side-room annex. A 14’-tall high-resolution line-array loudspeaker is surface-mounted on the front wall of the sanctuary, and a 12’-tall “dual-ended” medium-resolution line-array is surface-mounted in the front corner of the annex. Each unit has separate “sound lobes” aimed down to the main floor and up to the wrap-around balcony. The line-arrays are undecorated except for custom-matching paint. Other sound system features include a “hands-free” mixing system for most worship services, supplementary loudspeaker system for the choir platform, program monitor loudspeakers for ancillary & support areas, assisted-listening system for the hearing impaired, modest speech & music recording system for archive use or cassette tape distribution to the home-bound, permanent wiring for future professional recording, and permanent wiring for a temporary live-event mixing console in the balcony.

This typical Methodist sanctuary has a large-radius open-plan chancel platform, major axis along the floor-plan diagonal, radial-plan congregation seating, three-side wrap-around balcony, relatively low ceiling with a large dome, and a divisible secondary “overflow” annex (also with wrap-around balcony) attached to the side of the main worship space. It is very difficult to successfully use traditional loudspeaker systems—in a visually acceptable manner—in this uniquely-American style of church architecture. For this project, we specified an unusual line-array model with a coverage pattern highly suited for the sanctuary radial pew configuration (and remains the only one of its kind in the United States), and worked with the manufacturer to adapt two standard line arrays into a unique dual-ended design for the smaller annex.
Chancel Platform – View from Center Balcony