



Solution Story: Virginia Beach UMC ,VA

Another quality solution by: VICOM, Virginia Integrated Communications

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Highlights

- Martin Audio OmniLine Line Array speakers
- Violet Audio Digital Snake
- Soundcraft Si1 32 Channel Digital Mixer
- JBL Control 25 Choir Monitor Speakers



Martin Audio OmniLine Speaker



MEETING AN ACOUSTIC CHALLENGE

Due to the complex nature of the acoustics in the Sanctuary at Virginia Beach United Methodist Church, Vicom engineers partnered with Martin Audio Engineers to develop a speaker design that addresses the many curves and hard surfaces of the sanctuary. The most detrimental surface that causes the acoustical problems is the curved ceiling. The ceiling is not only curved above the main seating area, but there are mini domes over the balcony area.

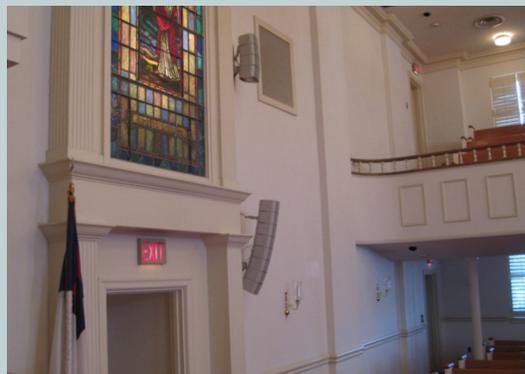


These curved surfaces cause "focusing" of sound creating many "hot" spots and unbalanced sound dispersion. Sound dispersion was designed to be kept away from these surfaces. The large chandeliers were also another area of concern due to the large glass globes which reflect sound in many different patterns. Care was taken in our design to make sure that sound

from the speakers is not aimed or reflected off of the chandeliers. Another problem surface is the face of the upstairs balcony. This is a large hard reflective surface which can create bad acoustical echoes which would greatly decrease speech intelligibility. Care was taken to make sure sound was not reflecting at these surfaces.

STATE OF THE ART SOUND REINFORCEMENT SYSTEM

Because of the challenging acoustical nature of the sanctuary, Vicom's solution was a combination of Martin Audio OmniLine Line Array Speakers, JBL Choir Monitors and a Soundcraft 32 Channel Si1 Digital



Martin Audio OmniLine Upper & Lower Speaker Arrays



Soundcraft Si1 32 Channel Digital Mixing Console

Mixer. Because the OmniLine Array is modular in design, a large array was used for the main seating area and a small array was used for the upper balcony seating. The result was even dispersion of sound in all seating areas with minimized reflection of sound and excellent speech intelligibility.

