

enhancement system consisting of 365 Tannoy loudspeakers and 61 QSC power amplifiers that would allow for acoustic conditions to be changed at a moment's notice.

**Processing systems:** one BSS Soundweb 9000 (DSP network hub), 17 BSS Soundweb 9088 (DSP network processor), one QSC QS Control System (PC controller and SW), five QSC QS Control 2 (T base 10 hub), 20 QSC CM 16 (power amp monitor hub).

**Electronic acoustic system (EAS):** 294 Tannoy CMS8-TDC (8" driver), 59 Tannoy MC12-8, 16 Tannoy custom S300. Total number of speaker boxes (603) some with multiple drivers in each box.

#### SOUND SYSTEMS

The sound systems for the complex proved the most difficult challenge due to the need for uniform sound coverage juxtaposed against the reality of the irregularly sloped seating levels as well as the need for high fidelity stereo coverage and precision zone control. In the end, the development of customized loudspeaker systems and the deft utilization of modern pattern control techniques helped overcome the problems. The strategic placement of loudspeakers and the use of "frequency shading" also helped in the creation of a balanced sound throughout the auditorium.

**Mixing consoles:** one Soundcraft Series Five, Allen & Heath Mix Wizard, Soundcraft Series Five 24 Bus.

**Monitor system:** two Tannoy T12 12" monitors, four Radian RPX-108P 8" monitors, two PAS VM1 12" monitors, four Shure P6TRE-1 Wireless In-Ear monitors, eight Shure P6HWE-1 Wired in-ear monitors, one Shure PA 760 antennae combiner, one Shure PA 705 unidirectional antennae.

**Amplifier systems:** 64 QSC PL 1.0 power amplifiers, 35 QSC PL 1.0 HV power

amplifiers, four QSC PL 1.8 power amplifiers, 13 QSC PL 2.0 HV power amplifiers, 19 QSC PL 4.0 power amplifiers, 12 QSC PL 9.0 power amplifiers.

**Sanctuary loud speakers:** Mono Cluster—three Tannoy custom #12a (S250 driver with four 10" drivers), two Tannoy custom #12b (T300 driver with four 10" drivers), six Tannoy B 400 HO (PHL 15"), 12 Tannoy i15B (PHL 15"), six Tannoy B950 (dual 18" subwoofer). Stereo Cluster—two Tannoy T300, six Tannoy S250, two Tannoy custom #13 (T300 driver with four 12" drivers), two Tannoy B400 HO, 20 Tannoy i15B (PHL 15").

**Delay loudspeaker system:** 52 Tannoy MC 12-8, 18 Tannoy i12, 16 Tannoy i12B, two Tannoy custom 7BR, two Tannoy custom 8A.

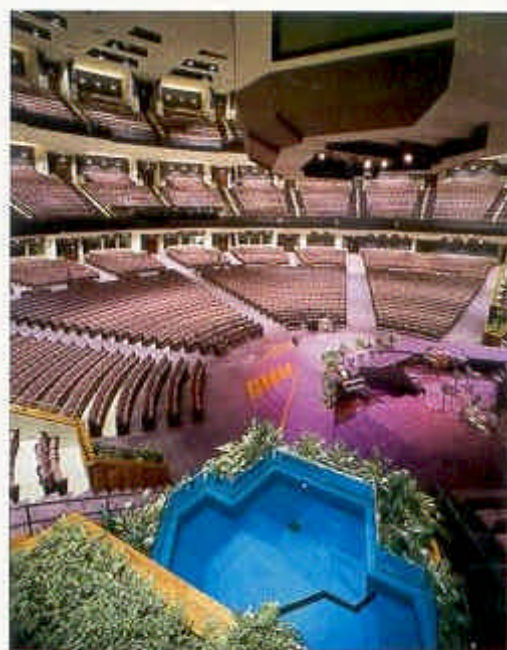
**Front fill main floor system:** four Tannoy BF8 (8" mid/high), four Tannoy i15B (PHL 15").

**Hallway loudspeaker system:** 58 JBL 26 CT (6" ceiling speaker), 19 JBL 24 CT (4" ceiling speaker).

**Wireless systems/microphones/D.I. boxes:** Six Shure U4D dual channel diversity receivers, eight Shure U2 microphones with Beta 87 element, four Shure U2 microphones with Beta 58 element, 10 Shure U1 body packs, one Shure UA845 antennae distribution system w/active remote antennae, three Lectrosonic DR 195 receivers, three Lectrosonic UM195 body packs, one Lectrosonic UMC antennae distribution, mixture of Lectrosonic and Sennheiser 102 mics for Lectrosonic UM 195 body pack, three Vega R-622 receivers, three Vega T-625 body packs, one Vega antennae distribution, 104 Sennheiser mics for Vega body packs, two E.V. MR 2500 receivers, three E.V. MT 2500 body packs.

#### VIDEO

Because of the great distance from the pulpit to some of the seats in the main sanctuary, considerable attention was



given to video projection with specific attention being paid to sightlines and aesthetic considerations. Not wishing to dim the lighting for the audience to see the projected images, the most powerful venue-class projectors were selected and implemented. The system was designed to be used for live image magnification, the projection of song lyrics, notes and announcements and to integrate computer graphics.

**Digital projection:** one 7GV, five for the large 20x25' floor screen; 5DV projectors for smaller gondola screens, six Stewart rear projection screens.

**Video:** three Sony D30s cameras; Grass Valley 200 switcher; Power Mac w/ Adobe Persuasion and Macromedia Director for Character/slide generator; Extron VSC 200 scan converter; Mac G3 based Media 100 for video and slides; DVCPro, S-VHS, Betacam for recording and playback; DPS-265 universal synchronizer for VHS playback; Allen & Heath 20 Input mixer for audio record and playback; , three Sony 25" composite monitors, 12 Sony black and white 6" monitors. WL