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Positioning A Church For The Future

Idlewild Baptist Church Outfits its Growing 143-Acre Campus

By Strother Bullins



Photo by Jim Kumorek.



Photo by Jim Kumorek.

Photo (far left): At front-of-house, a Yamaha PM1D digital audio console provides the needed channel count and flexibility needed for Idlewild's services and events.

Photo (near left): Also at the front-of-house position, an ETC Expression 3 with ETC's Emphasis moving light controller provide full access to the house, architectural and theatrical lighting system.

Lutz, Florida — Idlewild Baptist Church has a long and illustrious history of ministering to Tampa-area residents, growing and evolving along with its needs, as well as the needs of its congregation. Since its beginnings in a garage in 1933, Idlewild has become a notable, established place of Christian worship for its neighborhood. Naturally — as should happen with any healthy house of worship — the edge of this neighborhood has continued to expand considerably.

Today, Idlewild is not limited to one sanctuary or even one campus. Its ministry extends to a satellite campus and centrally operates from new facilities on its 143-acre Exciting Idlewild Boulevard campus. The new facilities — designed by Schwabb Twitty & Hanser Architectural Group, Inc. and featuring a 5,200-seat main Worship Center, 300-seat choir rehearsal hall, orchestra rehearsal hall, two student halls, and "Gatheria" atrium lobby area — have been thoughtfully equipped with the best audio and video systems for Idlewild's needs, explains Jimmy Moore, minister — technical ministries.

"The goals for the audio/video/lighting systems were to support the ministry need at the time with a strong emphasis toward being prepared for any foreseeable ministry need in the future," offers Moore, who — with the guidance of Bill Thrasher, Sr. of Kennesaw, Georgia-based Thrasher Design Group, Inc. — played an integral role in overall system selection.

A 'Non-Antagonistic' Approach

In approaching acoustic treatment and audio systems, Thrasher — the principal design consultant for Idlewild's new audio, video, and lighting systems — regularly refers to the

Photo (opposite page): Idlewild Baptist Church in Lutz, Florida undertook a massive building project resulting (in part) in a 5,200-seat sanctuary with a design that demonstrates outstanding forethought and preparedness for the future.



Bill Thrasher of Thrasher Design Group, Inc. designed the PA system around JBL Professional's Precision Directivity PD Series cabinets, with separate boxes handling the mid- and high-frequencies, another group of cabinets for the bass, and a set of subwoofers for additional low-end.

term "non-antagonistic" to explain his design philosophy. "The rooms that I do are non-antagonistic," he begins. "They aren't designed to do any one thing really well, nor are they designed to hurt anything."

In what Thrasher describes as a "totally electronic room," the main auditorium at Idlewild was acoustically treated to not interfere with what would always be PA-driven audio. The room — a three-level, fan-shaped space — features both flat and sloped main floor seating, terraced under-balcony seating which links levels one and two, and a circling, terrace-seated balcony accessible from the third level.

"The room shouldn't hurt the PA," he explains. "In that size room, you get very

little direct or natural sound from the platform into the crowd. The PA must get sound to every seat, and room acoustics are designed to not interfere with the sound system or congregational singing."

Thrasher describes the room as relatively absorptive, controlling reflections to keep reverb time at a comfortable 1.6 seconds. "There's a lot of absorption behind people's heads and at the rear of the room. In front, there are hard and diffuse surfaces. While I can't really use 'live' or 'dead' terms, I can say that we're very much into controlling reflections. If more reverb is needed, then a reverb unit can be turned on."

Auditorium Audio

Following a PA shootout, Thrasher recommended and Moore approved a loudspeaker system based on JBL Professional's Precision Directivity PD Series featuring PD764 mid/high-frequency enclosures. "At this point I am not a line array fan," explains Thrasher regarding taking a non-array approach to the main auditorium's sound. "Other than just looking at what the touring guys are doing, I often look at what's happening at THX theaters or in Las Vegas showrooms. The system at Idlewild is somewhat along the lines of systems JBL does for cinemas. The bass bin — a JBL Custom Shop 'Diamond Quad' enclosure with four 15-inch drivers — is an install version of the bass systems JBL does for cinemas. In total, there are three main loudspeaker devices at Idlewild: a bass bin system, a mid-high cabinet system, and subwoofer cabinet system. There's just a lot of them," Thrasher adds.

The auditorium has 20 JBL PD764 enclosures, 18 JBL 'Diamond Quad' CST51DQ bass bins, and 18 JBL CSP82 dual 18-inch driver subwoofer cabinets. Over 80 JBL Control 29AV enclosures provide sound

reinforcement under the balcony, while riser-mounted front-fills are custom-designed loudspeakers by Thrasher Design Group. These front-fills enclose Galaxy Audio S5N-8 low-frequency drivers and Electro-Voice ND2 drivers fitted on HPT64 horns.



Photo by Jim Kamorek.

Numerous racks of Crown amplifiers power the PA system at Idlewild.

Located between two primary A/V equipment rooms on the auditorium's third level, 56 Crown CT Series amplifiers fitted with IQ PIP-USP3 processing cards — providing all crossover filters, driver compensation equalization, and synchronization delays — provide ample power for the entire audio system. Also, in one of the A/V rooms, a master signal distribution/processing system of dual Yamaha DME24n processors — with MY16AE cards and AES3 digital I/O — is the nexus of the entire system; the second DME24n acts as a hot backup for the first.

Residing at front-of-house, a 96-input Yamaha PM1D mixing system provides the necessary mix power needed for the constantly-changing program at Idlewild. "The real workhorse of the system is the



Sony DXC-D50 cameras sporting Fujinon lenses and mounted on Vinten tripods and heads occupy camera positions one and two.

PM1D — and a DM1000 — at front-of-house," says Moore. "Thus far in our brief time in the room we have already mixed as many as 108 channels of audio for an event." The system was purchased nearly a year before the new facility was completed, allowing the technical staff to become well versed on its features, capabilities, and layout before its big room debut.



Idlewild's video control room is well equipped with a Ross Video Synergy 2 production switcher and Leitch 32 X 32 SDI and AES3 matrix routers. Idlewild current uses live video for image magnification (IMAG), and has plans to expand into broadcast.

On stage, rhythm section musicians are treated to quite the collection of monitors and self-mix equipment. Most notable are the five "Individual Headphone Mixing Stations" — or "IHMS," Thrasher abbreviates — each featuring a Yamaha 01V/96 digital mixer fed by a central Yamaha DME64n processor. "You have EQ, compressors, limiters, and more on every channel. Musicians have more control over what they hear. For higher end productions, it's the best."

In a third equipment room located adjacent to the stage, 16 Crown CT amplifiers power a capable loudspeaker monitoring system alongside racks of many more audio system components including a 32-channel Shure UHF wireless microphone system and 240 channels of passive microphone signal splitters.

The audio system is comprehensively networked: audio I/O as well as loudspeaker coverage is available almost everywhere in the facility. According to Thrasher, this is central to a well-designed, expandable audio system. "There are tie lines everywhere," he beams. "There's the ability to ship signal all over the building in various directions. That's another one of our signatures. Plastic pipe installed in the floor is really cheap [when the building is being constructed], and really expensive later."

Moore states that the system will continue to evolve, most notably in the realm of multitrack recording. "Loads of features and lots of flexibility give us plenty of room for growth," he offers. "The two Yamaha DM2000 consoles in MACR (the facility's multitrack-capable Media Audio Control Room) were an excellent choice for us. We await the implementation of 96 channels of digital audio multitrack devices; we are presently doing a mix to two tracks and are still growing in this area."



Christie Digital Roadie 25K DLP projectors utilized in a rear-projection configuration power the two main screens in the sanctuary.

Making Video a Priority

According to Thrasher, video wasn't part of Idlewild's ministry when he and his consulting firm stepped into the scene. That quickly changed as video training of the technical staff ensued while the new facility was built. The new auditorium's broadcast-capable SDI video production system features four Sony DXC-D50 cameras, a Ross Video Synergy 2 production switcher, Leitch 32 X 32 SDI and AES3 matrix routers (expandable to 64 X 64), and a variety of other video recording, distribution, and monitoring equipment.



An extensive catwalk system enables Idlewild's lighting technicians to access all architectural and theatrical lighting fixtures in the facility. A large elevator provides access to the catwalks from the loading dock, greatly facilitating the use of rental gear and the maintenance of installed equipment.



Photos by Jim Kumorek.

Blacklights provide illumination for discrete catwalk access during services and events. Directions in florescent paint to various positions in the catwalks enable volunteers less familiar with the catwalk system to quickly find the location to which they were directed.

At the front of the church, two large rear-projection Stewart Filmscreens — 28-feet wide by 15-feet, nine-inches tall — are illuminated by dual Christie Digital Roadie-25K DLP projectors with 6 kW lamps providing 25,000 lumens per screen.

Centralized Lighting Control

An initial goal of Idlewild's lighting system was to centralize control of all aspects of illumination. "Think about the value of this," precludes Moore. "The hallways entering the baptistry, organ chamber, vestibule, anything on stage, catwalks, architectural lights, any light source that can be seen in any way in the Worship Center — they can all be controlled from front-of-house."

Designed by Thrasher, engineered by electrical engineer David Rodgers, and config-

ured with the help of lighting designers Toronto, Canada-based Adrian Goldberg of Adagio Productions and Orlando, Florida-based John Haupt of JRH & Associates, the rig features an ETC Expression 3 controller with ETC Emphasis for automated fixture control, and — as Moore explains — offers "five different lighting systems" for the room. "Primary architectural lights on ETC Unison dimmers and control are Source Four PARs as well as ceiling-mounted devices," tells Moore. "Secondary architectural devices — high bay fluorescent with eight florescent lamps in each fixture — serve as work lights and emergency lights, which are also on the Unison system. Production lights are on Sensor dimmers; there are 9.5 racks of 96 dimmers. Then there are fluorescent lights above the catwalks as work lights. Finally, fluorescent black lights are along the catwalks [to ensure user visibility with minimal distraction to worship-goers]."

An aesthetically unique aspect of Idlewild's lighting is the incorporation of Color Kinetics' iColor Cover and Color-Blast products — hundreds of little LED fixtures behind the columns at the front of the auditorium. "Adrian came up with the idea," tells Thrasher. "It's all over the front of the building and just gorgeous. You can push a button and the whole front of the room basically changes color."

The Inevitability of Technical Evolution

To Thrasher, a large part of his job as an A/V designer and consultant is preparing his facilities and churches for the future and inevitable technical evolution.

That evolution will happen, Thrasher jokingly insists. "Christians just love the term 'evolution'," he laughs. "Yet technical systems do just that. They mutate and do all those words we hate. You have to plan for that. A console won't be there forever. For Idlewild, hopefully they'll get

ten years out of the PM1D, but then it will be time for something else. We didn't design the system around any one piece of gear or the wiring of it. We designed the system for inevitable change."

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