



Electro-Media Design, Ltd.

**Audio Visual & Acoustical
Design & Consulting**

**Audio Visual Operations
Consulting**

973 C Russell Ave.
Gaithersburg, MD 20879

301.355.5050 (O)
301.355.5030 (F)
<http://electro-media.com>



Company Profile

Electro-Media Design, Ltd.

973 C Russell Ave.
Gaithersburg, MD 20879

Contact:

Jeff Loether, ISHC

301.355.5050 (O)

301.355.5030 (F)

jloether@electro-media.com

<http://electro-media.com>



Electro-Media Design, Ltd. (EMD) *is an industry-recognized leader providing:*

Audio Visual Systems Consulting and Design services in the following areas:**Design of Systems**

- Presentation, Entertainment & Event Technologies
- Telecommunications & High Speed Internet Access
- Theatrical Lighting, Stagecraft & Event Space Rigging
- High-Tech, High-Touch "TeleCenter" Boardrooms
- Sound Systems
- Video Systems
- Video Teleconferencing
- Distance Learning Systems
- Flexible Entertainment Systems

Master Planning

- Provide peer and design reviews to ensure compliance with design guides and standards
- Provide value engineering reviews to reduce costs & maximize returns

Comprehensive Services from Design through Commissioning

- Concept/Schematic Design
- Design Development
- Construction Documents
- Bid/Negotiate
- Construction Support

Project Documentation

We develop two sets of documents (drawings and specifications): one set describes the entire infrastructure design including raceway (conduit, back box, cable tray, and risers), power, equipment room layouts, device coordination details, etc. to provide all information that the architect, interior designer, general contractor, electrical contractor, and related trades should know for GMP pricing and building the infrastructure to accommodate the audiovisual systems. The second set of documents provides the system technical designs including signal flow diagrams, rack elevations, wiring details, architectural coordination details, custom fabrication details, and equipment specifications. This is everything the A/V contractor will need to know to bid and fabricate the systems.

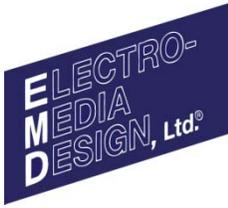
Company Profile



Architectural Acoustics Consulting and Design services including:

- Architectural acoustics design
- Auditoria and Stadia acoustics
- Acoustics Design for Recording and Broadcast Facilities
- Mechanical, electrical and plumbing noise control
- Vibration analysis and control
- Peer review for standards and best practices compliance
- Room acoustics modeling
- Electro-acoustical modeling and auralization
- Sound transmission loss modeling for internal and external walls
- HVAC noise modeling
- Environmental noise impact modeling
- Mechanical noise surveys
- Field testing for standards and building code compliance (FSTC / FIIC / OITC)
- Operable partition testing
- Environmental noise measurements
- Testing of acoustical materials
- Acoustical calibration (NVLAP accredited)
- Expert Testimony

Company Profile



Audio Visual Operations Consulting including:

- Developing and editing master design guides
- Creating branding initiatives for unique service levels and themed venues
- Developing standard operations procedures to ensure consistent guest experiences

Managed Event Technology Services for properties that provide

AudioVisual support on their own:

- Technical training and certification program for AV staff
- Basic technology sales training for AV, Catering and Event staff
- Staffing recommendations based on industry best practices
- Equipment inventory recommendations and procurement plan
- Operational support systems and programs

Independent Program Audit Services for properties that outsource

audiovisual support to a third party provider:

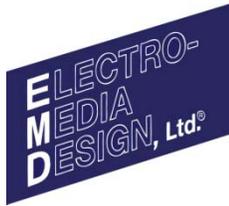
- Peer review of existing contract arrangements and service level agreements
- Evaluate current vendor service and financial performance
- Develop AV Service Standards to ensure consistency of service among a brands multiple providers
- Monitor and optimize AV vendor performance
- Facilitate win-win service agreements during contract renewals

Transition Management Services for properties that are navigating

between service models or a change in third party vendor:

- Needs analysis to identify the scope and scale required for each facility
- Feasibility studies to evaluate the options and alternative business models for AV and technology services
- Prepare and support the RFP process from invitation to contract
- Evaluate proposals and negotiate service level agreements that match property's needs
- Define performance metrics and agreements to achieve clear and measurable expectations

Company Profile



As independent consultants, EMD has provided consulting services for over 600 projects globally including hotels, conference and convention centers, spas and resorts, government facilities, corporate board rooms, theaters and auditoria, schools and electronic classrooms, training and meeting rooms, courtrooms, places of worship, restaurants and nightclubs, sports facilities and venues, and command and control centers.

EMD brings to its clients the perspectives of strategic technology planning and development, comprehensive coordination of infrastructure through operations, and a vision of the future that anticipates and accommodates both client and guest needs and expectations. EMD authored the Master Design Standards for many lodging and hospitality brands, including Marriott Hotels & Resorts, Ritz-Carlton Hotels, Fairmont and Raffles Hotels & Resorts, and the International Association of Conference Centers (IACC).

EMD is committed to a philosophy of high-quality guest experience and operational efficiency. A focus on the user experience influences EMD's design approach and is emphasized in the classes that they teach, the articles that they write, and in its overall consulting perspective. EMD believes that its first hand experience in systems design and AV operations makes it unique among audio visual consultants. EMD does not sell, manufacture, or install equipment or systems. EMD is committed to a philosophy of client advocacy and technical excellence.

We are members of the National Council of Acoustical Consultants (NCAC) and founding members of the Independent Consultants in Audio Visual Technologies (ICAT). Membership in both of these organizations is limited to bona fide independent consultants only.

Company Profile



In addition to our client and user centered philosophy we also design to ensure that our Five Tenets of quality audio visual system design are present in our work:

1. **Reliability** – The most important of all issues. Anything less than consistent, reliable service will affect the reputation of our systems and the property.
2. **Flexibility** – The architecture of flexible function spaces in hotels requires the technical systems to be equally multi-purpose.
3. **Ease of use** – Logical, intuitive controls for the system and equipment permit quick setup and changes to the system configuration by all levels of staff.
4. **Performance** - As the perception and expectancy of a high quality auditory and visual experience increases in our clients, our audio visual systems need to keep pace. Legibility, intelligibility, dynamic range and signal to noise ratios are some of the areas we address to accommodate the heightened sophistication of the audience.
5. **Cost-Effectiveness** – Each system component must be evaluated using these quality criteria for cost and benefit. Does it enhance reliability, flexibility, ease of use and performance? If it doesn't, it should not be a part of the system.

The geographic spread of EMD's work is global and includes projects throughout the United States and internationally:

Puerto Vallarta, Cancun, and Mexico City, Mexico; Guatemala; Osaka, Japan; Mallorca; Leipzig, Germany; Ireland, Barbados, Paris, France; Aruba; Lima, Peru; Malaysia; Toronto, Canada; Rio De Janeiro, Brazil; Kuwait City, Kuwait; Guanacaste, Costa Rica; Bahrain, United Arab Emirates, Beirut, Lebanon; Tripoli, Libya; and Grand Cayman.

EMD's design clients include:

American Red Cross, Aramark Management Services, Boeing, Destination Hotels & Resorts, Fairmont Hotels & Resorts, Four Seasons Hotels and Resorts, Hilton Family of Hotels, Hyatt Hotels, IBM, Loews Hotels, Mandarin Oriental Hotel Group, National Institutes of Health, Omni Hotels, Ritz-Carlton Hotels & Resorts, St. Joseph's Hospital, Sheraton Hotels and Resorts, Sodexo, Walt Disney World Resort Hotels, Washington Hospital Center, Westin Hotels & Resorts, Wyndham Hotels and Resorts, and many more.

Company Experience



Lodging and Hospitality

Specific hotel projects where we provided consulting and design services include in no particular order:

Waldorf Astoria, Mandarin Oriental, Orient Express, Kempinski Hotels, Anantara Hotels & Resorts (Qasr Al Sarab), Omni Hotels, Four Seasons Hotels, Loews Hotels, Destination Resorts, Hilton, Sheraton, Wyndham, Westin, Ritz-Carlton, Marriott (many, of various brands), Renaissance, Disney Resorts, Interstate Hotels, Sofitel Hotels, Benchmark Hospitality, International Conference Resorts, Sodexo Conference Center Management, Doubletree Hotels, Guest Quarters, John Q Hammons Hotels, Holiday Inn.

Design Standards

We are responsible for authoring and updating the audio visual and acoustics Master Design Standards for several flags including Marriott, Ritz Carlton, Fairmont, Raffles, and the International Association of Conference Centers, and have edited or contributed to many others. We are currently engaged to develop the audio visual and acoustics design standards for the Tourism Development and Investment Company in Abu Dhabi, United Arab Emirates.

Peer Reviews for Quality Assurance and Value Engineering Reviews

We are frequently engaged by both hotel management companies and by developers to provide “peer review” quality control and value engineering reviews for both renovation and new construction projects. Our peer and value engineering review activities inform and become part of our design activities ensuring the development of comprehensive and coordinated designs.

Event Technology Operations Management Consulting

We provide Audio Visual Operations Consulting to assist hotel owners and operators with enhancing revenues, profit and service through their AV Operations. Whether outsourced or managed internally, we have a demonstrated track record of profit improvement for our clients.

Our event technology operations management consulting activities inform our design activities ensuring the systems we design are cost-effective, functionally appropriate, and profitable for the venue operator.

Company Experience



Conference and Training Centers:

We are the industry-recognized thought leaders in providing education, consulting, and design services in the conference center industry, as reflected in being selected for the Award for Excellence by the International Association of Conference Centers. As Technology Partner to IACC, we guide the development and auditing of standards for presentation technology for members of this organization. We have provided consulting and design services for a wide range of conference center clients and projects, including:

Xerox Document University, Marriott Conference Centers, Aramark Management, Benchmark Management, Harrison Conference Centers, Dolce Conference Centers, Sodexho Management, Washington Hospital Center, Disney Resorts, St. Joseph's Hospital, IBM, National Institutes of Health, Hershey Hotels, Destination Resorts, Boeing Leadership Center, Hilton Conference Centers, and various other individual private, corporate, and university and government and hospital owned and operated conference and training centers.

Corporate, Sporting, Performing Arts and Others:

We provided consulting for various public and private sector clients including performing arts, sporting venues, corporate boardroom and training facilities, and institutional government and educational facilities.

Projects for corporate clients include:

The American Red Cross World Headquarters in Washington DC; the Institute for Scientific Research in Fairmont, WV; IBM Executive Briefing Room and Laboratories; Legent Corporation; Sandy Spring National Bank; The Dominion Group; Potomac Edison Power Company Conference Room; Bell South Telecommunications; TRW at the Portals and at School Street; Booze, Allen, Hamilton Conference Rooms; National Automobile Dealers Association Training Rooms; The Aerospace Corporation; Amisys Managed Care Systems; American Management Systems; TMA Training and Demo Room; Constellation Power Source Trading Floor and Conference Room, Medlantic; World Bank; Society for Microbiology; Boeing Leadership Conference Center; Hanley-Wood Conference Rooms; Willis Conference Center Feasibility Study; Summit Executive Center Consultation; Interbank Boardroom; Xerox Document University Conference Center; New York Times Meeting Rooms; Interstate Hotels Headquarters Consultation; Meristar Hotels Headquarters Consultation; Christian Broadcasting Network; Trex Company Meeting Room; Hamner Conference Center; and the Airlie Center.

Key Personnel

EXPERIENCE SUMMARY

Jeff Loether, ISHC
Principal in Charge
and Key Contact

Firm

Electro-Media Design, Ltd.

Location

Gaithersburg, Maryland

Role

Principal in Charge and Key Contact

Education

BA in Audio Technology & Computers, American University, Washington, DC, 1986

Experience

36 years

Founded Firm

1990

Prior to establishing ELECTRO-MEDIA DESIGN, Ltd., Jeff served as the Manager of Audio/Video Systems Design for the Marriott Corporation's Architecture and Construction Division from 1980 to 1990. He directed the conceptual development, design document production, procurement, installation, testing, and final acceptance of presentation and entertainment media systems for all of Marriott's varied facilities. While with Marriott, he completed over 250 projects including four and five-star resorts, convention/conference centers, corporate and educational facilities, and senior living communities.

Jeff's contribution to the hospitality industry has been acknowledged in many trade periodicals and publications, and he was inducted in 2003 into the International Society of Hospitality Consultants (ISHC) in recognition of his accomplishments. Jeff received his BGS degree in Audio Technology and Computers for Business from American University in 1985.

Jeff serves as the Technology Partner to the International Association of Conference Centers and teaches various classes and workshops for that organization. Jeff recently received the Pyramid Award for Excellence in Education from the International Association of Conference Centers and is an Adjunct Instructor for InfoComm and the International Communications Industries Association, the leading A/V trade association.



Key Personnel

EXPERIENCE SUMMARY

Robert Hendricks, CTS-D
Senior Audio Visual Consultant

Beginning with a degree in Radio, Television and Film from the University of Maryland in 1983, Bob's career encompasses over 25 years of experience in video production, engineering and audio visual systems. Before joining EMD, Bob was a designer and installation team leader with CCS Presentation Systems where he was responsible for a wide variety of project types including audio visual systems for both corporate and educational facilities. Before CCS he was Project Manager and Senior Designer for Systems Installation Group, providing design and installation of audio visual and security systems for commercial and government clients.

Bob's career began in the video studios of the Westinghouse Defense & Electronics Systems Center, followed by seven years as a member of the professional staff at the Johns Hopkins University Applied Physics Laboratory, where he specialized in video production and engineering. Later, while working in Europe, Bob founded Hariaste Ltd., a firm that provided design and installation of professional video production systems for a new television studio in the newly independent Republic of Estonia. Bob is an experienced programmer of Crestron and AMX control systems. He is conversant in Russian and Estonian. Bob has earned his Certified Technology Specialist-Design (CTS-D) certification from InfoComm.

Firm

Electro-Media Design, Ltd.

Location

Gaithersburg, Maryland

Role

Senior AV Consultant

Education

BA in Radio, Television and Film,
University of Maryland, College
Park, MD, 1983

Experience

28 years

Joined Firm

2008



Key Personnel

EXPERIENCE SUMMARY

**Luis-Eduardo
Soares, MSc
Principal Consultant
Acoustics**

Luis-Eduardo has been with ELECTRO-MEDIA DESIGN, Ltd. since 1994. Before that he was a Principal and co-founder of Archicoustics, Inc. in Miami, Florida. While there he was in charge of project management, engineering and consulting in sound system design, architectural acoustics, sound reinforcement, and noise/vibration control for clients worldwide.

Prior to relocating to the United States, Luis-Eduardo was a researcher at the Institute of Sound and Vibration Research (ISVR) in England. His work on the low-frequency sound field of recording studio control rooms helped to establish current design guidelines for bass trap applications. Luis-Eduardo also practiced as an independent sound system consulting engineer in his native country of Brazil. His diverse range of experience includes consulting for recording studio control rooms, theaters, auditoriums, sports facilities, and conference centers, houses of worship, commercial facilities, nightclubs, and private residences.

Luis-Eduardo received his Master of Science in Sound and Vibration (ISVR, University of Southampton, England) and his Bachelor's degree in Electrical Engineering (Catholic University, Brazil). He is a member of the National Council of Acoustical Consultants, Acoustical Society of America, and Audio Engineering Society. He is proficient in Portuguese, English, French, and Spanish, and has a working knowledge of Italian and Japanese.

Firm

Electro-Media Design, Ltd.

Location

Gaithersburg, Maryland

Role

Principal Consultant Acoustics

Education

BSc in Electrical Engineering –
Catholic University (Brazil), 1985

MSc in Acoustics -
Institute of Sound and Vibration
Research (England), 1991

Experience

26 years

Joined Firm

1994



Key Personnel

EXPERIENCE SUMMARY

Eric Bracht
**Senior Audio Visual
Operations Consultant**

Eric has been in the hospitality industry for over twenty years, with a primary focus on hotel audio visual department operations and sales. After graduating from Ohio University in 1998 with a Bachelor's Degree in Telecommunications, Eric moved to Nashville, TN where he was a freelance audio engineer before becoming the Manager of the Audio Visual Department at the Nashville Marriott in 1993.

In 1995 Eric was promoted to the Manager of Audio Visual Operations at the Atlanta Marriott Marquis. In this position he was responsible for all audio visual service at one of Marriott's premier convention hotels, including services to the International Olympic Committee and Worldwide Sponsors during the 1996 Summer Olympic Games. While at the Atlanta Marquis he was promoted to Sales Manager for the Audio Visual Department.

In 1998 Eric moved to the Orlando World Center Marriott Resort and Convention Center, the largest Marriott hotel in the world, as an Event Technology Sales Manager. In this position Eric was responsible for both securing business for the department, and then overseeing the show through completion. Eric continued his career at the World Center, becoming the Senior Event Technology Sales Manager and then Senior Event Technology Manager, responsible for overseeing all department operations at the World Center. In 2006 Eric became the Director of Event Technology at the World Center, responsible for both the sales and operations of Marriott's largest Event Technology Department, budgeted for an average of \$5.5M in yearly sales, with a best of \$6.8M in recent years.

Over the course of his career Eric has personally sold and overseen over \$10M in Event Technology revenue, and as a department manager and director been responsible for over an additional \$25M in revenue. His responsibilities have included overseeing five additional managers in his department, as well as a full-time staff of twenty technicians and specialists. Eric brings these years of field experience to Electro-Media, where he will be instrumental in the continual development and oversight of the Operations Consulting practice.

Firm

Electro-Media Design, Ltd.

Location

Gaithersburg, Maryland

Role

Senior Audio Visual Operations Consultant

Education

BS in Telecommunications,
Ohio University, Athens, Ohio, 1988

Experience

21 years

Joined Firm

2009



Key Personnel

EXPERIENCE SUMMARY

Kristin Bidwell
Audio Visual Designer

After Kristin earned two Bachelor degrees from Berklee College of Music, she traveled around the United States and Europe working on various albums in recording studios, as well as working as a live sound engineer, musician, and private music instructor. In 2007, she chose to become a Design Consultant. Kristin has been a project designer on performing art centers, courthouses, stadiums, business offices, university and high school classrooms and facilities, assisted living facilities, conference rooms, training centers, city halls, five star hotels, and residential homes. She has also assisted in audio forensic, expert witness, and acoustical projects.

Kristin is a member of InfoComm International, the Audio Engineering Society, the Acoustical Society of America, and the American Institute of Architects. Within these societies, she serves on various councils such as; the Independent Consultants in Audiovisual Technology Council (ICIA), the Technical Committee on Hearing and Hearing Loss Prevention (AES), the Technical Committee on Audio Forensics (AES), the Technical Committee on Acoustics and Sound Reinforcement (AES), the Technical Committee on Architectural Acoustics (ASA), and is a member of Bay Area Young Architects (AIA). She has also taken various courses in AV Design, Project Management, AutoCAD, Revit, and has extensive programming experience with Crestron and AMX products. When Kristin is not designing AV systems, she enjoys playing bass guitar.

Firm

Electro-Media Design, Ltd.

Location

Gaithersburg, Maryland

Role

Audio Visual Designer

Education

B.M. Music Production & Engineering,
Berklee College of Music
Athens, California, 2004

B.M. Music Business,
Berklee College of Music
Athens, California, 2004

Experience

13 years

Joined Firm

2011



Projects & References

Audio Visual Design

Marriott Orlando World Center, Orlando, FL

Contact

Roy Muth
(240) 744-1000
Host Hotels & Resorts Inc.
6903 Rockledge Drive
Suite 1500
Bethesda, Maryland 20817

Start Date

March 2000

Completion Date

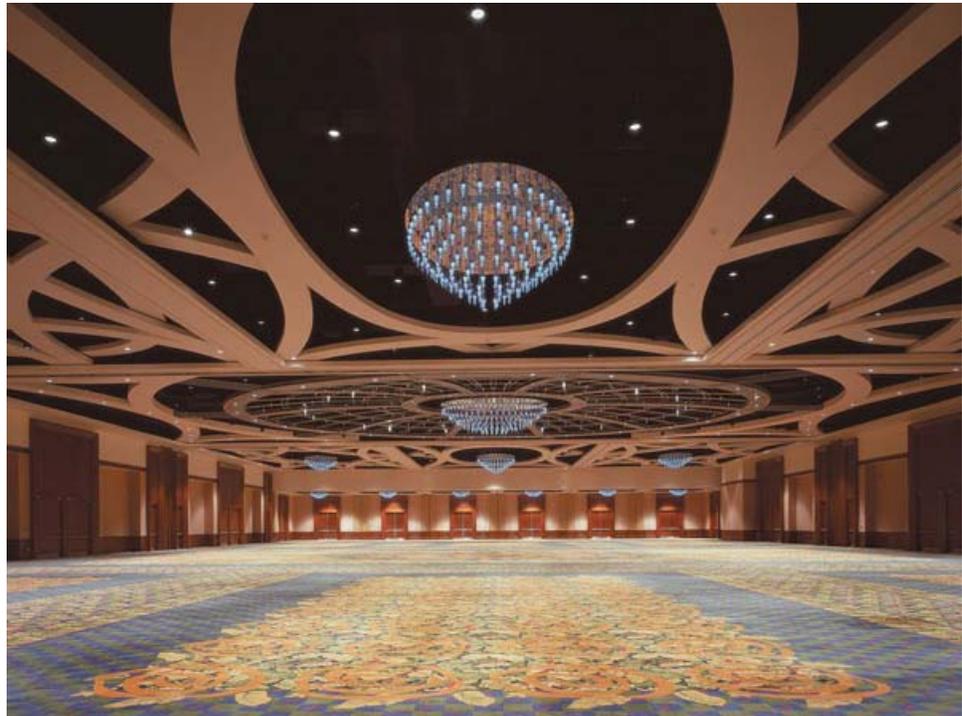
January 2010



Electro-Media Design, Ltd. has been providing complete and comprehensive consulting and design services over the past ten years to this facility's owners. The projects have included both renovations and conversions of existing spaces and expansion of the facility to include the largest clear-span event space in North America. The total new AV system cost was in excess of \$2 million. The Marriott Orlando World Center is the largest Marriott hotel in the world.

EMD developed comprehensive technical design documents for audio visual, sound, lighting, power, broadband network infrastructure, digital signage and electronic way-finding and related technologies.

The owner, Host Hotels & Resorts, Inc., continues to engage EMD for on-going renovation and new construction projects.



Projects & References

Audio Visual Design

U.S. Air Force Strategic Planning & Development Facility, Andrews Air Force Base, MD

Contacts

Douglas E. Elledge,
(404) 739-5119
Merrick & Co.
229 Peachtree Street, Suite
600 Atlanta, GA 30303

Start Date

August, 2008

Completion Date

Ongoing



Electro-Media Design, Ltd. is providing consulting, design, and project management/construction support services for a new state-of-the-art conference and briefing center. This multi-purpose venue includes a Presidential Briefing Center, ceremonial function hall, flexible function spaces, and related event and support spaces.

Technologies that Electro-Media is supporting include audio visual, projection, intercommunication, video teleconferencing, simultaneous interpretation, assistive listening, digital signage and electronic way-finding, recording and broadcast, and related systems. In addition to being used for basic meetings and briefings and for ceremonial functions, this facility can be “locked down” to full security “Top Secret” level for situation briefings and command/control at the highest levels.

Electro-Media Design was responsible for all architectural acoustics and noise/vibration control designs for the project.



Projects & References

Audio Visual Design

The Westin Diplomat Resort and Country Club, Hollywood, FL

Contacts

Jim Wurst, Nichols, Brosch,
Wurst, Wolfe & Associates
(305) 443-5206

161 Almeria Avenue
Gables, Florida 33134

Start Date

January 1999

Completion Date

July 2002



Electro-Media Design, Ltd. provided audio visual systems design and acoustical consulting services for the new 1,000-room resort, convention center, and country club on the beach in Hollywood, Florida.

This prestigious facility features over 200,000 square feet of flexible meeting spaces, the ultimate high-tech conference environment to accomplish state-of-art meetings. In addition to the convention center there are 39 individual meeting rooms, four ballrooms, and the 50,000 square foot unobstructed "Great Hall". The Convention Center is one of the largest in South Florida and can easily accommodate groups from eight to 8,000.

Our designs included audio/video systems, broadband networking, and meeting/hotel information displays. Fully digital systems support full productions, including portable staging and entertainment systems. Touch-screen environmental interfaces were utilized throughout all meeting spaces.



Projects & References

Audio Visual Design

Nationwide Conference Center at NorthePointe, Columbus, OH

Contact

Sean Anderson
(614) 840-7200
9243 Columbus Pike
Lewis Center, OH 43035

Start Date

November 2002

Completion Date

February 2004



Electro-Media Design, Ltd. provided an extensive analysis and master planning of the technology for the entire Conference Center facility. The survey included audio visual, architectural and interior design, lighting, power, digital signage and way-finding, and both wireless and broadband networking infrastructure.

A Master Plan was developed to guide the facility in budgeting and implementing technology upgrades to the Conference Center meeting spaces. Electro-Media also developed a staffing and audio visual services department business model including staff training.

Sodexo subsequently engaged Electro-Media Design to provide similar services for other Sodexo clients including Fannie Mae and the US Patent & Trademark Offices.



Additional Projects - Hospitality



The Ritz-Carlton Phoenix, AZ



Electro-Media Design provided full audio visual design, construction support and commissioning of AV systems for the renovation of ballroom and meeting spaces at this classic property.



Additional Projects - Hospitality



Mandarin Oriental Hotel & Spa, Washington, DC

Developed to be Washington DC's prominent hotel is in the Nation's Capital. Electro-Media Design, Ltd. provided consulting and designs for the presentation and entertainment audio visual systems throughout the public areas including food & beverage venues, meeting and function spaces, and the world-class Spa. EMD was also responsible for the design of the presentation and entertainment systems for the Presidential Suite. Our designs included computer controlled audio/video systems to support full productions, including portable staging and entertainment.

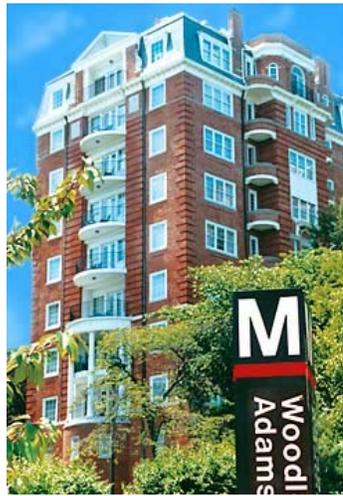


Additional Projects - Hospitality



Marriott Wardman Park, Washington, DC

Electro-Media Design, Ltd. provided designs for the audio visual technology upgrades during the massive renovation of this historic hotel and residence complex. The fast-tracked construction schedule included complete replacement of all house sound systems, including more than 78,000 square feet of meeting and function space. Hybrid analog/digital systems designed to support full productions including portable staging and systems were employed. Broadband networks are specified throughout all function spaces.



Additional Projects - Hospitality



JW Marriott Hotel & High Velocity Sports Bar, San Antonio, TX

Electro-Media Design, Ltd. designed the presentation and entertainment systems for the ballroom, meeting and function spaces, lobby and public areas, and food & beverage outlets, including the fabulous new High Velocity Sports Bar featuring dramatic projection and display technologies.



Marriott Desert Ridge Resort & Spa, Scottsdale, AZ

Electro-Media Design, Ltd. provided audio visual systems design for the largest hotel development ever undertaken by Marriott International. This 950 room mega-hotel and convention center is located just outside Phoenix. EMD designed audio visual systems for over 200,000 ft² of indoor and outdoor event space.



Additional Projects - Hospitality



Loews Philadelphia, Philadelphia, PA



Electro-Media Design, Ltd. designed the presentation and entertainment systems for the more than 40,000 square feet of meeting and function spaces. Our work included the design of audio/video systems, broadband network, and meeting/hotel information displays. A unique designer-led design-

build-operate procurement program was also implemented for this project. Loews Philadelphia Hotel occupies the PSFS Building, a National Historic Landmark and the world's first Modernist skyscraper.



Additional Projects - Hospitality



Omni Orlando Resort at Champions Gate, Orlando, FL



This golf resort is situated on one of the finest golf courses in the country. It is also very well equipped for business meetings with over 70,000 square feet of meeting space including two grand ballrooms, 27 meeting rooms, and two boardrooms equipped with state-of-the-art audio visual and telecommunications technologies. Our designs

included audio/video systems, broadband networking, and integrated digital control systems. Fully digital systems support full productions, including portable staging and entertainment systems.



Additional Projects - Hospitality



Loews St. Moritz, Miami, FL

Electro-Media Design, Ltd. provided acoustical consulting and design for all audio, video, and visual information systems for the hotel's 85,000 square feet of meeting and function spaces. The Loews Miami Beach Hotel Complex is located in the historic South Beach 'Art Deco' district and involved the restoration of the landmark St. Moritz Hotel and the construction of an adjacent 18 story tower addition.



Additional Projects - Hospitality



Marriott University of Cincinnati Conference Center, Cincinnati, OH

Facility managed by Marriott Conference Centers and built by the University of Cincinnati. Includes 20,000 square feet of state-of-the-art meeting spaces, 23 meeting/class rooms, 5,355 square foot ballroom, two boardrooms, two sloped-seating amphitheaters. All designs meet or exceed Universal Criteria for the International Association of Conference Centers. System configuration



Integrated music and sound systems for indoor and outdoor activity and circulation areas and food and beverage outlets. Combinable built-in audiovisual systems for ballroom, meeting, and conference rooms. Business amphitheater systems including integrated audio, video, control, and projection systems and acoustical design for two 100 seat sloped-seating venue for business presentations and videoconferencing. Comprehensive satellite and cable system for guestroom entertainment with meeting and hotel activity video information systems.



Additional Projects - Hospitality



MeadowView Hotel, Civic Hall, and Conference Center, Kingsport, TN



Award-winning conference center development managed by Marriott Conference Centers. Integrated music and sound systems for indoor and outdoor activity and circulation areas and food and beverage outlets. Combinable built-in audiovisual systems for ballroom, meeting, and

conference rooms. Business amphitheater systems including integrated audio, video, control, and projection systems and acoustical design for 100 seat sloped-seating venue for business presentations and videoconferencing. Flexible audiovisual systems and acoustical design for multi-purpose Civic Hall to accommodate sporting events, catered functions, and live performing arts productions. Comprehensive satellite and cable system for guestroom entertainment with meeting and hotel activity video information systems.



Additional Projects - Hospitality



J.W. Marriott Tripoli, Tripoli, Libya



Electro-Media Design, Ltd. Provided audio visual concept development, design construction support and Programming services for the JW Marriott Hotel in Tripoli Libya. The design was comprised of audio visual, Background Music, Projection and Control Systems for Ballrooms and Prefunction spaces, Meeting Rooms and Boardrooms, Food and Beverage Areas, Spa and Fitness Areas and Karaoke Rooms. The ballroom was equipped with high-definition projection, and ceiling recessed electric projection screens sized to serve the ballroom in flexible configurations.

We also recommended that the ballroom ceiling be equipped at strategic locations with retractable hang point devices known as “Busports”. These are retractable support devices that include both power and audio visual Network connections,



allowing audio visual equipment and lighting devices to be temporarily but securely installed for events, and served by signals from the audio visual equipment room rather than bulky source equipment in the event space. A system of digital signage in the public spaces and meeting facilities serves to direct guests to their events, display meeting names and schedules.



Additional Projects - Hospitality



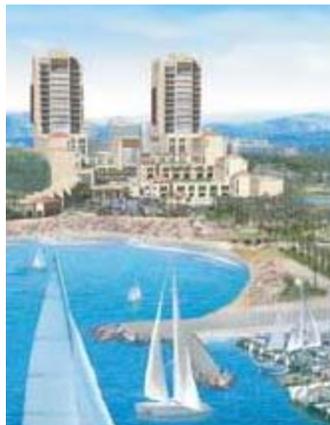
Abu Dhabi Golf Club, Abu Dhabi, UAE

Electro-Media Design, Ltd. designed and is supervising construction of audio visual systems for ballrooms, meeting spaces and public areas, and providing acoustics consulting for the entire project. The modern audio visual design includes



distribution of background music to all public spaces, complete ballroom systems including rigging points and other event technologies, spa AV systems, and a luxurious Presidential Suite with theatre and home automation. Scope of acoustical consulting includes architectural acoustics, noise & vibration control, and environmental impact of chiller plant on surrounding areas.

Kempinski Summerland Resort, Beirut, Lebanon



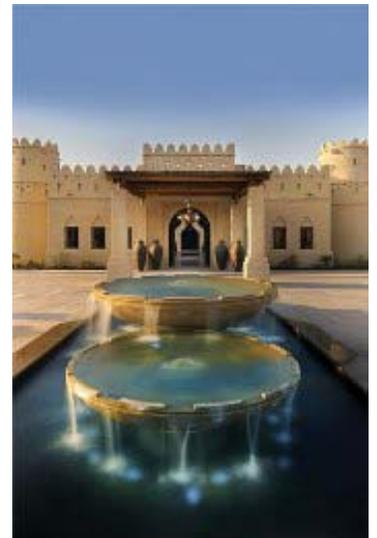
This resort hotel and mixed-use development will consist of a five-star hotel, state-of-the-art banqueting and conference center, restaurants and retail stores, in addition to a health club and marina and other outdoor facilities. Electro-Media Design, Ltd. is providing complete audio visual design and consulting from concept through construction support.

Additional Projects - Hospitality



Qasr al Sarab Desert Resort, Liwa District, UAE

Electro-Media Design, Ltd. Provided audio visual concept development, systems design and construction support for the Banquet Hall and meeting room facilities at this beautiful new hotel in the desert dunes of the Emirate of Abu Dhabi. The meeting facilities were recently used by the Abu Dhabi Executive Council. The system for this project included areas equipped with music and visual entertainment, room environment automaton including wireless touchscreen controls for all room elements. Complete surround sound including sub woofers and seat-shakers. Multi-format and multi-system visual content playback to accommodate all guest-provisioned content. The content management system also included digital video recorders and servers.



Additional Projects - Hospitality



Eastern Mangroves Resort Hotel, Abu Dhabi, UAE

Electro-Media Design, Ltd. provided audio visual concept development, design and construction support services (ongoing) for the Eastern Mangrove Hotel and Resort in Abu Dhabi, UAE. EMD designed the



audio visual systems to fully support the activities anticipated in each of the meeting and banqueting, food and beverage, and other public circulation areas. Audio visual treatment in hotel public spaces included high-quality background music, an integrated touchpanel control system with interface to building systems where appropriate, and custom audio visual systems for the Spa and special guestrooms. Additional provisions in the Ballroom and associated meeting rooms included a high-quality sound reinforcement system, installed digital video distribution and display technologies, and a flexible system of interconnection and event support provisions. The design was developed with reference to Banyan Tree design standards and Best Practices for hotels and conference centers utilizing the most current digital systems.

St. Regis Resort Hotel, Abu Dhabi, UAE



This premier luxury resort hotel and mixed-use development is located on the Abu Dhabi island of Saadiyat and will include a five-star hotel, state-of-the-art banqueting and conference center, restaurants and retail stores, serviced apartments and villas, in addition to a spa, health club, marina and other outdoor facilities. Electro-Media Design, Ltd. is providing complete audio visual design and consulting from

concept through construction support.

Additional Projects – Corporate Office/ Government



Baker, Donelson, Bearman, Caldwell & Berkowitz, PC, Washington, DC

Electro-Media Design, Ltd. Provided audio visual concept development, design and construction support services for the new Baker, Donelson, Bearman, Caldwell & Berkowitz, PC law offices. Our scope included Audio, Video, Teleconferencing and Control systems for boardrooms, offices and public spaces. The larger of the boardrooms being divisible into 3 separate boardrooms. The control of the audio visual systems as well as the separating and combining of the audio visual systems was controlled by in-wall and wireless touchpanels.



Additional Projects – Corporate Office/ Government



Howard County Government Building, Ellicott City, MD

Electro-Media Design, Ltd. Provided a design incorporating five inter-related subsystems. This system was comprised of a Video production and Streaming system an audio visual presentation and Distribution system a Sound Reinforcement system and a Control system. In addition, Cable Television Distribution and Displays were located throughout the building at various locations. The design was developed utilizing the most current digital systems.



Additional Projects – Corporate Office/ Government



American Red Cross World Headquarters, Washington DC



This project provides the main offices for the American Red Cross and includes meeting and training facilities, digital signage, and employee communication systems. It also includes the high technology Disaster Operations Center which is used to coordinate Red Cross operations from anywhere around the world.

Electro-Media Design, Ltd. provided acoustical consulting and designed comprehensive integrated audiovisual, communication and networking /control systems. Facility includes large conferencing center for presentations and social functions; training rooms, including computer proctoring systems; the daily operations center; disaster operations center; various conference rooms and briefing centers; a situation room; electronic reader board information systems; a flexible food service/cafeteria with multi-media systems; staffing, logistics and mapping centers; and an historic boardroom in the executive offices.

The systems in the Main Briefing Area, Alternate Briefing Center, and International Briefing Centers provide networked access to ARC information networks and remote office including large screen displays, control systems, and video conferencing capabilities. Press feeds are provided throughout the facility. All functional spaces are connected to a television production facility located within the building. The staffing and logistics centers also use large multi-color LED alphanumeric displays and plasma and LCD graphics panels to display information.

Additional Projects – Corporate Office/ Government



National Transportation Safety Board, Washington, DC

Electro-Media Design, Ltd. designed A/V and provided acoustical consultation for presentation auditorium for training, hearings and conferences, distance learning applications.



Additional Projects – Corporate Office/ Government



Loudoun County Government Building Board Room, Leesburg VA



“Electronic town hall” for county government seat; award-winning facility. Comprehensive acoustical and audiovisual design for boardroom presentation systems and various other meeting and conference spaces throughout the building. Boardroom audiovisual system features include video/data graphics projection and display; archival recording; independent delegate displays; robotically-

controlled video cameras and document display cameras; electronic voting system with tally display; sound reinforcement from supervisors, staff, clerk, and main lectern as well as from public seating areas; audio and video electronic media and press feeds; two-way interconnection with local county cable system; main live-production control system with multiple touch-screens including control of window shades and room lighting; and accommodations for satellite and video teleconference interconnection.



D.C. Department of Employment Services, Washington, DC

Electro-Media Design, Ltd. Provided audio visual concept development, design and construction support services for the new Department of Employment Services. Our scope included Audio systems and Projection systems for public areas and private training rooms as well as audio systems for the exercise room and audio and display systems for private offices. A control system was integrated to allow for the control of all audio visual systems, from in-wall touchpanels.

Additional Projects – Corporate Office/ Government



Headquarters, Tourism Development and Investment Company, Abu Dhabi, UAE

Electro-Media Design, Ltd. Provided audio visual systems design and acoustical consultation for this prestigious project. Our work includes complete architectural acoustics, including noise and vibration control. In addition to state-of-the-art meeting facilities with audio and video conferencing, the design features a large atrium equipped with event technologies such as an electronically steerable line array loudspeaker system, fiber optic video distribution and a CobraNet digital audio network.



Additional Projects – Education



Institute for Scientific Research Fairmont, WV

Electro-Media Design, Ltd. Provided audio visual systems design and acoustics for this 263,000 square foot research and development facility completed in 2006. ISR's facility is designed to encourage collaborative, interactive and visual-based research among 500 scientists and staff. Electro-Media Design provided audio visual systems design for a large exhibition center for trade shows, training and conference rooms, executive boardrooms, and teleconferencing facilities.



We also provided design for a large, highly stylized auditorium. This room is one of the facility's signature spaces. Criteria for the systems includes, high brightness large screen HDTV displays, TV-quality streaming video to all desktops, building wide paging system, high bandwidth audio visual connectivity throughout building, video teleconferencing and distance learning systems, voice-lift systems, interactive



white boards, and state of the art audio visual control systems, including the latest generation of integrated Creston controls. Our Acoustical work for this project includes mechanical noise control guidelines and establishment of acoustical criteria for a variety of spaces within the facility.



Additional Projects – Education



University of Maryland Laboratory for Telecommunications Sciences, College Park, MD



The Laboratory for Telecommunications Sciences (LTS) is a federal research lab located at the University of Maryland campus in College Park (Maryland) created to promote research collaboration between government, industry, and academia. LTS has developed primary research partnerships with the University of Maryland

Institute for Advanced Computer Studies and Telcordia Technologies.

Electro-Media Design (EMD) provided audiovisual space programming, detail design, bid administration, and construction support services for the audio and video systems throughout the facility. EMD also provide consulting services for architectural acoustics and noise/vibration control for the entire project.

The facility has state-of-the-art presentation and conference capabilities which include a tiered seating auditorium utilized for meetings of various sizes, including training, videoconferencing, and large assemblies.

The AV systems for this room include a high-resolution videographics projector, a wide-aspect-ratio screen, speech and program reinforcement, surround sound, and audio and video source components. Additionally, it has videoconferencing technology for traditional conferencing, distance learning, or web/broadcast applications. The flexible projection configuration allows HDTV-style widescreen images, high resolution computer images, or side-by-side images for videoconferencing.



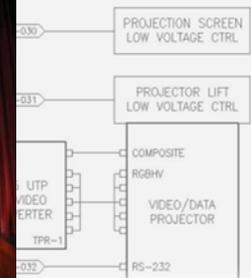
Additional Projects – Education



The Academy of the Holy Cross, Kensington, MD

Electro-Media Design, Ltd. Provided full design services, created the Request for Proposals, supervised bid negotiation and provided construction support services for audio and video systems at the school's new theater.

Technologies and systems included state-of-the-art sound reinforcement, video distribution, production and recording, presentation and display.



Additional Projects – Education



George Mason University Law School, Fairfax, VA



Electro-Media Design, Ltd. provided design services for 10 large electronic classrooms, a library, study rooms, two moot courtrooms, and the infrastructure for a future media retrieval/control facility.

Comprehensive design of building and data infrastructure for extensive electronic classroom systems including centralized control and media-retrieval, distance learning, video/data graphics projection and display, archival and live production recording, flexible programming sourcing including local and campus cable and multiple satellite reception.



Additional Projects – Education



Washington Hospital Center, Washington, DC

Electro-Media Design, Ltd. was appointed to develop the technology systems for the Washington Hospital Center’s “Cath Lab” (sponsored by Johnson & Johnson). This project involved several elements:

- The Catheter Laboratory Operating Theater is a four-bay facility where doctors perform operations to install stents in blood vessels of partially sedated patients. Robotic video cameras are positioned overhead to observe the doctor’s actions on the patient, and other cameras in the life-monitor display give a heads-up view of the doctor. The doctor wears a wireless microphone and earphone to allow two-way intercommunications with doctors in the classroom above, and with remotely-located doctors in other cities.
- A sloped-seating classroom is equipped with a complete voice reinforcement (from each seat) and program audio sound system. It also has a rear-projection display that can provide both side-by-side simultaneous displays (life monitors, video cameras, etc.) as well as being able to display centered standard and high-definition images. This classroom can support both live connections with the Operating Theater and serve to support more typical lectures and presentations. Video cameras record the proceedings for future archival use or for distance learning purposes.
- A Control Room provides central control of all AV system functions in the Cath Lap Operating Theater and in the main classroom. It also provides simultaneous recording the proceedings as well as serving to interconnect the Cath lab with other classrooms located across the United States.



Additional Projects – Education



Ruth Powell Building, University of Maryland Salisbury, Salisbury, MD

This award-winning project was a unique, new, flexible dining and education activities facility. There are several smaller classrooms on the upper level equipped with audiovisual systems and interconnected with the central control facility. The Boardroom on the second floor is equipped for video teleconferencing. The main dining areas are each equipped with built-in audiovisual systems to support distance learning and performing arts productions.



Additional Projects – Entertainment



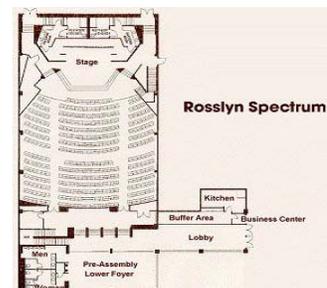
The Studio Theater, Washington, DC

Electro-Media Design, Ltd. served as acoustical consultants for the renovation and expansion of well-established performing arts venue including two live performing arts theaters, stacked. We provided comprehensive acoustical evaluation and design coordination of all interior and shell space architectural and interior elements, with development and evaluation of alternative construction methods and processes for acoustical performance and buildability.



Rosslyn Spectrum Theater, Arlington, VA

Renovations of original movie theaters to become “Business Theaters” including integrated audio, video, lighting, control, and projection systems and acoustical design for 200 seat sloped-seating venues for business presentations and video teleconferencing. Roslyn Forum Theater converts to live performing arts theater in the evenings, complete with full stagecraft support and theatrical lighting.



Additional Projects – Entertainment



Macon Coliseum, Macon, GA

Electro-Media Design, Ltd. provided a comprehensive electro-acoustical evaluation of 40-year old, 22,000 seat sports venue and design of sophisticated, high-performance ring-cluster sound system to overcome severe acoustical problems. Flexible, innovative design matches systems coverage to occupancy and layout



of events. Infrastructure includes accommodations for radio and television broadcast, paging, image-magnification and display, intercommunication systems, and interconnection with adjacent Convention Center. Facility used for competitive sports, equestrian events, concerts, basketball, hockey, revivals, and exhibitions.

Additional Projects – Houses of Worship



Ebenezer AME Church, Ft. Washington, MD



This is a church building with a 2,600-seat sanctuary with balcony, classrooms, choir rehearsal rooms, and audio/video production/recording studios.

Electro-Media Design provided comprehensive acoustical consulting services including electro-acoustical modeling of sanctuary, noise/vibration control throughout facility, and unique triple-cluster speaker system for sanctuary.

Electro-Media Design also provided Designs for comprehensive audio and video systems throughout complex.

Sound systems features include voice and live musical performance reinforcement and recording in main sanctuary, wireless assistive listening systems, performance foldback system, distribution throughout complex, and live and post production for radio and television broadcast purposes.

Video system features in sanctuary include image magnification; video/graphics projection; display of announcements, hymn lyrics, and scripture passages; and live and post production systems for recording and broadcast.

Design also includes simplified touch-screen control of sound, video, and lighting functions.



Additional Projects – Houses of Worship



Mount Sinai Baptist Church, Washington, DC

Renovation of sanctuary acoustics and sound systems of existing facility (in progress).

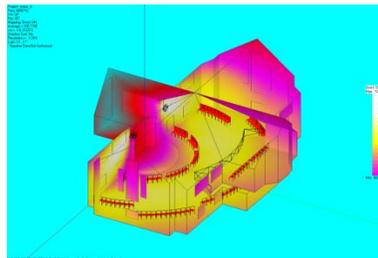
Electro-acoustic modeling of sanctuary and development of acoustical treatments to mediate challenging room acoustics in the main sanctuary and choir area.

System features include digitally steerable line arrays, digital mixing console, digital individual monitoring system for musicians, multi-track audio for live and post-production, recording for tape ministry, audio and distribution to other areas of church complex, reinforcement for live musical performances including choir and small instrumental ensembles, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.



Woods Memorial Presbyterian Church, Severna Park, MD

Renovation of sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of acoustical treatments to mediate challenging room acoustics. System features include central cluster sound system, reinforcement



for live musical performances including choir and small instrumental ensembles, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.



Additional Projects – Houses of Worship



Sligo Adventist Church, Takoma Park, MD



Renovation of existing facility, including complete new pulpit and choir area.

Electro-acoustic modeling of sanctuary and development of acoustical treatments to mediate challenging room acoustics. New cluster speaker system for voice and live musical performance reinforcement and recording in main sanctuary, assistive

listening systems, performance foldback system, distribution throughout complex, and live video and post production facilities.



Washington National Cathedral, Washington, DC



Historic, landmark facility. Testing, research, evaluation, and feasibility study of Sanctuary acoustics with recommendations for renovation of sound systems to accommodate very challenging and unique room acoustics. Design of acoustical attenuators for various electro-mechanical devices to reduce ambient noise in Sanctuary.

Additional Projects – Houses of Worship



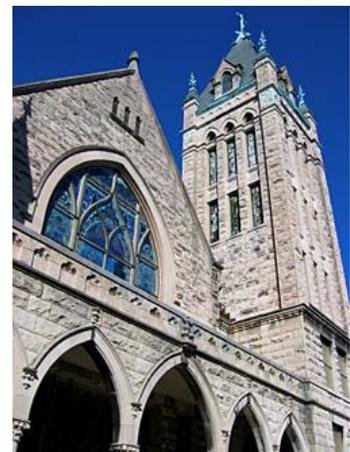
Zion Baptist Church, Washington, DC

Renovation of sanctuary acoustics and sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of acoustical treatments to mediate challenging room acoustics. System features include central cluster sound system, recording for tape ministry, foldback for platform, distribution to other areas of church complex, reinforcement for live musical performances including choir and small instrumental ensembles, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.



Central United Methodist Church, Asheville, NC

Renovation of sanctuary and sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of central cluster sound system to complement challenging room acoustics. System features include recording for tape ministry, foldback for platform, distribution to other areas of church complex, reinforcement for live musical performances including choir and small instrumental ensembles, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.



Additional Projects – Houses of Worship



Calvary United Methodist Church, Arlington, VA



Renovation of sanctuary and sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of central cluster sound system to complement challenging room acoustics. System features include recording for tape ministry, foldback for platform, distribution to other areas of church complex, reinforcement for live musical performances, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.

Unity Christ Church, Gaithersburg, MD

Renovation and expansion of sanctuary and education building. Development of acoustical treatment and flexible sound systems designs for worship services and classes, workshops, intensives, and live performances. Included facilities for recorded ministry.



Additional Projects – Houses of Worship



Faith Baptist Church, High Point, NC

Renovation of sanctuary and sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of central cluster sound system to complement challenging room acoustics. System features include recording for tape ministry, foldback for platform, distribution to other areas of church complex, reinforcement for live musical performances, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.

Free Gospel Deliverance Church, Coral Hills, MD

Renovation of sound systems of existing facility. Electro-acoustic modeling of sanctuary and development of central cluster sound system to complement challenging room acoustics. System features include recording for tape ministry, foldback for platform, reinforcement for live musical performances including choir and small instrumental ensembles, reproduction of recorded program material, assistive listening systems, and simplified centralized control of system functions.

Riverdale Baptist Church, Riverdale, MD

Concept and simulation studies for a new church complex with 2,000 seat main sanctuary, 30 classroom education building, fellowship hall, and activities building. Comprehensive acoustical consulting services including electro-acoustical modeling of sanctuary, chapel, and choir rehearsal rooms. Designs for audio and video systems throughout complex.

Sound systems features include unique triple-cluster speaker system for voice and live musical performance reinforcement and recording in main sanctuary and chapel, wireless assistive listening systems, performance foldback system, distribution throughout complex, and live and post production for radio/television broadcast purposes. Video system features in sanctuary include image magnification, projection and display, and live and post production for recording and broadcast. Design also includes simplified touch-screen control of sound, video, and lighting functions.