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Innovation at its Finest

With over 20 years experience both nationally and internationally, Onyx Engineering, Inc. is an industry leader in audio visual technology. Our success is a result of working directly with our clients to identify *their vision*. Innovation along with strong engineering talent enables Onyx to design and build the optimal technological environment.

Technology is a prerequisite in today's business climate. We strive to simplify and eliminate the fear associated with complex systems. This allows our clients to more effectively and efficiently utilize technology. Naturally, increased productivity and competitive advantages are realized as a direct result.

Architects, engineers, designers and builders depend on our precise documentation and solution-oriented creativity. As a design build firm, we leverage our extensive experience in engineering, installing and integrating highly complex systems. Successful, timely execution continues to cultivate relationships with Government agencies, Corporate enterprises, Houses of Worship and Educational institutions.

Onyx's commitment to the audio/visual industry includes extensive training and continuing education along with seminars on the newest technology hitting the market. Another ingredient to our success is the relationships we have developed with manufacturers over many years. They support innovation by developing technology that makes our clients' day easier and participate in various professional organizations to stay current on each vertical market. Our value proposition is simple; with every client we impart lessons learned over twenty years in real-world applications. Through an understanding of our client's expectations, we tailor our approach to technology ensuring each investment provides a true value with real ROI.

Our in-house team of designers and engineers will design and maintain your system to perform optimally over the long term. Our capabilities reduce project cost, while ensuring customized, turnkey systems that are reliable and client-friendly.

"Give customers what they want rather than only selling what you want them to have"

On the pages that follow, we have presented a number of relevant projects that have been completed, or are currently in the production process. These project references are a representative sampling of the capabilities and level of quality Onyx applies to every project.



What makes us different?

Specialized design and engineering capabilities:

Our in-house CTS Certified designers, AMX & Crestron programmers and engineering specialists allow us to deliver and provide strict quality control of the entire project from concept through installation.

Comprehensive Project Management Services:

20+ years of experience in audio, visual, and control systems applications and an equally experienced staff of industry veterans, allows us to provide comprehensive problem solving in a collaborative approach and turnkey project management services that removes the burden of technology integration and deployment from the owners.

Event Planning and Production Services:

Technical planning and production for world-class events in New York, Washington DC, Chicago, Los Angeles, and Hawaii has enabled us to build relationships with many specialized vendors, craftsmen, and others allied to our industry.

We have been able to leverage our experience in the planning, coordination, and allocation of resources for these events, and apply it to the processes we use in our systems integration business, giving us a unique breadth of experience that few others can claim.

These relationships also extend Onyx's "reach", and allows us to provide services throughout the United States and beyond.

One vendor, global services.



PROJECT REFERENCE

www.onyxeng.com

PROJECT: Exec. Conference Room – Langley Federal Credit Union, Hampton, VA.

SCOPE of WORK:

This Executive Conference Room features rear projection, videoconferencing (Polycom VS4000), SMART interactive displays, 7.1 Surround Sound, Crestron control, multi-zone lighting, concealed table microphones, custom-fabricated presentation podium, and multimedia sources.





PROJECT REFERENCE

www.onyxeng.com

PROJECT: Executive Conference Room – Communications client, Virginia Beach, VA.

SCOPE of WORK:

This Executive Conference Room features a motorized projector lift that automatically lowers the ceiling-mounted projector from its concealed housing in the ceiling, an LCD projector, Plasma Display Panels, a wireless Crestron® touch-panel control system, a “surround-sound” AV receiver, wireless RF computer keyboard, and laptop computer interfaces.





PROJECT REFERENCE

www.onyxeng.com

PROJECT: Corporate Conference Room – Glasser & Glasser, Norfolk, VA.

SCOPE of WORK:

This Executive Conference Room features a Crestron® touch-panel that operates all audio and video equipment from the conference room table. A motorized, retractable LCD projector and projection screen, videoconferencing system, audio and video recording capability, custom audio system with flush-mounted table microphones. Advanced circuitry in the conferencing system provides extremely high quality audio with echo cancellation.



Onyx Engineering's conceptual rendering.

Actual room following construction.

This project illustrates Onyx Engineering's ability to provide 3D modeling of prospective spaces, allowing the client to "see" the concept, prior to any construction commitment.



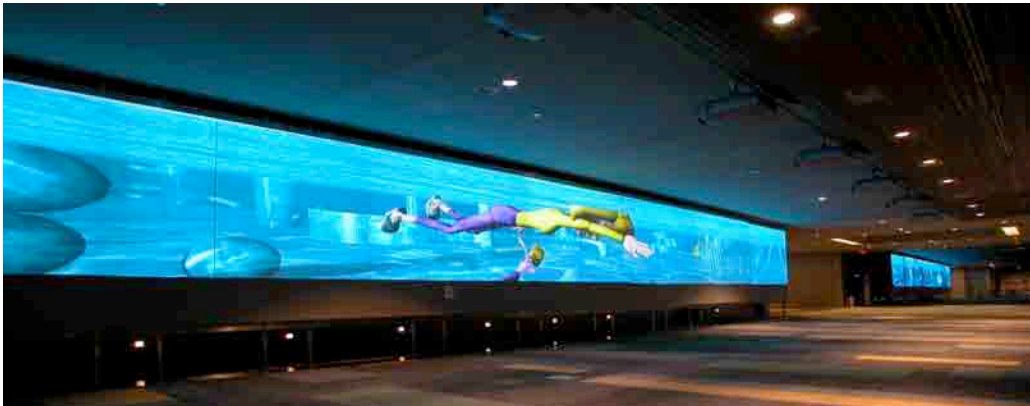
PROJECT REFERENCE

www.onyxeng.com

PROJECT: Virginia Beach Convention Center - Virginia Beach, VA.

SCOPE OF WORK:

The convention center boasts 518,522 sq. Ft. including exhibition space, dividable Ballroom space, and numerous Meeting rooms. The audio-visual systems throughout the facility feature all-digital processing and control based on the MediaMatrix™ and ControlMatrix™ platforms, by Peavey Electronics, Inc. The signal distribution and amplification systems utilize CobraNet™ technology for multi-channel audio distribution over a standard Ethernet network. This state-of-the-art system also provides remote monitoring capability from any computer on the network. There are over 850 loudspeakers making up the paging, background music, and speech reinforcement systems installed in the facility. Integration and control of all the different systems within the facility is accomplished through a Crestron control system that utilizes touch panels with familiar, user-friendly graphics-based control screens. One of the more stunning features of the new building is the installation of four 90-foot long, dividable video walls, located on the first floor concourse and pre-function areas. Images will be projected on the wall by up to eight, 10,000-lumen projectors per wall. When an entire wall is “lit up,” it will display more than 6 million pixels or close to 24-million pixels when all four walls are utilized!





PROJECT REFERENCE

www.onyxeng.com

PROJECT: Supreme Court of Virginia: Justice's Conference Room

SCOPE OF WORK:

Design and integrate an audio-visual presentation and display systems in the Justice's 4th floor Conference Room and Study at the Supreme Court of Virginia. The system will provide for the display of video from various sources along with the appropriate audio content; including DVD and VHS formats; Direct TV; computer video input; videoconferencing, and streaming (live) video from the Supreme Court Room. This includes a flat panel display "media wall"; extending the satellite network to integrate it into the system; DVD and VHS cassette decks for video playback and presentation and a camera system capable of providing a "live" video feed from the Supreme Court Room, to the Justice's conference room with an audio feed are part of this system. Additionally a new multi-channel "Surround Sound" system will be installed in the Justice's Conference Room. A Polycom videoconferencing system (ISDN), consisting of a camera assembly, CODEC, programming and integration with the proposed audio-video and control system. Onyx will design, furnish and install an appropriate system of microphones as required for audio and videoconferencing. Onyx will design and install a custom audio-video control system and user interface, The Graphical User Interface (GUI) shall be designed with input and assistance from the end-users, with the goal of providing a familiar, easy-to-use and intuitive touch panel-based control device.





PROJECT REFERENCE

www.onyxeng.com

PROJECT: Council Chambers – Town of Leesburg, VA.

SCOPE of WORK:

This public meeting space features a fully automated audio mixing system, a broadcast video system with distribution for press feeds, a custom multimedia presentation lectern with a SMART® interactive touch screen, and a custom multimedia plan presentation desk with a concealed ceiling-mounted document camera for full size document display on the video system. All system functions are accessible and controllable via a Crestron® control system, and there are LCD touch-screen control panels at strategic positions for presentation source control. Finally, a video and audio logging system creates an official recording of meetings.





PROJECT REFERENCE

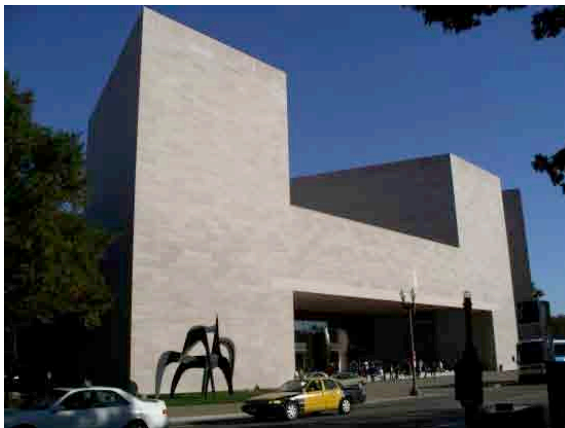
www.onyxeng.com

PROJECT: National Gallery of Art – Washington, DC.

Sculpture Garden Sound Reinforcement for live performance
East Building Large Auditorium

SCOPE of WORK:

“Audio-on-Ethernet” multiple stage/FOH positions in the Sculpture Gardens connected to processing and amplifier rack in sub-level basement. East Building Large Auditorium involves complete video upgrade to digital cinema systems and a sound reinforcement system upgrade.





PROJECT REFERENCE

www.onyxeng.com

PROJECT: American Film Institute Silver Theatre – Silver Spring, MD.

SCOPE of WORK:

The AFI Silver Theatre and Cultural Center is a state-of-the-art moving image exhibition, education and cultural center. Anchored by the restoration of noted architect John Eberson's historic 1938 Silver Theatre, it also features 32,000 square feet of new construction housing two stadium theatres, office and meeting space, and reception and exhibit areas. The exceptional technical facilities of the AFI Silver include film formats from 16 to 70mm, high-definition digital cinema video projection, broadcast quality video recording and distance learning capabilities via satellite, fiber optic and the Internet. Whether it's silent film at the proper frame rate with live musical accompaniment, 70mm wide screen spectacles or digital cinema, the AFI Silver offers state-of-the-art technology in each of its three theatres - with seating for 400, 200 and 75, respectively - as well as in its world-class conference room.

The Theater was a collaborative effort by Onyx Engineering, Cardinal Sound & Motion Picture Co., and Sony. Onyx was responsible for all of the audio and speech reinforcement systems, as well as the control systems for both the audio and cinema systems.





Additional Client Listings

Government

City of Norfolk, VA
City of Ocean City, MD
City of Richmond, VA
City of Virginia Beach, VA
Joint Forces Staff College
Montgomery County, MD
NATO
National Center for State Courts

Town of Leesburg, VA
United States Air Force
United States Army
United States Coast Guard
United States Marine Corps
United States Navy
U.S. Office of Personnel Management
White House Military Office

Education

Academy of the Holy Cross
Bishop MacNamara High School (MD)
Bishop Sullivan High School
Chesapeake Public Schools
Henrico County Schools
King William County Schools

Tidewater Community College
Thomas Nelson Community College
Regent University
University of Richmond
University of Virginia
William & Mary

Corporate

Battelle Corporation
Book Hill Partners
Busch Gardens
Capital One
Colonial Williamsburg Foundation
Cox Communications
EG&G Corporation
Glasser & Glasser
John Deere Vehicle Group

Langley Federal Credit Union
Lockheed Martin
Marriot – Courtyard
Mitsubishi Chemical
Neathawk Dubuque & Packet
Newport News Shipbuilding
Simplex Grinnell
Tesoro Corporation



Manufacture Affiliations – Products

Integrated Control Systems

Crestron (Certified programmer on staff) AMX (Certified programmer on staff)

Computer Controlled (DSP) Audio Systems

Peavey Electronics: MediaMatrix, X-Frame, ControlMatrix, Nion
BSS Audio: SoundWeb Biamp: Audia / Nexia
Rane Corp: RPM-Series QSC: Basis / Rave

Professional Audio System Components

AKG Acoustics, Inc.	Allen & Heath
Ashly Audio	Audio Technica
Beyerdynamic, Inc.	Biamp Systems
BSS Audio	Clear-Com Intercom Systems
Community Professional Loudspeakers	Countryman Associates
Crown Audio	Duran Audio BV / Intellivox
EAW	Electro Voice
FSR Electronics	Intelix Corporation
JBL Professional	KSI Electronics
Lectrosonics	Lexicon
Midas Consoles	Meyer Sound
Denon-Marantz Professional	Middle Atlantic Manufacturing
Mystery Electronics	Peavey Architectural Acoustics
QSC Audio	Rane, Inc.
Renkus-Heinz	Sabine
Sennheiser Electronics, Inc.	Shure Brothers, Inc.
Soundcraft	Symetrix, Inc.
Tannoy, North America, Inc.	Telex Communications, Inc.
Whirlwind, Inc.	Yamaha / Nexo Commercial Audio

Video Processing, Display and Distribution Systems

Extron Electronics	AutoPatch - AMX
Analog Way	RGB Spectrum
V-Brick	Digital Projection
Projection Design	Sharp Electronics
Sanyo	NEC Visual Solutions
Stewart Filmscreen	Barco

Videoconferencing Systems

Polycom Systems	Tandberg (Distribution)
Sony HD	

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