a revolutionary breakthrough in acoustical design
Constellation is an extraordinary breakthrough in acoustical science that effectively solves the complex challenge of attaining optimal, yet flexible acoustics in building design. Constellation gives architects and acoustical consultants the freedom to design state-of-the-art multi-purpose venues without the constraints and expense of room shapes, dedicated structures and added materials. The acoustical effectiveness, ease of control, and virtual invisibility of Constellation ultimately will enhance the success of your venue.

Constellation comprises a complete solution of equipment and services—provided exclusively by Meyer Sound—which together allow instantaneous alteration of acoustical properties to suit the nature of the event taking place.

Constellation encompasses Meyer Sound’s patented VRAS algorithm, advanced digital processing and miniature transducer technology along with decades of research into the acoustical attributes of exceptional listening spaces. The result is a degree of flexibility unattainable with mechanical methods of variable acoustics such as movable walls, drapes, orchestra shells, or secondary chambers.

Constellation is provided as an integrated solution that includes on-site evaluation, supervision and final tuning. Meyer Sound’s Constellation team will work with your entire design team to guarantee that the results meet all of the agreed project goals. Once Constellation is commissioned, the acoustical properties of your venue can be optimized with the press of a button.
• Allows venues to be truly multi-purpose, providing natural-sounding acoustics appropriate to a wide variety of performances
• Integrates rigorous design, calibration, and certification methodologies with a flexible hardware and software package in a complete, turnkey system
• Relies exclusively on Meyer Sound’s own team of qualified experts
• Offers greater acoustical flexibility at far less expense when compared to architectural solutions
• Maintains the venue’s aesthetic appeal and is virtually invisible
• Eliminates labor, maintenance and storage costs associated with orchestral shells and moveable panels
• Employs an easy-to-use interface: one button press changes room acoustics
• Introduces a sustainable technology that achieves long reverberation times with less volume and fewer building materials
• Can be implemented as part of a retrofit or new construction

SUMMARY OF ADVANTAGES: A CONSTELLATION SYSTEM...

"CONSTELLATION IS, TO MY EARS, LIVING PROOF THAT SKILLED ENGINEERING AND TECHNOLOGY CAN INDEED IMPROVE THE PHYSICAL SPACES WHERE WE LISTEN TO MUSIC."

JOHN ADAMS
PULITZER PRIZE-WINNING COMPOSER
CONSTELLATION GIVES ME A LEVEL OF ENVIRONMENTAL CONTROL THAT I'VE NEVER HAD BEFORE. IT’S A CREATIVE TOOL THAT WILL OFFER A LOT OF POTENTIAL FOR YEARS TO COME.

TODD HERRBACH
SENIOR AUDIO ENGINEER
NORTHLAND, A CHURCH DISTRIBUTED

NORTHLAND, A CHURCH DISTRIBUTED
LONGWOOD, FLORIDA
DCA ARCHITECTS AND BUILDING GOD’S WAY

For Northland, A Church Distributed, the goal for its new 3,000-seat facility was to create a worship space that would facilitate intelligibility for the sermons, power for the musical instruments, and flexibility to accommodate a variety of presentations. It was also critical for Northland to maintain the aural perception of a close-knit congregation in the larger space by having a system that would encourage participation of the attendees. The common solution for all these requirements was Meyer Sound Constellation. Northland’s installation was the first in a worship facility and has since supported community outreach programs, including highly successful concert performances by world-renowned orchestras such as the Dallas and Detroit symphonies.
Logomo’s uniquely flexible and hi-tech concert hall presents challenging complexities that would confound any traditional acoustical solution. Occupying a 34,000 cubic meter former railway locomotive maintenance facility, the hall features a 130-ton gliding seating structure lifted on air beds that can vary both the size of the performance space and the seating capacity. Three configurations accommodate audiences from 1200 to 3500. The goal was to host any performance—from chamber music to Broadway musical to opera to rock concert—in any configuration, and without compromising acoustics. Following counsel from Akukon acoustical consultants, Logomo’s development team specified a solution utilizing a Constellation system with multiple presets that would instantly adapt the acoustical signature of the room for both the event and the venue configuration. Constellation functions either independently or works in conjunction with a permanent Meyer Sound concert sound reinforcement system.

“WITH CONSTELLATION, WE CAN STAGE OPERAS, CONCERTS, THEATRE, CONFERENCES AND EVEN FILMS WITHOUT HAVING TO ACCEPT COMPROMISES IN ACoustICS.”

JANNE AUVINEN
EVENTS AND VENUE DIRECTOR
LOGOMO

LOGOMO CONCERT HALL
TURKU, FINLAND
PEKKA VAPAAVUORI, ARKVA ARCHITECTS
Inside a 2000-seat venue purpose-built for this exhilarating spectacle, famed director Franco Dragone captivates audiences with astonishing performances by dancers, synchronized swimmers, motorcycle stuntmen, acrobats, and aerialists—all working around, in and over a vast 3.7 million gallon pool of water. The entire show is accompanied by live music, although the band plays to video cues inside an acoustically isolated backstage “studio” to allow precise control and placement of all sounds. In this application, principal sound designer Francois Bergeron and associate Vikram Kirby realized that Constellation was essential for realizing the full effect of the show. By extending and enhancing the direct sound of the reinforcement system, Constellation permeates the space with a vivid yet natural acoustic ambience. The audience can be totally immersed in a dynamic musical experience, or when desired, transported into extraordinary acoustical soundscapes with a larger-than-life sense of depth, spaciousness and awe-inspiring sonic grandeur.

“PEOPLE COME TO HOUSE OF DANCING WATER EXPECTING TO EXPERIENCE SOMETHING THAT YOU CAN’T EXPERIENCE ANYWHERE ELSE IN THE WORLD. CONSTELLATION IS ONE MORE WAY WE DELIVER ON THAT EXPECTATION.”

VIKRAM KIRBY
ASSOCIATE SOUND DESIGNER
HOUSE OF DANCING WATER

FRANCO DRAGONE’S HOUSE OF DANCING WATER
CITY OF DREAMS MACAU, DANCING WATER THEATRE
PEI PARTNERSHIP ARCHITECTS
In the heart of Silicon Valley, Valley Christian Schools’ new Conservatory for the Arts supports and enhances music education by applying—appropriately—the latest in cutting edge digital technology.

At the heart of the conservatory is a rehearsal and performance space designed to function as one large room or—by activating dual Skyfold walls—to be divided into two acoustically isolated rooms. The goal was to provide the ideal acoustical environment for any musical style or instrumentation, from solo flute to full marching band, in any room configuration. Following guidance and referrals from the consulting firm Acoustic Dimensions, the conservatory determined that Constellation could achieve all desired goals, including two different simultaneous acoustical characteristics for the divided room configuration. The Constellation system at Valley Christian Schools’ Conservatory of the Arts was among the first to incorporate D-Mitri, Meyer Sound’s latest generation of digital processing, and the first to use iPads™ for local preset selection.

“ I started the rehearsal with Constellation off, and when I turned it on I could see the students’ eyes just come alive. ”

TROY GUNTER
VICE PRESIDENT AND DIRECTOR, CONSERVATORY FOR THE ARTS
VALLEY CHRISTIAN SCHOOLS
Located adjacent to the Frank Gehry-designed New World Center—and using one 75’ × 100’ wall as its projection screen—Miami Beach SoundScape opens new realms for experiencing music in an outdoor setting. Connected via multichannel fiber optic lines to the intimate concert hall inside the New World Center, Constellation at SoundScape picks up the rich acoustic ambience of the live orchestra, optimizes the sound for open-air acoustics, and then recreates a fully immersive concert hall experience in a verdant outdoor setting accommodating over 2,000 music lovers. Constellation is a permanent attraction, with all weatherproofed transducers secured in the surrounding tubular steel columns and graceful “ballet bar” structures.

During the New World Symphony’s live “Wallcasts,” Constellation’s enthralling sound accompanies projected HD images of the indoor concert. Constellation also provides presets for use with movie showings, or to support live pop/rock concerts on SoundScape’s own outdoor stage.

“EVERY ORCHESTRA IN AMERICA SHOULD CHECK OUT THE WALLCAST CONCERTS AT SOUNDSCAPE, WHICH SET A NEW STANDARD FOR THE OUTDOOR RELAYING OF INDOOR MUSICAL PERFORMANCES.”

ANTHONY TOMMASINI
MUSIC CRITIC
THE NEW YORK TIMES

MIAMI BEACH SOUNDSCAPE
MIAMI BEACH, FLORIDA
WEST 8 NEW YORK, ARCHITECTS
The 57-seat Pearson Theatre, located at Meyer Sound’s Berkeley headquarters, realizes John Meyer’s dream to create a venue that could support Meyer Sound’s education program while also providing an effective space for experimentation, movie screenings, live music, product demonstrations, and presentations—all without compromising the acoustical suitability for any one application in order to accommodate another. With Constellation, the Pearson Theater easily adapts its acoustical characteristics for a variety of uses while providing the aesthetics of a high-end performance venue.

Constellation at the Pearson Theater includes a speech enhancement setting that allows presenters—even those with soft voices—to be clearly understood everywhere in the room without using a microphone. Remarkably effective even in much larger halls, Constellation’s “voice lifting” feature adds only those early reflections that naturally enhance speech presence and clarity, distributing the effect uniformly throughout the space. This feature is extraordinarily useful for dramatic presentations as well as for meetings where many participants are speaking in succession on stage and in the audience.

PEARSON THEATRE, MEYER SOUND
BERKELEY, CALIFORNIA
MARCY WONG DONN LOGAN ARCHITECTS

“CONSTELLATION IS A BRILLIANT SOLUTION THAT EFFICIENTLY AND EFFECTIVELY PROVIDES THE ACOUSTICAL RANGE NEEDED TO SUPPORT A MULTITUDE AND DIVERSITY OF USES.”

MARCY WONG
ARCHITECT
MARCY WONG DONN LOGAN ARCHITECTS
Zellerbach Hall at the University of California, Berkeley is housed in an AIA Honors Award-winning building, and is home to Cal Performances, which sponsors a wide range of events, including orchestral, chamber music, jazz, theatrical, dance, spoken word, operatic, and ethnic performances. The university also uses Zellerbach for graduations and other campus events. This program diversity imposes immense demands on the 2,014-seat hall’s acoustics, and making Zellerbach Hall a perfect candidate for the Constellation System. On one evening Constellation enables an audience to experience a symphony orchestra in the warmth and resonance of a concert hall and allows ensemble musicians to better hear each other, while on the following evening it provides increased intelligibility for a play.

“PERFORMING AT ZELLERBACH HALL WITH THE CONSTELLATION SYSTEM, ONE CAN DEEPLY APPRECIATE HOW FAR TECHNOLOGY AND SCIENCE HAVE DEVELOPED. THE HALL’S ACOUSTICS COME TO LIFE IN RESPONSE AND ONE CAN TELL THAT THE AUDIENCE AND MUSICIANS ARE HAVING A NEW AND EXTRAORDINARY EXPERIENCE.”

MAESTRO KENT NAGANO
FORMER MUSIC DIRECTOR
BERKELEY SYMPHONY ORCHESTRA

ZELLERBACH HALL
BERKELEY, CALIFORNIA
ARCHITECTS VERNON DEMARS AND DONALD HARDISON

extraordinary live experience
At KAUST, a graduate-level university along the shore of the Red Sea, Constellation is essential for the scientific research conducted in CORNEA, one of the world’s most advanced 3D virtual reality environments.

Mechdyne Corporation and University of California San Diego designed CORNEA as a 3D visualization lab for exploring and interacting with complex datasets and mathematical models. Research projects here include dynamic seismic and atmospheric processes, geological and man-made structures, multidimensional molecular structures, oceanographic displays and even archaeological sites. In CORNEA, dynamic computer graphics are stereoscopically projected from 24 4K projectors onto the walls, floor, and ceiling, with multidimensional sounds provided by Constellation. KAUST also includes an interactive multi-purpose room (MPR) where the voice lifting feature in Constellation improves intelligibility for in-house and networked conferencing. MPR’s variable acoustics can be changed simultaneously with active simulations in CORNEA while showing compatible 8K stereoscopic 3D projections.


ZACHARY SELDESS
AUDIO SYSTEMS COORDINATOR AND DEVELOPER VISUALIZATION LAB, KAUST

KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KAUST)
JEDDAH, SAUDI ARABIA

"As users descend into a cavernous space within a virtual archeological excavation, Constellation allows us to simulate the ambient acoustic properties of the cave, providing subtle, powerful, non-visual cues to make the lab a one-of-a-kind virtual reality environment for scientific research."

ZACHARY SELDESS
Audio Systems Coordinator and Developer Visualization Lab, KAUST

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support event diversity

WITH MOST OTHER SYSTEMS, YOU HAVE TO DESIGNATE FIXED-STAGE MICROPHONES, SO THE STAGE CANNOT BE MOVED. BUT WITH CONSTELLATION, YOU CAN USE THE ENTIRE ROOM AS YOUR STAGE.

THORSTEN ROHDE
PRO ACOUSTICS ENGINEERING

MUMUTH MUSIK UND MUSIKTHEATER
GRAZ, AUSTRIA
UN STUDIO ARCHITECTS

Within the free-flowing architecture at MUMUTH, Constellation couples with the hall’s unusually flexible interior construction to support a wide diversity of events with ease. Designed by UN Studio, MUMUTH’s architecture highlights segmented flooring, sections of which can be raised or lowered individually, allowing a variety of seating arrangements and stage sizes to be configured using computer control. With presets programmed to meet the acoustical requirements for jazz, chamber, vocal, and symphonic, and choral music, the Constellation system installed by Kraftwerk can accommodate the varied combinations of room configurations and event programming. The Constellation system is also equipped with a voice lift feature for speech, eliminating a fixed stage position and truly supporting total room reconfiguration.
The biggest complaint from orchestral players, particularly in large halls, is not being able to hear each other on stage. I didn’t want them to have to rely on wedges; I wanted them to hear each other. The Constellation technology really accomplished that, with very minimal impact on the mix.

Fred Vogler
Principal Sound Designer
Star Wars: In Concert

STAR WARS: IN CONCERT

The first touring application of Constellation acoustic system was heard in Star Wars: In Concert. The successful arena tour offers a rare opportunity for fans of George Lucas’s space opera to relive their favorite movie moments through the world’s largest touring LED screen, with 40 musicians and 40 singers performing John Williams’s unforgettable score. Using equipment supply from Solotech, a Constellation system creates an electronic orchestra shell for the musicians to effectively hear each other, much like they would in a concert hall.
Educators strive to help students achieve their full potential, but many schools suffer from limited resources and space, leading to compromises in practice and performance venues. These challenges make Constellation an appealing technology for educational applications, as a single performance hall now can handle anything from band competitions and class meetings to theatrical productions and graduation ceremonies — each optimized with acoustical qualities best suited for the event type at the press of a button. This flexibility extends a school’s potential to inspire student creativity in music and all performing arts. Constellation’s subtle enhancement has impressed the trained ears of school musicians and faculty members in a wide range of educational facilities, such as the University of California San Diego, Louisiana State University, Colorado College, Cuesta College, Sage Hill School, Temple High School, Crowden School and many more.
ACOUSTIC SYSTEM WITH GREEN ADVANTAGES
Constellation provides acoustical characteristics suitable for symphonic music without requiring a large interior volume and hard, heavy surfaces. This reduces the carbon footprint of the building by reducing the amount of construction materials. Also, over the long run, it dramatically reduces the energy consumed by HVAC and lighting systems when compared to venues with larger interior volumes.

ENERGY EFFICIENT MANUFACTURING
MADE-TO-ORDER WITH IN-HOUSE COMPONENTS
By making our products—including most components—right here in Berkeley, we save energy otherwise used to transport components or sub-assemblies from elsewhere in the world. Also, we only build a product once it’s been ordered, reducing wastage and energy usage from inventory storage.

CLEANER FOR THE ENVIRONMENT
We employ a responsible manufacturing process from start to finish, which includes recycling all scrap materials, filtering and recirculating all water used in the cone-making process, and cleaning all vapors from the air using a state-of-the-art Catalytic Burner Exhaust Gas Abatement System.

PRODUCT COMPONENTS
COMPLIANT WITH ENVIRONMENTAL DIRECTIVES
All our product components are manufactured to comply with the European RoHS and WEEE directives, ensuring that we are not adding to the toxic elements in our environment.

SUSTAINABLE BUSINESS PRACTICES
INVESTING IN WHAT MATTERS
It’s not just about the environment—we make sustainable business decisions about all aspects of our business, including hiring locally, keeping our manufacturing close to home, and investing in the future by contributing to worthy arts and educational institutions.

A STEADY COURSE
There’s more to be done, but we’ve made a solid start. You can count on us to continue implementing “greener technologies” through our own innovations and by adhering to the highest standards for environmentally friendly business practices.
Privately-owned and operated since its founding by John and Helen Meyer in 1979, Meyer Sound has been at the forefront of professional audio innovation for more than three decades. Meyer Sound manufactures and supports professional sound systems designed for optimal performance and ease of use. Renowned for their pristine sound, reliability, efficiency, and long life, our systems are the choice of top sound designers and consultants worldwide, and are supported by comprehensive technical service, support and educational programs.

In addition to holding 40 U.S. and international patents, Meyer Sound has been widely recognized by numerous industry awards, including the prestigious R&D 100 Award.

In order to maintain the highest level of quality control, Meyer Sound designs and manufactures all products at its Berkeley, California headquarters.

Meyer Sound is a leading worldwide supplier of systems for theaters, arenas, stadiums, theme parks, cinemas, convention centers, houses of worship, and touring concert sound rental operations.

"AT MEYER SOUND, WE HAVE A TRADITION OF CONSTANT INNOVATION WITH A SINGLE OBJECTIVE: ENHANCE THE AUDIENCE EXPERIENCE."

JOHN MEYER
COFOUNDER AND CEO
MEYER SOUND