



The Palladium typically hosts a varied program that takes in Broadway, jazz, rock, and symphonic music.

# Updating the Palladium

By: David Barbour

## An Indiana concert hall gets sound and lighting systems designed to take on all comers

In 2011, we covered the newly opened Palladium, a concert hall that was (and is) the centerpiece of the Center for the Performing Arts in Carmel, Indiana. The center also features the Tarkington, a 500-seat proscenium space, and the 200-seat Studio Theater. Recently, the Palladium underwent a substantial technical

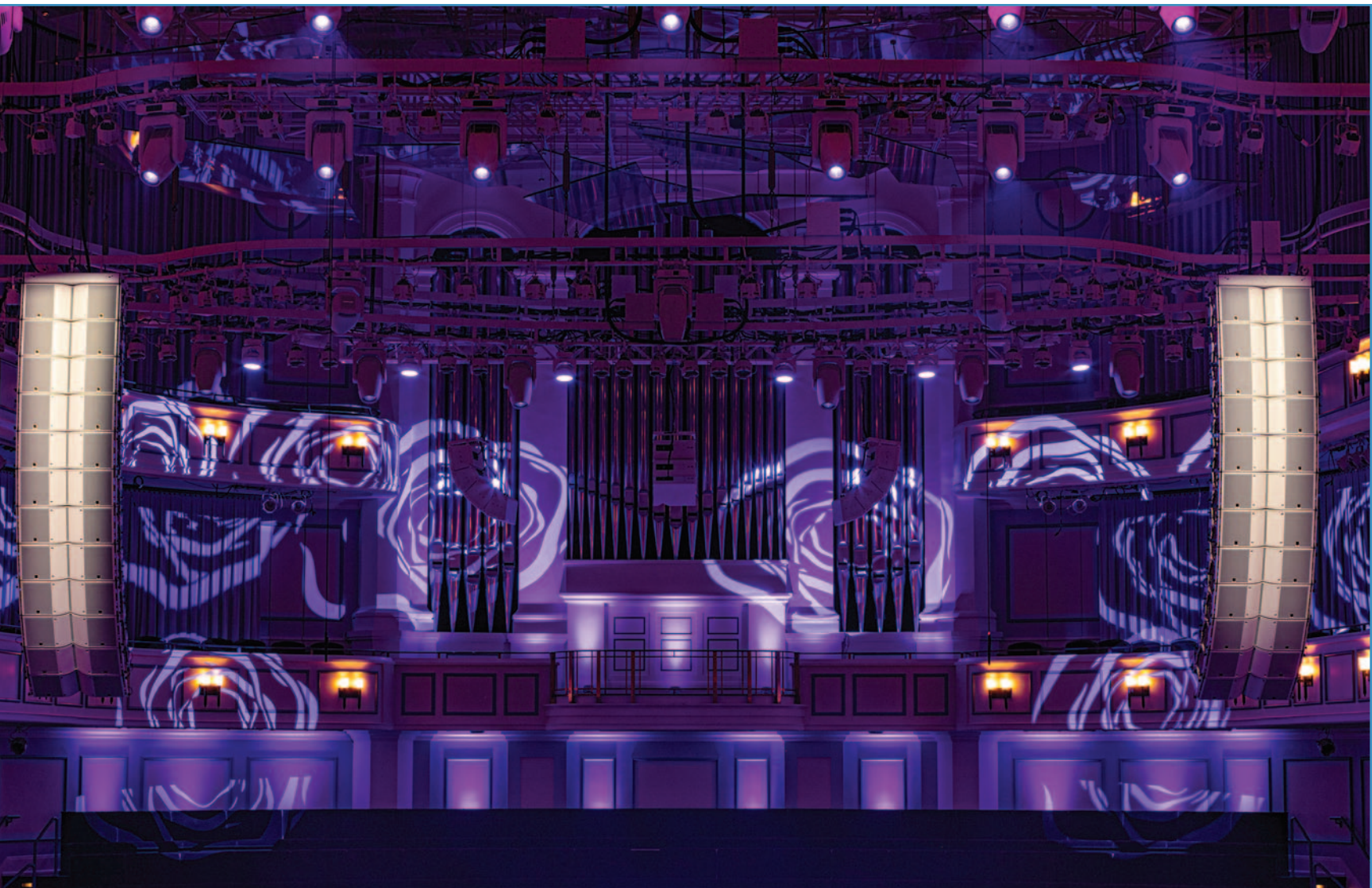
upgrade that aligns it with its evolving (and eclectic) programming.

Writing about the new venue for *LSA* (“Under the Glass Canopy,” July 2011), Judith Rubin noted, “The building’s four-fronted symmetrical design, massed around the domed central space of the single-room concert hall, was inspired by Andrea Palladio’s Villa

Capra, La Rotonda, built in 1566. Its exterior detailing was inspired by the Viennese Secessionists; the interiors were influenced by the neoclassical designs of the 18th-century Scottish architect Robert Adam. Interior designer Walter Knabe created custom wall designs.” David Schwarz was the architect of the project.

The Palladium, Rubin added, “is based on the traditional shoebox-shaped concert hall with high ceilings and massive, sound-reflecting walls. The room is symmetrical, from side to side and front to back, creating a cen-

The Center for the Performing Arts photos by Joshua Heasty; lighting design by Nick Brown



The new lighting system draws heavily on Ayrton profile units, including 16 Eurus S, 10 Diablo S, and five Khamsin S plus 15 Claypaky Sinfonya Profile 600s. An ETC Apex 10 console provides control.

tral column topped with a cylindrical dome with an oculus in the middle. The two oval spaces that fuse into the central volume are also symmetrical from front to back with identical outermost walls and ceilings surrounding the half dome. The Palladium is one of the few concert halls that play into Palladio's multiple uses of symmetry."

Times change, however, and, in technological terms, a decade and a half might as well be a century. Jeff Steeg, the venue's chief operating officer, notes that the Palladium's original sound system was designed "more for reinforcement than amplification," which was problematic given the wide range of acts that were soon getting booked. "The artists we were bringing

in after the first ten months led into the business' commercial side, and we found that the system didn't perform as well as we needed. With some left-over funding from the project, we added pieces to the system, getting it to the point where we could work with it. We lived with it from 2011 until June and it worked well for us. We did a lot of great shows with it, having gotten it to a point where it gave good coverage across the hall."

Indeed, the programming at the Palladium is nothing if not varied. The recent lineup includes the Carmel Jazz Fest, a Duke Ellington-George Gershwin tribute, and a songbook evening with Michael Feinstein, artistic director of The Center for the Arts.

Also scheduled to appear are Average White Band, Nick Carter, soul violinist Damien Escobar, Ben Folds, Grand Funk Railroad, Broadway leading lady Renée Elise Goldsberry, the Australian Chamber Orchestra, and Indiana Wind Symphony.

In providing aural support for so many musical styles, Steeg says, "We knew that some spots were good but not great." During COVID lockdown, he adds, "We took a hard look" at the system, pondering how to upgrade it for the venue's next ten years. When the venue reopened for touring acts, Steeg began noticing that contract riders specifically excluded some boxes in the Palladium rig. At the same time, the venue's aging lighting gear was

failing, and replacement parts were becoming impossible to find. Realizing that an upgrade was needed, the venue's management approached the city of Carmel's redevelopment commission, seeking funding for a lighting and sound upgrade. Awarded about \$1.5 million in TIF (tax incremental funding) money, the hunt for new gear began.

Steeg obtained bids from d&b audiotechnik, L-Acoustics, and Meyer Sound. Meeting with staff members from the Palladium, he says, "We wanted a system that was purpose-built for the room and how we do business now: This means everything from classical music to rock, country, and jazz. And with our unique rigging setup and glass canopy, we made it a rule that you have to use our PA." The glass canopy, one of the hall's most intriguing features, was the product of an intense collaborative effort between theatre consultancy Artec, Schwarz Architects, and rigging expert J. R. Clancy Inc. The canopy, fabricated by Waltek & Company, of Cincinnati, is made up of multiple trapezoidal pieces of glass in varying thicknesses, tilted to catch and reflect the sound frequencies and mounted in four sections on a steel frame that is raised and lowered via Clancy's custom, dead-haul drum-and-winch system.

"We knew that there were some areas we wanted to elevate," Steeg says. "We went back and forth with different bids." Systems were scored for efficiency and then for price. "That's what gave us the winning bid, from system designer Force.Tech and supplemental partner Mid-America Sound," both based in nearby Greenfield. "We have worked with both vendors since almost the beginning," Steeg says. "Jason Wells [owner of Mid-America Sound] and I have a relationship that dates back before that, as we're both Indiana University graduates."

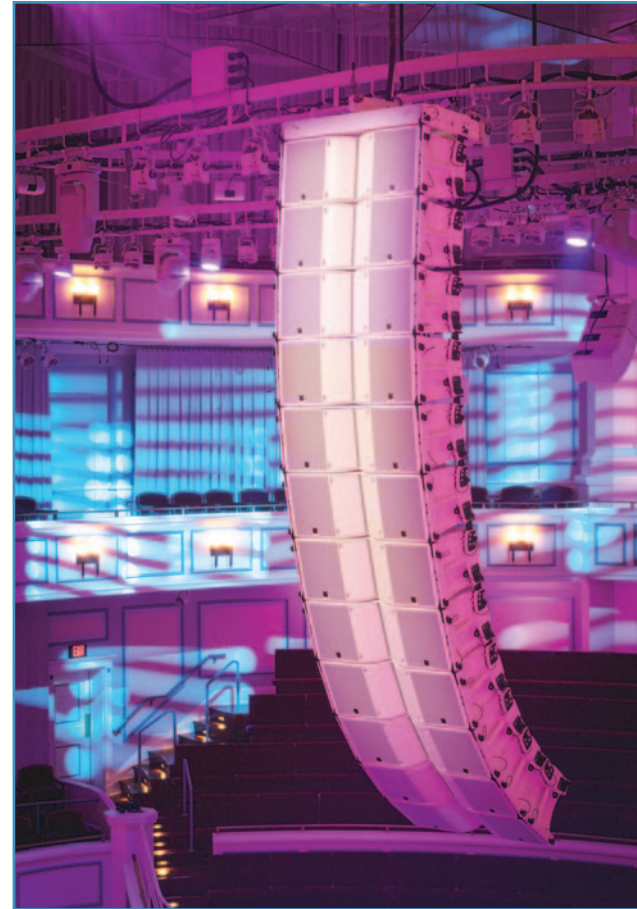
Force.Tech oversaw the system design and installation, acting as the lead on the project. Mid-America

Sound supplied the loudspeakers and related equipment. Also, Haverstick Designs, the Carmel-based acoustical testing and design consultancy, conducted an acoustic analysis of the hall, working with a LIDAR scan and 3D model, accurate to within 1/4", created by the Indianapolis-based firm Immersaf Media.

"The system they put together is really good," Steeg continues. "We knew that, technologically, things have changed dramatically in 14 years, so a new system would automatically elevate the experience." When an L-Acoustics system was proposed, Steeg and company did their homework, checking out a similar rig in Clowes Memorial Hall at Butler University in Indianapolis. "Of course," he adds, "we knew L-Acoustics is a very reputable brand."

The system chosen includes a main hang of L-Acoustics K3 long-throw units, arrayed 12 per side, with front fill provided by eight X8 passive two-way coaxial speakers. "The two curved stacks of speakers suspended above either side of the stage, which provide most of the volume, are much more robust," notes Scott Hall, the venue's director of communications. "The number of cabinets was increased from nine to 12 on each side, providing better vertical coverage from the floor orchestra level to the highest boxes on the fourth-floor gallery level. Subs are KS21s, placed two per side. Ancillary fill zones, including the rear seating and the upper levels, are covered using a collection of A10i medium-throw boxes and additional X8s. Additional acoustic materials, designed to deaden reflections from walls and other surfaces, will be installed at a later date."

Among the advantages of the L-Acoustics rig are better and more consistent room coverage across the entire system, with a smoother transition between speaker zones; more consistent volume, regardless of the distance from the speakers; and a reduction of unwanted reverberation



The new loudspeaker rig includes a main hang of L-Acoustics K3 long-throw units, arrayed 12 per side, with front fill provided by eight X8 passive two-way coaxial speakers.

and sound reflections. Another plus factor is the ability to quickly replace equipment from the well-stocked warehouse at Mid-America Sound should it be needed. Front-of-house sound is controlled using a DiGiCo SD9 console, with another DiGiCo SD9 in monitor world.

The new lighting system draws heavily on Ayrton profile units, including 16 Eurus S, 10 Diablo S, and five Khamsin S plus 15 Claypaky Sinfonya Profile 600s. An ETC Apex 10 console provides control. "We asked Nick Brown, our lighting director, 'What would you love in a system?'" Steeg says. "He looked at the variety of our programming and his key recommendation was increasing the number of intelligent fixtures in the new system." The lighting gear

was provided by Indianapolis Stage Sales and Rentals, with Palladium staff doing the installation.

Steeg notes that touring acts familiar with the Palladium have noted the difference made by the new lighting units. “People have been saying, ‘Man, I don’t know what you did, but it looks amazing.’ It’s because of the LED fixtures’ color-mixing capabilities and the additional gobo slots we have now. Nick is like a kid in a candy store; he went to town with the gear. It has changed the visual impact of the shows here.”

As noted, certain upgrades are planned for the auditorium’s interior, but Steeg expresses high satisfaction with the latest tranche of sound and lighting gear. Indeed, the Palladium seems well-positioned to handle a panoply of musical acts for some time to come—at least until the next technological revolution. 📶

### The Center for the Performing Arts Team

Chief Operating Officer: Jeff Steeg  
Director of Production: Lisa Posson  
Technical Director, Palladium: Ben Dobler  
Lead Audio Engineer: Rob Glass  
Former Assistant Director of Production:  
Joe Wisner  
Lighting Director: Nick Brown  
Technical Director, Tarkington:  
Joshua Hasty  
Funding: Carmel Redevelopment  
Commission PA System  
Audio System Design/Installation:  
Force.Tech  
Audio Gear Supplier: Mid-America Sound  
Acoustical Consultant: Haverstick Designs  
Lighting System Equipment Provider:  
Indianapolis Stage Sales & Rentals, Inc.