



The

WARNER THEATRE

New Sound System Takes Historic Venue to the Next Level

By George Petersen

The story of Washington D.C.'s Warner Theatre is one that could be repeated about dozens of theaters around the country that began as classic art deco movie palaces, which in a bygone age, hosted silent films and vaudeville performers. As the years continued, many of these fell to the wayside, yet a fortunate few — like the Warner Theatre — were reborn and restored to reflect their former glory.

» A Little History

Debuting as the Earle Theatre in 1924, what is now known as the Warner Theatre had something special from the start, with its popular rooftop garden, basement restaurant/ballroom, and precision Rockette-styled "Roxyette" dance troupe — all in addition to successfully making the transition to hosting talkie movies. Even its location was perfect — just a few blocks from the White House.

The theater eventually switched to an all-movie format and in 1947 was renamed for movie mogul (and Warner Brothers co-founder) Harry Warner. During the 1950s and '60s, the Warner blossomed with roadshow blockbuster films like *Ben Hur*, *Dr. Zhivago*, and *Hello, Dolly!*, but by the 1970s, like many huge movie palaces during that era, the Warner Theatre lost its luster. It briefly regained prominence in the mid-1970s as a rock venue, even hosting the Rolling Stones

for an unannounced show there in 1978 — but the theater finally closed to the public in 1989.

After an extensive three-year restoration/renovation project, the theater reopened in 1992 as one of the gems in a revitalized downtown area. Now established as a preeminent D.C. Metro showcase, and home to the annual *BET Awards*, the Warner Theatre stage has hosted performers ranging from Frank Sinatra to Tony Bennett to ZZ Top to Paul Simon, with the latter accepting the first-ever Gershwin Prize awarded for a popular song — beneath its magnificent proscenium in 2007.

» Back to the Present Day

Now as a venue in the Live Nation family, a decision was made to upgrade the Warner Theatre with a sound system that would provide audio that would be on a par with its splendiferous decor and classic design. After a long series listening tests and auditioning of various systems, the nod for the new audio rig went to Outline, which is fairly new in terms of exposure to U.S. audiences, yet has a 40-year legacy in Europe.

"The goal was to put in a system that wasn't going to overpower the venue — either visually or sonically," says Tom Bensen, senior VP and managing director of Outline North America. "Keep in mind that this is a historic theater of great significance and keeping the feeling of the

venue — with a minimal visual footprint from the sound system — was very important. That was one of the reasons for selecting the [Outline] Butterfly system — it provides a high output from a small package. Another part of the requirement was weight restrictions. They can't hang a huge heavy array in front of the proscenium. After looking at the options, the Butterfly was a perfect match."

"I was looking for a single system that could cover the entire house without having to resort to using under-balcony speakers," notes the Warner Theatre's audio department head Ishai Ratz, who previously spent 25 years with Maryland Sound Inc., the sound company that handled the installation, with MSI's Matt Snyder overseeing the project.

» Up and Away

"From an installation standpoint, the system went up very quickly," Bensen says. "With a Butterfly system, you set your angles in advance, and it literally took under 30 minutes per side to hang the system. I showed up at 10 in the morning and we were done at three in the afternoon — and that included an hour and a half for lunch. It was as simple as it could have possibly been."

That part of the project went smoothly, due in no small part to advance planning. "We had given the venue our designs using Outline's Open

Array software, which is incredibly accurate three-dimensional prediction software," notes Bensen. "The data we publish on our products in Open Array is spot-on accurate and we provided the theater with an extremely accurate prediction." Open Array can indicate the coverage and response, as shown in **Fig. 1**, where the display predicts the sound at the Warner's FOH listening position (the small white dot at last row of the main floor). The Outline array hang is capable of 120 dB in the red areas, -3 dB in yellow and only -6 dB in the green zones, such as the upper balcony rear.

The main hang has two sides, each with six Butterfly CDH 483 Hi-Packs (two 8-inch woofers; two 8-inch mids; and 1.4-inch-exit HF driver) above two CDL 1815 Low Packs (flown cardioid subs with 18- and 15-inch drivers) and eight CDH 483's below. Eight arc-delayed Outline LAB15SP self-powered 15-inch subwoofers are beneath the stage and six of Outline's MiniCOMP.A.S.S. steerable speaker systems (with variable horizontal control) handle the front and stage lip fill duties.

"The Warner Theatre is actually a very nice sounding hall and gives you a good starting point," says Ratz, speaking of the theater's acoustical signature. "It has a few issues, just like any house that wasn't originally designed for multiple-use performances. That said, it is a very good



STATS

Year Opened
1924, as the Earle Theatre

Location
Washington, D.C.

Grand Reopening
1992, after a 3-year upgrade

Main Hangs
Outline Butterfly CDH 483
Hi-Packs (L-R, 14 per side);
Outline Butterfly CDL 1815
Low-Packs (2 per side)

Below Stage/Fills
Outline LAB15SP (8),
MiniCOMPA.S.S. (6)

found the coverage to be even everywhere throughout the venue. Every visiting mix engineer that's come here since January has commented on how good the [sonic] picture is at the mix position. And even when you walk from all the way in the back down toward the orchestra section, the coverage and sound is absolutely seamless."

» Flexibility is Essential

The approach in the Warner Theatre project was to create a permanent, yet touring-style system. "So while it's an installed system, it can be removed or reconfigured to the needs of various shows where visuals, or staging, or whatever dictates the need for that," Ratz explains. "We do rock and pop shows, but we also have a one-month run with the Washington Ballet performing *The Nutcracker*, and the visual aspect of the array will not work with that. The array is flown with mo-

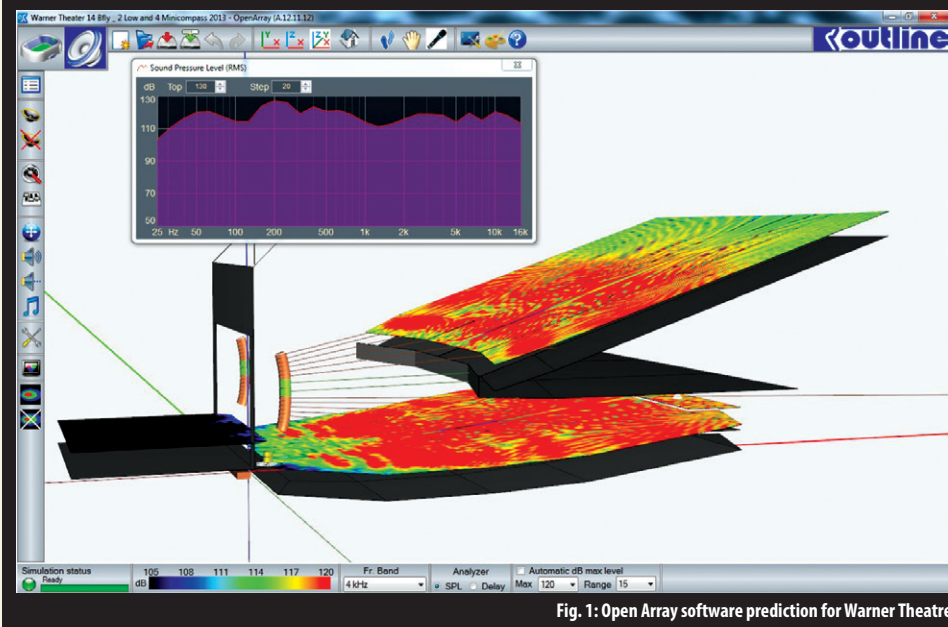


Fig. 1: Open Array software prediction for Warner Theatre

tors — just like a touring rig — and I can remove it or lower it or change it. It's a removable array. It is mainly intended to be used as-is, but if the need arises, it's easily reconfigurable. Being able to accommodate any production that comes through was very important to me."

Bensen completely agrees. "The diverse programming of the Warner Theatre called for a sound system that was equally at home with rock, R&B, classical/symphonic, Great Ameri-

can Song Book and theatrical presentations. The Outline Butterfly is truly one of the most versatile systems we manufacture, able to meet all of these requirements, and yet do so with a minimal visual impact. We specialize in volumetrically efficient designs that get very high SPLs from relatively small enclosures, while delivering high definition and high resolution sonic performance." Gear is great but people make it all happen, says Ratz. "I should say a few words of thanks to Maryland Sound and the project manager Matt Snyder. They got the system up and ready under a nearly impossible schedule and did it right in the midst of their busiest season of the year, while handling so many events during the presidential inauguration. So thanks to MSI, both for that and in accommodating the special needs of the Warner Theatre in a very nice way." FOH

"The array is flown with motors, just like a touring rig, and I can remove it or lower it or change it. It's a removable array." —Ishai Ratz

place to present an amplified show."

One of the first artists to inaugurate the new system was Lynyrd Skynyrd, which, according to Ratz, "was our loudest show with the system to date, yet we did not suffer any ill effects or feel the house degraded the quality of the audio. A huge part of that was the design of our particular array by the [Outline] factory, which prevented any high-end energy — such as snare hits — from striking the fascia of the balcony, which would reflect right back to the stage. We placed two Butterfly Low Packs in the center of the array right in line with the fascia and those two not only improved the bottom end of the flown array, but eliminated that noticeable sharp high-end reflection to the stage. They did a great job with that."

Of course, the Warner Theatre hosts all kinds of events, and it hasn't been all rock 'n' roll. "The next show after Lynyrd Skynyrd was Tony Bennett — a total extreme shift of the spectrum," says Ratz, "but Tony's engineer Tom Young was very pleased with our system. During the show I walked the house and

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