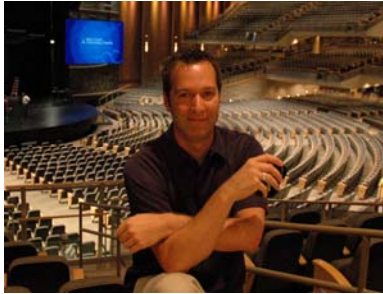


## DANLEY SUBWOOFERS HANDLE THE LOW-END FOR WILLOW CREEK CHURCH



Chris Gille, audio department head at Willow Creek Community Church, South Barrington, Illinois, added six Danley TH-115 subwoofers to augment the existing Meyer system. Willow Creek is one of the world's most famous mega-churches with a 7,200-seat auditorium.

SOUTH BARRINGTON, ILLINOIS – APRIL 2009: Willow Creek Community Church is one of the most famous mega-churches in the world and regularly draws over 22,000 attendees to its suburban-Chicago location every weekend. Its truly awe-inspiring auditorium boasts over 7,200 seats, which technically makes it the largest theater in the world. Thanks to state-of-the-art sound, LED display, and projection systems, not one of those seats could be fairly described as “bad,” a fact that makes Willow Creek’s services so engaging. Nevertheless, the sheer volume of the space thwarted every attempt to deliver bass response that was commensurate with the rest of the system, brought ultimately to a happy resolution with the purchase of six Danley TH-115 subwoofers.

Willow Creek’s main auditorium sound system includes a three-way Yamaha PM1D digital mixing system that drives BSS SoundWeb and Meyer Galileo processing. A Meyer-based sound reinforcement system covers most of the room with two sets of stereo line arrays. One set delivers musical



content, whereas the second delivers speech. In addition, four Meyer USW subwoofers tucked into cavities in the stage combined with four suspended Meyer M3D subwoofers to convey the system’s low-end.

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“The eight total subs in the system were not enough to ‘keep up’ with the rest of the system,” said Chris Gille, Willow Creek’s audio department head. “We knew we were light on subs in the design, but didn’t know that the room’s cubic volume would just eat them for lunch. To get any definition meant twinkling the clip lights.” T.C. Furlong was one of the partnering designers with Willow Creek on the project, and they suggested that Danley Sound Labs might have a solution to the problem.

“As I recall, I heard some bold claim about the pure power and musicality of a Danley... something to the effect of ‘two TH-115s could knock the back wall down at club-levels with 2,000 people dancing,’” laughed Gille. “I knew that the sheer volume of our space just ‘swallowed’ the air out of the others we had tried. So we had to give the Danley TH-115s a shot. Could they really command a room as large as ours, as claimed?”

While retaining the four suspended Meyer M3Ds, Gille removed the subs in the stage and put the six Danley TH-115s in the ‘bunkers’ that flanked the stage. The difference was immediate and obvious. “With the old subs and the suspended M3Ds,” he explained, “we had the necessary ‘woof’ of moving air, and the existing M3Ds still provide that vital part of our overall sound. But now that the Danleys are in the system, we have the ‘knock,’ the impact, the definition, the musical clarity of note. Before, a bass player could be walking all over and you would feel the power and the depth of the bass. But now you hear each note’s clarity and the separation between the notes. The bass and kick lock together. In an attempt to describe it, the impression is that the M3Ds move sustained air, and the TH-115s add definition to it.”

Gille was surprised that T.C. Furlong recommended that they could simply repurpose six existing Crown K2 amplifiers to drive each TH-115 in bridge mode. Gille stated, “I would not have tried the K2s because it would take a subwoofer with greater efficiency than any I have ever experienced to make a K2 adequate. But surprisingly, it’s actually more than enough!”

It’s a good thing too, because every other speaker, amp, and processor in Willow Creek’s system is monitored and networked, except for the Danleys. At first, Gille was uncomfortable with the idea that the Danleys would be the only part of the system that wouldn’t be able to report clipping. But with the new subs in place for many months now, he’s no longer concerned at all. The six Danley TH-115s more than keep up with the other 120-plus loudspeakers in the system.

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Gille was also concerned that if the Danleys delivered as promised in that huge auditorium, they would necessarily crush everyone seated near the stage. But by arranging each group of three TH-115s in a “triangle” configuration, the resulting pattern, including whatever the bunker and floor contribute, became “friendlier” to those sitting nearby.

“We’ve had many positive, unsolicited comments on the upgrade,” said Gille. “Specifically, musicians have expressed appreciation for the improved clarity. The prominent, accurate ‘click’ of the kick, coupled with the improved musicality of the bass, have really brought the mix together and given everyone something to lock into.”



Danley Sound Labs is the exclusive home of Tom Danley, one of the most innovative loudspeaker designers in the industry today and recognized worldwide as a pioneer for “outside the box” thinking in professional audio technology.

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