12Stone Church Serving its satellite congregations with synchronized dual-feed services

CUSTOMER
12Stone Church®, US
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CHALLENGES
With four permanent campuses, the church needed a flexible way to distribute live-to-tape dual-feed services from either of the “co-central” campuses to the other seven campuses.

SOLUTION
Two K2 Summit 3G (one at each major campus) and four K2 Solo 3G media servers (one at each campus) for single feed “Time-Slip” with ChannelFlex (for future implementation of dual-feed transmissions of time-correlated material), two 2.5 M/E Karerra production switchers (one at each major campus), four LDK cameras (Lawrenceville) and four LDX Première cameras for production (Sugarloaf).

BENEFITS
The unique ability of K2 to record two HD streams per channel on a single clip and synchronize playback using ChannelFlex without having to gang channels was key. The solutions deploying live K2-delayed transmissions and pushing clips from the originating campus from prior events to the satellite venues as backup provided a high level of confidence of availability at the all-volunteer-operated satellite venues.
Background

As one of the fastest growing churches in America, 12Stone Church® — a Wesleyan Christian Church — recently opened its Sugarloaf campus outside of Atlanta, to join with its Central campus in Lawrenceville, GA and two satellite locations in Hamilton Mill and Flowery Branch, also in Georgia. At these four locations, 12Stone provides 20 worship services weekly to a congregation of over 30,000, with Sugarloaf seating 1,000, Lawrenceville seating 2,600, Hamilton Mill seating 800 and Flowery Branch seating 500.

Originally brought in by 12Stone in 2008 to upgrade the Central campus to HD production, Technical Innovation’s Blue Hat Design, a systems integration firm specializing in audio/video installation and broadcast solutions for houses of worship (HOWs) headquartered in Norcross, GA, was once again tapped in 2014 to install a fully equipped HD video production facility at the new Sugarloaf campus.

Because of Grass Valley’s relationship with both Technical Innovation and 12Stone, they converged at Grass Valley’s Atlanta (Norcross) office to brainstorm with Joe Paryzek and TJ Scott of Grass Valley sales to develop the workflow definitions and signal transport concepts which ultimately drove the final design by Technical Innovation.

Solution

With nine venues in total, 12Stone needed a flexible way to distribute live-to-tape services across their growing network of campuses. While the church deployed two Grass Valley Komera 2.5 M/E production switchers and four LDX Premiére cameras as part of this project, two K2 Summit 3G and four K2 Solo 3G media servers are at the heart of the flexible workflow that accomplished their production goals.

The multisite trend in HOW provides tremendous cost savings and attendee flexibility and convenience by opening satellite venues — as opposed to main campus expansions — but which require the deployment of video transmission between sites. The cost of video coverage at satellite venues is typically far offset by the cost in money and disruption of expanding the main campus.

“Once the K2 servers were set up and the staff trained, we found that running the application in a workflow that could be considered complex by non-media professionals was fairly easy for the volunteers to handle.”

David Roche
Project Manager, Technical Innovation’s Blue Hat Design

In addition to a full HD production facility, Sugarloaf is equipped with its own lighting grid, LED lighting panels, 3G fiber camera interconnections, audio connections, three 16-foot tall cyc walls, several Yamaha audio mixing consoles with Dante networking, Christie projectors and top of the line video monitors and IMAG displays.

In practice, it is difficult at best to synchronize the events at the satellite campuses with the main campus so they all “arrive” at the message from the main campus at the same time. This is where K2 Solo is the king in simplicity of deployment and operation, as well as being uniquely qualified with ChannelFlex to execute Grass Valley’s “Time-Slip” application where dual-feed transmission of time-synchronized material occurs — a design requirement for future use (see www.grassvalley.com/docs/Application_Notes/servers/k2_solo/GVB-1-0106A-EN-AN_K2_Solo_Playback_Time_Delay.pdf). Larger churches not only transmit a traditional switcher-based program feed to their satellite venues, but for their larger satellites, they also transmit a graphics rich side-screen feed for the satellite venues.
Benefits

While other dual-feed synchronized channel solutions require ganged channels to make an application of this sort work, they are riddled with opportunities for errors, including accidental swapping of clips in the playback channels, as well as the channels playing-back out of sync.

K2 with ChannelFlex provides for a simplified solution as easy as playing back a DVD. K2-delayed transmissions and pushing clips from the originating campus from prior events to the satellite venues as backup provided a high level of confidence of availability at the all-volunteer-operated satellite venues.

“When we first approached this project with 12Stone, we knew the solution had to be both cost-effective and easy enough for volunteers to operate,” said David Roche, project manager for Technical Innovation’s Blue Hat Design. “Once the K2 servers were set up and the staff trained, we found that running the application in a workflow that could be considered complex was fairly easy for the volunteers to handle. Key to this was the ‘live video network’ and ‘opportunistic media network’ architecture presented to us by Grass Valley as the technological basis for supporting 12Stone’s workflow without concern for complicating the in-event operation by volunteers.”

Fully operational since Easter Sunday in 2014, the system at 12Stone’s Sugarloaf campus won Technical Innovation a 2014 Commercial Integrator BEST Award for Best House of Worship Project for its innovative design.

The Sugarloaf building — designed by Wakefield, Beasley & Associates — houses both 12Stone’s worship center as well as the John C. Maxwell Leadership Center, which provides training for pastors and motivational speakers. The unique design allows 12Stone to share its HD production facility with the Maxwell Center.

About Technical Innovation’s Blue Hat Design

Technical Innovation’s Blue Hat Design delivers broadcast solutions to the worship market designed to enhance messages to growing congregations. From systems integration services, emerging media technology, equipment provisioning, or broadcast consulting services, Blue Hat Design provides innovative and dynamic, yet cost-effective, solutions tailored to meet individual needs and are backed by comprehensive training and support.

For more information about TI Blue Hat Design, visit: BlueHat-Design.com

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