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## TECHNOLOGY SPOTLIGHT

# She Loves Out Loud



### Case Study:

West Coast  
Worship Conference

### Out of the Box

PRESONUS STUDIO LIVE ARC MIXERS

AUDIO-TECHNICA'S 3000 SERIES  
WIRELESS SYSTEM

PLANAR VS SERIES LED DISPLAY

BROMPTON TECHNOLOGY TESSERA S8  
LED PROCESSOR

DME'S BARFACE PRO FS

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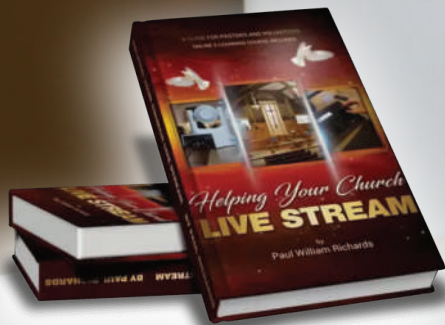
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**T**his is one of those life moments, like hosting Saturday Night Live. I have been given the privilege of being the guest editor for this issue of Technologies for Worship Magazine. Some of you may remember my column In The Muse that started in 2008 and has continued for 11 years! Towards the end of 2019, I was sharing some of the events that I'm involved in for 2020 and they came up with an innovative idea to focus an issue on the practical aspects of executing these events.



**HOLLAND  
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event of this nature with multiple locations and multiple broadcast platforms.

The second event is a national conference called the West Coast Worship Conference. The dates are June 25-27, 2020 and it will be held at Calvary Chapel

Chino Valley. It is a Calvary Chapel Association event that is volunteer driven and brings together leading technology experts with regional worship experts to provide a conference that is geared towards the average church, and also provides vision and content for larger churches. We will take an insider's view of what it takes to pull off a national event with what I call "local heroes".

Both give us real life case studies that I hope will inspire you to do something great in your area. This is the time to mobilize God's people to use technology and the gifts and talents He's given us to do something massive for His glory. I look forward to hearing the stories of the great things you will do this year! 🙏

The first event is what I believe will be an historic one for the United States. I was approached by a woman in our church who was asked to be part of a national prayer movement for women called She Loves Out Loud. I was asked to build the initial website and have watched this simple vision to gather women to pray become a nationally televised event that will broadcast February 15, 2020 from 9 am to 1:30 pm PST primarily through social media channels. This event will broadcast through Facebook Live, YouTube and Lifeway's Digital Pass. I believe it will be the first event of its kind to use social media as its primary outlet for broadcast. We will take a unique behind the scenes look at what it takes to pull off a massive streaming

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Technologies For Worship Magazine (TFWM), a division of INSPIRATION Technology Conferences, Inc., is published and printed in Canada. TFWM, 103 Niska Dr., Waterdown ON LOR 2H3. Tel: (905)690-4709 or Fax: (905)473-9928. Unsolicited articles, photographs and artwork submitted are welcome but TFWM cannot accept responsibility for their return. Contents of this publication may not be reproduced or quoted in whole or in part, by mimeograph or any other means whatsoever without the express written consent of TFWM. Although every precaution is taken to ensure accuracy, TFWM or any of its affiliates, cannot assume responsibility for the content, errors, omissions or opinions expressed in the articles or advertisements and TFWM and its affiliates hereby disclaim any liability to any party for any damages whatsoever. Canadian publication mail sales, publication agreement No. 40841587. Canadian Publication:

permit pending ISSN 1498-3184.  
Return undeliverable Canadian addresses to:  
103 Niska Dr., Waterdown ON, L8B 0M8  
Publication Agreement #40841587

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## ACT Lighting Named North American Distribution Partner for zactrack Automated Follow Systems

**A**CT Lighting, Inc. is pleased to announce it has become the exclusive North American distributor of zactrack automated follow systems, which are easily applicable for all live staging situations from theatrical productions to business presentations.

Vienna, Austria-based zactrack uses state-of-the-art Ultra-Wide-Band (UWB) real-time radio tracking technology on a frequency spectrum available worldwide without any licensing for the end user. Radio tracking transmits through common stage materials and is undisturbed by any effect or weather-related interference. zactrack offers high accuracy and speed in 3D space and uses a unique and patented fixture alignment algorithm to deliver unparalleled accuracy to any moving fixture around the stage. A single zactrack server can simultaneously control lighting fixtures, video effects and 3D sound. It integrates with any stage network and works with the lighting designer's console of choice.

"ACT Lighting is delighted to be the North American distributor for zactrack," says ACT CEO Ben Saltzman. "The accuracy and precision of the PRO system is amazing and we know that zactrack's next

generation of automated follow systems will generate interest among our customers. They will want to take advantage of this unique, highly accurate and easy to use system for a wide range of their live staging needs; the plug-and-play fifteen-minute setup time is unprecedented and a game changer in this category."

zactrack SMART is the world's first plug-and-play automated follow system for 3D tracking of stage lighting, sound or video effects. The system uses self-measuring mesh network technology and takes less than 15 minutes to set up. zactrack SMART's unique combination of automation and simplicity puts the full power of tracking in the hands of designers. The zactrack PRO system is tailored to fulfill all requirements for big projects.

zactrack Founder and CEO Werner Petricek says, "We are happy to name ACT Lighting as our newest distribution partner. ACT Lighting is well-known for representing an impressive list of brands, and zactrack is an ideal fit with the top-of-the-line technology and service environment their customers have come to expect. We're looking forward to doing big things together!"



**ESTA Announces the Winners of the 2020 Members Choice Awards at NAMM**

Left to right: Brad Nelms, ACT Lighting; John Von Fange, The Light Source; Max Wilson, Applied Electronics and Chris (Chippa) Curran, TMB

**T**he ESTA's Members Choice Awards are quickly becoming a coveted honor at the NAMM Show. For the second year, product nominations have grown as well as the votes cast. ESTA member exhibitors nominate a new product and ESTA member attendees vote on their favorite products in 2 categories – gadget and equipment. Voting was done by electronic ballot sent to ESTA member attendees each morning. Winners were announced to an enthusiastic crowd on Saturday, January 19 at the Design Studio booth after The 2020 NAMM Show closed for the day.

The winner for the Gadget category is The Light Source for The Mega-Coupler Grounder. The Equipment category had so many great products there was a 4-way tie! The winners are: ACT Lighting for the Ayrton Diablo, Applied Electronics for Video Wall Truss, The Light Source for The Gym Light Cage, and TMB for the ProPlex FOH Friend. For more information of these proud winners and to see all the exciting nominated products, go to [www.esta.org/MCA](http://www.esta.org/MCA).

ESTA and NAMM are pleased to offer this opportunity for industry recognition of new products. Thanks to all the contestants and congratulations to the winners!

## DiGiCo's KLANG Integration Nets Three Industry Awards at NAMM

**W**hile DiGiCo's new Quantum3 38 was the obvious pro audio "show-stealer" at this year's NAMM, the manufacturer's native integration of KLANG's immersive IEM mixing system within its SD-Range worksurface was simultaneously being recognized by the industry press with an unprecedented trio of awards.

At the 19th Annual Parnelli Awards, considered by many to be the "Grammys" of the live event industry, Audiotonix CEO James Gordon and KLANG:technologies Head of Sales Phil Kamp accepted the coveted "IT" Award for Indispensable Technology, Audio. the sole accolade given to an audio manufacturer for the evening.

DiGiCo and KLANG also received two more awards during show hours: a FOH Gold Star Product Award, collectively selected by the publication's editorial staff for Best Console Integration, and a ProSoundWeb and Live Sound International 11th Annual Readers' Choice Award.



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# PreSonus StudioLive ARc Mixers

**P**reSonus® new StudioLive® ARc series combines a multi-channel 24-bit, 96 kHz, USB-C compatible, USB 2.0 audio interface with an analog mixer front-end, to create a hybrid design that simplifies recording and mixing using a single intuitive console. Featuring newly designed high-headroom analog circuits, along with the company's high-gain XMAX Class A mic preamps, StudioLive ARc audio interface mixers fulfill the needs of both modern worship musicians and content creators.

Three models are available: The StudioLive AR8c offers 4 mic preamps and 6 balanced line inputs for 8x4 recording/playback, while the StudioLive AR12c

sports 8 mic preamps and 12 balanced line inputs for 14x4 recording/playback, and the StudioLive AR16c delivers 12 mic preamps and 16 balanced line inputs for 18x4 recording/playback. All models support recording every channel plus the main mix over USB and feature a musical, 3-band analog EQ on every channel; mic/line boost for low-level vintage synths, broadcast microphones, and consumer electronics; and Bluetooth® 5.0 connectivity. The onboard stereo SD recorder is great for recording a rehearsal or a mobile podcast interview or quickly capturing songwriting ideas. An all-new digital effects processor with 16 presets supplies rich reverbs, lush delays, and fat chorusing and includes

a dedicated send and return, as well as a bypass footswitch jack (footswitch optional).

All StudioLive ARc series mixers have PreSonus' unique Super Channel, which can handle four stereo analog and digital sources at once. The Super Channel combines wireless stereo Bluetooth 5.0 input, stereo input from the onboard SD recorder or from a USB-connected Mac or Windows PC, and RCA and 1/8-inch stereo inputs—great for use with turntables and high-tech devices.

The new mixers come with a powerful recording software suite for Mac® and Windows®. Make multitrack recordings for your podcast or band with one click using Capture® live recording software. Create complete

studio productions and design effects and bumpers with Studio One® Artist recording and production software, augmented with the Studio Magic Plug-in Suite, a collection of useful plug-ins in VST, AU, and AAX formats by the top names in virtual instruments and effects.

With their powerful and flexible recording and mixing capabilities, combined with classic analog sound and familiarity, PreSonus StudioLive ARc series hybrid mixers fulfill the diverse needs of today's musicians and content creators. Pricing for all three models is as follows: StudioLive AR8c \$499.95, StudioLive AR12c \$599.95, and StudioLive AR16c \$699.95. **T**

**Available now.**



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# Audio-Technica's 3000 Series Wireless System

WITH NETWORK CONTROL AND MONITORING OPTION



**A**udio-Technica's expansion of its acclaimed 3000 Series Frequency-agile True Diversity UHF Wireless Systems with the addition of a network port now allows network control and monitoring along with the same easy setup, versatile operation and rock-solid, richly detailed high-fidelity sound as standard 3000 Series components.

Expanding on the functionality of the standard 3000 Series Wireless System, the new network control and monitoring option is unique for a wireless system in this price category, as it allows the 3000 Series to be compatible with A-T's proprietary Wireless Manager software, a Mac OS/Windows application for remote configuration, control, monitoring, spectrum management and frequency coordination of compatible Audio-Technica devices in sound

reinforcement or installed sound applications. The software package offers a broad range of control and management functions of networked receivers, grouped into three tabs: Device List, which auto-discovers connected compatible A-T hardware and allows users to populate a device list of Audio-Technica and other manufacturer's wireless systems; Frequency Coordination, which allows real time spectrum scanning via the 3000 Series Wireless with Network option or other A-T connected network enabled receivers, or the option of using the pre-loaded television channel database for off-site planning; and Monitor, which allows live monitoring of connected systems with the option of filtering the displayed devices by assigned tag groups. Parameters monitored include AF, RF, battery, transmit power and more.

Audio-Technica's 3000 Series

wireless systems give users the power and flexibility to operate within the congested UHF spectrum. With a class-leading 60 MHz tuning range, which is more than twice that offered by the previous versions, 3000 Series systems are available in two frequency bands – DE2 (470–530 MHz) and EE1 (530–590 MHz). Frequencies can be easily scanned and selected on the receiver and then synced with the transmitter via IR sync functionality. The 3000 Series even lets users set a backup frequency that can be quickly swapped by pressing the transmitter's multifunction button in the event of unexpected interference.

The Audio-Technica 3000 Series with optional network control and monitoring (indicated by an "N" in the model number) will be available in a wide range of preconfigured systems starting at \$729.00. **T**

**Available February 2020**

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Two times a year, at Easter and Christmas, most churches are faced with the problem of needing to increase the number of seats in their sanctuary. This means expanding into overspill rooms and thus requiring an equally flexible audio wiring system. Unfortunately, traditional audio wiring requires feet upon feet of expensive, hard-to-install copper cabling. The modern solution is a Dante enabled Audio-over-IP system from Focusrite. One discreet Ethernet cable acts as a substitute for multiple copper audio cables – streamlining your installation and substantially reducing time and costs associated with setup and maintenance.

Visit our website to learn more about expanding your campus using Audio-over-IP solutions from Focusrite Pro.

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# Planar VS Series LED Displays



**T**he Planar® VS Series is a full-featured series of rental and staging LED video wall displays built for easy assembly and transport, adaptability to diverse environments and fast serviceability.

Offered in 2.5, 3.9 and 4.8 millimeter pixel pitches, the new Planar VS Series is aimed at rental and staging professionals who assemble video walls for events, concerts and mobile studio backdrops. The LED displays have been built from the ground up to address the real-world requirements and feedback from customers who desire a lightweight, simple design that is quick to assemble, teardown and transport—but also rugged enough to withstand wear and tear.

“The Planar VS Series balances the needs and desires of rental industry professionals with the innovative ideas of Planar’s research and development team,” said Romeo Estores, senior product manager at Planar. “We believe this purpose-driven design will save time, while adding impact and excitement to almost any event.”

The Planar VS Series rounds out Planar’s rental and staging portfolio with a complete set of LED display solutions designed to meet every need. It joins the Planar® CarbonLight™ LED Displays, a comprehensive line of lightweight, versatile and easy-to-deploy LED displays that includes a wide range of models for eye-catching, creative installations. It also complements the Planar® VVR Series, a family of indoor and outdoor LED displays that deliver fast assembly and easy access to electronics.

## Fast Assembly and Tear Down

At less than 62 pounds (28 kilograms) per square meter, the Planar VS Series is a lightweight yet rugged solution designed to meet the needs of today’s fast-paced rental and staging industry, making it a great solution for houses of worship looking to take their viewing experiences to the next level.

The series supports single-person installations with magnetic points that hold the LED cabinet in place as it is being installed, along with integrated ratcheting cabinet locks to easily secure cabinets together. It also comes with integrated corner protection and an anti-collision bottom edge to prevent damage as cabinets are moved around.

## Versatile Design and Easy Serviceability

The Planar VS Series offers a flexible design that can be adapted to a wide variety of rental and staging environments. The displays can be hung or stacked to form video walls of nearly any size. In addition, curved designs can be achieved at different angles.

The Planar VS Series supports universal modules for stress-free serviceability. The displays also include swappable power supplies that can easily be removed and replaced.

The Planar VS Series is available through the company’s global network of authorized resellers. **T**

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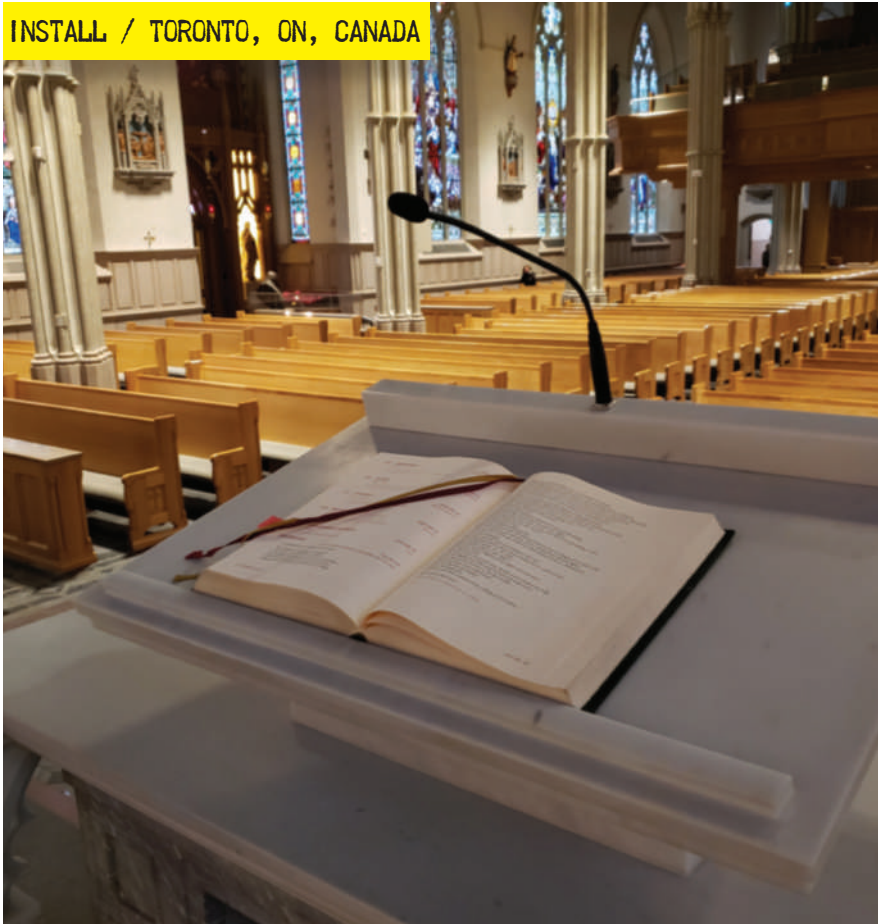
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## Countryman ISOMAX 4RF Rescues Audio After St. Michael's Cathedral Basilica Renovation

**A**fter an 18-month renovation, St. Michael's Cathedral Basilica in Toronto was disappointed to discover that their new audio system was not suited for the space or challenging acoustics. In order to resolve this problem, church leadership tapped G.H. Grassby & Associates to design and install a new system that included Countryman ISOMAX 4RF and ISOMAX Headset microphones for added clarity and intelligibility during services.

"We were called in late last year to see if we could come up with a new solution for their sound reinforcement problems," explains David Grassby,

G.H. Grassby & Associates. "It is a very big space with extremely tall cathedral ceilings, plenty of hard surfaces and stained glass throughout. Unfortunately, the original system was not up to the task. Countryman microphones were one component of an entirely new system that we designed and installed after the first of the year."

Grassby and his team are long-time fans of the ISOMAX 4RF podium and headset microphones. They specified six headsets and two 4RF podium microphones for the new cathedral system.

"The ISOMAX 4 with a hypercardioid polar pattern is close

to perfect right out of the box," adds Grassby. "It is sonically pure and provides great intelligibility without sacrificing the warmth needed for most male and female voices. It sounds almost like a broadcast – rich and authoritative. With very little work we had it exactly where we wanted. The microphone is excellent."

ISOMAX 4RF podium microphone provides Active Vibration Isolation that detects and subtracts table thumps, handling noise, and other vibrations from the signal, providing full, clean sound without the need for bulky shock mounts. A tightly controlled, consistent pickup pattern preserves voice quality at any angle while reducing feedback. Grassby notes that "the tight pattern allowed placement within five feet of the FOH loudspeakers with no issue – not something all podium microphones can do."

Known as one of the best-sounding headset mics of all time, the ISOMAX Headset Microphone is sleek, comfortable, and stays securely in place. It zeroes in on its source, capturing warmth in a wide frequency range while rejecting unwanted sounds and monitor feedback even better than most handhelds.

"When it comes to microphones, we always go with Countryman," Grassby explains. "We work with a lot of churches and in many acoustically challenging spaces. We know we can rely on Countryman mics to sound magnificent every time."

Grassby & Associates brought in The Canadian Rigging Company to supervise installation of the new system that was made up of 24 custom designed loudspeakers hand built in Canada by Belisle Acoustic Laboratories of Montreal Quebec. Power is supplied through eight QSC CXDQ amplifiers processed and controlled through the latest generation of QSYS technology.

Grassby concludes, "Sound pressure levels and quality of sound exceeded specification objectives and response from the cathedral staff and congregation has been overwhelmingly positive. We are very proud of the result." ■

PHOTO: THE ADDITION OF A COUNTRYMAN ASSOCIATES MICROPHONE HAS GREATLY IMPROVED THE AUDIO QUALITY AT ST. MICHAEL'S CATHEDRAL BASILICA. PHOTO COURTESY OF COUNTRYMAN ASSOCIATES



# Brompton Technology Tessera S8 LED Processor

**A**s houses of worship search for ways to engage with members and attract new audiences, LED displays and advances in visual technology make it possible to involve and inspire congregations more efficiently. Rich bright colours, low latency, accurate skin tones, and - most of all - reliable, easy-to-use processors and software that can be simply set up and configured by a place of worship's in-house engineer have become a 'must' when it comes to choosing the right system. Leading LED processing manufacturer, Brompton Technology, not only delivers on technical features but also offers second-to-none, 24-hour global tech support, ensuring peace of mind for every service.

Following the continuing success of Brompton's Tessera family of LED processors and controller cards, the company's new Tessera S8 innovative LED processor is perfect for high-profile projects that don't require large output capacity but still want to benefit from the flexibility of Brompton's highly acclaimed Tessera feature set

and easy-to-use software to produce stunning end results.

Sitting alongside the award-winning Tessera SX40, this latest mid-range processor provides support for all of Brompton's ground-breaking Tessera processing features, including the newly announced High Dynamic Range (HDR) and Dynamic Calibration, which offer a truly revolutionary approach to delivering better image quality for LED screens without requiring finer and finer pixel pitches to achieve it.

In addition, the Tessera S8 offers features such as On-Screen Colour Adjustment (OSCA) for easy seam corrections; Dark Magic for dark area detailing and ChromaTune for precise colour adjustments. It has full 4K60 input support, with eight 1G outputs each capable of 525K pixels at 60Hz and 8 bits per colour. Coupled with industry-leading Ultra Low Latency with just 1 frame end-to-end latency and High Frame Rate for reduced motion artifacts in fast moving content of up to 144 fps (frames per second), the brand new Tessera S8 becomes the obvious choice for companies

facilitating the worship market that are looking to maximise their offering for mid-sized projects.

The Tessera S8 delivers peace of mind for users, with the ability to operate a full HD output with closed loop redundancy. This is achieved via the cabling loops being created from the primary port, through a string of fixtures, and then taken back to the processor. In case of any unexpected signal loss or errors with the loop or primary feed, the backup port takes control and within one frame switches to the backup feed, ensuring a worry-free live event.

With houses of worship continuously looking for ways to make content more powerful and messages from the service more memorable, the Tessera S8 brings previously unimagined capabilities to both new and existing LED panels by delivering truer colours and unparalleled levels of brightness, evoking a much more personal experience and longer-lasting impact on every member of the congregation. **T**

**Available now.**



# RME's Babyface Pro FS

**R**ME's new Babyface Pro FS is the latest addition to the company's popular Babyface family of audio interfaces. The Babyface Pro FS is a 24-channel, 192 kHz, bus-powered USB audio interface that offers several upgrades over its predecessor, the Babyface Pro — including the addition of its proprietary SteadyClock FS technology which brings self-jitter to new lows and provides recording musicians and live recording engineers with the most pristine audio available.

Additional upgrades to the Babyface Pro FS include the same headphone circuits available in RME's leading ADI-2 Pro Series converter/headphone preamp. These two new headphone outputs, offering TRS and mini-jack sockets in parallel, feature completely separate driver stages to perfectly match low- and high-impedance

headphones, guaranteeing pristine sonic results no matter what type of headphone is used. The 3.5-mm TRS phones output power rises to 90 mW. The THD of both headphones' outputs is improved by up to 10 dB and now uses the same output op-amps as the ADI-2 Pro. For mobile users, a K-slot has been installed that can be used with a variety of locking solutions for theft protection. The Babyface Pro FS remains 100% bus-powered for complete mobile operation.

The Babyface Pro FS also includes the incorporation of newly designed analog and digital circuits, with a new +19/+4 dBu switch on the bottom of the unit which adds a direct way to reduce the output level, improving signal-to-noise ratio for sensitive active monitors and avoiding distortion/overload — helping to keep TotalMix FX faders near 0dB. Like all

RME interfaces, the Babyface Pro FS comes complete with the company's proprietary TotalMix FX mixing software.

## All-in-One Solution for Musicians

Additionally, the Babyface Pro FS features a variety of added benefits for performing and recording worship musicians.

RME has teamed with several leading guitar plugin manufacturers to offer those who purchase a new Babyface Pro FS in the Americas before March 31 with a promotional bundle of guitar plugins.

Ideal for worship musicians of all levels, the bundle provides players with a virtually unlimited variety of sounds and effects in an ultra-portable setup for both home recording and live performance during services.

Plugins offered in the bundle include S-Gear's ultra-flexible guitar

amplification software which can be used as a standalone application or as a plug-in for DAW recording software. Compatible with both PC and Mac, S-Gear employs sophisticated tube amp modeling algorithms to deliver highly authentic guitar amp sounds with a natural feel.

Babyface Pro FS purchasers will also have free access to the full, unlimited versions of Plugin Alliance's Brainworx BX Opto and Brainworx BX Masterdesk plug-ins. Customers will also receive trial versions of Pianoteq 6 by Modartt and the Blue 3 Organ by GG Audio, and rounding out the plugin offerings, Babyface Pro FS customers will receive a free 14-day, full version of Gig Performer. After which, a special VIP offer applies.

For more information, please visit [rme-usa.com](http://rme-usa.com). **T** *Now available.*

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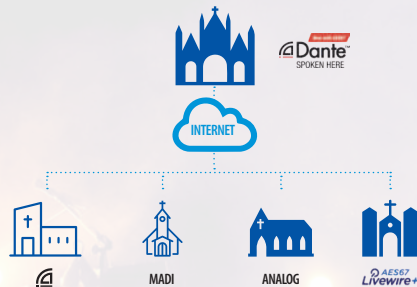
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# Planning Your Portable Church Lighting Strategy

BY TIM ADAMS

**P**ortable church tech is especially challenging—for both people and equipment. The constant week-in and week-out stress of getting a complete tech system up and running and then packed away again wears on you. Easily the hardest part of your technical setup to get right consistently is lighting.

A large part of this is due to the difficulty of getting your lights as high as they need to be in order to not blind your worship team and pastor. As with so much of life, the way to approach this challenge is to compromise. If your priority is the best lighting possible, you will spend thousands of dollars to get a ground supported truss system that requires a team just to setup. If your priority is the best lighting possible on a budget, then

the best you will likely get is a tripod crank stand that can elevate your lights to about 16 feet.

This height may sound good for your needs; however, placement of your lights is key. You need to provide a good lighting intensity across your stage, and this means that the lights need to have a wider beam angle. If it helps, think flood light vs. spot light. If you have already invested in lighting fixtures that are more spot than flood, you will either have to move your lights further back to get a good wash of light or replace your fixtures. You might think you can add diffusion by turning your spot lighting into wash lights, but bear in mind that you lose about 40% of your lighting brightness anytime you diffuse a light. This means that you will need

more fixtures to achieve the same intensity you had before.

Ideally, your lights will be positioned with a 45° down angle and be located 45° off center. This can be especially helpful for shallow stage areas where you don't want to cast a shadow onto a wall or projection screen behind the person. We also light from the sides so that there is not a shadow on one side of the face when the person turns; this happens quite dramatically when you light from directly in front of the person. The 45° down angle is about right for most people to light their eyes beneath their eyebrows without blinding them too much.

Your front lighting is the most important because without it, no one can really connect with what's happening on the stage.

Can you use overhead lighting already installed in the facility? Sure, but one of the key uses of lighting is to direct focus and if everything is lit the same, how do we know where to look? It's also helpful to know what to light and when; the use of shadow or darkness is a powerful tool and should not be overlooked. Many churches have a thought that everything has to be lit all the time, but this creates a static environment that is not conducive to dynamic worship. I don't mean you have to have a flashy lighting system during church but having flexibility in what you can light can come in handy.

We cannot talk about lighting strategy in a portable environment without talking about power. If ever there was a solid argument for investing

in LED fixtures, portable churches would be front and center. Having run tech for a portable church for a decade, I can tell you that incandescent fixtures will trip a breaker faster than you can sneeze if you are not paying attention. LEDs are your friend as a portable church. Of course, you do have a slight headache in running DMX to every fixture that needs to be controlled, but you generally have to run DMX to dimmers with incandescent fixtures, anyway. The other advantage is you don't

have to worry about lamps blowing up or shattering, spreading glass everywhere. LEDs also run much cooler, which means you can pack them away faster, which is always a huge plus in a portable environment. You also don't have to worry about external dimmers, so setup and strike (tear down) can be a bit faster and more efficient, as well.

How do you transport your lighting system? Having a rolling case or cart that can house your fixtures is the best and least backbreaking method I

have come across. I prefer a case as this protects your fixtures from all sides; a cart generally has open sides which can lead to damage to your fixtures. Lighting isn't inexpensive and you want to make sure that investment is protected as much as possible, especially when it is crammed into a trailer with a lot of other equipment. A case also helps protect your fixtures from water damage should the trailer get a leak in the roof, which is also something I have experienced.

Remember I mentioned

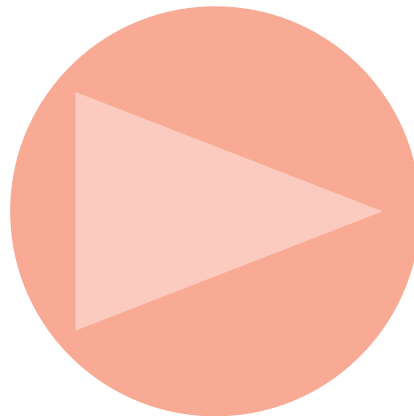
compromise? Being portable means that sometimes changes happen last minute, necessitating a change to your lighting placement. As long as the worship team, pastor and tech understand that changes may not yield a desirable result in terms of lighting placement and/or execution, feel free to compromise to meet the need. It is important that all parties be understanding and be willing to compromise in order to provide the best experience possible under the circumstances. 📺



# How to Design Lights for Worship

We spend a lot of time on YouTube watching videos from other churches and church techs that share tips and tricks and showcase a variety of different ways you can make tech work for you. The above video is a perfect example of this. Part of the "Churchfront with Jake Gosselin" series of videos, this video highlights how to make the most out of a simple lighting rig for worship, covering the gear and software you can use, and offering three techniques for making the most out of any lighting system.

After you've watched this, check out the rest of the videos on this excellent channel. We are subscribers - are you?





## First Baptist Church of Stockton Chooses ADJ Lighting for New Facility

**A**n extensive package of ADJ lighting fixtures has been installed in the new contemporary worship center of First Baptist Church in Stockton, CA. Amongst other fixtures, Vizi CMY300s serve as the main moving head luminaires, creating beam effects and GOBO projections on stage, while COB Cannon Washes cover both stage color and house lighting duties.

When the opportunity arose for the thriving First Baptist Church in Stockton, CA to acquire a neighboring building they embraced it to create a dedicated space for their growing contemporary worship services. After

diligent research, the church's leadership worked with local supplier Nor Cal Pro Audio to specify a modern lighting system that would allow maximum flexibility for the space, allowing it to be used both for services and as a community center.

Headed up by Jorge González, Nor Cal Pro Audio specializes in providing audio and lighting installation services to a wide variety of establishments – but especially churches – throughout the North California area.

Having acquired the building next door to use for their modern worship services, the First Baptist

Church of Stockton leadership were clear that their new facility would make the most of the latest technology. The senior pastors, together with Head Media Tech, Saul Bello, worked with Jorge who helped them whittle down their 'dream wish list' into a specification that would allow them to achieve their vision on the available budget.

"To work out exactly the right moving head fixture for the job," explains Jorge, "we organized a shoot-out at the church's new building. I arranged for a number of different lighting manufacturers to bring along their products, and Saul and the pastors decided that the

ADJ Vizi CMY300 was the option they wanted to go for. They particularly liked the smooth color mixing it offers – it really wowed them! The LED source was another important factor, they were very clear that they wanted all LED lighting, to save money on power and to avoid having to replace blown lamps."

The Vizi CMY300 is a feature-rich hybrid moving head luminaire that can be used interchangeably as a beam, spot or wash. Its specially-designed 300W cool white LED engine allows it to generate a massive output that is suitable for use in large venues and on big stages. Meanwhile its extensive



collection of beam shaping tools – including CMY color mixing, two GOBO wheels and two rotating prisms, as well as motorized zoom, focus and iris – provides lighting designers with maximum creative potential.

For the First Baptist Church of Stockton project, Jorge and his team installed six of the fixtures on an upstage truss. This allows them to project GOBO patterns down onto the stage, create mid-air beam effects above it and also generate washes of color anywhere they are required. In addition, two further Vizi CMY300s were installed on a front of house truss, which can serve as spotlights. These fixtures are also fitted with custom GOBOs of the church's logo, which can be projected onto blank walls at the sides of the auditorium.

To add static color washing to the stage, seven of ADJ's popular COB Cannon Wash fixtures are mounted to the upstage truss between each of the moving heads. These potent units harness the power of a 150-Watt RGBA COB (Chip On Board) LED to generate smooth color mixing and a broad even wash with no hot spots or color shadows. With an extremely wide native beam angle of 80-degrees, the units are supplied with easy to fit lenses that can be used to reduce the beam angle to 40- or 50-degrees if required. Jorge opted for the 40-degree lens option for the First Baptist Church of Stockton stage, to create concentrated splashes of color.

In addition, eight of the COB Cannon Wash DW versions of the fixture – which feature variable color temperature white

LED sources – are used to provide in-fill washing for the stage. Six units are hung directly above to provide downlight, and the remaining two fixtures are mounted at either side of the stage to provide side-fill. These fixtures are also fitted with the 40-degree lens, while Jorge opted to use the optional Barn Door accessory on the side units to prevent stage light straying into the eyes of the congregation.

As well as being ideal for stage washing, the COB Cannon Wash is also an extremely popular fixture to use for house lighting in modern churches. With its wide beam angle and powerful output, it is capable of generating a warm white wash that is perfect for when the house lights are 'up'. However, it's full color mixing ability then provides creative lighting designers with the option of bringing the color palette used on stage out into the auditorium to fully immerse worshippers during a service.

"When we took out the old fluorescent lights that had been in the building before, we realized that the COB Cannon Washes fit like a glove into the old recessed fittings that were already in the roof," explains Jorge. "It made the install very easy, we just took out the old lights, dropped in the COB Cannons and strapped them down so they couldn't get knocked out of place. The result is very impressive and was surprisingly affordable for the church. I researched what an electrician would charge to supply and fit a regular dimmable house light, and it wasn't actually that much less than we



**ADJ Dealer / Installer: Nor Cal Pro Audio**  
[www.norcalproaudio.com](http://www.norcalproaudio.com)

**Project Manager: Jorge González**

**Church Head Media Tech: Saul Bello**

**Church Lighting Tech: Nick Walz**

#### **GEAR LIST**

- 54 x ADJ COB Cannon Wash
- 8 x ADJ COB Cannon Wash DW
- 8 x ADJ Vizi CMY300
- 8 x ADJ Dotz Par
- 4 x ADJ D6 Branch
- 180' of Global Truss America F34

**Photography: Brian Dowdle**

charged for the COB Cannons. And, of course, they wouldn't have the RGBA color mixing or DMX control!"

A total of 47 COB Cannon Wash units are installed across the ceiling to provide house lighting for the large space. To help with running a DMX signal to all of them, Jorge utilized four of ADJ's D6 Branch signal splitter / amplifiers. Each of these compact and sturdy units takes an incoming DMX signal, boosts it, and outputs it via six output (+ one thru) 3-pin sockets.

This extensive lighting installation is rounded out by eight of ADJ's Dotz Par tri-color COB wash fixtures. Two of these illuminate the drummer, housed in a sound-proof booth at the rear of the stage, while the remaining units serve as truss warmers. The large six-legged, floor-standing truss structure is constructed

from 180' of Global Truss America F34 truss and not only supports all of the on-stage lighting fixtures, but also serves as an integral part of the stage set thanks to the vibrant colored light provided by the Dotz Pars.

The completed project provides the church with a state-of-the-art worship facility that combines a flexible stage rig with a house lighting system which serves the necessary practical function as well as allowing the atmospheric colors from the stage to be extended throughout the whole space. Jorge reports that everything went very smoothly throughout the install and the church leadership were extremely pleased with the end result. So it seems that ADJ's professional lighting products together with Nor Cal Pro Audio's emphasis on great customer service proved to be a winning combination! **T**

# Assistive Listening on Your Smart Phone

BY TIM ADAMS

**Y**ou may not be aware, but the Americans with Disabilities Act has some fairly stringent requirements regarding the installation and availability of assisted listening systems in any space that is used for gatherings, specifically when that space utilizes an amplified sound system.

How does this affect you? Well, with updated 2010 regulations taking effect back in 2012, this means your church could be in violation of current regulations, especially if you have built a new church or gone through a renovation in the intervening time without installing an assisted listening system (ALS).

Fortunately, the cost of procuring and deploying an ALS has come down with the introduction of new WiFi-based systems. No longer utilizing the popular 72MHz RF band, these Wifi systems implement a dedicated ALS WiFi network venue-wide (also a requirement of the 2012 updates) through the use of enterprise-level network

equipment (e.g. routers and access points).

How does this provide lower costs? Well, you no longer have to purchase individual body pack receivers for people to check in/out; these are BYOD (bring-your-own-device) systems that allow people to utilize their own personal smartphones and/or tablets. There is an app that runs on their device and often, you can also let the user use whatever hearing appliance they normally use already. Regardless of whether it's a T-coil, headphones, or ear bud, chances are they have a solution they prefer already, which further reduces your initial purchase costs and restricts the need to clean these listening devices to maintain good hygiene between users (can you imagine sharing headphones or ear buds with other people without a cleaning in between users?)

This all sounds good, but what are the downsides? Well, first off, the enterprise-level networking equipment that is required to run in conjunction with these

systems often costs quite a bit more than consumer-level equipment. This can jump the initial installation costs; however, it is important to point out here that the initial entry price point for an RF base package with 4 body pack receivers, the transmitter, antenna and accessories is the sunny side of \$2000 alone, so a basic WiFi ALS that runs about \$1200 all-in still presents a pretty incredible value. When you factor in the total cost of ownership of the RF system, which includes replacing headphones, ear buds and T-coils, along with the time required to clean these pieces every week, replacement batteries, the charging systems (for rechargeable batteries), and the other expendables, the operational cost skyrockets in comparison to a comparable WiFi ALS.

What is the big hidden benefit of a WiFi ALS? It's the ability to scale your system to hundreds of ALS users without a huge cost. Whereas the RF ALS requires a financial

investment for every user (the body pack receiver), the WiFi ALS provides the signal to as many smartphones/tablets as you need. If you need more bandwidth, you can add additional access points to help manage the load. There is theoretically no limit to how many users you can support; reality is that your ALS users will represent a minority in your church rather than the majority.

It is important at this juncture to stress the importance of NOT utilizing an existing WiFi network to handle the user load for your ALS. You should have a dedicated WiFi network for your ALS users specifically. You can connect your wired network to the ALS server to provide Internet access to your ALS users while they are connected to the ALS network, as a convenience. However, you don't want the quality of the ALS signal to be degraded by having to share that signal with every member's device on the same network. This is not best practice and is not recommended. Why go

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to the trouble of installing an ALS system if all you will do is cripple it by forcing it to share the same WiFi network as everyone else?

Thus far, Sennheiser, Listen Technologies, Williams, and AudioFetch provide WiFi-based ALS solutions, though I would encourage you to do your research on each solution as some are specifically designed to function in a church environment and others are designed to allow the venue to serve ads along with assisted listening service. Another area to consider is the administration backend; some solutions are quite simple, others are quite complicated or simply not currently available yet. Look for the ability to name your channels if you have more than one. For example, if you have an English-language assisted listening and a live foreign language translation option – it would be important to distinguish these two channels on the backend so your users know which channel is the one they want.

Also important is whether an active Internet connection is required, either for initial setup and configuration or for ongoing operation. One of the solutions on the market requires the ability to “phone home” to a central server in order to function at all. Not knowing this when setting up your ALS will produce huge frustration for you.

The age of WiFi-based, real-time audio communication is here, and it's awesome! Even better: there are WiFi ALS solutions that cost less to purchase, are fairly easy to configure and deploy, and have a significantly lower total cost of ownership, which helps eliminate excuses for why your church has not invested in complying with the ADA.

For more information on the specific requirements for venues that host gatherings, including how many ALS users you are required to support, please visit [https://www.ftc.gov/system/files/documents/public\\_comments/2017/03/00020-140394.pdf](https://www.ftc.gov/system/files/documents/public_comments/2017/03/00020-140394.pdf). 

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BY HOLLAND DAVIS

**S**eptember 5–7, 2019, marked the second annual West Coast Worship Conference hosted by Calvary Chapel of the Chino Valley. The West Coast Worship Conference began with a simple vision to gather worship, tech and pastoral leaders together for encouragement, fellowship and inspiration. However, even a simple vision requires months of planning and a large number of volunteers to host an event of this magnitude.

## IT BEGINS WITH A TEAM

Pastor David Rosales was generous to provide the West Coast Worship Conference with an organizing team led by Holland Davis from Calvary Chapel San Clemente. The organizing team included members from the worship department, the finance department, the creative and media departments and a liaison from Pastor David Rosales' administrative team. This included Jered Caballero (worship leader), Gerri Torres (worship assistant), Tina Torres (event coordinator), Jayde Meza and Zach Long (graphic design and social media), Carin Schaller and Anna Rivera (administration) and a representative from the tech team and finance. This team began meeting monthly one year prior to the event and weekly using Zoom two months prior to the event.

## DEVELOPING A PLAN

I work best with deadlines and since the deadlines are primarily promotional in nature, the communication department set the calendar for when items are due. We set internal dates to develop graphics and create communication pieces based on when we needed to have promotional items for events to whom we wanted to promote the WCWC. For instance, there are a number of regional pastor events we wanted to make aware of the conference, so we developed post cards to include in the giftbags given to the registrants of these events. After New Years' we sent out save the date eblasts to past registrants and we began phone calls to invite churches to join us for the conference. The plan includes publicity deadlines, program deadlines, social media deadlines, website deadlines, advertisement deadlines and sponsorship deadlines. It then becomes the responsibility of the event organizer and the event coordinator to keep the team on schedule.

## DEVELOPING A PROGRAM

The primary responsibility I have as the organizer is to organize the program. My goal is not necessarily to bring presenters together who have popular appeal to get a crowd. My goal is to bring together presenters who will have compelling content that is inspirational and transformational. Our main sessions are taught by Senior Pastors. This is strategic because Senior Pastors cast the vision for worship in the local church. In essence, the Senior Pastor sets the parameters for worship, the practices for worship and selects a worship leader that will practically implement the Senior Pastor's vision. What we often call a worship leader is really an assisting pastor who catches the vision of the Senior Pastor and partners to bring that vision into fruition. Thus, we want the worship leaders, tech teams, vocalists, media teams to hear from vision casters who will encourage them and challenge them in their pursuit of excellence. Our workshops are taught by what I call "local heroes" and industry professionals. Because the conference is held near the Los Angeles Basin, we have access to some incredibly creative people and industry leaders. We are able to tap into these resources through relationships. Having served in various ministries and having a background in the worship music industry through Maranatha! Music has allowed me to develop some unique relationships that add tremendous value to the West Coast Worship Conference.

## DEVELOPING A VOLUNTEER BASE

Probably the one component that is most underused is volunteers. We don't actually refer to them as volunteers, we refer to them as servants and we do so for Biblical reasons. A volunteer is someone who donates their time because they are helping you fulfill a cause they believe in and that is mutually beneficial to them. A servant is someone who is called by God to serve using their gifts and talents, thus answering God's call to serve your event. In order to develop a large volunteer base, we have clear



responsibilities and times that are needed to serve. We need help with registration, moving equipment, setting up chairs, helping vendors, stage turn overs, recording workshops, providing food and snacks and making sure signage stays in place. We also have help with social media posts on Twitter, Instagram and Facebook. We start making announcements for help three to four months prior to an event, and Calvary Chapel Chino Valley is known for their massive servant culture, so already have an ongoing list of people who are available to serve wherever needed. We also extend this to participating churches who want hands on experience with sound, stage and lights and are willing to take a servant role in helping the tech and media department manage the event.

## HAVING A SWITCHED ON ADMINISTRATIVE TEAM

When I speak about administration, I am specifically speaking about the financial end of things. The

administrative team is usually connected to the host church and ensures the event stays on budget and the employees are able to maintain their job performance and manage the additional burden of hosting an event. This means managing overtime hours and helping make decisions to release responsibilities to volunteers where it's feasible. In 2020, we are using the event registration platform developed by Planning Center Online. It is the best solution for the host church, and it provides the flexibility we need in the registration process. We want the ability to get information on who is coming, what instruments they play, what positions in their church they hold so we can be more effective in developing content that will meet their needs.

## ATTRACTING SPONSORSHIPS

If you are interested in attracting sponsors, there are some hard realities you need to face. First of all, they get a ton of requests so

# AN INTERVIEW WITH HOLLAND DAVIS, THE DIRECTOR OF THE WEST COAST WORSHIP CONFERENCE



**TFWM:** What's the vision behind this year's conference? Why would someone want to come two or three years in a row?

**Holland Davis:** For me personally, there are two reasons. First, it's a reunion. It's a time for me to reconnect with pastors and worship leaders, musicians, and friends that I've met over the years. In many ways it's like going to NAMM for me. I don't go to NAMM just to see the cool stuff. I also go to meet up with friends that I'd love to spend more time with but because of the business of ministry and serving at a local church I don't get to. So, a big plus for me is relationship. Second, it's a chance for me to be challenged and renewed in the WHY of what I do. There are a lot of classes that tell you the HOW, but I need to be reminded of the WHY and the West Coast Worship Conference is designed to offer both... the WHY and the HOW.


**How do you get that balance between the WHY and the HOW?**

**Holland Davis:** The WHY we get through the main sessions. We've had an incredible line up of some of the best Bible teachers on the West Coast. In 2019 we began the conference with a live podcast with David Rosales, who came to Christ at an event where Arthur Blessit was preaching and Mike MacIntosh, the first director for Maranatha! Music, was there as well. It was an incredible evening recounting the worship music of the Jesus Movement. David Rosales, Pastor of Calvary Chapel Chino Valley, commented on modern worship music by saying, "Some artists have gotten more caught up in wanting to be crossover types of musicians, they want popularity and they use their Christian origins as a stepping stone to become something else. If there is anything that I think that the church needs today, it's a return to the worship of Christ for Himself." Mike MacIntosh, from Horizon Christian Fellowship said, "We've got to be about our Father's business and that isn't playing church. So, use this music to capture the imagination of the nonbeliever and then the believer." It's these kinds of messages that help me to refocus on what matters. Some of our other speakers have included Dr. Larry Powers Dean of the Golden Springs Bible College, Sandy Adams from Calvary Chapel Stone Mountain in Georgia, Raul Reis from Calvary Chapel Golden Springs, Steve Whinery from Tri-Cities Calvary Chapel, Don McClure from the Calvary Chapel Association and Jeff Johnson from Calvary Chapel Downey. Calvary Chapel Downey was a hub for new songs of worship during the Jesus Movement.

The HOW is done through the workshops. In 2020 we will have leading



they are making a decision based on a multitude of criteria that has nothing to do with your event. Don't get discouraged or feel like they aren't interested in BEING INVOLVED. SOMETIMES IT COMES DOWN TO scheduling conflicts and budget to support your event. Second, realize they are a business and not a ministry. Even if the company is a Christian company and supports ministries, they need to justify their presence financially. If participation in your event doesn't result in sales for them or they don't get the promotional value they may not want to participate in your event. Third, relationship goes a long way. The vendors that participate in the West Coast Worship Conference are friends I've known for some time, and they just happen to be in key positions at various companies.

If you are interested in attending the West Coast Worship Conference, you can get more information and register at [westcoast.ccaworship.com](http://westcoast.ccaworship.com). 

technology experts like Doug Gould from Worship MD. Doug is a leader in the area of mixing, networking solutions for audio, in-ear monitoring and future technology. He's a true innovator in his approach to training, representing Earthworks Mics, Martin Guitars and others. His wife Sherri leads our vocal track and is one of the leading vocal coaches in the nation. I've known Doug and Sherri for over 20 years and their commitment to excellence is inspiring to me and so many others. We will have classes for visual artists, musicians and leaders, including pastors. That is my special area of focus. Being a Senior Pastor, I have a heart to help other Senior Pastors develop a vision for worship in their churches that is spiritually focused and not focused on trying to make the church attractive to get more people. Worship isn't a church growth methodology, but it's often treated that way. I'm also a big fan of technology and I'm always looking for solutions and sharing those solutions with others. For two years in a row, QSC has been involved in teaching technology classes on audio. Audio Fusion, one of the innovators of using iPhone technology for in-ear monitoring has been a huge partner with us. Worshipsong, Inc. with their award-winning multi-track band app is another huge partner. Risson Amps, innovators in the development of modern guitar amplifiers will be there, as well as Deven Berryhill, the son of Bob Berryhill from the Safaris who wrote the Wipe Out riff, will be teaching guitar. There is also a growing list of new tech companies.

## How is the conference looking for 2020?

**Holland Davis:** I'm super excited for this year's conference. We still have space open for sponsorships and so far we have some incredible speakers lined up. David Rosales will be there again, and we also have Brennen Beeler, a new and upcoming pastor from Regenerate Church, who will be joining us as well. We always have an incredible line up of songwriters / worship leaders who lead the worship. One of our criteria for inviting worship leaders to the platform is they have to introduce original new worship songs. Worship Leaders are always looking for new material and when they come to a conference they are looking for something to take back to their church.

## Give us the 411 on the conference.

**Holland Davis:** The dates for this year's conference are June 25-27, 2020. It will be hosted at Calvary Chapel Chino Valley and you can register online at [westcoast.caworship.com](http://westcoast.caworship.com). The cost is only \$85.00 / person and includes a lunch and a dinner. There are also FREE resources available through the website and for those who are looking for past Worship Conferences, we have created a resource called [caworship.com](http://caworship.com) that also lists new songs, past workshops and main sessions from our previous conferences. It's an incredible FREE resource. We hope to see you there!

## West Coast Worship Conference Partners and Sponsors

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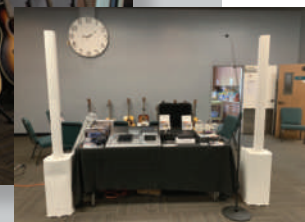
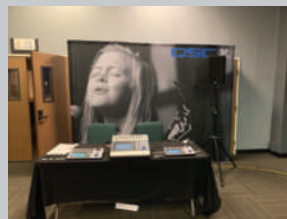




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# BRINGING LIGHT INTO THE DARKNESS

## *(or at least onto your stage)*

**H**ow you light a stage or a set is often an overlooked part of the equation in broadcasting a service, yet lighting often has the biggest impact on the quality of a broadcast. You can have expensive cameras with amazing lenses, but if what's being filmed isn't well lit the end product is simply hard to see. However, with the advent of social media, the way we see video production is changing. The audience is more willing to accept less expensive lighting options if the content and overall video quality is good enough. She Loves Out Loud

will be broadcasting from both a studio location and a church location. Brian Dunaway, from Cross Church in Northwest Arkansas, is handling the live streaming portion of the broadcast. He says the challenge is always to do more with less dollars. Cross Church is a multi-site church with multiple stages, so their money needs to stretch. Their main church facility, which broadcasts primarily through social media outlets, is fitted with ETC lighting and economically priced fixtures from companies like Elation and Chauvet. According to Dunaway, their stages are only being used two



hours a week, 52 weeks out of the year, so they don't need the top of the line fixture in every facility, they just need fixtures that work for their formats. Because they broadcast through social media channels, the level of expertise needed to properly light a stage is not as critical. Although they do use a light meter to check for hot spots, lighting placement is as simple as viewing the monitor and adjusting the lights as needed to achieve an evenly lit stage.

The broadcast portion of *She Loves Out Loud* is being shot live in a television studio where lighting needs are more demanding. Sean Maxwell, Media Operations Manager, says they brought Glen Beck's lighting guy, Lowry Perry, to create sets with a more cinematic approach to lighting. He achieved what Sean Maxwell likes to call the "Hollywood lighting" effect, which is a very dramatic approach to lighting. Their set is around 65 foot candles. To the naked eye, this doesn't look well lit, but on camera it looks great and, in postproduction, they are able to develop a very warm and inviting look. In total, Maxwell says they have around 300 light fixtures running 600 amps in their lighting grid. The huge power draw is motivating them to rethink their lighting approach to include LED lighting that has much lower power requirements. They currently have a blend of ETC LED lighting and standard incandescent lighting fixtures.

The studio uses Mole Richardson lighting for spotlights and baby zip lights for dramatic effect, along



with scoop lights that give a whole lot of light all over the stage. ETC Source 4s are used to provide very focused lighting on a specific subject. Broadcast panel lights offer diffused, even lighting. The studio is constantly adjusting their system with the use of a light meter, and their cameras also have lighting scopes to adjust accordingly. Most of their lighting fixtures have shutters so they can keep the light focused on the desired subject. Broadcast quality LED lighting fixtures have the ability to adjust the color and intensity of the light from the fixture. and all lights are controlled from an ETC ion 6000 lighting console.

Both Dunaway and Maxwell highly recommend hiring a lighting consultant when you're designing your initial lighting scheme. If you consider

the growth of social media outlets like Facebook Live and YouTube as a means of communication, it's important to have a good visual presentation that's pleasing to the eye because that is the environment people are going to. You want someone who understands color temperature and intensity and how to control all those elements to get the best possible image using your set up for film. Shooting for broadcast requires different lighting demands than lighting for production. The cameras need to be taken into consideration. Newer digital cameras require less foot candles versus first generation cameras that require a lot of foot candles, and this will even affect the type of lights you purchase from incandescent to LED. Each set up is unique and it's

amazing how a gorgeous and well-lit stage can look even in a prosumer level camera when broadcast through social media outlets, so it's worth investing in your lighting design.

Since *She Loves Out Loud* is broadcasting on social media outlets, the variation in lighting from one location to the next is not as critical. The studio lighting will have a cinematic look. The stage lighting of a local church will be more one dimensional. The audience is used to network news bringing in brightly lit video via Skype from a remote location or broadcasting poorly lit video shot on their iPhone alongside videos produced in a studio. Well-lit video will still get more views because they're visually appealing, but good content will always win in the end. ■

720 x 480  
(DVD)

1280 x 720  
(HD Ready)

1920 x 1080  
(Full HD)

# Video: Converting Content for Multiple Types of Display Formats

BY TIM ADAMS

3840 x 2160  
(4 K)

In this modern, media-saturated age, it's important to understand not only the various formats and resolutions we are likely to interact with, but also how to convert content into those formats for public display.

For starters, let's talk about signal acquisition; the general rule of thumb is that you capture footage and stills in the highest quality that you can. If you're a professional video producer like me, you likely have a full 4K setup, complete with professional wireless mics, lights, tripods, etc. However, you don't always have this equipment with you and that means you are stuck using your smartphone or tablet. However, this doesn't have to mean that you are settling; the camera technologies in these devices has seen exponential improvement

over the last decade and the newest iOS and Android platforms are capable of capturing some staggering imagery.

I am a big fan of knowing your equipment and how to use it, and truly believe this is more important than the quality of the equipment you have. Remember, the audience will forgive you for just about anything as long as you have compelling content. However, if you can capture in higher quality, do it!

Once you have acquired your media, what do you do with it? Well, if you're planning on sharing it to social platforms only, every platform has their formatting standards and this information is readily available in the Help sections of those platforms. However, what if you shot in 4K but need to display in

1080p? What is resolution and how does that compare to format?

Let's break down these terms first so we are all on the same page: RESOLUTION is a measurement of how many pixels are in an image, but this can be misleading. A smartphone can shoot 1080p, but it has a lower quality image than a 1080p professional video camera. Why? It has to do with sensor size and the ability of that processor to process images/light.

Imagine the sensor is made up of buckets (pixels). The depth of these buckets determines the amount of light the sensor can handle and process; this has a direct result on the sensor's ability to generate a high-quality image. Shallower buckets have a lower dynamic range (difference between white and black in a given

image). Deeper buckets generate a higher dynamic range, which means a wider difference between white and black. Imagine a grey scale with 8 steps vs. a grey scale with 32. The second grey scale will produce a smoother image because there are more steps. The same thing occurs with color and this is where we get the term bit depth. While the size of the sensor is important, so is the amount of processing power behind it. This is why the newest iPhones are able to take such stunning images – the processing power to generate those images is immense compared to the DSLR cameras of 10 years ago.

Now, let's talk display formats. These are established standards for how an image or video is displayed and establishes bit depth, resolution and frame rate.

1080p refers to 1920x1080 (pixels wide x pixels high), with progressive image processing as compared to 1080i, which is the same pixel dimension, but utilizes interlaced image processing.

Display formats are mainly categorized into computer and video and there are lots of them. On the computer side, you have SVGA, XGA, WXGA, WUXGA, etc. and on the video side there is 480i, 480p, 720p, 1080i, 1080p, 4K, UHD and more.

This myriad of display formats can and has led to much confusion so having an understanding of aspect ratios, formats, and how that can affect the final image is important. Aspect ratio is a simple calculation of dividing width by height-

and this will result in a decimal that describes either a rectangular or square. If you have a rectangular image but need to display that image in a square format, there are compromises to be made. The opposite is true, as well. If you have a square image to be displayed in a rectangular display, you will have a pillar-boxed image (black bars on the sides of the image) or your image will be stretched to fit the rectangular format. You may have heard of terms like 4:3 or 16:9; these are aspect ratios that are particular to certain display formats. I call this display physics – you need to understand how the final display format compares to your original acquisition format and what compromises may need to

be made in order to produce a usable image.

Conversion software is readily available that will handle the complexities of converting file formats, but it doesn't necessarily take care of differing aspect ratios for you. Of course, many of these conversion solutions will have settings you can use that establish the kind of encoding you want to employ and it will simply default to the aspect ratio and resolution of the original footage. If you want to change any of these settings, you often have to do that manually.

There are lots of resources online that can educate you on how to convert between varying formats and resolutions, but it can help to learn the basics before

you get too far down that particular rabbit hole. For more detailed information on the display resolutions currently out there, visit: [https://en.wikipedia.org/wiki/Display\\_resolution](https://en.wikipedia.org/wiki/Display_resolution)

There are many terms that are used interchangeably and in conjunction with display formats that are important to understand. Aspect ratio, frame rate, progressive/interlaced, bit depth, resolution, file format, compression, extension, file wrappers, etc.

For now, let's keep it simple and understand that knowing your display format will help you determine what your resolution needs to be and that will help you when you are looking at how to capture your media at the outset. 📺

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PHOTO CREDIT: SEAN MAXWELL

# How to Get Your Prayers Heard

BY HOLLAND DAVIS

**L**ivestreaming provides a unique opportunity for churches and local ministries to impact a global audience, but most churches aren't set up to handle the unique challenges that come with streaming audio. She Loves Out Loud is broadcasting live from the Life Outreach International studios in Dallas, Texas. Although they are primarily a television broadcast studio, they provide a model that any church can follow.

The heartbeat of their audio production is the SSL C-100 and Avid S6L consoles. They have a dedicated audio engineer to mix the live audio feed that

is recorded multi-track into Avid Pro Tools. With She Loves Out Loud, the audio input list is fairly simple. There will be three mic'd hosts. Diane Strack, the visionary behind She Loves Out Loud; Sheila Walsh, host of Life Today and Cynthia Garrett, host of The Sessions based out of TBN UK. There will be a worship leader with a microphone and Roland RD-700 keyboard. There will also be one or two guests on set and a video roll in, which accounts for a total of eight inputs. A mixed feed is sent to the Blackmagic ATEM Television Studio Switcher and embedded into the video feed and then sent out

to the Streaming Encoder.

The above is the general idea of how it's all put together, but how do you make it sound like a recording? For this I had a conversation with Dylan Bennett from Joshua Springs Calvary Chapel. They use a Presonus StudioLive 64 and record directly into Pro Tools, but their live feed comes from a stereo aux send that they run through a mastering chain that includes a separate EQ, compression and a limiter. They mix the stereo aux separately through 5" studio monitors to closely represent what the end user will experience listening through headphones,

computer speakers or their iOS device. To compensate for smaller speakers Dylan adds a shelf boost at 100 Hz to recover the low end that's lost in the translation. He also cuts around 300-400 Hz to clean up the "midrange mud" and adds a high shelf to bring a little sparkle to the mix. The Compression / Limiter gives the online mix a little more punch without distorting through smaller speakers.

For live band recordings Joshua Springs Calvary Chapel uses a template from Luke Hendrickson, which is available on [productiononline.com](http://productiononline.com). Hendrickson created the Pro Tools Template that is being used by Bethel Church in Redding and Jesus Culture. This template allows you to mix live in Pro Tools & Logic Pro X, and includes all the plugins settings needed to sound like a Bethel Music recording. All you need to supply is a band that sounds like Bethel Music! Actually, it takes a pretty powerful computer that takes a Dante split from the front of house and licenses to the plugins suggested in the Template. The Plugin settings in the template include sample sounds for the Steven Slate Trigger, Autotune 8.1, BBE Sonic Sweet, Waves Plugins such as SSL 4000, API 2500 Compressor, CLA Compressors, L2, C6, Renaissance DeEsser, Renaissance Reverb, NLS and PuigTec EQ. The idea is to give you an out of the box solution to achieving the same level of sonic quality that you hear when you see Bethel Music live online.

Some considerations to

keep in mind: when you run audio through a heavily processed mastering chain, you will have latency issues. Even adding wi-fi cameras through wireless transmitters like Slingstudio add up to 15 milliseconds of latency and needs to be compensated for. What is the solution? Most encoders will allow you to compensate for delayed audio and video. Calvary Chapel Joshua Springs uses Livestream Studio and adjusts for latency in the software settings.

If you are mixing live in Pro Tools and using a template like Luke Hendrickson's template, you need someone to stay on top of the mix. For instance, if you're using a plugin like a drum trigger, which sounds amazing on big songs, and you drop into a ballad, you need to turn off the drum trigger or else you have a Spirit quenching moment. Same with a snare gate. The drummer moves to nice sounding brushes and the

drums disappear. The plus side is you have the potential to sound amazing. The downside is it requires a greater commitment on the part of the church to provide trained staff.

Regardless of budget and whether your volunteers are professionally trained or not, you want high quality results. Joshua Springs Calvary Chapel doesn't mix live through Pro Tools because they don't have trained staff. Instead, Bennett records the live Sunday morning mix using a USB key in the Presonus StudioLive 64. The following day, Dylan plays back the aux recording that is sent to the livestream and does a virtual mix. This includes setting the EQ, compression and limiters. It's preferable to have a separate space to mix the streaming audio independent of front of house, but if you don't, then this method provides a way to get a fairly good static mix that is workable. Once the mix is in the "ball park" a less trained

volunteer can simply adjust volume levels as needed.

Keep in mind, live streaming audio is closer to studio engineering than live engineering. Having said that, a lot of churches will simply set their aux mix to post fader and cover the mix in reverb in the hopes that a sonic smoothie will cover a multitude of sins. It doesn't. Take the time to invest in getting the audio right because it does make a difference in people wanting to hear your message or, in the case of She Loves Out Loud, to hear your prayers. **T**

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**Holland Davis** is a teaching pastor, veteran worship leader, composer and author. He is the Senior Pastor of Calvary Chapel San Clemente and CEO of [worshipsong.com](http://worshipsong.com). You can follow him on twitter or Instagram @hollanddavis

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# She Loves Out Loud: Uniting A Million Women to Pray

BY HOLLAND DAVIS

**A**uthor and She Loves Out Loud co-founder Diane Strack was impacted by the words of her late mentor Vonette Bright to “gather the women to pray. They are the only hope for our nation.” On February 15, from 9 AM to 1:30 PM PST, She Loves Out Loud will gather hundreds of thousands of women to pray. But how does one go about gathering women to pray from all over America, from different churches in one organized event? Using social media and live streaming technology!

I was introduced to She Loves Out Loud through Cynthia Garrett from

Cynthia Garrett Ministries, who hosts a program on TBN UK called The Sessions. Cynthia Garrett attends Calvary Chapel San Clemente and invited me to build the initial website for She Loves Out Loud. Diane Strack believes that hope and healing comes through prayer and genuine, healthy relationships – women coming together in sisterhood, helping one another to find peace and a God-confident future, and a passionate team of diverse women has come together to plan and execute She Loves Out Loud as a free, live-studio production broadcast from multiple locations to connect thousands of churches nationwide.

## It begins with great content.

It used to be that quality drove the value of the viewership and a lot of money was spent on quality production. However, in our social media driven world it's content that drives the viewership and viewers are willing to accept lower quality if the content is compelling. She Loves Out Loud is a programmed event that is built around seven prayer themes.

**Sheila Walsh**, Bible teacher, television host and bestselling author of

PHOTO ABOVE: STUDIO A, SHOWS THE SET FOR SHE LOVES OUT LOUD  
PHOTO CREDIT: SEAN MAXWELL

numerous books including, *It's Okay to Not Be Okay*, will lead the charge in praying for victory over depression;

**Christa Lynn**, licensed therapist and human trafficking survivor will lead in praying for abuse and trafficking victims and survivors;

**Priscilla Shirer**, speaker and New York Times bestselling author of multiple works including her award-winning book, *Fervent: A Woman's Battle Plan for Serious, Specific and Strategic Prayer*, will speak about and pray over race relations;

**Megan Brown**, winner of the 2019 Armed Forces Insurance Robins AFB Military Spouse of the Year award, will lead in praying over America and military spouses;

**Carol Kent**, speaker, non-profit founder, former radio co-host and prolific author of more than 20 books, including, *When I Lay My Isaac Down*, will pray over the nation's children;

**Melody and Troy Lovvorn**, who founded the ministry *Undone Redone* after experiencing infidelity, addiction, divorce and eventual remarriage, will lead the charge in praying over marriages;

**Claire Culwell**, mother, speaker and abortion survivor will share her story of forgiveness, adoption and choosing life.

**Cynthia Garrett**, speaker, television host and author of *Prodigal Daughter* and *I Choose Victory* will be hosting the *She Loves Out Loud* studio event.

**Christina Reynolds**, worship leader, singer-songwriter is a worship



leader at the International House of Prayer, Kansas City and co-host of *The Sessions* with Cynthia Garrett. She will be facilitating worship at the *She Loves Out Loud* studio event.

Because of the compelling vision and the relationship between Diane Strack and each participant, everyone is donating their time so the entire event can be offered for FREE. The key to compelling content is relationship. It's meeting people, discovering their unique contributions and casting a vision they would want to contribute to.

Once you have a line up and content, you will want to organize it into a program rundown sheet that gives an overview of all the components for the date. Cynthia Garrett, the event producer for *She Loves*

*Out Loud*, has produced a rundown sheet that breaks each guest into individual segments. Each segment has an introduction, which can be in person or using a video that introduces the guest's story. An interview section with the guest and a time for prayer to happen in the local churches that are joining the *She Loves Out Loud* livestream. The problem with a broadcast event is dead time is really bad. To overcome this, Christina Reynolds will be leading worship on site at the live broadcast and this will be streamed to the churches. Churches are also encouraged to provide their own worship and lead their own times of prayer during these segments.

## Capturing A Live Event

*She Loves Out Loud* is being broadcast from the Life Outreach International Studios, home of the *Life Today* program with James and Betty Robison and hosted by Sheila Walsh. The studio itself records in Standard Definition using Sony 960 Cameras to produce a five-camera shoot. The cameras are brought into an earlier generation of a standard definition Blackmagic ATEM Television Studio Switcher via SDI. They record to Sony XDCam and DVcam recorders which gives them an extremely rich, high quality film-like image which translates to an attractive finished product.

PHOTO: CONTROL ROOM SHOWS THE SWITCHER AND MONITORS  
PHOTO CREDIT: SEAN MAXWELL

I'm reminded of the days when people would hear a recording and ask what amp plugin was used to get that great Vox AC-30 tone? The answer would always be to take a Vox AC-30 and mic it. The same is true here – there's nothing like recording to tape or film to get a great visual.

Audio is multi-tracked using a SSL C-100 Console into Avid Pro Tools. The value of multi-tracking in post-production is it gives you the flexibility to “scrub” the audio by taking out pops, clicks, coughs, sneezes or any other unwanted noise. It also allows you the ability to achieve a produced sound that is well balanced and mastered for broadcast. Additionally, the cameras can record four channels of audio and become a back-up source for audio and video.

After a program is recorded, the editors convert the file from Standard Definition to High Definition in post editing using Adobe Premier Pro. They use Aberdeen Broadcast Services (<http://www.aberdeen.io>) to transcode and deliver files to hundreds of broadcast networks worldwide in the particular broadcast standard they require. To simplify the process, the production chain is multi-cameras into a switcher to a recorder to editing software and output to a distribution service.

## Producing A Live Stream Event

She Loves Out Loud is a live event according to Brian Dunaway from Cross Church in Arkansas. Cross Church is a servant driven,

multi-campus church that meets in Springdale, Pinnacle Hills, Fayetteville and Neosho, Arkansas. Dunaway produced the 2019 National Day of Prayer streaming feed from our nation's capital. For National Day of Prayer, Dunaway says they used Livestream because “we feel like they are the frontrunner” in streaming technology. “They allow you to reach the few or the many at different price points, all cost effectively and so you have the potential to reach people with the gospel that you will never meet.” Livestream allows you to stream live through their platform and also stream on “Facebook Live, You Tube and other social media platforms at the click of a button. And, depending on your followership, your one organization can reach tens of thousands of people.”

“Another company we've fallen in love with,” says Dunaway, “is Living as One. Living as One allowed us to bring Nick Hall from Minnesota into Statuary Hall in Washington D.C. when we pushed his big National Day Of Prayer event out.” Living as One provides affordable solutions for livestreaming events in high definition to or from multiple locations into one feed, using a live streaming technology called Resilient Streaming Protocol (RSP) that protects against audio and video quality loss during transmission. It even guarantees a stable streaming solution over wireless cellular hotspots. Living as One also provides a cloud based DVR feature that allows the broadcaster

to set a beginning and end point so the stream will appear to be in real time even if the broadcast source begins a few minutes early. It's used by Life Church, Elevation Church and Harvest Christian Fellowship with Greg Laurie. She Loves Out Loud will be broadcasting from Dallas, TX, but will bring in a segment featuring Racial Reconciliation with Donna Gaines and Priscilla Shirer from Bellevue Baptist Church in Memphis, Tennessee. In order to facilitate this broadcast and receiving site you need a Living as One Encoder. The RAY E1210 is their newest “low cost” portable web platform encoder, retailing for \$ 1299.

National Day of Prayer used a Black Magic ATEM Television Studio Pro 4K Switcher. Because there was a budget for production, they used an outside video production company for a multi-camera shoot and they provided a HDMI and SDI feed into the ATEM Television Studio Pro. Dunaway says they keep a Blackmagic ADI to HDMI 6G Mini Converter handy to handle going from SD to HDMI. National Day of Prayer also used a Mac Laptop running ProPresenter for graphics and a Livestream Encoder for livestreaming broadcast. This will be a similar set up for She Loves Out Loud and it's portable.

## Getting it Out to the Masses

She Loves Out Loud is making the live broadcast available on Facebook Live, [SheLovesOutLoud.org](http://SheLovesOutLoud.org) (by embedding YouTube

Live) and Lifeway Digital Pass. Drew Porterfield is the Broadcast Engineer for Lifeway Broadcasting and is involved in streaming hundreds of events annually for Lifeway. Lifeway is a syndicate partner for She Loves Out Loud, which means they are not streaming the event, but are taking the stream and making it available to over 2.5 million unique visitors that use Digital Pass. For those who are unfamiliar with Digital Pass, it is a “Netflix” style platform that is free to join and offers a number of free content for individuals and churches. Register online at <http://digitalpass.lifeway.com>. They also have paid On Demand content and Live Events. The beauty of all three of these streaming options is how simple it is to receive the live stream. All a church or individual needs is an internet connection and a computer or handheld device such as an iPhone or Android phone. The goal is to give women wherever they are the opportunity to join in this movement of prayer.

## How to participate in She Loves Out Loud

She Loves Out Loud will begin broadcasting at 11:00 am CST, and churches are encouraged to “join the movement” online at [shelovesoutloud.org](http://shelovesoutloud.org) to receive information on how they can become a host site for the broadcast. Individuals and churches can also participate through Lifeway Digital Pass or watch it on Facebook at <http://www.facebook.com/shelovesoutloud>. ■



# Gathering Women to Pray Through Social Media

An interview with  
Diane Strack,  
President of  
***She Loves Out Loud***



**T**echnologies for Worship had the opportunity to sit down and interview Diane Strack. She is the President of She Loves Out Loud, a new women's prayer movement that will hold its first event February 15, 2020. We wanted to give readers a glimpse behind the vision that catalyzes people to use their gifts, talents and technology in unique and creative ways. Technology is a tool - a really fun tool - but without a purpose, it's just a toy. At Technologies for Worship we are not only interested in presenting articles that educate, but also inspire to use technology for purposes that matter.

## **TFWM: You've been very effective in getting volunteers together!**

**Diane Strack:** My husband, Jay Strack, is always telling me if you can perform a vision on your own then it's not of God. When God brings a vision, He brings people together to work together, to build together, to team together. It's important we build community in our churches so we can do more together, and people meet through these relationships of giving to each other. Sheila Walsh and I met through a friend. We had breakfast together and the Lord knit our hearts and come to find out God was calling Sheila to a prayer ministry the same time He was calling me to a prayer ministry. Cynthia Garrett and I met at an event through Leon Schoeman from TBN UK. What is so special about She Loves Out Loud is that God is actively working in the hearts of people in a unified manner who had never met each other before!

## **TFWM: Where did the vision for She Loves Out Loud begin?**

**Diane Strack:** Several years ago my mentor, Vonette Bright, called me to her home before she died and said, "Diane, gather the women to pray. It's the only hope for our nation." At the time, it didn't really resonate within me beyond the thought that yes, of course we're to pray. In my mind she

PHOTO CREDIT: DIANE STRACK

was just telling me to continue in women's ministry. But then the women's marches began, and the #MeToo Movement exploded, and the hurt and the anger being expressed through these movements began to eat at me, because I realized that so many of these women don't know the healing that can take place through Christ, they don't understand the unconditional love of the Father, and that through the Saviour all things are made new. I reread Vonette's book, 'Passion for Prayer' again, and realized that where she had called women together to pray using zip codes, we don't really do that anymore – we use social media instead. And it was like the Lord said 'You can do this; and I will help you do it through social media.'

This burden to gather the women was in me, and I called a few friends and asked them to pray with me. A group of us met in Washington D.C., and that's when I met Cynthia. From there, things just continued to grow, and She Loves Out Loud began to take shape. I met Holland Davis from Calvary Chapel San Clemente through Cynthia Garrett, and one day James Robison said through Sheila Walsh, "How about I give you the whole studio to use for your event?" People heard what we felt called by God to do and they caught the vision for prayer. We don't have a lot of famous names, we have a few, but mostly it's the simplicity of gathering the women to pray. We call it our adventure with Yahweh!

### **TFWM: What are the different areas you have volunteers serving in?**

**Diane Strack:** When I talk about volunteers there are two kinds. There are people like Holland Davis and Cynthia Garrett who give of their talents and their time, then there are other volunteers that have said we'll just take our corner of a city or a state and we'll gather women together to pray. One of the things I've seen, especially in volunteers, is we've seen women in small cities catch the vision to gather women together in their cities. One woman contacted me and she lives in a little town of 5000 people and she's praying for 1% to gather together. Now that seems like a small number but for her in her little community it's requiring her to put everything else on hold and just go to work. She's doing that without my involvement. Someone else called and said we've decided to bring three counties together and they've decided to meet at Chick-Fil-A and

walk together in a mom-train to pray for our children with She Loves Out Loud.

What I've done is I've gone ahead with a vision, moving 100 miles an hour with that vision and I'm learning how to do things like how to build a Wordpress Site, how to do Facebook live, whatever it takes. My favorite story is the story of the manna from heaven, and how everyday Israel would wake up and the manna was there. That's how my life has been. Every day I open my computer and the manna is there. There hasn't been one thing that I needed that God hasn't provided.

If you can perform a vision on your own then it's not of God. When God brings a vision, He brings people together to work together, to build together, to team together.


### **TFWM: So, the simple vision is to gather women to pray.**

**Diane Strack:** That's right. I've written often on aloneness, that it's not good to be alone. I'm meeting women all across America who have digital friends, but they're not meeting other women and in their solitude they're making bad decisions. Here's my belief. I believe that women have three things they can choose. They can stay trapped in the aloneness. This especially happens to those who have experienced abuse. They can surround themselves with friends who will encourage them to stay angry and seek revenge. Or they can release that pain to the Holy Spirit and ask God to heal and restore their lives and move them forward into

the plans God intended for them. One of the things we are doing through She Loves Out Loud is to encourage women to have a sisterhood, to be there for one another using social media.

### **TFWM: What is the best way for individuals or churches to join She Loves Out Loud?**

**Diane Strack:** Just go to [shelovesoutloud.org](http://shelovesoutloud.org) and join the movement! We will send continual information about the event. We're also sending out weekly words of encouragement and sharing what others are doing to gather women together to pray. Our hope is women will catch the vision to build relationships around prayer, to look into each other's face and to really be there for one another.

She Loves Out Loud will be held at 11:00 am CST online at [SheLovesOutLoud.org](http://SheLovesOutLoud.org) or register with Lifeway Digital Pass at [digitalpass.lifeway.com](http://digitalpass.lifeway.com). 



## She Loves Out Loud— *February 15, 2020*

What is involved in launching a social media phenomenon uniting women across denominational, racial, geographical and socio-economic barriers to pray? She Loves Out Loud is doing just that. The simple vision is to gather women to pray; the methodology is to use technology to do it.

### FIRST YOU NEED A HUB

The HUB for She Loves Out Loud is the website, <https://shelovesoutloud.org>. The initial site was built by Holland Davis from Calvary Chapel San Clemente, but later updated to its current form by Megan Brown. The site is being hosted by Worshipsong Solutions based out of San Juan Capistrano and is the information source for

churches and individuals that want to participate in the event and join the ongoing prayer movement it's catalyzing. The key features of the site are the registration module, the event schedule, the planning kit, information on speakers, partners and press releases, but it's the fact that the website becomes the primary broadcast source for the live event and She Loves Out Loud broadcast channel

that makes it essential. Event participants are encouraged to register to "join the movement." This link takes you to a Mail Chimp form that handles the online registration for She Loves Out Loud. There is a special link for military wives to join and receive a free copy of 'It's Okay to Not Be Okay' by Sheila Walsh.

Under the PLANNING KIT & MEDIA RESOURCES tab is the information to stream the event for an individual or church site. It's being offered by Lifeway's Digital Pass as a FREE event. It's also being broadcast on the website under a future "WATCH LIVE" tab and on Facebook Live. Facebook Live offers a way for other

PHOTO: LEFT TO RIGHT DONNA GAINES, CYNTHIA GARRETT, SHEILA WALSH, DIANE STRACK

pages to host an event stream on your personal page. Through this method, She Loves Out Loud will be streaming on the Facebook pages of Daystar, CBN, International House of Prayer and Student Leadership as well as individuals, sponsors and event partners. Facebook Live offers extraordinary visibility for events to reach massive audiences. Under this tab marketing resources can be downloaded for promotional purposes.

Under the SCHEDULE tab is a suggested program for churches hosting the event. The program flow will be an interactive, immersive experience that bounces between a live studio broadcast and the remote audience. Because it is a national broadcast, the start time is based on the host site's time zone. The studio broadcast begins at 11:00 am Central Standard Time which means East Coast begins at 12:00 pm and West Coast begins at 9:00 am. In order to participate, host sites need a computer that can broadcast on a large screen with audio. Under this tab is a tab called HOSTING CHURCHES that provides a searchable database of churches that have registered as host sites.

WATCH LIVE will provide an embedded YouTube live stream that churches will be able to use to participate in the event, or they can register for Lifeway's Digital Pass. The value of Lifeway's Digital Pass is it offers a variety of FREE programming that includes other events, Bible Studies and training



## LIFE OUTREACH INTERNATIONAL GEAR LIST

**Cameras:** Sony BVP-900, BVP-950, Sony F55 (Life Today Show)

**Field Cameras:** Sony A7iii

**Switcher:** Blackmagic ATEM Television Studio Switcher

**VTR's :** XDcam, DVcam

**Video Editing:** Premiere Pro & Adobe Suite

**Audio Editing:** Avid Pro Tools

**Audio Consoles:** Avid S6L, SSL C132

**Wireless Mics:** 30 channels of Sennheiser 6000 series, 2000 Series IEMs

**Lighting Console:** ETC ion 6000

**Lights:** Mole Richardson, ETC, Chauvet Pro, Elation

**Light Types:** Source 4, 1K, 2K, 5k, 10k, Baby Zip, Scoops, LED tape

workshops. It's FREE to join and there is paid programming as well. She Loves Out Loud chose YouTube's platform because it's free for nonprofits, and it's well known and highly stable. Other internet channels will be carrying the She Loves Out Loud event and a list of other viewing options will be listed in just in case a church is experiencing technical difficulties.

## NEXT YOU NEED A PROGRAM

The initial vision of She Loves Out Loud was to find seven locations across the United States and drop into each location when it came to their section of the programmed prayer schedule. However, the logistics of pulling this off were cost prohibitive. It's achievable, but not practical and the decision was made to develop a televised program that would lead the women through seven areas of prayer. The next step was to find people to highlight each area of prayer. The seven areas of prayer include 'Overcoming Anxiety and Depression' led with Sheila Walsh; 'Choose Life And Forgiveness – Emphasis on Foster Parenting and Adoption' with Claire & Barbara Culwell; 'Healing of Abuse and Trauma' with human trafficking survivor Christa Lynn; 'Prayer for Military Wives' with Megan Brown, 'Racial Reconciliation' with Priscilla Shirer and Donna Gaines live from Bellevue Baptist Church in Memphis; 'Praying for Our Children and the Next



Generation' with Carol Kent; and 'Healing of Marriage Betrayal and Porn Addiction' with Melody and Try Lovvorn. Each person was selected based on their compelling stories of hope and healing.

## **YOU NEED A PLACE TO HOST THE EVENT**

James Robison, the host of Life Today and the President of Life Outreach International caught the vision for She Loves Out Loud through Sheila Walsh and very generously offered the use of his television studio, where James and his wife Betty tape the Life Today Program. They are providing the bulk of the production needed for the live event and will be working with Brian Dunaway (who

managed the live stream for the National Day of Prayer) to live stream She Loves Out Loud to all its various platforms. They will be providing two floor directors and a stage manager. The stage manager is responsible to get the guests to and from the stage and to mic them. The floor directors are responsible to get them in and out of position once they are at the stage. They will also be providing assistance with crowd control.

## **YOU NEED A TEAM**

Having so many moving parts means you need a host team to pull them together. First you need an event producer who is responsible to set the flow of the event including welcomes, video intros, camera cues for specific

camera cuts, cutaways to remote sites and breaks. This is compiled in a Rundown Sheet that gives a quick overview of the event with times for each segment. In the control room will be a producer who will make decisions as to what segments need to be shorted should a guest take more than their allotted time. A good rundown sheet will have ten extra minutes built in because things always go over time. The producer will need to have a way to communicate with the programs' hosts in the event that a segment needs to be shortened or even cut. This is usually done through an in-ear comm system.

The program hosts for She Loves Out Loud includes Cynthia Garrett, Sheila Walsh and Diane Strack in studio, and Donna Gaines from a remote location. Their primary purpose is to ensure each segment is given enough time to introduce the subject, hear the story and give host sites the opportunity to pray for people who resonate with the topic. The goal is not to simply pray for the topic, but to pray for those who are affected and in need of prayer. When the interview segment is finished, the live hosts will encourage the site hosts to lead their groups in prayer. At the same time, prayer will be taking place live in the studio. The cardinal rule in all of this is no dead air. To ensure this rule is strictly adhered to, Christina Reynolds from the International House of Prayer will lead responsive worship during

the prayer times. This gives site hosts the choice to turn off the audio and prayer, lead their own worship or listen and join in. Once the worship ends, the next segment begins. One of the tricky parts is that this is a four-hour event over lunch, a 30-minute lunch break will be taken. Host sites are encouraged to have lunch on site. During this time Christina Reynolds will continue to lead in responsive worship.

## **YOU NEED TO ADD THE FINISHING TOUCHES...**

...things like graphics, song lyrics or names in the lower thirds, video clips, slides that introduce a section, a point or a highlight a sponsor. Brian Dunaway will be adding these to the live stream using ProPresenter. Video clips will be rolled in through the studio switcher. This takes the final visual product and gives it a finished look. The slides are being created in Powerpoint. It's important when saving images to save them as tiff files. A tiff file is a graphics container that stores raster images which allows you to manipulate high quality images which are needed for video. Logos and lower third graphics also need to be saved as tiff files. Jpeg or PNG files can become blurred when they are enlarged to the size that is required for video.

Although She Loves Out Loud is produced in a television studio, the same processes are involved in producing a church event. The goal is to expand your idea of what is possible using the technology you have. **T**

PHOTO ABOVE: SHEILA WALSH

# DEVELOPING A CONFERENCE PROGRAM THAT WORKS

BY HOLLAND DAVIS



OPEN MIC AFTER PARTY • PHOTO CREDIT: DANIEL EDWARDS

**T**he average church in America is 75 adults. However, when you attend a workshop at one of the premier technology events, the clinician is typically going to demo a digital mixing console with enough channels to give everyone in the church their own mic. Obviously, the average sized church does not need nor could afford a large digital mixing console. There is a fine line between balancing and developing content that encourages the average church and yet engages large churches. Here are some principles that we use in selecting what works for the West Coast Worship Conference.

## Identify the categories of workshops needed

We may not be able to offer workshops in every category, but it helps us to see the scope of what churches need. Some categories are essential to have every year. For instance, we know we need an instrument track, a vocal track, a tech track and a leadership track. We know in our instrumental track we need to offer something for the main instruments in a worship team including acoustic guitar, electric guitar, rhythm section, bass and keys. We know in our vocal track we need to offer classes that focus on personal care and others on

harmony and arrangement. We know our leadership track needs to offer the essentials on song selection, healthy relational dynamics and working with senior leadership.

Some categories are optional, such as a kid's worship track, songwriting track, sign language track or a visual track. Although visual arts is becoming more common in churches, not every church is ready for video announcements or multi-camera production. These workshops are optional because they are topics that are relevant to some churches, but not to all of them. However, the reason we do offer them is to provide engaging content for

those that need it now, while at the same time giving a vision to growing churches so they can plan for the future.

## Identify qualified clinicians

This is not the time to give little Joey his big break teaching a worship leading class because you think he's super anointed and a nice guy. People are interested in knowing what works. You want to select people who are seen as experts in their field. For instance, the West Coast Worship Conference has a number of worship leaders who are published songwriters. It makes sense to have them teach a class on songwriting. It doesn't



make sense to have your homegrown worship leader teach a class on songwriting simply because you like the songs they write and you want to encourage them. Same thing for instrumental classes. However, just because someone is a good player doesn't mean they are a good clinician. You need to find clinicians who are skilled and have the ability to communicate.

### Don't offer too many workshops at the same time

As a run of thumb, I divide the number of conference attendees by 50 and that's the number of workshops I have going at one time. If I have 200 attendees, then I will have no more than four workshops being conducted at the same time. I once had ten workshops happening at the same time and some workshops had no attendees and others were packed. Had I only had four workshops happening at the same time, I could have estimated that all the classes would be full. It also makes it possible to record all the workshops because all you would need



is four recorders to cover every workshop slot. I also make it a habit of repeating workshops at least once so if one time slot is missed then people can attend

another one. The West Coast Worship Conference offers four workshop slots with eight different topics offered twice for a total of 16 workshops. Because

PHOTOS ABOVE: RHYTHM SECTION WORKSHOP AND (BELOW) DEVEN BERRYHILL (SON OF BOB BERRYHILL AND CURRENT GUITARIST FOR THE SAFARIS AND THE TOURMALINERS

some conference attendees can only come Saturday, we offer two workshop slots on Friday and two on Saturday to accommodate those who work during the week.

### Offer something unique

We've been privileged to be able to introduce new technology to our conference attendees. One of the most exciting new technologies we've introduced is an in-ear monitoring system from Audio Fusion that uses the iPhone. It is a high quality and economically priced option that is scalable and fits into a small church budget. We were also able to introduce a new online workflow solution for churches called Ministry Space. Each of these companies was able to build loyal followers at our event because we limited our vendor space to only include partners we believe in.

### Communicate, communicate, communicate

We communicate in a variety of ways, in a variety of locations, the variety of conferences we offer. It's on our website, it's on the pre-event screens, it's during the event in our tech sponsor spotlights, it's in our conference booklet, it's in our social media adverts. We make sure people know the titles of the workshops, the name of the clinicians, the company or church they represent and how to hear the workshop. We also include a way for conference attendees to give us feedback via an online survey they can complete. This helps us in planning future events. **T**



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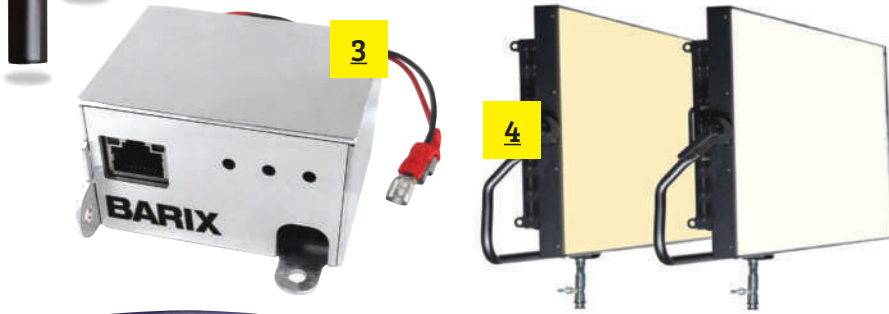


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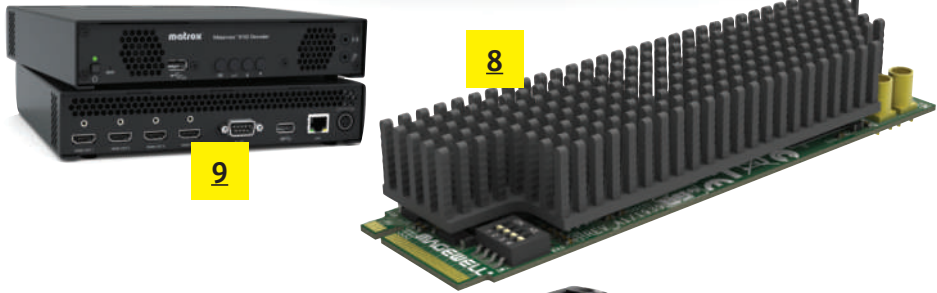
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