



Metropolitan Washington, D.C. Synod  
**Evangelical Lutheran Church in America**  
*God's work. Our hands.*

305 E Street, NW • Suite 300 • Washington, D.C. • 20001

# Online Worship Technical Best Practices from Katie Simbala



Improving your live streaming can seem like a daunting task without some help. I'd like to offer some advice on how to get better audio and video feeds for your live stream worship.

Here are a few options to help:

## **Lighting:**

- Try to avoid backlighting (this is when you are sitting directly behind a source of light like a window or lamp).
- I am a fan of "natural light", which can come from sitting directly in front of a window.
- If you don't have access to a window in your filming space, then I recommend placing a lamp in front of you where you are filming.
- If you'd like to purchase an external light, I recommend this [LED Ring Light](#).

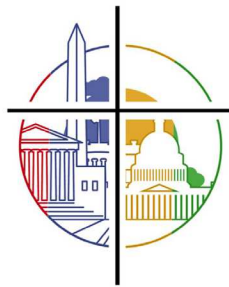
## **Mobile Device Audio:**

If you don't have any tools other than your smartphone, using the video camera on your device would be just fine if you address your audience directly in front of the device.

You can improve your audio quality by adding an [external microphone](#), compatible with both Apple and Android. You can also use a microphone you already own by using a [small interface](#), however this option is only compatible with iPhone and iPad.

If you'd prefer to use a [Lavalier Mic](#), this a good option for both iPhone and Android, but please know when using iPhone you will need a [dongle](#).

If you are using your phone and it's NOT in close proximity to you (ex: you have the phone far away and it's capturing a wider angle) you can still purchase the same external microphone with a [longer cable](#) and a [stand](#) and place the microphone closer to where the "action" is happening. This way you deliver sound to your audience that isn't echoed or does not sound very far away. You can decide if the microphone or lav mic is more appropriate for your needs.



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### **On Premises Audio Set Up:**

If you are live streaming from your church, there is a way for you to use your existing sound set up to get a cleaner audio feed to your audience.

This will require an [Audio Interface](#) that would allow you to send a feed from your board to your computer. This will require a bit more steps for set up but it will ultimately be the best way to deliver a high quality audio feed.

Some soundboards have a built-in interface, so you'll need to do some research to determine whether your soundboard has that capability. If you are in the market for a soundboard with a built in audio interface, I recommend this [Mackie board](#).

### **Video Camera Set Up:**

If you have a DSLR or Video camera at your disposal, you can improve your video quality on your live stream by downloading software for your computer to read the camera as a webcam. You will need to have the A/V USB cable that came when you purchased the camera. If you do not have this cable you will need to order it as well (ex. I own a [canon 60d camera](#), and [this is the cable](#) I need.) These cables tend to be used in other technology, I'd recommend you check if your external hard drives might be using the same usb's or check your home tech junk drawer.

The software is free for Mac however you would need to pay for Windows. Here is the [youtube video](#) I used to follow the steps of installation for mac. Here is a [video](#) I found for windows.

Mac Software Links:

<https://github.com/v002/v002-Camera-Live>

<http://camtwiststudio.com/>

Window Software Links:

<https://sparkosoft.com/sparkocam>

### **Larger Video Set Up:**

If you are using this time to upgrade your system for future use and would like to control several camera feeds, then I highly recommend [The Sling Studio](#) system. You are able to connect up to 10 devices to it and control everything on an [iPad](#). It becomes its own router and connects all the devices via wifi. I use this system when we do our larger events, like [Bishop Leila Ortiz's](#)



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[Installation](#). We used 2 DSLR's and 4 iPhones. Our Communications Director, Kelly Champagne, controlled the bottom thirds, title cards and what camera feed went live via an iPad.

This is a larger investment, however, if you feel that you are already considering upgrading to a better livestream set up, this can work for a simple set up and larger set up in the future. You can send an audio feed from your soundboard to the sling studio unit and go live on to Facebook and Youtube.

If you have any questions and would like some one on one time to discuss your specific situation, please feel free to reach out to see how I can be of service.

Praying for each of you as you navigate ministry in such trying times.

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