

Live Streaming Setups, Simple and High Quality

A quick note: **Streaming with Zoom is the most interactive way to stream but the sound quality for music is poor.** Any time more than one person speaks or sings at the same time, the sound will tend to cut out often. For that reason, singing and responsive readings are not recommended. Here is a workshop led by Bruce Reyes-Chow on how to creatively use Zoom in your worship services online.

https://zoom.us/rec/play/6Mclf7yt-2o3E4GWsASDAvZ_W47oLaqsgSjL_qEExU20VncDMVCgMLEQYz_fVgMeg5YoFFFTW8BBE8?continueMode=true

Facebook and YouTube have superior quality for music and sound if you use good microphones close to the speakers and musicians.

Interactivity is limited to chats. Facebook is the format with which more people are familiar and it is easy for people to add comments or text prayer concerns right below the video stream. If someone is monitoring these comments during the worship stream, the session can become more interactive. Having one or more people assisting you on your live stream makes it easier for you to concentrate on leading worship. By the way, you can stream your zoom session to YouTube or Facebook but you will still be limited to the audio quality of the zoom meeting.

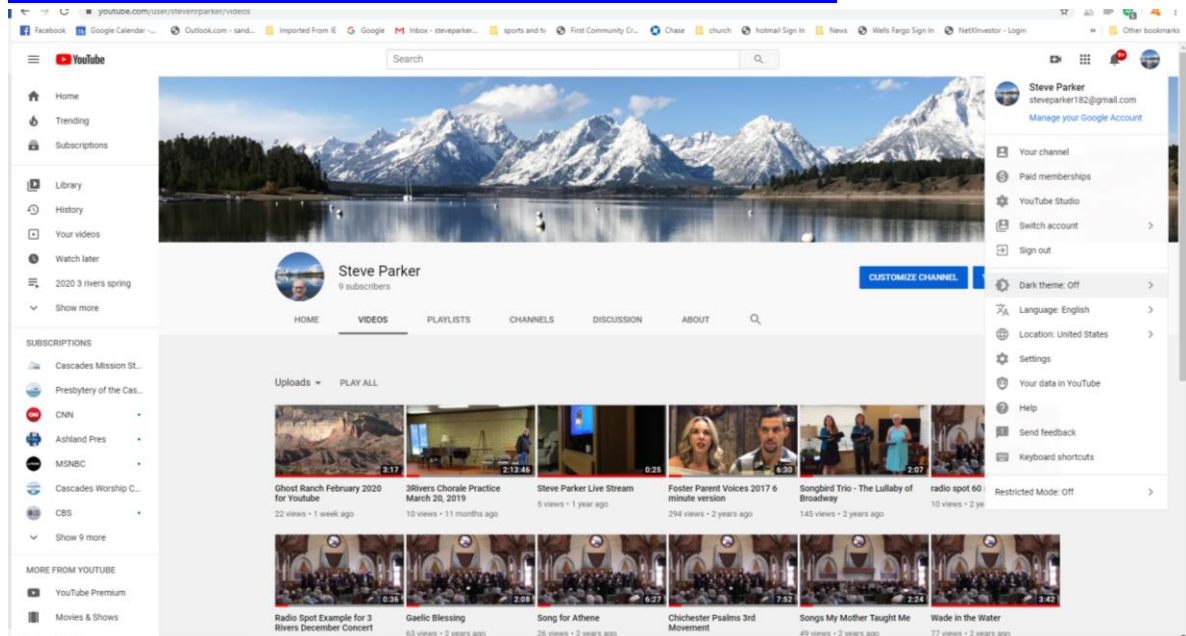
Here are some Simple Setups

1. This is the easiest and least expensive way to stream. Put your Smartphone on a tripod with smartphone mount such as this one from Walmart

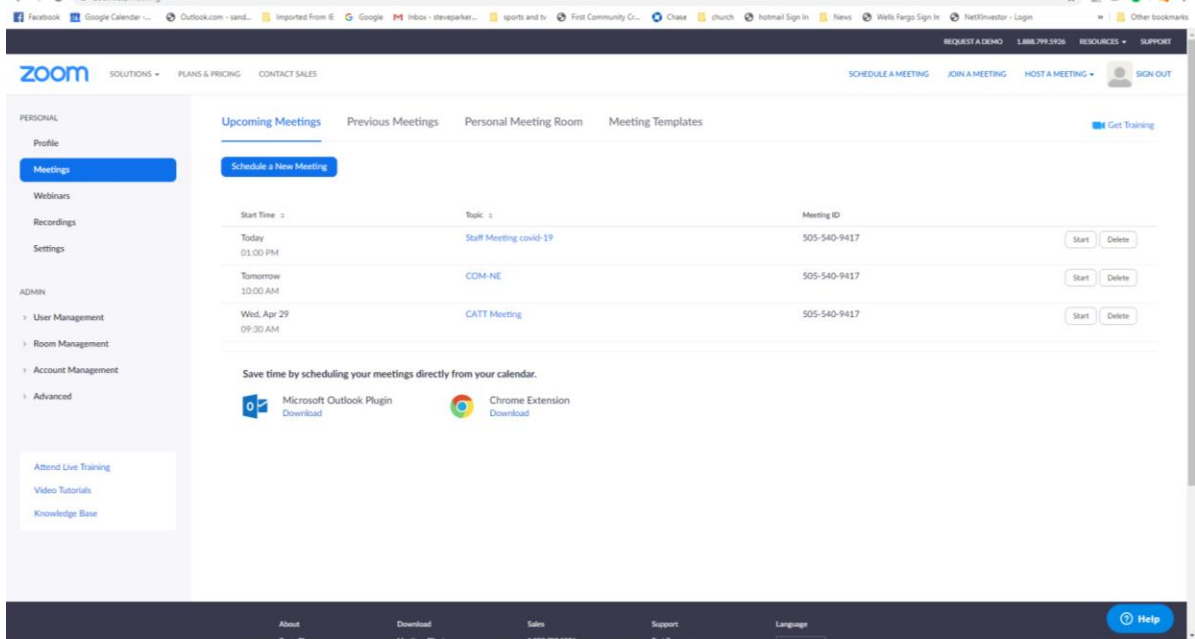
<https://www.walmart.com/ip/Universal-Tripod-Smartphone-Mount-fits-Virtually-All-Phones-eCostConnection-Microfiber-Cloth/188797807>

2. Streaming on Facebook with a phone, you will have to place the phone in portrait mode. (Note: Placing it on a tripod will give you a more steady picture. Also, you may get more pleasing results by broadcasting with your laptop and webcam.)
3. Stream to Facebook live. (this is the easiest platform for streaming) Login to your Facebook account and click live button at the top of the screen. Be sure you can see your video. You can point the camera to yourself for podcasting or hit the reverse screen button at the top of the screen to point the camera away from you.
4. Click Start Live button to begin your broadcast. People will be able to see your stream if you point them to your main page on Facebook. Tips on getting better sound for your stream are later in this video. If you are using your phone only, keep the speakers close to the microphone. **Note: If you want only the simplest way to stream, you can stop reading this tutorial now. Keep in mind that you can also stream to Facebook with a tablet using the same method or with your laptop equipped with webcam, or your desktop computer equipped with webcam. Other options below.**
5. Or download the YouTube live application to your phone. YouTube will prompt you to login with your google account. If you don't have one, you will need to set one up. Then start live. You will need to give people a link to your videos in order for them to see your stream. Go to YouTube. Log into your account. Click on the icon right hand upper corner. Select Your Channel. Then click on videos. On the top of the page select the link and send it to your viewers. When you are live a window will appear with a red live next to it. People can click on it to view. This is my YouTube channel shown as an example.

<https://www.youtube.com/user/stevenrparker/videos>



6. Or stream to zoom meetings. You will need a zoom account. Sign up here <https://zoom.us/> The free account is limited to 45 minutes and has limited features. You will most likely want to purchase the pro account for \$15 a month, however you can get a discounted non-profit account on Tech Soup [TechSoup Zoom discount program](#). Again, it is best to keep close to the microphone and use a high-quality webcam and a high-quality microphone or connect to your sound mixer (more on that later). You will need to create a meeting for your viewers and copy the invitation. Then mail it to your viewers. The recording by Bruce Reyes- Chow above walks you through some of the ways you can use this platform. It is best to limit how many people can talk at one time. Normally you will want to mute most of the participants and only unmute their mics when you want to allow them to speak. In short, Bruce uses only prerecorded music, does not use responsive readings, uses other creative ways to encourage people to participate, makes use of hand raising and chats in order to allow people to communicate. The zoom site also provides online tutorials to walk you through the various setups and features of the format. Below is a screen shot of Cascades Zoom account to give you a familiarity with the setup screen.



Ways of improving you sound and video for that matter

1. Purchase a high-quality webcam (usually superior to the built-in webcams on laptops); such as this Logitech webcam at Staples
https://www.staples.com/Logitech-C920-HD-1080p-Pro-Computer-Webcam-with-Dual-Stereo-Microphones-960-000764/product_445476
2. Purchase a high quality USB microphone such as the one Bruce Reyes-Chow uses https://www.staples.com/Blue-Microphones-Snowball-iCE-USB-Microphone/product_962397
3. If using an iPhone, purchase a mic compatible with the iPhone such as [this one](#) from Amazon. You will also need your lightning mic adapter that came with your iPhone for newer models. If you cannot find yours amazon has them to purchase [Here](#).
4. Connect your laptop or camcorder to your sound system mixer. If you are using a camcorder, you will need one with an audio input. On a laptop, you will also need an audio input. The simplest way to connect to the mixer is to use the earphone out of your sound mixer and connect it to your camcorder or laptop input using a cable such this one from B&H Photo \$22

https://www.bhphotovideo.com/c/product/663902-REG/Lectrosonics_MC65_MC65_TRS_188_to.html

5. Be sure to keep speakers and musicians close to their microphones. Also remember that the best music production will be available if you use the YouTube or Facebook streaming platform only. You can also use this method of sound connection for Zoom meetings but zoom is not set up for music production. It is designed more for interactive meetings.
6. The camcorder will give you superior sound and video but requires more equipment and setup as well as expense. Below is the least expensive way to set up a camcorder streaming system. You can also set up a multicamera streaming system but the price tag rises quickly because you will need a video mixer. Multi camera systems are not covered in this tutorial.

Some Churches are Pre-recording their worship services and then posting them online

If you are using this method you can record your video and upload them to YouTube, Vimeo, Facebook or your favorite site. You may want to edit your videos in this case. A simple and inexpensive video editing software option is [here](#). If you purchase, be sure to create an account and download your software from the account pages, otherwise you may be using the demo version. Mac users can use iMovie which normally comes with your operating system or can be easily downloaded. If you are confused by the interface and would like assistance, Steve Parker may be able to assist you.

[Contact](#)

High Quality Basic Setup

Canon VIXIA HF R800 Camcorder (Black) (for better sound quality, a camcorder such as this that has an audio input is needed)

\$219 https://www.bhphotovideo.com/c/product/1308395-REG/canon_1960c002_vixia_hf_r800_camcorder.html

Epiphan Webcaster \$269 (no computer needed) Facebook or YouTube
https://www.bhphotovideo.com/c/product/1338511-REG/epiphan_esp1382_webcaster_x2_facebook_live.html/overview This device allows you to connect wirelessly to your WIFI internet source or to connect directly to your router by way of ethernet cable.

HDMI to HDMI mini cable \$18 (You will need this to connect your camcorder to the Epiphan Webcaster) https://www.bhphotovideo.com/c/product/1062798-REG/hyperthin_sahtm08black_hyperthin_mini_hdmi_to.html

Magnus GP-100 Light-Duty Tripod (basic tripod. You may want to purchase a sturdier tripod for more stability. \$12.95 <https://www.walmart.com/ip/50-Inch-Aluminum-Camera-Tripod-For-Canon-Nikon-Sony-Samsung-Olympus-Panasonic-Pentax-eCost-Microfiber/134062957>

(note: the adapters and cables below are designed to fit a number of sound and internet systems. If you are streaming wirelessly you will need a strong signal. If you want a better, more stable stream, use ethernet cables. You may not need all of the audio adapters below depending on the sound mixer in your worship space.)

ethernet cable 50' \$18 https://www.bhphotovideo.com/c/product/633523-REG/Comprehensive_CAT6_50BLK_50_15_2_m_Cat6.html

Audio Cable Lectrosonics MC65 TRS ¼" to 3.5mm Cable (10', 3.05 m) \$22
https://www.bhphotovideo.com/c/product/663902-REG/Lectrosonics_MC65_MC65_TRS_188_to.html

Movo Photo F-XLR 3.5mm TRS Female to XLR Male Adapter \$13
https://www.bhphotovideo.com/c/product/1500857-REG/movo_photo_f_xlr_3_5mm_trs_mini_jack_female.html

Neutrik XLR Female to XLR Female Adapter \$8.88
https://www.bhphotovideo.com/c/product/491522-REG/Neutrik_NA3FF_XLR_Female_to_XLR.html