

STREAMING COMPONENTS

This list is made up of a few budget components for those just getting into livestreaming. Of course one could add \$20k cameras and high level audio components to give a professional sound, but everyone has to start somewhere.

MICROPHONES

These mics are great inexpensive options for doing a live stream at home. Of course the cheapest mic is the one you already own and will likely work just as good.

- Sennheiser Pro Audio ME 2-II – A basic lav that sounds great. - \$139
- Rode SmartLav+ for Smartphones – SMARTLAV – This is a mic for your phone. - \$69
- Rode Wireless GO Compact System – WirelessGo – Just add your favorite 3.5mm connected mic to enable wireless audio for a small space. - \$199
- FIFINE UHF Wireless Mic System – K037 – When budget is slim, this mic has great reviews and includes everything you need to connect a lav wirelessly to a camera. - \$39

AUDIO MIXERS

These audio mixers will have enough outputs to serve both as your primary mains and secondary output for broadcast.

- Yamaha MG06 6 Channel Mixer – Need a small mixer just for your livestream? This will do it. Boasts 2 XLR inputs and 2 stereo instrument ins. Has two XLR outputs and two ¼” line out for your stream! \$99
- Behringer X12– A simple tablet controlled digital mixer, the X16 will easily mix a small band or your next home livestream. You will need a tablet or computer connection to control this wifi enabled mixer. - \$398

VIDEO CAMERAS

These video cameras are good options for streaming and double as capture devices as well.

- Canon VIXIA HF R800 – Entry level camcorder with full HD output. Will need a lot of light to look good. - \$220
 - *Compact yet capable, Canon's black VIXIA HF R800 includes a FULL HD Sensor, SD recording, 32X optical zoom and mini HDMI output.*
- Canon VIXIA HF G21 Full HD Camcorder – A great middle of the road prosumer camera. - \$999
 - *The Canon VIXIA HF G21 Full HD Camcorder captures 1920 x 1080 Full HD video using a 1/2.84", 2.9MP HD CMOS Pro image sensor, and a 20x optical/400x digital zoom lens. Mini HDMI Output.*
- Sony HXR -NX100 Full HD - A great Pro level Camcorder that includes advanced features like XLR inputs, ND filters, and easy to use external buttons for quick manual adjustment to settings. - \$1498

- The HXR-NX100 Full HD NXCAM Camcorder from Sony brings high-quality performance, adaptability, and ease of use to a compact, handheld body. The camcorder features a single Exmor R sensor with Full HD 1920 x 1080 resolution, Sony G lens with 12x optical zoom range, and a 24x Clear Image Zoom. The integrated zoom lens features individual lens control rings for focus, iris, and zoom. The lens can be used in either full-auto mode with servo control or as a completely manually operated lens.

LIGHTING

If you need a little extra lighting or need portable lighting for an intimate service outside of your main auditorium, maybe these will help.

- **Neewer BiColor 660 LED Video Light Kit X2 - \$249.99**
 - *Sold on Amazon, these are a great little light kit for a small live stream. While they are not the brightest or the softest light, they are compact, include batteries and stands.*
- **Cowboy Studio Light Fluorescent Light Kit x4 - \$195 and up**
 - *This is an inexpensive starter kit with continuous lighting for your most basic streaming or capture. Not the highest quality components, but when money is scarce, this is a great option.*
- **Kino Flo 4' Gaffers Kit x2 - \$3336**
 - *One of the most recognized names in the video business for compact portable lights, Kino Flo Gaffers kit is a high quality dual 4' light kit that will serve you for many years. Great in studios, home kits or portable. Make sure you pair it with some heavy duty stands.*

VIDEO SWITCHING

If you have multiple inputs – even just a camera and a computer for playback – you will want to consider one of these. Of course, they are more options, these are just two great options for your entry level streamer.

- **BMD ATEM Mini – a low cost HDMI switcher that doubles as a video input device. - \$299**
 - *The new ATEM Mini makes it easy to create professional multi camera productions for live streaming to YouTube or innovative business presentations using Skype. Simply connect ATEM Mini and you can switch live between 4 high quality video camera inputs in dramatically better quality images. Has 2 additional audio inputs and one output for monitoring.*
- **BMD ATEM Television HD – a low cost SDI & HDMI switcher with advanced features. - \$999**
 - *The world's first live production switcher for broadcast, professional and AV users with HDMI and SDI inputs, multi view, talkback, DVE, audio mixer, flash media players and more!*

RECORDING

Most cameras will let you record directly on them via SD card or other media type. But if you want to record your switched output, consider one of these.

- **Atomos Nija – 5" monitor with recording on 2.5" SSD via HDMI input. - \$695**

- *Record up to 4k resolution on standard 2.5" SSD. 1 HDMI input with 1 HDMI pass-thru output. Small compact. HDR compatible.*
- BMD Hyperdeck Mini – SDI input recording on standard SD cards. - \$695
 - *Records 1080p via SDI input on to standard SD cards. Had SDI pass through and HDMI output. Can be controlled via USB-C. Supports h.264 and ProRes codecs.*

VIDEO STREAMING ENCODERS

Once you have content, you will want to push that out to your streaming platform. If you don't have a computer that is taking in the video and software to push it out, you will want to a hardware encoder like one of these.

- Teradek Vidu – HDMI \$695 and up
- Boxcaster HDS2 – HDMI \$ Included in the subscription

VIDEO CAPTURE CARDS

If you have a computer already and want to use a streaming services software, you will need one of these and a powerful enough computer for your stream quality and bitrate.

- BMD Decklink Mini Recorder – PCI Express card for PC or Mac designed to take an HDMI or SDI signal. - \$145
- BMD UltraStudio HD Mini – Thunderbolt 3 external capture box designed to take an HDMI or SDI signal. - \$495
- BMD Ultra Studio Mini Recorder – Thunderbolt 2 external capture box designed to take an HDMI or SDI signal. - \$145
- Aja U-Tap USB 3.1 Powered SDI OR HDMI Capture box – Designed to take an SDI OR HDMI signal and connect via USB3. - \$345
- Osprey VB-USL USB Video Capture Device – Designed to take an SDI signal via USB 3 - \$364

FREE VIDEO STREAMING SERVICES

Some say free video streaming is worth what you pay for it. Facebook and Youtube are yet the top places to stream church services by far and they don't cost a dime.

- Facebook a great way to share with your networks that already exist.
 - Likely the most popular service
 - Free to all
 - Has restrictions based on FB guidelines
 - Can be targeted towards a group, page, or public.
 - Limited quality levels
 - Has built in archiving for when your stream is done
 - Scheduling features limited to Facebook
- Youtube Live – a flexible way to stream your services out to the public or private groups
 - Free to all
 - Trusted service to most everyone but also blocked by many

- Can help facilitate your brand
- Can be monetized
- Easy to find content
- Higher quality than others like Facebook

VIDEO STREAMING SOFTWARE

Many streaming services require software. Some have their own. Here are a few of the more popular independent software companies who provide streaming software that can be utilized with multiple services – some will even send to multiple services at the same time.

OBS – a free, open source software available for Windows, Linux or Mac. – \$0 free forever

VMIX – a for pay video production software primarily for PC. - \$60-\$1200 per license

LiveStream Studio – video production software that is free for all Livestream subs - \$50-\$75 per month

Wirecast – Video production software for MAC or PC designed specifically for streaming - \$599-\$799