Livestream Plan for Church of the Good Shepherd (Webster, NY)

Good Shepherd has been recording and distributing its Sunday service from the beginning of the COVID restrictions of on-site worship in April. The current process involves broadcast quality recording of the Daily Prayer service, readings, and homily following the BCP. Additionally, we record musical performances, choir anthems and hymns with our organist, other parishioners and choir members and edit those pieces into the finished program. This program is then distributed via an e-mailed web link and embedded in our website landing page.

As we are preparing to resume in-church services, it was decided to replace the recorded program with livestreaming of the service. Our goal for livestreaming is to maintain the content, variety, and quality of the recorded program, including all aspects of our musical worship, and adding a capability to allow those not present at the church to still participate in the service. In a nutshell, we will be producing a live webcast program each week that will include both live and recorded musical pieces, and remote guest readers and homilists. At the end of each Sunday service, the recorded program will posted to our website for those who wish to watch it at their convenience.

To accomplish this, we will be installing two broadcast-quality PTZ NDI cameras, one mobile wireless GoPro camera, and vMix and vCall production software that will allow us to simultaneously record and livestream our Sunday worship. Audio is fed from our existing PA system. (Please refer to the attached drawing for a schematic of this system.) The project will cost approximately $12-14,000 installed, a cost underwritten by a donation from one of our parishioners. Once operational, and with some basic training, this Livestream Studio can be operated by one individual. We decided to train 4-5 individuals who can rotate week-week and allow those involved flexibility in scheduling. I have attached details of the equipment and software mentioned above.

Additional considerations were made to address the lighting quality around the sanctuary (modifying the existing lights so they are outputting the same color temperature and luminance), and streaming the live program to a large LCD screen in our Narthex to accommodate overflow, should we exceed the maximum number of people in our sanctuary.
PTZOptics Third Generation Visca Over IP Joystick Keyboard

- SUPPORTS: Supports up to six cameras
- KEYS: Dedicated keys for quick camera switching for your main pan tilt zoom cameras
- NO LATENCY: This redesigned joystick effectively eliminated latency
- CONTROL: Access even the finest camera detail settings over IP including iris, focus and zoom
- ULTIMATE: This joystick is the ultimate control, making broadcast quality truly affordable

PTZOptics 30X-NDI Network Broadcast Camera - White

- Simultaneous 1080p via HDMI, SDI, NDI/IP
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- 30x Optical Zoom
- Audio Line-in for HDMI and NDI/IP
- 10 IR Presets; 255 via Serial/IP Control

TP-Link 5 Port Gigabit PoE Switch | 4 Port PoE 56W | 802.3af Compliant

- PoE hub with 4 port PoE + 1 Uplink port, auto negotiate PoE power with PoE devices and protect the non-PoE devices
- 4x PoE (802.3af) ports providing up to 15.4W per port, total PoE budget 56W
- Ideal for PoE IP Cam, EAP, Access Point, IP Phone
- Fanless design, always working there silently
- Plug-and-play, simple set up with no software or configuration needed
PRODUCE, STREAM & RECORD WITH VMIX

vMix is software that allows you to create professional quality productions on your own computer at a fraction of the cost. vMix gives you the power to add multiple cameras, videos, images, audio, web streams, Powerpoint, titles, virtual sets, chroma key, and much more to your production. You are then able to display, record and live stream your production all at the same time!

vMix Call is the easiest way to add guests to your live production. Simply add a new vMix Call input to vMix and share the provided web site with your guest to login, it couldn't be easier! Repeat this process for as many guests as you need up to the 8 available in vMix Pro.