

National Capital Presbytery Hybrid Worship Proposal

June 20, 2020

OVERVIEW

This proposal outlines the hardware and software needed for live streaming. It also provides for a phased approach to developing a versatile, user-friendly system in a logical manner.

PARTNERS

This proposal is a blanket offering for hardware, training, and support for Churches and Congregations within National Capital Presbytery.

GOALS & PURPOSE

National Capital Presbytery is providing the following recommended list of equipment to help Churches and Congregations expand their worship offerings beyond the single device solutions of Zoom or Skype that have been in use the past few months during this time of social distancing. The installation, setup, and training which are offered at a group rate for members of National Capital Presbytery will enable Churches and Congregations to get up to speed without the need of individual research.

SCOPE OF PROJECT

This proposal is written in a phased context. Beginning with the tools necessary for producing a live-switched hybrid worship service to incorporate cameras in the sanctuary with Zoom participants.

LEVEL I

The immediate needs for any Live Streaming is the development of their backbone for multicamera/multidevice switching and encoding to a web streaming service. Considerations have been made for future expansion of capabilities to include additional cameras and devices.

Switcher:

- BlackMagic Design ATEM Mini Pro HDMI Live Stream Switcher
 - **\$595.00**
 - Can take up to 4 HDMI sources (camera/laptop/etc.)
 - Enables quick deployment with existing cameras
 - Enables future-proofing for expansion beyond LEVEL I
 - One button push to Live Stream (Facebook/YouTube)
 - One button push record to USB device
 - Technical Specs: [BlackMagic ATEM \(B&H\)](#)

** The switcher will require a computer or laptop and an HDMI monitor for setup.*

Camera (recommended):

- Sony HXR-MC88 Full HD Camcorder
 - **\$1,298.00**
 - HDMI output (with embedded audio)
 - Analog audio input (for connecting to existing house audio system)
 - Technical Specs: [Sony Camcorder \(B&H\)](#)
 - Magnus VT-4000 Tripod System with Fluid Head
 - **\$159.95**
 - Technical Specs: [Magnus Tripod System \(B&H\)](#)
 - Kramer HDMI Cable
 - **\$58.40**
 - Technical Specs: [Kramer HDMI Cable \(B&H\)](#)
 - Kopul 100' XLR (to connect to existing house audio system)
 - **\$29.99**
 - *need 2*
 - Technical Specs: [Kopul 100' XLR \(B&H\)](#)
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Audio (optional - separate from house audio system):

- Sennheiser XSW-D Lavalier/Handheld Microphone Kit
 - **\$966.70**
 - 2x wireless lavalier microphones
 - 1x wireless handheld microphone plug-on
 - 1x handheld microphone
 - Connectors for directly into switcher or camera
 - Technical Specs: [Sennheiser XSW-D Kit \(B&H\)](#)

LEVEL II

Expansion of camera capabilities and multiple devices. It also includes upgrading the presentation software for all graphics and roll-ins.

Additional Camera(s) (recommended):

- Sony HXR-MC88 Full HD Camcorder
 - **\$1,298.00**
 - HDMI output (with embedded audio)
 - Analog audio input (for connecting to existing house audio system)
 - Technical Specs: [Sony Camcorder \(B&H\)](#)
- Magnus VT-4000 Tripod System with Fluid Head
 - **\$159.95**
 - Technical Specs: [Magnus Tripod System \(B&H\)](#)
- Kramer HDMI Cable
 - **\$58.40**
 - Technical Specs: [Kramer HDMI Cable \(B&H\)](#)

Graphics/Playback: (software)

- ProPresenter
 - **\$399** (*first year*)
 - Playback of all video clips
 - Fullscreen Graphics
 - Lower thirds/graphic overlays
 - Technical Specs: [ProPresenter](#)
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LEVEL III

Upgrade of switcher, expansion of camera capabilities, to include remote control of robotic cameras. It also includes upgrading the presentation software from powerpoint for all graphics and roll-ins.

Switcher:

- BlackMagic Design ATEM Television Studio HD
 - **\$995.00**
 - Can take both HDMI and HD/SDI Cameras
 - Enables quick deployment with existing cameras
 - Enables future-proofing for expansion beyond PHASE I
 - Able to take audio from existing house system
 - Technical Specs: [BlackMagic ATEM \(B&H\)](#)

Encoder/Recorder:

- Teradek Cube 655 h.264 Encoder
 - **\$1,990.00**
 - One button push for Live Streaming
 - Technical Specs: [Teradek Cube \(B&H\)](#)

PTZ Camera(s):

- PTZOptics 20x-SDI Gen2 Live Streaming Camera
 - **\$1,699.00**
 - Technical Specs: [PTZOptics \(B&H\)](#)
 - Kopul Premium Series 3G-SDI Cable (100')
 - **\$72.95**
 - Technical Specs: [Kopul SDI Cable \(B&H\)](#)
**number of cables depends on distance needed for each camera*
 - Pearstone Cat 6a Snagless Patch Cable (100')
 - **\$15.99**
 - Technical Specs: [Pearstone Cat 6a Cable \(B&H\)](#)
**number of cables depends on distance needed for each camera*
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PTZ Control:

- PTZOptics 4D IP Joystick Controller (IP-based control)
 - **\$695.00**
 - Multiple Camera Control via Cat-5/6
 - Video Signal via HD/SDI (BNC)
 - Will need network switch for multiple cameras
 - Technical Specs: [PTZOptics Control \(B&H\)](#)
- Netgear ProSafe 5-Port Gigabit Desktop Switch
 - **\$29.99**
 - Technical Specs: [Netgear Switch \(B&H\)](#)

Graphics/Playback: (software)

- ProPresenter
 - **\$399** (*first year*)
 - Playback of all video clips
 - Fullscreen Graphics
 - Lower thirds/graphic overlays
 - Technical Specs: [ProPresenter](#)

Video Distribution:

- A-Neuvideo 1x8 HDMI Splitter and Extender over Cat5e/6 System
 - **\$481**
 - Video distribution for multiple monitors in sanctuary/worship space
 - Technical Specs: [A-Neuvideo HDMI Splitter/Extender \(B&H\)](#)
 - Kopul Premium Series 3G-SDI Cable (3')
 - **\$18.95**
 - Technical Specs: [Kopul SDI Cable \(B&H\)](#)
 - *number of cables depends on number of monitors*
 - Pearstone Cat 6a Snagless Patch Cable (100')
 - **\$15.99**
 - Technical Specs: [Pearstone Cat 6a Cable \(B&H\)](#)
 - *number of cables depends on number of monitors and distance needed for each monitor*
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INTEGRATION/TRAINING

We will provide 2 technicians to integrate all equipment needed for Live Streaming. They will assist with setup and provide training on use of the equipment.

We recommend at least 2 lay members of the Church or Congregation to be available for the training session, as well as at least one representative of Staff.

Integration/Training:

- 2 Technicians
 - **\$600**
 - Up to 5 hours of integration/training
 - At least 2 lay members available for training
 - At least 1 staff member available for training

Ongoing Support

- Phone support
 - A phonecall is always free, if you should have an issue, please do not hesitate to call or email
- On-site support
 - **\$75 / hour**
 - Should you need on-site support, we will send a technician out to assist, please don't hesitate to call or email

QUESTIONS

For any questions you may have, please contact Zeke Dowty:

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