

**Professional Livestreaming Information Document**  
**5.12.2020**

The purpose of this document is to provide worshipping communities with information on livestreaming equipment and livestreaming professional providers. These are meant to be long-term solutions for livestreaming and require a significant investment. This information is captured from All Saints' Atlanta, which recently received bids from 3 companies.

This document includes the following:

- Rationale for livestreaming, used in discernment among the leadership of All Saints'
- Summary of company's proposal
- Summary of equipment
- Contact information for livestreaming professional providers
- Other churches that have used these companies

These services range from 10k-45k. If this is not something your congregation is able to do, please be assured the Offices of the Bishop are continuing to work on solutions for congregations in the 1500 to 2500 range that could also suffice for long-term usage. When those solutions have been identified, we will begin offering online trainings for congregations on implementation.

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**Video Streaming at All Saints'**

Prepared by Jocelyn Cassada, the Rev. Zack Nyein, and the Rev. Dr. Andrew Barnett

**Rationale**

All Saints' is a leader in the Episcopal Church, and worship is one of our greatest strengths. We believe now is the time to share our worship with the city and world. The COVID-19 pandemic has revealed just how far-reaching our impact can be in the digital space. In a matter of weeks, we have made hundreds of interactions with parishioners and others, and we have reached thousands of people with each Sunday worship video. From a community engagement perspective, we already know that the vast majority of newcomers first encounter us online. Streaming our worship services allows people new to the Episcopal tradition to be drawn in by the beauty of our worship before they ever walk through our doors. Streaming also provides pastoral care and deepens connection, because it allows us to reach homebound parishioners, those who travel or have moved away, and those whose work schedules prevent them from attending on Sunday morning. Finally, streaming creates a stewardship connection because it invites online worshippers to support God's work at All Saints'.

**Summary**

We have received bids from three vendors in the Atlanta area: Amitrace (Basic, Mid-Level, and Deluxe), Messenger AVL, and Commercial Audio Services. We hosted each vendor for a site visit and engaged them in a detailed discussion of our needs. We also secured an offer from

Threshold Acoustics to review these bids and assist us in negotiations with the vendors. Threshold is a consulting company, based in Chicago, and was recommended to us by Christ Church Cathedral, Cincinnati. The principal difference between these proposals will be found in the quality of cameras, the capability of the controllers, and the video experience of the companies.

*All Saints' Atlanta chose to contract with Amitrace. Below are the basics of the 3 levels that Amitrace offered.*

**Basic: This is the "apples to apples" bid with the other two vendors.**

We asked Amitrace to send this bid as a comparable comparison with our bids from CAS and Messenger AVL. They recommend 4 PTC cameras, and a Datavideo HS1300, which would serve as the control system for the cameras. Amitrace does not believe these cameras will provide any significant improvement in video quality over the single camera already in use.

**Mid-Level: Includes a TriCaster**

This bid includes a NewTek TriCaster TC410, which provides a software-based video controller. It gives us quite a bit more flexibility and control over the video feed. It is essentially a powerful computer that combines all of the audio and video inputs into one interface, thus requiring fewer hardware components. It has an expected life of 10 years, assuming adequate cooling and ventilation. This bid proposes 4 Panasonic 30x PTZ cameras, which we consider commercial grade cameras. They will provide a noticeable improvement over the current camera, though they are not top-of-the-line.

**Deluxe: Includes a TriCaster Bundle, and high-end cameras**

This bid includes a high-level TriCaster controller. They propose a bundle here, which includes the TriCaster 410 Plus and TC1SP control panel. This system would give us the highest level of flexibility and control over the cameras.

The cameras in this bid come close to cable broadcast quality. These high-end cameras will allow us to live stream evening services, and would mitigate issues that arise from low lighting. Importantly, these high quality cameras would allow us to film the altar and chancel areas without installing cameras in/on the organ case. These cameras would be installed on the side walls of the church, and would be more discrete from the congregation's perspective. To be successful from this angle, higher quality cameras are needed than we find in the CAS or Messenger proposals.

Amitrace recommends 2 Panasonic AW-HN130 HD Integrated PTZ cameras (high-end quality), and 2 Panasonic 30x Zoom PTZ cameras (mid-level).

All 3 proposal to All Saints' used comparable equipment. The difference in the proposals is:

- Basic
- Mid-level
- Advanced

Below the equipment for each tier is listed. Important to note that the equipment cost does not include installation. This gear must be professionally installed.

#### **Basic Tier:**

- Datavideo HS1300 x1
- PTC 140 x4
- RMC300c x1
- **Estimated Equipment Cost: 5.5k**

#### **Mid-Level Tier:**

- TriCaster TC410 Plus A-la-Carte (Optional) (x1)
- Panasonic Remote Camera Controller (x1)
- Vaddio Wall Mount Bracket (x4)
- 8-Port Gigabit Network Switch, NDI Compatible (x1)
- Panasonic 30x Zoom PTZ Camera with HDMI Output and NDI (x4)
- Monitor\_27, Slim Bezel Black 27" 5ms (GTG) IPS Widescreen LED Backlight LCD Monitors, HDMI 1920X1080 (x1)
- XLR-F to XLR-M (Audio Mixer to TriCaster output (15-ft) (x2)
- **Estimated Equipment cost: 15.5k**

#### **Deluxe Tier:**

- TriCaster TC410 Plus BASE Bundle (includes TriCaster 410 Plus and TC1SP) (x1)
- Panasonic AW-HN130 HD Integrated PTZ Camera with NDI|HX (x2)
- Panasonic Remote Camera Controller (x1)
- Vaddio Wall Mount Bracket (x4)
- 8-Port Gigabit Network Switch, NDI Compatible Panasonic 30x Zoom PTZ Camera with HDMI Output and NDI (x1)
- For Streaming with cellular modems plus local internet connect (x1)
- Solo video encoder only - cellular modems must be purchased separately. For use with LRT virtual cloud server only sold separately. SDI+HDMI Inputs. First year warranty and 3- Hour LiveU Internal battery included. (Non- Profit) Modems must be purchased seperately. (x1)
- Monitor\_27, Slim Bezel Black 27" 5ms (GTG) IPS Widescreen LED Backlight LCD Monitors, HDMI 1920X1080 (x1)
- XLR-F to XLR-M (Audio Mixer to TriCaster output (15-ft) (x1)
- **Estimated Equipment Cost: 32k**

Attached are some photos of the actual equipment used in these packages.

## PTZ CAMERAS

*Complete Range of Pan-Tilt-Zoom Cameras*



**PTC-150**  
1080P Camera

- 1/2.8 inch CMOS sensor. 1920x1080px Full HD resolution, 60fps
- 30x Optical Zoom
- 1x 3G-SDI, 1x HDMI, 1x CVBS video output
- Digital noise reduction function (DNR)



**PTC-150T**  
1080P HDBaseT Camera

- 1/2.8 inch CMOS sensor. 1920 x1080px Full HD resolution, 60fps
- 30x Optical Zoom
- 1x 3G-SDI, 1x HDMI, 1x CVBS video output from camera
- HDBaseT technology, HDMI output from Receiver
- Digital noise reduction function (DNR)
- Includes HBT-11 HDBaseT Receiver



**PTC-140**  
1080P Camera

- 1/2.8 inch CMOS sensor. 1920x1080px Full HD resolution, 60fps
- 20x Optical Zoom, 10x Digital Zoom
- Advanced 2D/3D noise reduction technology



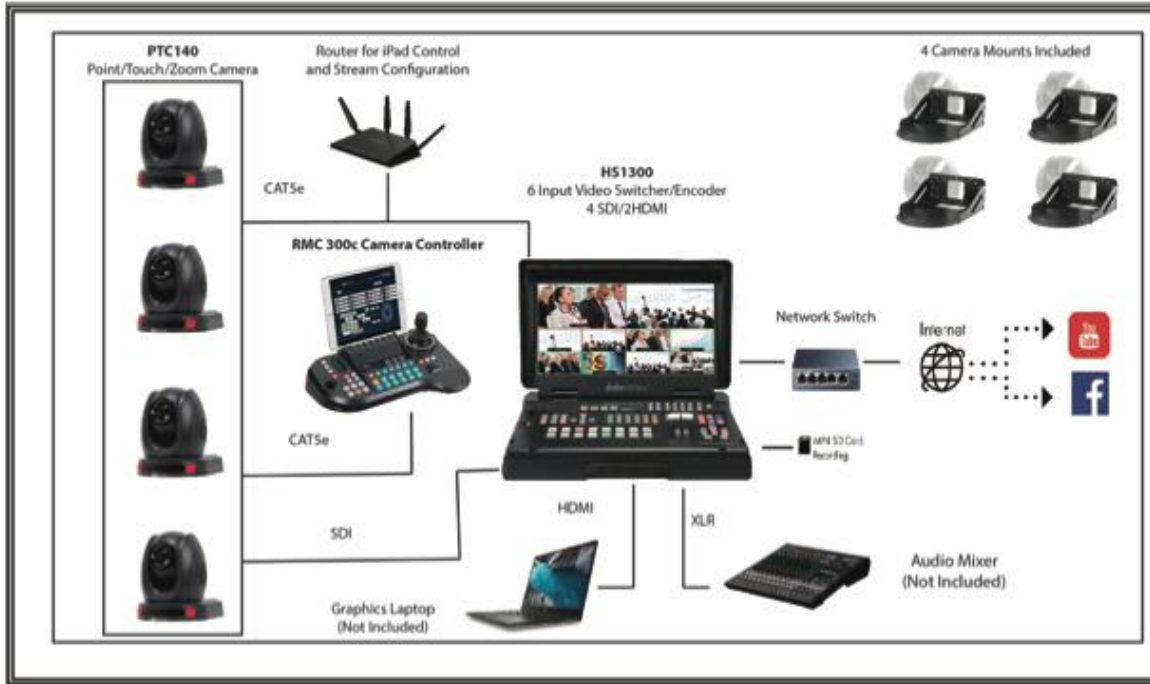
**PTC-140TH**  
1080P HDBaseT Camera

- 1/2.8 inch CMOS sensor. 1920x1080px Full HD resolution, 60fps
- 20x Optical Zoom, 10x Digital Zoom
- HDBaseT technology
- Advanced 2D/3D noise reduction technology
- H.264/H.265 video compression for streaming
- Includes HBT-11 HDBaseT Receiver

We also have PTC-150TL and PTC-140T cameras available, which are designed to work with the HS-1500T and HS-1600T Hand Carry Studios. Both of these cameras do not include the HBT-11 Receiver.



## 4 CAMERA WORKFLOW



# HAND CARRY PORTABLE STUDIOS

*The World's Most Compact Video Studio*



**HS-2850**  
8 to 12 Input HD/SD  
Hand Carry Studio

- Supports up to 12 HD or SD inputs in a variety of configurations (SDI and HDMI)
- 3 SDI and 1 HDMI freely assignable output channels
- 2 PIP and 2 DSK assignable for luma key or alpha key
- Built-in graphic overlay system for HDMI title input, software included
- Built-in 8 Channel Intercom/Talkback system for communication with camera crew
- Built-in audio delay for lip sync



**HS-2200**  
6 Input HD/SD  
Hand Carry Studio

- Supports up to 6 HD inputs in a variety of configurations (SDI and HDMI)
- 5 SDI and 1 HDMI freely assignable output channels with matrix switching
- 2 PIP and 1 DSK assignable for luma key or alpha key
- Built-in graphic overlay system for HDMI title input, software included
- Built-in 8 Channel Intercom/Talkback system for communication with camera crew
- Built-in audio delay for lip sync



**HS-1600T & HS-1500T**  
4 Input HDBaseT  
Hand Carry Studio

- Built-in HDBaseT technology allows you to run power, uncompressed video, camera control, and tally over a single CAT6 ("network") cable
- Built-in H.264 streaming encoder and recorder for seamless broadcasting on the internet (HS-1600T Only)
- Supports 3 HDBaseT cameras and 1 HDMI input for titles or external source
- Built-in camera controller with a joystick and preset buttons
- Built-in audio line in and audio mixer with hardware faders



**HS-1300**  
6 Input HD  
Hand Carry Studio

- A complete solution for switching, recording, streaming and monitoring
- 4 SDI and 2 HDMI inputs, 3 HDMI outputs
- 2 built-in keys for chromakeying or luma keying
- H.264 recorder and streaming encoder for seamless online broadcasting
- Instant buttons for starting/stopping recording and streaming
- Built-in animated stinger transitions and virtual set backgrounds

All-in-one hand carry video production studios are lightweight, easy to transport, and feature a convenient safety cover for protecting the backside connectors.



## **Livestreaming Professional Providers Contact Information**

### **Amitrace**

Phone: 770.263.9190

Email: [sales@amitrace.com](mailto:sales@amitrace.com)

Website: [www.amitrace.com](http://www.amitrace.com)

Amitrace did the installations for the [Cathedral of St. Philip, First Presbyterian Atlanta, and Ebenezer Baptist Church.](#)

### **Commercial Audio Systems**

Phone: 404.325.4892

Website: [www.commericalaudio.com](http://www.commericalaudio.com)

### **Messenger**

Phone: 678.413.2301

Email: [Gary@messengeravl.com](mailto:Gary@messengeravl.com)

Website: [messengeravl.com](http://messengeravl.com)

Messenger did the installation at [Basilica of the Sacred Heart of Jesus.](#)

### **Lighting and Production Equipment Inc.**

Phone: 404.597.1400

Email: [Bharlan@lpe.com](mailto:Bharlan@lpe.com)

Website: [lpe.com](http://lpe.com)

Lighting and Production Equipment Inc did the installation at St. Luke's Atlanta and Grace Cathedral Charleston