



## Worship Streaming Success Story

### Central Moravian Church Produces Engaging Live Streams

#### The Church

In historic downtown Bethlehem, Pa., Central Moravian Church is an inclusive community of God's people which assembles for worship, education, and fellowship as members of the worldwide Moravian Church. Organized in 1742, Central Moravian Church is Bethlehem's first congregation and the oldest Moravian Church in North America.

#### The Challenge

Within a large, historical building, Central Moravian Church wanted to update its AV technologies while creating systems that will remain relevant for years to come. The church's architecture required cameras with a significant optical zoom in order to capture close up views from long distances. The integration team was asked to maintain the aesthetic look of the space and hide cabling wherever possible. Everyone involved in the project strove to preserve the inside beauty of the space while maximizing efficiencies for a multiple-camera operation. Prior to acquiring PTZOptics cameras, the church used just a few webcams with a laptop to stream services, says Will Schwab, Media Director at Central Moravian Church. He said his team quickly realized the laptop was not equipped to handle three video input sources. Additionally, Central Moravian's production team had to set up and take down the systems before and after each service.



**PTZOptics NDI@JHX Cameras**  
PTZOptics pan, tilt, zoom, streaming cameras at 1080p. Designed with NDI@JHX, SDI, HDMI, and IP outputs. Power, send video, and control your camera over IP.



**PTZOptics Joystick**  
PTZOptics offers multiple joystick controllers including the pictured IP controller, as well as a serial controller. Set and call over 255 presets.



**Wirecast Control Surface by X-keys®**  
A USB controller with dedicated keys for Telestream Wirecast 9 and newer. Includes direct selection of 12 sources on five layers, transition controls & more.



**Wirecast Gear 420**  
The Wirecast Gear 420 Professional Video Streaming System from Telestream. Includes Wirecast Pro & NewBlue Titrer Software.



**24-port POE Network Switch**  
24-Port managed PoE switch with (16) 802.3at PoE+ ports, (8) Gigabit Ethernet ports, and (2) SFP ports. Powerful second-generation UniFi switching.

**Also Included (not shown):**  
AVFI desk, Stereo USB audio bridge, Uninterrupted Power Supply, AVFI desk, Focusrite Computer Monitors (2), USB expansion HUB and keyboard/mouse



### The Result

Using power over ethernet, the integration team at Philadelphia-area Haverford Systems placed two white PT-30X-NDI cameras in the front of the church and two PT-30X-NDI cameras in the back of the church. These cameras are able to capture head-and-shoulder views of people from up to 75 feet away, which allows Schwab and his team to create scenes that incorporate the organist and the soloist in the back of the church and the two pulpits and baptismal font at the front of the sanctuary.

Schwab says the team uses Wirecast to set up shots, along with an X-keys controller and a PTZOptics joystick for on-the-fly adjustments. The church regularly uses the equipment for special events such as weddings and baptisms that require PTZ camera operation. Currently, Schwab says he is monitoring Central Moravian's YouTube statistics, which include viewers from as far away as Korea and Nepal. During a special Easter service, Schwab was able to use Wirecast to bring a remote caller into their production using a cell phone. Using Wirecast and the X-keys controller, Schwab and his team have continued to find new ways to spread the message of God and share the mission of the Central Moravian Church.

### For More Information:

Check-out Telestream Wirecast Gear here:

<https://www.telestream.net/wirecastgear/>

Check-out Telestream Wirecast Pro here:

<https://www.telestream.net/wirecast/pro.htm>

Download free Desktop Presenter software here:

<https://dynamic.telestream.net/downloads/download-desktop-presenter.asp?prodid=desktoppresenter>

Check-out PTZOptics here:

<https://www.ptzoptics.com>



Wirecast Pro



Wirecast, PTZOptics, and X-keys operation



Wirecast Gear in rack