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January-February 2021

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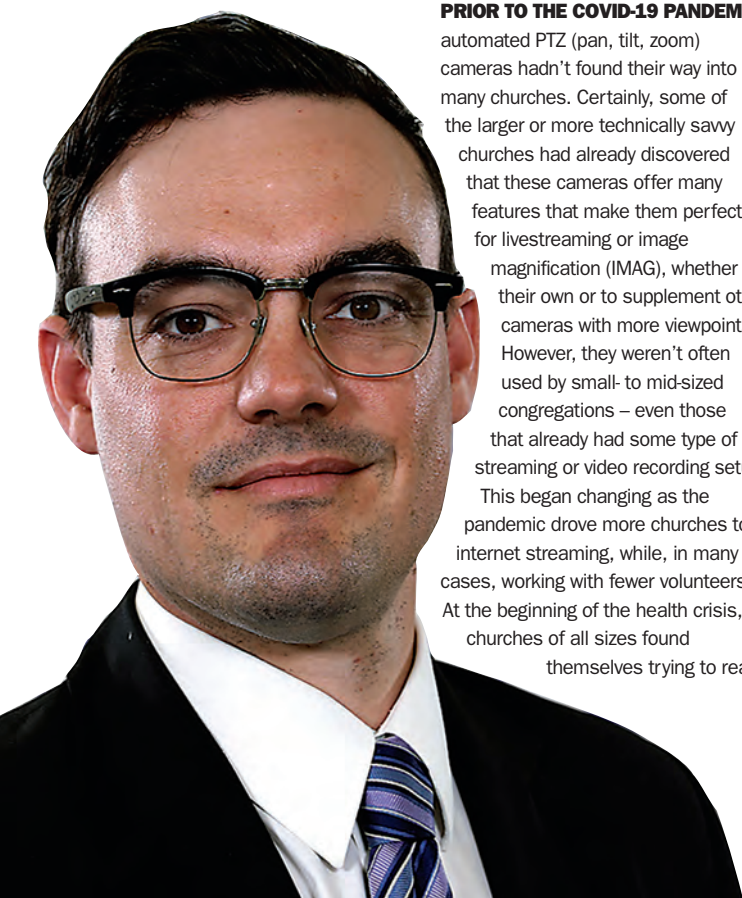


# PTZ cameras

## Helping churches adapt to the pandemic



**Paul W Richards**, director of marketing at PTZOptics, discusses how the ease of setup and operation of PTZ cameras let churches get up and running with streaming quickly while minimising volunteer requirements



**Paul W Richards**

**PRIOR TO THE COVID-19 PANDEMIC**, automated PTZ (pan, tilt, zoom) cameras hadn't found their way into many churches. Certainly, some of the larger or more technically savvy churches had already discovered that these cameras offer many features that make them perfect for livestreaming or image magnification (IMAG), whether on their own or to supplement other cameras with more viewpoints. However, they weren't often used by small- to mid-sized congregations – even those that already had some type of streaming or video recording setup. This began changing as the pandemic drove more churches to internet streaming, while, in many cases, working with fewer volunteers. At the beginning of the health crisis, churches of all sizes found themselves trying to reach

their congregations online as they were forced away from their normal physical worship spaces.

While there are seemingly endless options for outfitting a livestreaming or video recording system, PTZ cameras have many appealing attributes that make them ideal for houses of worship. Many pastors, staff and volunteers may be more familiar with smartphones, camcorders, DSLR or broadcast cameras, but PTZ cameras' form factor and remote operation can make them easier to install and use week-to-week.

### Space and sightlines

Churches face some unique challenges in choosing the right camera, the first of which is the size of the sanctuary. Many worship spaces are very large, but it isn't practical long-term to install a camera right up front – where it could interfere with sightlines when in-person services resume – or anywhere that takes up floor space that could be used for seating.

The rear of the room may be ideal but, without the right amount of zoom, a camera placed at the back of the sanctuary gives such a wide shot that viewers at home can't make out

any detail. PTZ cameras are available with zoom options up to 30X and use optical zoom – rather than the digital zoom found on consumer-level camcorders – to maximise image quality. A PTZOptics 30X PTZ camera, for example, can easily capture high-quality head-and-shoulders shots from over 22m away and can still zoom out wide enough to show the entire worship space.

PTZ cameras can also be less obtrusive than alternatives. Traditional cameras require an operator, which means they tend to take up a lot of space and may disrupt the worship environment's look and feel. The small form factor, discreet design and remote operation of PTZ cameras enable them to be installed out of the way and practically unseen. They can be mounted on walls, ceilings and poles, allowing for great camera angles with no visual intrusion.

### Simplifying installation

Churches that weren't already set up for streaming found themselves hurrying to get sermons online for their communities. Wiring can always be a real challenge for any new equipment installation,

but even more so under this time pressure.

Knowing that people will eventually be coming back to church, running cables across aisles and walkways isn't safe. However, running video, power and remote control cables through walls requires electricians and contractors. Not only is that a significant expense but such professionals can also be harder to schedule time with during a pandemic.

With PTZ cameras that use video-over-IP technology – such as the NDI protocol developed by NewTek – and support Power over Ethernet (PoE), all connectivity can be handled with just one Ethernet cable. Using AV-over-IP eliminates the need for SDI or HDMI cabling for signal transport. The single Ethernet cable can power the camera from a PoE-equipped network switch; send audio and video to the production or streaming computer; and control the camera's pan, tilt and zoom capabilities. Ethernet cabling is inexpensive, low-voltage and easier to install inside walls and crawl spaces than other cable types. In some cases, churches may also be able to save money by eliminating the need for a professional installer.



### Streaming with fewer volunteers

When churches went into lockdown because of Covid-19, many lost access to their most valuable resource: volunteers. Suddenly, pastors and limited staff needed to run a livestream themselves with nobody else to help. This is where another attribute of PTZ cameras shines.

Using traditional cameras and camcorders requires a dedicated operator positioned at each camera to control the zoom level, pan and tilt of the camera. PTZ cameras, in contrast, can be remotely controlled

from anywhere. Further minimising the need for onsite personnel, one operator can run both the video production software and the cameras. Remote camera control for select PTZ cameras is available inside popular software like vMix, Wirecast, Livestream Studio and OBS.

Churches even have the option to allow volunteers to help with camera control from the safety and comfort of their own homes. For example, PTZOptics offers a control app and plug-ins that let users log in remotely, or even control multiple PTZOptics cameras, through video conferencing software like Zoom.

### Long-term gains

While Covid-19 restrictions may be the initial motivation for many churches to consider PTZ cameras, they are far more than just a short-term solution. Churches that adopt PTZ camera technology during the pandemic will find that investment worthwhile even when people start returning to church.

While volunteers will come back, the flexibility of these cameras and their control systems offers more options to use these resources in the most effective way. PTZ camera setups are also expandable, as more cameras can be added without additional capture devices or computer ports. And because we will always have members who want or need to worship from home, the near-immersive experience made possible by broadcast-quality video and powerful zoom lenses will continue to be important.

While there are less expensive, consumer-grade options, investing in quality equipment is worth every penny. PTZ cameras are still quite affordable, and their additional cost can be easily offset by the money saved in additional equipment, installation and training. Churches can have a better livestream, and far more flexibility in the future.

[www.ptzoptics.com](http://www.ptzoptics.com)

# X102FD

## A line array killer ...

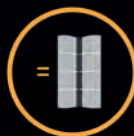
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