



## St. Michael's Cathedral Case Study Capturing sanctuary with 4K cameras



## ⊕ CHALLENGE

When Canada entered its first lockdown in March 2020, the team that operates St. Michael's Cathedral in Toronto knew they'd have to overhaul their streaming system to more robustly broadcast online and continue to offer a place of sanctuary for their community. Beyond increasing network bandwidth, it was obvious the Cathedral needed to upgrade video quality in order to provide the best experience for their members. Now that their parish would worship and experience their historic building primarily through streaming, blurry images and unbalanced light, along with other limitations, would no longer suffice.

## ⊗ SOLUTION

Working with audio visual solution specialists Cinema Stage, the teams decided to enlist a collection of 4K Panasonic camera solutions to meet their various needs. St. Michael's Cathedral is now equipped with three AWUE150WPJ8, two AWUE150KPJ8, and one AWHE130KPJ8 PTZ camera, one AVUHS500PJ 4k/12G production Switcher and one AWRP150GJ PTZ Controller – six cameras in total to capture the magnificence of the 173-year-old historic building.

## ☑ RESULT

With detailed planning and a push from Panasonic to quickly get Cinema Stage the cameras they needed to complete the project, St. Michael's Cathedral was able to switch to an upgraded camera networking without any downtime. This new system supported 4,000 virtual visitors a day, with more for Sunday service. The larger sensors in the upgraded, 4K cameras mitigated the lighting issues created by the large windows and bright altar the previous cameras were unable to capture properly. Similarly, the increased resolution has given the team at St. Michael's more flexibility to zoom in on speakers at the altar and other points of interest around the Cathedral without losing image clarity.

For members of a community, houses of worship have always been a sanctuary – a space that is always open and available to everyone. That is especially true during trying times, when people need that feeling of safety and security most. That's why, when St. Michael's Cathedral Basilica in Toronto closed its doors amidst the global pandemic in 2020, its team, under the direction of His Eminence Thomas Cardinal Collins and the Archdiocese of Toronto, knew it needed to redefine what it meant to be there for the community in difficult times.



Previously, the cathedral had broadcast its Sunday Masses online. But the system was not nearly robust enough to achieve their vision for an online platform.

"When the lockdown started in March of 2020, we started streaming every day," said Sheryar Malik, Systems Administrator at St. Michael's Cathedral. "That's when my nerves really started to kick in because we weren't really built for this."

And bandwidth wasn't the only issue. The St. Michael's team had previously installed cameras for broadcasting services but were unhappy with the results: Low-resolution images, poor contrast, issues with zoom and focus, and overall quality had been below their standards. To remedy the issue, they began working with Audio Visual Engineer Mark Webster and his team at Cinema Stage.

"One of the key problems is that the lighting levels change so dramatically because of the large stained-glass windows," Webster said. "As Covid started, broadcasting was becoming more important, and our existing system wasn't quite meeting our expectations."



## Capturing the brilliance

Along with the drastic shifts in lighting were challenges presented by the bright white altar that is the backdrop of many of the shots. The previous camera system, installed in 2016, was unable to balance the brilliant brightness of the altar with its surroundings and – even worse – those speaking in front of it. The result was a loss in clarity and detail as the cameras failed to capture the specific details that make St. Michael’s a grand and unique place to worship.

“The previous cameras would either focus on the altar and darken everything around it, or they would adjust to the surrounding area and the altar would become dim,” Malik said.

As St. Michael’s began discussing how to address these issues with Webster and his Cinema Stage team, they explored various options for suppliers. Webster was determined to stick to a single, reliable provider he knew he could trust to meet the standards for the project.

“I immediately went to Panasonic,” he said. “A Panasonic product has extremely good longevity and track record, and since we were receiving four thousand views a day and the expectations were extremely high, the system has to work. So many people depend upon it.”

## Finding balance

The first decision was to replace the current 1080p system with 4K technology. While high-end, modern 1080p systems would still offer a sensor upgrade, the goals of the project coupled with the specific challenges of light and space presented by the historic building called for a true upgrade in this technology. One major impact the increased resolution offered was the flexibility to zoom across the large cathedral.

“The space is really large, and for some of the distances we needed to cover, we wanted a really good zooming capability,” Webster said.

For both groups, one of the key factors in selecting Panasonic cameras was their longevity.

“There was a sense that 4K was the future,” he said. “So, it made more sense to invest in that now instead of getting another set of 1080p cameras that we’d regret in the near future.”

Ultimately, the teams decided to enlist a series of Panasonic camera solutions to meet their various needs. St. Michael’s Cathedral is now equipped with three AWUE150WPJ8, two AWUE150KPJ8, and one AWHE130KPJ8 PTZ camera, one AVUHS500PJ 4k/12G production Switcher and one AWRP150GJ PTZ Controller – six cameras in total to capture the magnificence of the 173-year-old historic building

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Sheryar Malik  
Systems Administrator  
St. Michael’s Cathedral

# Panasonic

## Acquiring the product

Once they identified the best models for their needs, and with a great level of foresight and planning, Webster and his team were able to complete the camera upgrade and switch over to the new technology with zero downtime - even while the St. Michael's team continued to broadcast every day. He also credits the Panasonic team for their efforts to make this process as smooth as possible.

"It was a big race to get this up and running as fast as possible, and I have to compliment Panasonic for really pushing to get this product in," Webster said. "They pulled it in from every direction of the globe so we could have it in our hands, complete the job and satisfy our client."

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## Setting a new standard

For the teams involved, the results were immediate: Clearer images, better control, increased ability for zooming and more. But it didn't take a closeness to the project to recognize the leap in video quality. While members of the church have reached out to comment on the upgrade of the streams, other institutions have reached out for guidance on how to similarly upgrade their own streaming offerings for their members during these times.

"We get good comments from our viewers, but we were predominantly contacted by the other parishes asking us what system the Cathedral was using that looked so amazing," Malik said. "A good amount of those parishes went with Panasonic cameras as well."

As for the ability to balance the light and the dynamic range of the historic building, Malik said, "That's something we've noticed, now that we have these Panasonic cameras, has been taken care of very nicely."