



Porto Porto at MUTEK Nocturne - Photo: Sean-Vadaru

MUTEK CASE STUDY

Streaming the Montreal MUTEK festival with PTZ cameras



⊕ CHALLENGE

Capture the essence of 12 electronic music shows in a video live stream at the MTELUS concert hall over the course of three days. The streaming cameras would need to perform well in a concert setting with variable lighting conditions and a live audience, generating high-quality feeds that could be cut together in real time.

⊗ SOLUTION

The video production team went with a combination of live camera operators and remote-control PTZ cameras. They chose Panasonic's AW-UE100K, AW-HE130W and AW-UE150K PTZ cameras for their reliability, versatile image controls, smooth movement and proven performance in low light conditions. Behind the scenes, they used AW-RP50 and AW-RP60 remote camera controllers.

☑ RESULT

MUTEK achieved the video production values and rich online experience they were hoping to deliver. The team reformulated the Nocturne shows into a series of six programs that were streamed on MUTEK's virtual platform during the festival, presenting talented homegrown artists to electronic music fans around the world.



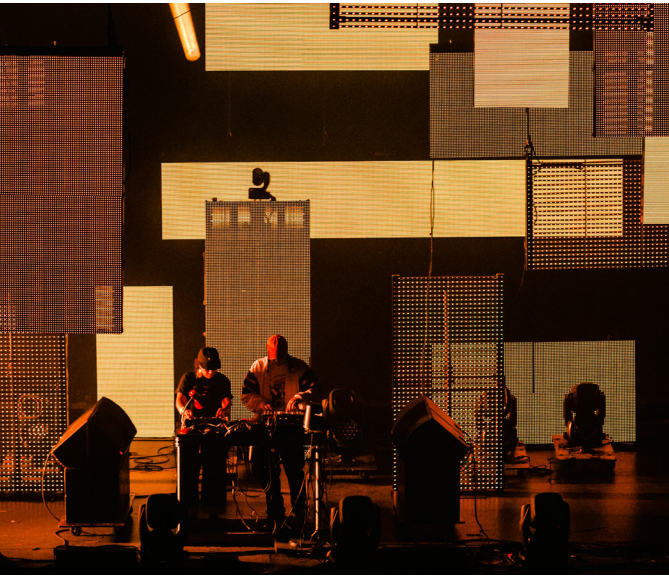
Phèdre at MUTEK Nocturne - Photo: Sean-Vadaru

[MUTEK](#) is a fixture in Montreal's vibrant cultural scene. Founded in 2000, this not-for-profit organization goes above and beyond to promote digital creativity in sound, music and audio-visual art, providing a platform for the most original and visionary artists through its annual festival.

The MUTEK 2021 live/online hybrid festival featured 148 live electronic music performances and an exhibition of digital works and installations at several venues around Montreal and on the web. As part of the festival's online component, MUTEK recorded its Nocturne series of shows, an electronic cabaret of the most rhythmic, enchanting artistic expressions from across Canada, and then streamed these live performances for a global audience on its [virtual platform](#).



Phœk/Iregui at MUTEK Nocturne - Photo: Sean-Vadaru



Phèdre at MUTEK Nocturne - Photo: Sean-Vadaru

Mindful of MUTEK’s mission to showcase audio-visual artistry, the team was determined to select appropriate gear and deliver high-quality, TV-like production values for the Nocturne live streams. “We produce full-scale broadcasts with multiple cameras and a portable version of a recording studio,” says Benjamin. “It’s definitely not a point and stream kind of approach.” The production team actually does each program cut live with a master audio and video, switching between camera angles on the fly to create the best experience for online viewers.

Camera Set-Up in the Concert Hall

To get maximum coverage of MTELUS’s large auditorium, Transmission supplemented their live camera operators with remotely controlled PTZ cameras installed overhead, onstage and at several other points around the hall. “Everything is done live so having reliable equipment is important. That’s why I was very happy to be able to go with Panasonic PTZs,” says Cameron. “I’ve been using these cameras for years—for live streaming and IMAG support for concerts and other live events—so I’m quite familiar with the product. I knew we could count on them.”

The PTZ cameras used at the festival have large, high-quality sensors that are more sensitive in low light conditions and thus reduce image noise. The large sensors, coupled with the cameras’ precise control over colour, contrast and sharpness, produce video feeds that mix well with feeds from other professional-quality cameras, ensuring a consistent look throughout the stream.

“All of our feeds came to a matrix, which then split and sent feeds to us and the projectionist,” adds Cameron. “So the cameras were actually used for both the live stream and the content on the screens behind the artists.”

The Challenge of Recording Live Performances

Thanks to a relaxation of COVID-19 rules, 2021 marked the return of live stage shows in front of large crowds, a welcome change from the restrictions that had been in place for the 2020 hybrid festival. “People were just so excited to have an audience back in the house,” recalls Ian Cameron, co-owner of video production firm [Transmission](#), MUTEK’s streaming partner. “The show was for the house as opposed to the camera or the stream.”

Capturing a series of live shows at one of the festival’s indoor venues, the MTELUS concert hall, presented a new set of technical challenges that the production team hadn’t encountered in the studio-like atmosphere of MUTEK 2020. “What’s good for the broadcast or recording is bad for the audience in the house, and vice versa,” explains James Benjamin, co-owner of Transmission. “For example, if the lighting is great for the audience in house, it’s going to cause problems for the cameras. If the lighting is good for the cameras, it usually means that it’s taking away the ambiance for the people in the house.”

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A Memorable Festival Experience

According to Benjamin, who also performed at this year's event, MUTEK is known as a real artists' festival, a place where up-and-comers, veteran performers, popular headliners, and niche artists are all treated with respect and all receive excellent production support. Cameron agrees, saying that festival organizers have a reputation for going the extra mile to accommodate participants and help them convey their artistic vision.

The MUTEK team's commitment to building a high-quality showcase for artists and creating a unique experience for their fans shines through in the care they've taken to produce their video streams and then curate them for presentation on the festival's virtual platform.

"By and large, the artists themselves were pretty blown away by the results, and these aren't people who are necessarily easy to please," says Benjamin. "The feedback we've had is, 'Wow, it looks amazing, it sounds amazing, thanks so much.' I don't think we've had anything but positive comments."



Yu Su at MUTEK Nocturne - Photo: Sean-Vadaru



Martin Messier at MUTEK Nocturne - Photo: Frederique Menard-Aubin

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