Hermann's Jazz Club: Technological Challenges for a Venue During the Pandemic

William Stewart

When the pandemic lockdown began in March 2020, [Hermann's Jazz Club](#) in Victoria, BC swiftly adapted. Hermann's is run by the Arts On View Society and the board initially gave approval to purchase two phones and an audio interface to get us started with livestreaming. The venue had been shut down for three weeks when my friend Ashley Wey and I walked into a cold and lonely room with tables and chairs sitting more like they were in storage than ready for patrons. At first, the two of us set up about twenty feet from the stage with our minimal gear. Ashley is a fantastic pianist and performer, married to an equally great bassist, Louis Rudner. She has a keen interest in sound engineering and her partnership with Louis as a performer gave us what we needed to get going on streaming them as duo with me as tech.

The first question we asked was: where do we stream? We had 3800 followers on Facebook (6150 at the time of writing in fall 2020) and zero on our new YouTube account, so Facebook was the obvious choice for us to start with. Eventually we started having copyright problems using Facebook, so we switched to YouTube. We've since gained 1700 followers on the YouTube platform. Our first shows were plagued by poor internet speed, but—with substantial donations to both the artists and the venue—the support we received from the community was phenomenal. The Arts On View board was immediately in support of upgrading our production capabilities. Not only had we discovered this to be a viable endeavor during the pandemic, we knew it would become a permanent addition to live music. Twelve months in, we are still learning from every performance, and we feel like we have a great product.

For the audio portion, we quickly discovered that the sound reinforcement needed in the venue is very different from what is needed on a livestream. For example, someone speaking can be clearly heard in the venue without a microphone, but is inaudible on the stream. Hermann's has a sound system which includes a Behringer X32 Rack digital mixer. The X32 has a 32-channel Digital Signal Processor (DSP) with great configuration options. Knowing that we would return to a live audience at some point, I configured it as a splitter so that channels one through sixteen serve as house sound, and the same sixteen inputs also go to channels seventeen through thirty-two for livestreaming. Three months after our start, with our patrons returning, we added Tom Bowler to the tech team, and the three of us created an audiovisual booth at the back of the venue, relinquishing our original spot in front of the stage.

It is a real challenge for one tech to mix cameras, live audio, and streamed audio all at once. Being in the same room as the performance and accurately mixing the audio that's going to a livestream is difficult. There are several stages of delay between the performance and the Facebook and YouTube streams, which can be thirty seconds behind real time. To help overcome this challenge, we have a monitor of the livestream output at the audiovisual booth that is in real time with the performance. We still need to check the stream audio on Facebook and YouTube with headphones to get a good mix and audiovisual sync. Sometimes we rely on viewer comments to help with this. When I'm at home, the tech at the club and I communicate by texting, making adjustments to the mix and troubleshooting as the show proceeds. It is possible to make adjustments from home using a remote desktop, but best if the show tech at the venue makes the adjustments. The texting between the three of us has become a fun way to share the shows. An added bonus of the X32 mixer is the ability to do multi-track recordings of the performances. This allows for a complete remix of any recorded show.

In this photo of the X32 software, everything that is green is connected to the livestream output.

Phones as live video cameras have many limitations. They capture static shots that are much more detailed when close to the subject. They also rely on Wi-Fi for their stream, so they need a very good wireless access point. At our inception, we were using a phone app to stream, which worked on a basic level. In planning for new cameras, I needed to consider our production software and the processing power needed for multiple cameras. I chose PTZOptics NDI cameras, one with 12x zoom and another with 20x zoom, because the company has outstanding support. They cost \$3400 CAD each. PTZ stands for Pan-Tilt-Zoom, which means that the cameras can be at fixed positions in the venue while we still have the kind of control that allows us to catch close-ups of each musician by adjusting the camera angles and focal length remotely. NDI stands for Network Device Interface, which was developed by NewTek. This allows one Category 5e or 6 cable (Cat5e or Cat6) to supply power using a Power Over Ethernet (POE) switch as well as video connection to anything on the network. In conjunction with this system, I chose a gaming PC with an Intel i7, eight-core processor unit (CPU) and a graphics card with six gigabytes of Graphics Processing Unit (GPU) processing power.

Researching encoding software, I looked at Vmix (\$700 USD retail) and OBS Studio, which is free. Both are great, but we wanted to simulcast our stream to both Facebook and YouTube. Having been a Vimeo user for many years, I finally chose their Vimeo Premium paid services. That cost us \$1150 CAD per year, allowing simulcasting and video management with the added incentive of their live production software called Livestream Studio 6. It comes with great features and is very easy to use, so it was a simple choice. In conjunction with Livestream Studio 6, we use an app called PTZOptics Camera Controller that allows us to save multiple camera positions for each camera before each broadcast. This is essential for quick perspective changes during the performance.

Screenshot of Livestream Studio 6.

PTZOptics camera controller.

Production booth.

British Columbia provincial health allowed restaurants to reopen in June. There were no capacity limits set, other than what a socially distanced table arrangement dictated. Our executive director, Nichola Walkden, held back Hermann's opening date until July 23 and did a brilliant job of distancing patron seats from one another and the stage. Although Hermann's is a restaurant, it is also a ticketed venue, meaning our capacity is limited to fifty seats. In addition, there are plastic dividers carefully designed to protect (but not obstruct) the view of the stage. Staff wear masks, as do many musicians and patrons. Simplifying food service, dinner is now a gourmet chef-served buffet that is rolled out in the large space at the front of the stage before disappearing at show time.

New etiquette was needed for musicians and fans to interact. Musicians have been asked not to socialize at the tables before and after the show, while patrons have been asked not to approach the stage after the show. It is a challenge, because everyone feels bonded after a great performance. Instead of two sets, we opted for one 90-minute set to limit the length of time in the venue.

On September 8, 2020, the BC health authority made a sweeping announcement that background music could be no louder than conversation level and that liquor sales must stop at 10pm. The time is not an issue for us as our shows are finished by 9:30pm, but we find the conversation level edict problematic. We are currently seeking clarification on this point. Hermann's is a listening venue, and we often ask patrons not to talk much during performances.

Our new strategy is to make this part of the pre-show announcement: no singing, no dancing, no talking, definitely no yelling—and yet patrons still have a wonderful time. This is the new pandemic etiquette.

On the weekend, I was doing a show and two guys in plaid shirts came in and over to me. One of them flashed a badge and said he was an inspector. He said we were in violation of the conversation rule and there would be a \$5000 fine for non-compliance. I responded that no one was talking, and he insisted that it didn't matter. I then pointed out that I was having a normal conversation with him while the music was playing without any trouble, making the whole thing quite arbitrary. We later realized that these two guys were just trolls. I share this not to diminish the importance of safety, but to give an example of how fear-driven our population is during this pandemic.

On September 18, the minister of public safety announced \$2000 fines for venues and \$200 fines for individuals who contravene the background music rule. He also gave more authority to bylaw officers, inspectors, and police to issue these fines. We have been assured by a Vancouver Island Health Authority representative that, because Hermann's is a ticketed venue and our entertainment is not background music, we are not subject to this rule. I'm taking a wait-and-see approach.

Ticket sales have been slow. On Friday we sold thirty-four of fifty tickets, but only twenty people came. Our patrons are so supportive that no one has asked for a refund. They are here to support us and the artists they love. Total donations from livestreams average 67% to performers and 33% for the venue by the donors' choice. Because we are largely drawing from the same generous viewers who, I assume, help many causes, donations have dropped quite a bit. But we are hopeful that our reputation will continue to bring new followers and further support.