



CASE STUDY

Thank you for the music

Challenge

To stream six Edinburgh International Festival concerts to viewers around the world, via the festival website, and subsequent broadcasts on the Classic FM digital platforms.

Solution

Eight Panasonic AW-UE150 PTZ cameras, three AK-UC4000 system cameras, three AW-RP150 remote camera controllers, and a Panapod.

"Without that Panasonic PTZ technology, we would not have been able to deliver the quality and range of concert coverage that we've been able to do this past year. The PTZ workflow allows us to be fast and efficient in a way that nothing else would and has transformed what we are able to do for the musicians."

Matt Parkin – Co-Founder/CEO

Stagecast

Stagecast and Panasonic have helped the Edinburgh International Festival reach a wider audience than ever before by streaming six classical concerts from the world-renowned annual arts event. As specialists in live streaming and filming of both classical music and opera, Stagecast drew upon its extensive experience of bringing remote audiences closer to the orchestra.

"The past 18 months has proven to be a rollercoaster for both Stagecast and the performing arts in general. Orchestras haven't been able to perform to audiences, so the performing arts rapidly shifted to live streaming performances behind closed doors," explained Matt Parkin – Co-Founder/CEO, Stagecast.

"It has also given us the opportunity to change the way in which classical music is presented. We have seen traditional orchestra layouts starting to change to accommodate live streaming. For instance, sometimes we position soloists so that they are looking at other members of the orchestra to enable them to connect more, and we can position cameras to convey that connection to an audience."



New venues bring new filming challenges

By using Panasonic broadcast solutions at one of three specially constructed outdoor pavilions, located at the Edinburgh Academy Junior School, Stagecast was able to broadcast the concerts to viewers around the world, via the festival website, and selected concerts were also broadcast on the Classic FM digital platforms.

The spectacular temporary pavilions provided a Covid-safe alternative to the festival's traditional concert halls. However, the venues also posed the new challenge of filming in a semi-outdoor environment, with daylight and all the variabilities of the Scottish summer climate.

Stagecast used a rig system to film the concerts built around a total of eight [Panasonic AW-UE150 PTZ cameras](#), one of which was mounted on a Panapod. They also used three [Panasonic AK-UC4000 Studio System cameras](#) – one on a crane and the other two at the back of the venue with super-telephoto lenses for front coverage of the enormous venue. Using the UC4000 cameras meant that the images could be accurately picture-matched with the UE150 cameras using [scene files](#) provided by Panasonic. Scene files are special files that alter the image output from a camera to ensure that each camera can be picture-matched despite having different sensor sizes. Panasonic has a host of scene files available for the UE150 for download from its website to enable picture-match to a host of its other cameras.

The backstage production team consisted of the director, script supervisor, vision engineer and two camera operators, working four cameras each. One of these operators also controlled the upward and downward movement of the [Panapod](#), for shots behind the orchestra. The vision engineer's role was to maintain the colour shading of each of the UC4000s on the [Panasonic AK-HRP1000 remote operation panel](#).

“Control of the PTZ cameras was handled over IP, with video signal routing over SDI,” added Matt. “This allows us to get full broadcast-quality video feeds back to the control room. We use a lot of automation to deliver complex, fully scripted shows with a relatively small team, including our own monitor switching and tally solutions built with Bitfocus Companion and Elgato Streamdeck controllers. We also use custom software for recalling preset camera shots on the AW-UE150s from a playlist.”



Orchestra filming

“Filming orchestras has a range of specific requirements,” said Matt. “The cameras we use must be silent for use in concert halls. They must also be compact and be able to disappear on a stage. We have never had a musician complain about sitting next to a camera, or even the fact that they’re moving during a concert.”

“When working with social distancing measures, we have needed to keep the physical presence on stage to a minimum, which the UE150s have really helped with. We are also able to put PTZ cameras in positions where you wouldn’t be able to place a camera operator. This greatly helps in full-capacity venues, as you don’t have to take out as many seats to accommodate camera positions. That’s a real advantage for us and the concert promoters we work with.”

Matt added that he had been working with PTZ cameras for about 10 years and has advised several high-profile concert halls, orchestras and opera companies on setting up their own camera systems. He considers the AW-UE150 to be a game-changer for performance filming due to the excellent picture quality, 4K/HDR capabilities and improved smoothness of moves that the cameras offer.

“Without Panasonic PTZ technology, we would not have been able to deliver the quality and range of concert coverage that we’ve been able to do this past year,” said Matt. “The PTZ workflow allows us to be fast and efficient in a way that nothing else would have allowed, especially with the restrictions and challenges of social distancing, and it has transformed what we are able to do for the musicians.”

Andrew Moore, the Head of Music at the Edinburgh International Festival, added that the festival had captured much more content on-demand this year than any other year. He explained: “We’ve managed to integrate video capture in a really discrete and subtle way, capturing wonderful film without the audience in the venue even realising until they see it at home. I think the way that all our technical providers have worked together is fantastic. They have shared knowledge, expertise and infrastructure across all the different disciplines - whether that’s sound, video, and lighting - to enable the festival to work. They are back doing what they love and that’s been terrific to see.”

About Edinburgh International Festival

Edinburgh International Festival is the world's leading performing arts festival, featuring the finest performers from the worlds of dance, opera, music and theatre.

Created in 1947 to celebrate the enduring human spirit, the International Festival serves as an annual cultural exchange, every August, for an international audience. The 2021 Festival pioneered the return to live performance in Scotland from 7-29 August 2021 with 170 performances from 988 artists of 25 nationalities.



