



Live Streaming: The Abbey Theatre

By The Company of Ten, resident theatre company and owners of Abbey Theatre St Albans

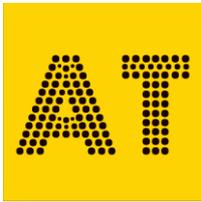
The seed of the idea that we should live stream productions from the Abbey Theatre was planted early on during lockdown. In March our busy programme of productions had to be postponed or cancelled. We hoped that we could just pick these up again as soon as audiences were allowed back into the theatre but by the beginning of June it was clear that it might be many months before people were able to return with no social distancing restrictions, so we started to investigate alternatives for our autumn productions. Live-streaming seemed a viable option, but not having any experience of doing it, we hastily researched the technology required and soon concluded that this was something that we could achieve.

At that time, we also had three visiting productions booked into the theatre – a folk evening, a jazz evening and a short run by St Albans Chamber Opera. As it became obvious that none of these events could proceed in front of a live audience, all three promoters approached us to ask about our live-stream option instead. We even carried out successful tests for one of the promoters to demonstrate the quality of the sound and the video/audio synchronisation, although in the end, all three decided it would not be economic to proceed without a full audience. But that was not going to deter members of The Company of Ten from streaming our own productions!

The introduction of ‘The Rule of Six’ brought additional challenges. Cast sizes would need to be limited to a maximum of six as would the size of the set construction crew, backstage crew and technical team (previously comprising lighting and sound but now including video director and camera operators) and none of these ‘bubbles’ should be allowed to mix. Our Production Executive has been working hard over the past few months to find small cast plays with minimal set for which we could obtain both performing rights and live-streaming rights and it has not been an easy task.

To give us experience of using the technology without a live audience we started the season with *Radio Fun*, a four-hander sketch show in the style of a radio play written by one of our members, the comedy TV writer Brian Leveson, and his writing partner Paul Minett, who generously gave us permission to live-stream the production. This was followed by a one-man show *Drama King*, again without a live audience, written and performed by one of our members ahead of his short tour around the South East of England. Most recently we were delighted to be able to welcome back a small socially-distanced audience to see *Building the Wall* by Robert Schenkkan, which has given us the opportunity to test out our front of house COVID measures. This was followed by *Relatively Speaking* in November and *The Secret Garden* for Christmas.

The Company of Ten prides itself on the quality of its productions and we were determined that the live-stream should be of the highest possible quality within the constraints of the technology available to us and within a very limited budget. Initially we assumed that we could use an ordinary webcam for our live-stream but it soon became apparent that most cheap webcams do not have the necessary picture resolution and are only designed for close up pictures. So instead we settled on using an entry level video switcher - a BlackMagic Design ATEM Mini – which simulates a webcam and allows up to four high definition video cameras to be connected via HDMI. Other software solutions such as OBS Studio are available but the advantage of using the ATEM Mini is that it provides a hardware control



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surface for switching between cameras whilst leaving the PC to which it is connected free to run Show Cue System in the foreground.

Whilst a number of different streaming services are available, we felt the one that both we and our audience were most familiar with was Zoom (will Zoom follow Hoover and Google in becoming a generic term?) We had previously attended a number of live music events and plays over Zoom Meetings where the sound and picture quality were atrocious. Also, we didn't want our stream to be interrupted by an audience member forgetting to disable their camera or microphone, nor did we want to have to issue a complex set of instructions to our audience explaining how to configure Zoom settings to prevent this. Therefore, we decided to use Zoom Webinar instead. Webinar is an add-on to the Zoom Meetings Pro licence but the total monthly cost for an entry-level package that allows up to 99 people to join the webinar (plus the host) equates to only four tickets so it is not prohibitive.

We configured Webinar so that only our paying customers could access it from a single device. A few hours before the performance they are sent an email from Zoom containing a simple link, unique to them, and all they have to do to join the live-stream is click on that link. We configured our box office system, Spektrix, to ask for an optional donation equivalent to the ticket price that they paid for their live-stream ticket to cover any additional people who might be watching from the same location. Incidentally it is worth noting here that most live-streaming licences require you to charge the same ticket price as for a live audience – you cannot charge less or more.

There was much discussion about whether to use just one camera for a wide-angle view of the stage from the rear of the auditorium or to have additional cameras positioned nearer the stage to provide close up shots of the actors. From the outset we had hoped that we would eventually be able to welcome back a live, socially-distanced audience, and we realised that positioning cameras in the body of the auditorium would cost us a significant number of seats and cause logistical problems. Eventually we settled on a single camera positioned in the centre of the back row to provide an overall view of the stage (and to switch back to quickly if one of the other cameras lost focus or had some other problem) and two additional cameras, also in the back row, to provide the close-up shots. The fourth channel of the ATEM switcher takes the HDMI output from the host PC so that we can provide pre-show entertainment over the live-stream whilst we are waiting for all of the audience to join.

The theatre already owned a High Definition video camcorder and initially we intended to supplement this with two DSLR stills cameras (which also provide video output) borrowed from members of the company. However, it soon became apparent that with the lenses available to us we could not zoom in sufficiently to get close ups of the actors and also these cameras could not be configured to provide a clean HDMI feed, i.e. minus the information icons that are visible on the camera's built-in LED display. After seeking professional advice, we settled on using two other camcorders, also borrowed from members.

At first the actors were very conscious that they were being filmed and wondered whether they should modify their performance to reflect that. However, from the outset, we were clear that this was a theatrical performance, hopefully in front of a live audience, that also happened to be streamed; it was not a film or TV programme that was going to be pre-recorded and edited especially for transmission, so the actors should deliver their performance as normal. We felt that the live aspect was important to our audience, so much



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so that we deliberately film the audience in the auditorium for a couple of minutes before curtain-up to increase the sense of inclusion for those watching from home.

The most difficult aspect of the technology to get right has been the sound, especially considering that we are catering for two different audiences. Each production has had slightly different issues and we have spent many hours trying different combinations of sound desk levels, video switcher and Zoom settings to achieve an acceptable quality. The levels tend to be very sensitive and it can be difficult to strike a balance between live-stream sound that is either too quiet or is overloaded and distorted. It is vital to listen to the sound levels as a Zoom user and here Zoom Webinar allows you to start in 'practice mode' so that you can test the sound and video as part of the pre-show checklist prior to opening up the webinar to the audience.

At the moment we have settled on using three or four microphones positioned at the front of the stage. During one of our productions, we experimented with using a radio mic instead but this still took time to get the levels right and it required a separate sound operator who had to sanitise the mic before and after use. For a larger cast this would be less practical bearing in mind the need to keep the numbers of technical crew to a minimum and we would have to hire in additional radio mics, thus adding to the cost.

No matter how much care you take setting up the sound and video, ultimately your viewers' experience depends on the reliability of their internet connection, the device on which they are viewing the live-stream, and their level of technical skill in resolving any issues – all aspects over which you have no control. Whilst the majority of viewers who provided feedback told us that the sound and picture were excellent, nevertheless we had a few who complained that the sound was not loud enough, or was too loud. We even had one viewer for Radio Fun who managed to tune in with only sound and no picture.

Has it been worth it? The answer is a resounding yes! For *Building the Wall* we sold an equal number of live and streamed tickets and bearing in mind that in many cases more than one person was watching on each device, we have reached many more people than we are able to accommodate in the theatre under current social-distancing regulations. Some of our viewers tuned in from as far afield as the USA and Australia! The feedback from both sets of audiences has been terrific with many of the live-streamers saying that it has given them the opportunity to be involved with theatre again even though they are self-isolating or nervous of attending the theatre in person.

This is a difficult time for the performing arts industry and we feel that in some small way we are supporting the industry by helping audiences continue to enjoy live theatre and build their confidence to return in person just as soon as they feel able. The alternative would have been to mothball the theatre and walk away but for The Company of Ten that was just not an option!

[*Building the Wall*](#) performed at Abbey Theatre, St Albans 13 – 17 October 2020.