

Brandlive Production Playbook

There are a number of important components to consider when planning a live broadcast. Deciding on a theme, selecting presenters, curating content, and assigning skilled moderators make up some of the requirements of putting on a successful event. An equally crucial piece of the puzzle is your production strategy: what kind of video and audio equipment will you need? Is the broadcast location set up to accommodate your equipment? What do you do if your internet speed isn't up to par? We have created this holistic, beginning-to-end Brandlive Production Playbook to ensure that you don't miss a step when mapping out your live video plan, and we highly recommend you use it as a guide to achieve high quality production value during your live event.

1. Planning Your Broadcast

It is crucial to think ahead when planning your Brandlive broadcast. Make sure you consider all production logistics from the start, and begin planning your event 2-3 weeks in advance to allow yourself time to work through the details.

We recommend you follow these steps when mapping out your next Brandlive event:

- Determine the theme or purpose of your event.
- Confirm the date and time of your event.
- Determine the location of your broadcast, and make sure there will be internet and power on site.
- Consider your specific equipment needs - how many cameras and microphones you'll need, whether you'll need to set up lighting, etc.
- Visit the broadcast location, test the internet speed (www.speedtest.net) and make sure there are no firewalls preventing you from streaming from that location.
- Identify your team – this includes the presenters, moderator, producer, and anyone else who needs to be involved with the broadcast.
- Think about any content you want to show on your event page (logos, recorded videos, PowerPoint slides, screen share, etc.).
- Determine in advance whether you will require close-up camera shots, and plan accordingly.
- Decide whether you want an in-person audience at the event. If so, ensure that they have access to the same on-screen content as those viewing online.
- Create the event page using the Brandlive Admin Console, uploading any relevant content such as PowerPoint slides, images, logos, and copy.

Additional notes:

Internet access and power availability are two of the most critical details when setting up a live video production. Visit the broadcast location ahead of time to make sure you have power where you need it, and to ensure that the internet is adequate for streaming.

An upload speed of 10 mbps is considered the minimum for stable broadcasting, and anything less can cause problems. Keep in mind that you may need to adjust video resolution and/or bitrate settings in Wirecast to compensate for slower internet.

Make sure you know who you'll need on set with you. Will you require an extra set of hands to operate a camera or change mics on presenters? Is this a large event that will require AV technicians to run sound and video projection? (If so, do you need to coordinate with them to get video or audio feeds?) Having 1-2 production assistants on set can be very useful.

Finally, think about where you will situate the presenters. Is the backdrop visually interesting without being distracting? Is the lighting adequate, so that your presenters are well-lit without significant areas of shadow on their faces? Are there windows that will let in unwanted light, and if so are there shades to control that? Staging your on-screen talent and positioning the light correctly are crucial elements of a high-quality broadcast.

2. Pre-Production

Once you've mapped out what you need for your broadcast, you'll want to focus on your production plan in order to eliminate surprises ahead of time. This way, you will be able to concentrate on producing a great broadcast the day of.

We recommend you follow these steps when mapping out your production plan:

- Put together a comprehensive checklist of all the equipment you will need.
- Work with your presenters to create a Run of Show for the event day. Call out the places in which you will show certain slides or videos, or have a product demonstration on camera.
- Gather all of the visual assets you will need for your production such as logos, videos, images, and slides.
- Build your Wirecast profile with all of your visual assets and output settings, including your RTMP code, stream key, and recording settings.
- Do a simple test stream with a logo and music to make sure the broadcast settings are correct.
- Check the test page on your account to make sure you can see and hear your test broadcast.
- Check in with your Customer Success Manager if you need help with firewall testing, finding your RTMP code and stream key, or building the event page.
- If you have any concerns regarding internet speed/availability or firewalls at the broadcast location, contact your IT department for assistance. Firewall settings can be found here on Brandlive's website: <https://www.yourbrandlive.com/resources/firewall-support>

Additional notes:

When you go over your equipment list, visualize every link in the chain. Don't forget about things like cables and connectors. Is there any additional equipment you need to rent? Make sure you've got everything you need!

If there are any parts of the setup that are new or different for you, connect them ahead of time and test them to make sure everything works. You don't want to be caught off guard by an issue you hadn't anticipated.

3. Day of Event

The day of your event has arrived, and it's time to set up the equipment and get ready for your broadcast.

The steps below will help you get your broadcast set up for success. There is a lot of information here, so make sure to read through these carefully so as not to forget a critical step:

- Check your event page again to make sure that your necessary content is uploaded, the description and information for viewers looks correct, etc.
- Arrive at the broadcast location at least 3 hours before the go-live time. If you can set up and test a day before, that's even better. You'll want plenty of time to get everything working smoothly.
- Connect to the internet on your broadcast computer. Open a web browser and test the internet speed (www.speedtest.net). Make sure the upload speed is still adequate for streaming (at least 10 mbps upload).
- Quit any other programs running on your computer, and disconnect any unnecessary devices from your computer such as USB flash drives.
- Connect your cameras to the broadcast computer (HDMI out of the camera, into a thunderbolt converter for Mac or a USB converter for PC).
- Connect your audio equipment, whether it's a microphone plugged directly into the camera, or several wireless mics plugged into an audio mixer. Connect the mixer to the computer via USB.
- Open your Wirecast profile and start a test stream with a logo or title card and music. Check the test page to make sure you can see and hear the stream. Leave this stream going for a minimum of 5 minutes.
- While the test stream is going, add your camera shots and any other visual assets in Wirecast.
- Link the camera shots to the audio source in Wirecast, and link any other image or video assets to their proper audio sources. Listen with headphones as you click through all the shots to check them.
- Check the CPU usage of your computer during the test stream (Wirecast gives a readout above the Live window). If it's running up into the 80-90% range, you may need to adjust your streaming and recording settings. Refer to the troubleshooting section of this document for more information.

- Make sure pre-recorded videos are set to **hold** when finished instead of loop, and **uncheck** the box that says "Remember position even when not live".
- On a layer above your camera shots, build any lower-third graphics that you want, with presenters' names and titles.
- Make sure all your shots and assets are aligned in a way that makes sense to you.
- If using chat moderation, set up the moderation page on a separate laptop or tablet. Educate the moderator if they have any questions.
- Make yourself a list of things to remember before you go live, specifically to start streaming and start recording. Tape the note to your computer so you can't miss it!

4. Rehearsal

An important component of preparing for your broadcast is setting aside time for rehearsal. The more rehearsal time you have, the more smoothly your broadcast will go. It is important that the presenters and producers are aligned on the Run of Show, so that no unexpected surprises happen.

- Ensure that your presenters are on site and ready to go at least 30 minutes before the go-live time.
- Remember the Run of Show you created during pre-production? Go over this document with your presenters and allow them time to rehearse their content.
- If using multiple cameras, be clear with your presenters on which camera they need to look at. For example, if you have a second camera dedicated for product shots, have your presenters talk to the first camera.
- Explain to your presenters how you will count them in at the start of the show. (For example: verbally count "5, 4, 3, 2", then silently count "1" in your head while pointing to the presenter and making their shot live.)
- Align with your presenters on how they will bring the broadcast to a close. A clear verbal cue such as "Thanks for watching; we'll see you next time!" will help you know when to fade out to your closing logo or title card.
- Remind your presenters to check in regularly with the moderator to see if there are any questions from the audience (or check their laptop/tablet if using "send to presenter" mode).
- The presenters should always repeat the names of the people asking questions via chat. This is important for helping the audience feel engaged and known.
- Go through the full Run of Show, clicking through each shot/asset in order. Triple-check that everything is set up correctly, especially audio and video sources.
- Check that the audio level of all sources are matched to an acceptable level (more info at the end of this section).
- Do a full sound check with all microphones.
- Make sure you or your camera operator are prepared for any close-up shots on either the presenter or product.
- Ask everyone on location to silence their cell phones. Putting cellular devices in airplane mode is strongly recommended when using wireless mics, to avoid signal interference.

- Finally, remind the presenters that it's completely okay if they make a mistake. If that happens, they should simply laugh it off, collect their thoughts, and move on.

Additional notes:

You'll want to make sure you normalize your audio levels in advance. When setting the audio level of your sources, a good rule of thumb is to keep the maximum level around -6db on Wirecast's audio meters. During your rehearsal, run through each shot that contains audio to make sure none of the sources are significantly higher or lower than the recommended range. You may need to manually adjust the audio level of certain shots, especially music or videos which might be mixed at a higher level. You can adjust the audio level of an asset by selecting its audio source in the editing window, then bringing the level up or down in the Volume tab.

5. Go Live!

When you've finished rehearsal and you're confident that everything is in place, it's time to go live for the show. Follow the steps below to get your live show running!

- About 10 minutes before your scheduled broadcast time, cue up your opening title card or logo in the live window and click the broadcast icon button to start streaming.
- At the 5-minute mark, ask your presenters to take their places.
- Click the Record button 1 minute before you go live.
- Announce when you're at the 1 minute mark, and again at the 30 second mark.
- Remind your presenters to smile and have fun!
- Count down verbally from 5 seconds, and fade to the live camera shot on a silent "1".
- Monitor the outgoing audio with headphones, making sure it's neither too quiet nor overdriven.
- Keep an eye on your CPU usage indicator at the top of the Wirecast window. You don't want it getting into the 80% range or higher. Refer to the troubleshooting section for more information.
- Follow along with the Run of Show and listen to the presenter for any verbal cues to show specific visual content.
- Clearly communicate to presenters when you're in a break or playing a video, and give them plenty of warning before you count down to bring them back on camera.
- Double check that microphone audio is not broadcasting during a break or transition.**
- When the presenter signs off at the end of the broadcast, fade to a closing title card or a logo with music.

Additional notes:

Stay focused during the broadcast. It's easy to get distracted, but this can lead to mistakes. In addition your presenters may notice if you get distracted, and this could distract them in turn. Always monitor the outgoing audio with headphones. If a presenter walks on or off camera while wearing a wireless mic, don't forget to bring their audio level up or down as necessary.

6. Post-Event

Your live broadcast was successful and is all finished! Before you pop open the celebratory beers, however, there are a few post-event items to take care of.

- As soon as you've faded out to the closing image/music, let your presenters know that the broadcast is finished and they are clear.
 - Congratulate the presenters and let them know they did a good job!
 - Stop your recording, but leave the stream going for 1-2 minutes. This allows the delay to catch up, and also provides a better experience for viewers who may not close their browser window right away.
 - Ask for feedback, and share suggestions for what could be done better next time.
 - If requested, trim and post the Ustream recording to the event page right away so that it can be viewed on-demand.
 - If you recorded a video file to the computer, give it to the client if requested or save it as necessary.
 - Break down all the equipment, and restore the location to the way you found it, i.e. reset any chair or tables that you moved, etc.
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Troubleshooting

When setting up and producing your live broadcast, issues may arise that you'll need to diagnose and fix. When you're confronted with unexpected problems, the most important thing is to remain calm. You are the professional, and the client will expect confidence that you will make the live broadcast happen, and updates/information about what is going on and how long it will take to fix.

All of this to say, *never stop communicating*. Don't wait to deliver bad news, and never tell the client to leave you alone. Communicate the basic issue and ask for a few minutes to troubleshoot. Report back with options and let the customer know if there's anything they can do for you.

Here are examples of issues that could come up, along with suggestions for fixing them:

A camera source won't show up in Wirecast.

- Check that the camera is turned on.
- Check all connections between the camera and the computer (unplug/replug).
- If using a Blackmagic UltraStudio Mini Recorder on a Mac computer, use the Blackmagic Desktop Video utility in your System Preferences to make sure it is set to the HDMI input (not SDI).
- Restart Wirecast with everything plugged in, and try adding your shots again.
- Restart the computer with everything plugged in, then reopen Wirecast and add your shots.

There is no audio in Wirecast from the microphones or audio mixer.

- Check that the microphones are turned on.
- If using wireless microphones, make sure the corresponding receivers and transmitters are set to matching frequencies.
- Check all connections between the microphones and the computer (unplug/replug).
- If using an audio mixer, make sure it's turned on and that the main volume is turned up. Be sure to also check the volume for the channels that the mics are plugged into.
- Check that the shot you've selected in Wirecast has the correct audio assigned to it.
- Restart Wirecast with everything plugged in, and try adding your audio again.

The audio meters in Wirecast show a signal, but I can't hear anything through my headphones.

- Ensure that the headphone icon is clicked below the audio meters next to the Live window. If it is greyed out, you won't hear the audio feed that is being broadcast out.
- Next to the headphone icon is a speaker icon; make sure this is clicked on (white). If it is greyed out, you won't hear the output audio through your headphones.

I have audio signals in my Preview window, but when I take the shot Live, there is no audio going out to the broadcast.

- Check that the speaker icon is clicked below the audio meters next to the Live window. If it is greyed out, your output will be muted.

When I click the button to begin streaming, Wirecast shows this error: "Cannot connect to the RTMP/Flash server at the given IP address..."

- Go to Output → Output Settings and check that the RTMP address and stream key are entered correctly. Make sure there are no spaces or incorrect characters.
- Copy/paste the correct RTMP address and stream key into their fields again if necessary.

When I click the button to begin streaming, it blinks green and then turns red.

- Make sure you're connected to the internet, preferably via Ethernet on a dedicated network.
- Check the internet speed (www.speedtest.net) to make sure it's strong enough for broadcasting. An upload speed of 10mbps or more is ideal for broadcasting.
- Work with your IT department to make sure your internet firewall settings allow you to broadcast out. View this link for the recommended firewall settings:
<https://www.yourbrandlive.com/resources/firewall-support>

My computer's CPU usage seems to be running high, in the 80-90% range.

- Close all unnecessary programs that are open on your computer. When doing a live broadcast, Wirecast should be the only application running.
- Go to Output → Output Settings and edit the Encoding settings. You may need to consider lowering the resolution and bitrate of your video stream.
- Also in Output Settings, check the settings of your video recording. Try recording at a lower resolution and bitrate to avoid overworking the computer.
- [Click here for the recommended Wirecast broadcast settings](#). Keep in mind that these settings are a base starting point and may need to be altered depending on your specific circumstances.
- If you've tried the above steps and your CPU usage is still high, your computer may not be powerful enough for broadcasting. [Click here](#) for recommended technical specifications of computers and operating systems.

The internet dropped out, and my broadcast stopped.

- If you can get the internet back up and continue broadcasting, do so as quickly as possible.
- Ask your moderator to communicate to the online viewers that they may experience a temporary break in the video stream.
- If the internet is not working and you can't stream, calmly let your moderator and presenters know so they can communicate with the online audience and decide how to proceed.
- Remember that a backup option is to record the presentation for broadcast at a later date.

We hope that this Brandlive Production Playbook provides you with all the information you need when planning & producing your live broadcasts, and we highly recommend that you continue to use it each time you go live. As you now know, there are so many steps on the production side alone; why leave any of them to chance?

Please reach out to us at support@yourbrandlive.com if you have any questions. Good luck and we look forward to seeing you live!