

Part Three

8.0 Video Editing

If you are starting to get jobs and shooting shows for promoters, it is likely you are going to be the one editing the footage together. Some of the bigger promotions are cutting and streaming all their shows live, and so will often not need an edit afterwards, but for many promotions it is more cost-effective for the show to be shot by one person and edited by that person afterwards.

Editing is also a great way to prepare yourself for directing live in the future. With the techniques we are going to discuss, you get to edit a show almost as if it were live, but without the pressure of the live environment, and with the advantage of being able to go back and fix your mistakes before the product is seen by the viewer.

8.1 – Software

The two pieces of editing software I would recommend are Adobe Premiere and DaVinci Resolve. Both are industry standard.

I personally use Adobe Premiere and the Adobe Creative Suite. For a monthly membership you are given access to many pieces of well-known software like Premiere, Photoshop, Audition and After Effects. I use all of these in my work with shooting and editing professional wrestling.

Not everyone will be able to or want to spend money on software straight away though. If this is the case, or indeed if you just prefer it, DaVinci Resolve is available for free from the DaVinci website.

Both pieces of software are very versatile, and can be used to edit short films, sport, drama and almost any other type of show. There is one feature, however, that both programs offer that is extremely useful to someone editing professional wrestling. That feature is 'Multicam'. This feature basically recreates a vision mixer in your edit suite and allows you to pick from different camera angles as they all play simultaneously.

Here's what it looks like in Premiere:

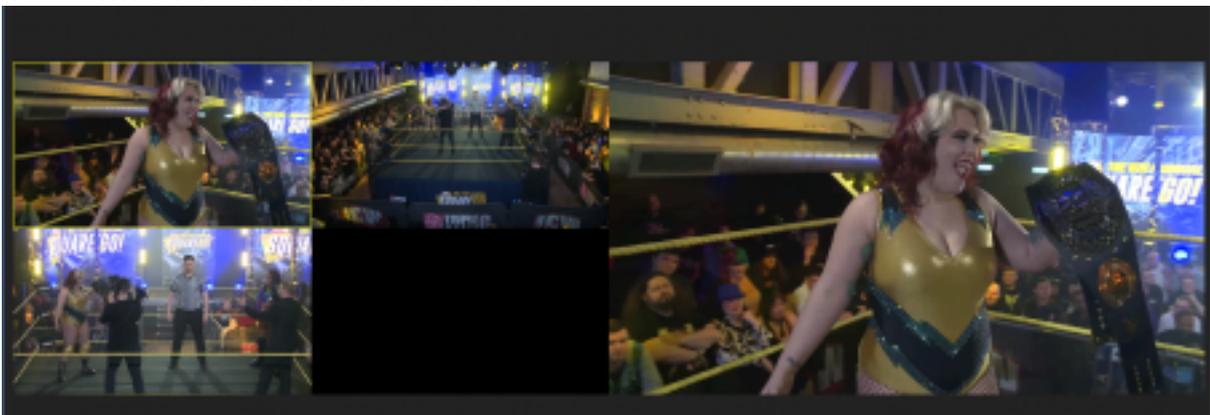


Figure 1: Multicam View in Adobe Premiere

And here it is in Resolve:

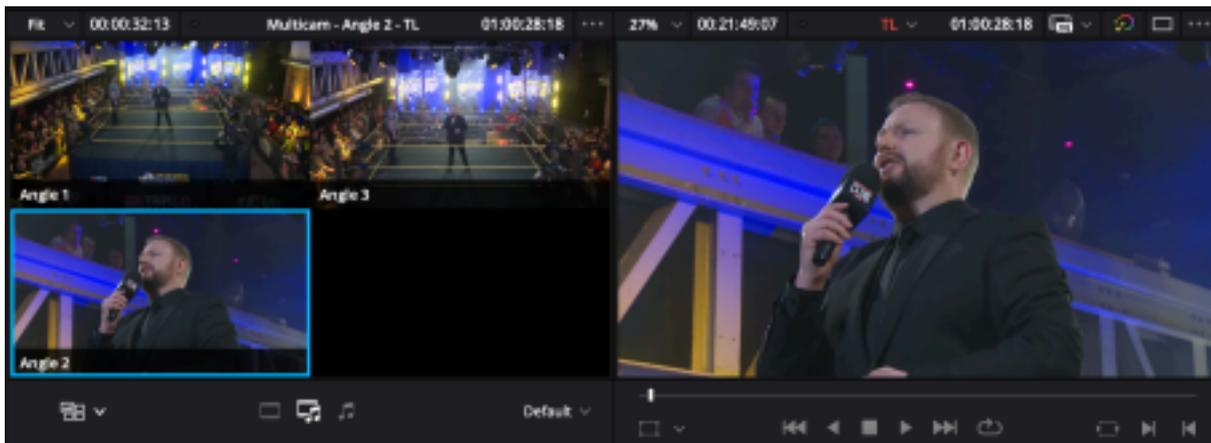


Figure 2: Multicam View in DaVinci Resolve

In this example there are three cameras. One is a wide lock-off, one is an operated hard cam, and one is a hand-held ringside camera. Both programs allow many more camera angles to be used. It should be noted however, that the more angles you have, the more processing power you will need. If you end up editing an eight-camera show, you will either need a powerful computer, or to start looking into proxy files. For the moment though, let's keep it simple and work with this three-camera match.

8.2 - Creating your multicam clip

Let's say we have multiple files. Each is a recording of a match from the different angles mentioned above. To create a multicam clip, we need to find a sync point. This is a point in the clip that we can tell the software is the same moment in time across all clips. Ideally, you will have performed a sync clap at the start of the show, or in this case match. This is done by pointing all cameras at one person, hitting record, and then having that person clearly clap once. As they enter frame their hands should be open, and when performing the clap, they should hold their hands closed for five seconds or so. Here's an example:

<https://youtu.be/GqH4ScoOIQk>

If you don't have a sync clap as a reference, you could use the moment that a wrestler first touches the rope on their entrance, or something similar. You just need to find something that is a clear moment in time across all cameras. If you are shooting it all yourself of course, just do a sync clap, either with your hands or a clapper board.

8.1 - Adobe Premiere Multicam

Please read this all whether you are using Premiere or Resolve.

The next step is to put a marker at this point. You can do this by double-clicking your clip to open it in your source window, navigating to the moment of the clap and then pressing the 'm' key. You will then see a green marker appear:

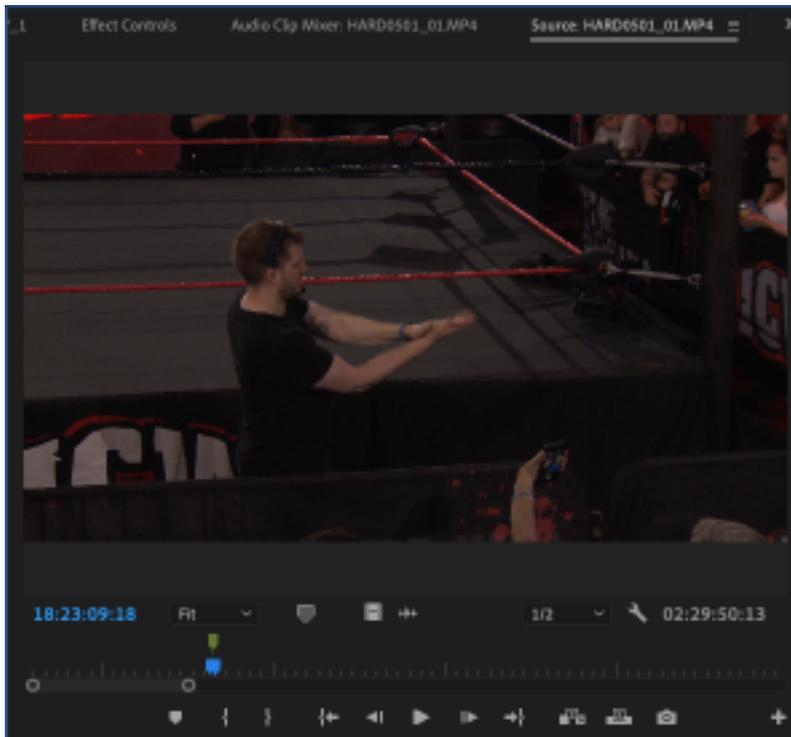


Figure 4: Setting a marker in Premiere

Do this for all your clips.

It is then time to tell Premiere that you want these to be part of a multicam clip. Select all of the clips in your project window, right-click and choose 'Create Multi-Camera Source Sequence'. In the pop-up that appears, choose 'Clip Marker' as the Sync Point, and give the sequence a name. 'Multicam' will do fine. Click 'OK' and you will see a new source sequence appear in your project window. Right-click this and choose 'New Sequence from Clip'. This will create another sequence file in your project folder, with the same name – but different icon – to your source sequence. You can rename this if you like, as this will be the main timeline you will work on. Normally it will appear with one video track and one audio track. See the video below:

<https://youtu.be/yKQjJGxj4tk>

We are almost ready to edit. First, though, we want to look at our audio. By default, Premiere combines all the audio into a single track on our timeline, as can be seen at the end of the video. For the way I edit professional wrestling, this isn't suitable. I'd much rather have my main video track – with all my camera angles inside – on the same timeline as all my audio tracks. This way I don't have to keep going into the multicam source sequence to see what my audio looks like. To do this, hold 'Ctrl' on PC or 'Cmd' on Mac, and double-click on the video track of your main multicam

timeline. This will open up the source sequence that contains all of your camera angles and audio tracks. Select all of these, right-click and choose 'unlink'. Then, select all of the audio tracks, right-click and choose 'copy'. Go back to your main timeline, select the sequence in it, right-click and again choose 'unlink'. Then delete the audio track, go back to the very start of the timeline, right-click and choose 'paste'. This will put all the audio tracks in the correct place in relation to the multicam video.

Here is a video example:

<https://youtu.be/30Cp1rRUR1w>

Now we are in a place to start editing.

8.3 - DaVinci Resolve Multicam

The following is all done in the 'Edit' tab, which you can choose at the bottom of the Resolve program window.

The process for Resolve is quite like Premiere. You should open all your clips and put a marker on them by pressing 'm' at your chosen sync point. Then select all the clips in your media pool, right-click and choose 'Create New Multicam Clip Using Selected Clips'. Name this as 'Source Sequence' or whatever makes sense to you. You will see this clip appear in your media pool. Create a new timeline in your media pool. Open this and drag your Source Sequence into it. You will now have one video and one audio track, just like we did in Premiere.

Just like in Premiere though, we want to have our audio channels in the same timeline as our multicam clip. To do this, right-click on your source sequence and choose 'Open in Timeline'. Select all of the video channels, right-click and choose 'Link Clips'. Then right-click again and choose 'Link Clips' again. All of your tracks are now separate. Select all the audio tracks, right-click and choose 'copy'. Right-click on your Multicam Timeline in your media pool and choose 'Open in Timeline'. Unlink the audio and video tracks, delete the audio track, navigate to the very start of the sequence and paste in your audio. These are demonstrated in the video below.

<https://youtu.be/8lsk-TmZzuU>

If you are not seeing all your angles then click between single and dual viewer mode in the top right of Resolve, and check that the multicam option is selected in the source pull-down on the left, as pictured below:



Figure 7: Multicam and dual/single view buttons

If you have all this lined up in Resolve, then you are ready to start editing.

In both programs, it's simply a case of pressing play and selecting the camera you'd like to use at the desired time. You can do this by clicking the angle in the window, or by using the relevant number on your keyboard. I prefer the keyboard as I find it quicker, and more like editing a live show. If you make a mistake, you simply drag your timeline indicator back to before you made the mistake, hit play and choose the correct angle at the correct time to rectify it.

If you wish to apply an effect to a cut – like a dissolve – then make the cut as normal, press stop and then apply the effect.

8.4 - Editing styles and techniques

Of course, editing a show is not just about choosing angles at random until you're at the end of the timeline. There are reasons we cut to angles at particular times. These decisions are linked to what we have learned earlier in the course about the role of each camera.

As we discussed, the hard cam is generally showing the geography of the match – where everyone is. The ringside cameras are best for capturing high impact moves and emotion. Wide shots can show crowd and the arena, as well as a safety camera that shows everything. These are just some of the things that should impact the hundreds or even thousands of cuts you may make during a show.

The style in which you choose to edit is in the end, up to you. What do you think looks good? What do you think tells the story? How many cuts is too many in a match?

What I would like to do now is discuss some specific examples of scenarios and how I would edit them, and why I think it is a good way to do so.

8.5 - Entrances

For wrestler entrances, I want to show the viewer where we are. I then want to draw their attention to the entrance way, ramp, stage etc. and make a feature of the performer who is about to appear. I want to get their character across, or to show that they are a star, or whatever the show or promoter demands at that time.

Have a look at this Undertaker entrance at Wrestlemania 27:

https://www.youtube.com/watch?v=YHH0YgiD8WQ&ab_channel=WWE

It begins with big wide shots that show off all the lighting effects, the arena and the crowd. We get tight shots of his opponent Triple H standing in the ring waiting for him. Our attention is first drawn to the grand setting, and is gradually drawn, after all the atmospheric shots, to The Undertaker entering the arena.

What didn't happen was that Undertaker's music hit, the director instantly went to a tight shot of the entrance, and we were then subjected to 30 seconds of nothing before The Undertaker entered.

Of course, this is production and budget of the highest level, that we won't have available to us at a local indy show. The task is then to edit something together – with your or someone else's footage – that does the absolute most to create as good a product as possible.

Note all the cross-fades during this entrance. I would almost never use a cross-fade or dissolve during regular action in a wrestling match, but I use them a lot during entrances. For an entrance like The Undertaker's, with its slow and atmospheric shots, a fade can be the perfect transition between shots.

Here's an example of using cross-fades and the available production to edit together an entrance that's interesting and atmospheric:

https://youtu.be/FuWF8LN_csU?si=mN05s9_x4ZO3MS0e&t=1316

and another with a slow zoom towards the entrance with a cross-fade to the next shot:

<https://youtu.be/DuOEBj84Llo?si=KXMQxEaTy5TWHt4V&t=6469>

If you are shooting and editing a show, think about what shots will be useful to you in the edit, and then shoot them during the show. With experience you quickly learn that most wrestlers do not walk out on the stage the second their music hits. They often wait for the beat to drop in their entrance tune before doing so. You need to shoot and edit in a way that allows you to make the time between the MC announcing them, their music hitting, and the moment they walk out onto the stage, interesting for the viewer.

8.6 - Talking Segments

WWE edit their talking segments very well. There is always a reminder of the geography – who is in the ring and where. They include lots of tight shots, and the

camera operators add 'pushes' to these tight shots. That means they start slightly wider and do a slow zoom in to the wrestler as they are talking. This emphasises the point they are making, makes us think more about them and what they are saying, and generally adds production value and drama to the segment. As an editor you need to capture these moves properly. If you shot a talking segment and added these slow pushes in, make sure you cut to that angle at a good time to capture them.

Another technique to think about with talking segments is Video Follows Audio – or VFA. This means that you normally cut to the single (a shot including only one person) of the wrestler AFTER they have started talking. It may only be a second, but you should delay your cut to allow this to happen.

I like to imagine the camera as a person standing next to the people involved in the shot. So here, imagine yourself standing directly in the middle and a few feet in front of Cody Rhodes and Roman Reigns. Before they talk, you would probably be looking at both of them – getting the geography of what is going on in your mind. Then, when someone started talking, you would turn your head to look at them. When the other person started talking, it would take you a short amount of time to turn your head and look at them. If one of the people said something particularly nasty, nice, interesting or inflammatory about the other, you would turn to look at the person who was not speaking to see their reaction to what has just been said. This can all be reflected in your edit.

8.7 - In-ring Promos

https://www.youtube.com/watch?v=7HuWKnHjEIA&ab_channel=InsaneChampionshipWrestling

If you are reading this you are probably familiar with the in-ring promo, a typical example of which is above. A wrestler or team of wrestlers makes their entrance and addresses the crowd and camera.

In terms of editing, there are a few things to keep in mind. One is having a variety of shots that help tell the story but are different to each other.

It does not look good to cut between two shots that are very similar. Have a look at this:

<https://youtu.be/HMVgc2rTXYA>

Around six seconds in, what do you notice? The camera angle has changed, but the shot is very similar. Did you like it? The chances are you didn't.

This example is from an entrance, but it would be very easy to make this mistake

during an in-ring promo, or indeed during a match with two operated hard cams. When watching the ICW Jack Jester promo, you will notice that the shot from the hard cam and the shot from the ringside camera are normally quite different. The hard cam is head to toe and the ringside camera tends to be tighter. There is not one right way to do this. You could swap those roles, and indeed now that is what I tend to do. What you don't want to do is cut from one shot to another, where two cameras are framed very similarly. In a talking segment like this it could be particularly distracting to the viewer and could detract from the content of the promo.

Thinking about all these topics will help your shooting, editing and directing.

9.0 - Audio Editing

The nuances of audio mixing and editing are the subject of many, in-depth courses. In my experience though, I have found there are some topics that are particularly useful when it comes to shooting and editing professional wrestling.

9.1 – Audio Volume Levels

As we discussed earlier, I prefer to have my timeline consisting of a multicam track and then all my audio tracks beneath. Here is a list of audio tracks I would have in a typical edit:

1. Microphones
2. Music
3. Ringside Camera
4. Hard Cam (atmos/background)
5. Commentary One
6. Commentary Two
7. Promos
8. Additional Music
9. SFX

This would be for a show that I have edited into an episode, or a streaming event etc. It consists of matches, backstage promos and adverts.

Nine channels are enough to present some problems. You can't just stick them all on there at 100% volume and hope for the best. Instead, we must provide an audio mix that has some thought behind it.

My feeling is that the audio presented to the viewer should be like that of someone who is at the show live, in the front row of the audience. This spectator though, has the benefit of earphones that give them a feed from commentary, a feed from the mics that the MC and the talent are using, and a feed from the music that plays for the wrestler entrances.

In Premiere we can adjust these levels using the Audio Track Mixer. In Resolve, it's the audio tab. I prefer setting the levels here rather than changing the volume of individual clips in the timeline. It's clearer to see quickly and allows for fewer mistakes in my opinion.

You will have to listen to what you have shot and edited to find out what you think is a good mix. I would, though, suggest something like this:

1. Microphones (-3db)
2. Music (-9db)
3. Ringside Camera (-8db)
4. Hard Cam (atmos/background) (-20db)
5. Commentary One (-3db)
6. Commentary Two (-3db)
7. Promos (-6db)
8. Additional Music (-15db)
9. SFX (-6db)

Of course, you will probably only be using some of these in the first jobs you do. Channels 1-6 are the most important here, and the most likely to be what you use to begin with.

My thinking is that voices should be around the same level. If you watch WWE, an in-ring promo is around the same volume as the commentators. The same with the ring announcer/MC. Ringside audio is loud enough to feel immediate and nearby. There is also a good level of atmospheric sound (atmos) from the crowd, that the viewer gets a feel of the size of the arena. They can hear the people in the front row, but they can also hear the thousands of other people in the arena, but at a slightly lower level.

If you watch a show where the commentary audio is a lot louder than the action in the ring, it gives the impression of the commentators being detached from what is going on. We can hear what they are saying, which is of course important, but the action feels distant. It feels like they are watching it on TV themselves and commentating over it.

Commentary levels should be loud enough for us to clearly hear what the commentators are saying, but not so loud that they are distracting from the action in the ring.

9.2 – Audio Techniques

Things can start to get technical here. Perhaps in your first job where commentary was recorded for the show, you had no part in it. You could be handed audio that is totally distorted. If that's the case, then there is a limited amount you can do about it.

Distorted audio means there is a lack of audio information that you will be able to salvage. If the audio, however, is just a bit quiet, or uneven in its volume throughout the show, there are things you can do to help.

The first thing is compression. This is a common audio tool that can be put to great use. It makes the difference between the quiet and loud parts of your audio track smaller, resulting in a more consistent audio level throughout. I find this particularly useful for commentary and talent microphones in a show. To me, the viewer should be able to hear these at a consistent level throughout the show. I don't think small nuances in level add to professional wrestling like they may do in a feature film. I don't want my audience to have to change the volume level on their TV while watching a show I have produced.

Here's how to apply it to a track using the audio track mixer in Adobe

Premiere: <https://youtu.be/NIOLYVw6rdI>

Other things you could do are consider adding bass to a poorly recorded commentary track to beef it up a bit. You should also be aware of what tracks are playing over what channels. Do you have one commentator's voice coming out of the left speaker, and the other commentator the right? And if so, is this really how you would like your viewer to experience the show?

Music volume is also important. When recording a show in a new venue, I make sure to speak to the venue technician. They are usually able to give me a feed out of their mixing desk that I can plug into my cameras with an XLR cable. XLR cables are very common cables, often used to carry audio. The cameras I have recommended as being suitable for pro wrestling all have XLR ports that you can utilise here. In the edit, this gives us an audio track that has a clean feed, without the noise of the audience. Adding this track on top of the audio from the room will sound superior to relying on ambient sound only.

Audio is often over-looked at the independent level, but it is something you should aim to do well. Keeping what we have discussed here in mind will help.

Part Four

In the final part of the course, we are going to look at an introduction to directing, and options for the technical setup for a show.

10.0 - Directing

This is the area of shooting professional wrestling that I would argue is the most difficult to learn. After all, as director you are the one in charge, and the buck stops with you. It is not a position you want to be in without some experience.

For that reason, what we will be looking at here is an introduction, albeit one that will set you in good stead to start your career in directing professional wrestling.

10.1 – Transitioning into directing

Many multicam directors are camera operators before moving into directing. Although the director has important professional relationships with many members of the crew and talent, there is a particularly strong relationship between director and camera operators. As a camera operator, it is the director who is talking to you directly for much of the show. It is the director who is telling you where to be, when to move and whether they are happy with your shot or not!

It is, then, a common transition for a camera operator to move into the role of director. If the operator has had extensive experience of performing that role, it is likely that they know very well the positions and shots that are required of not only their camera, but of all the other cameras on the shoot. This knowledge is extremely useful when making the jump to director and taking on the responsibility of telling everyone where to be.

As I have said, when you are the director, the buck stops with you. If you have rehearsed a segment which doesn't go right on the night when it's happening for real, you may look to the camera operator who missed it. At the end of the day though, it is your responsibility to instruct that camera operator and to make sure they know what is going on and what shot you need from them.

10.2 – Responsibilities of a director

For this discussion, I'm going to assume that you are directing an independent show with a decent budget and size of crew. You have several camera operators, all with prosumer level cameras and all with a good level of experience.

In this role, things that are your responsibility include but are not limited to:

- Positioning of cameras
- Position of backstage or Front of House (FOH) equipment
- Talking to talent regarding spots and entrances
- Recording of the show
- Streaming of the show
- Loading cameras with media (memory cards etc.)
- Audio levels (whether taking care of them yourself or delegating to a sound recordist)
- Backup of footage
- Lighting (whether on your own or through discussions with venue staff)
- Technical links to other crew
- Video feed to backstage monitors
- Calling the shots! Telling your camera operators what shot you are on, and what's coming next

On large professional shoots, it's very unlikely one person would have to be in charge or "across" all of this. Professional wrestling, however, is different. Budget constraints affect every promotion, especially at the independent level. As director you will hopefully be an experienced individual who is able to deal with issues arising in all these areas, and all at once!

We are going to cover the more technical aspects of these responsibilities later. For now, let's consider the creative ones. Talking to talent and your crew is perhaps the most important thing about directing. You do not have to be an extrovert, and you do not have to be loud. You do, however, need to be able to confidently put forward your vision for the show. You also need to be able to do this in the face of doubt or opposition and maintain a professional relationship that shows you are in charge of this area of the production.

10.3 - Shot Calling

Let us consider calling shots. This is you talking to your camera operators through a headset, telling them which shot you are about to take, and then telling them again when you have taken it. In professional Outside Broadcast (OB) setups like major sports and indeed wrestling at the highest level, each camera will have a tally attached to it. This is a red light that illuminates when that camera is live. In independent wrestling it is quite unlikely, although not impossible, that you will have tally lights. Therefore, you need to communicate to your camera operators that they are about to be taken live, are now live, and are now not live, by using your voice. I use a simple method for this. It is not one I invented, just one that I have heard other

directors use, and then have adapted slightly to suit the needs of the wrestling shoots I work on.

Say I have three cameras – camera one, camera two and camera three. My directing may go something like this:

“Ready three, take three. Still on three, still on three. Ready two.....take two. Still on two and we’re going to fade through to one. Ready one, hold your shots, fading through to one, and I’m on one.”

Let’s break that down. I’m telling camera three to get ready. That means they must present a shot I can use. That means they shouldn’t be reframing, moving around, zooming in etc. When I say ‘take three’ I am pressing the button on my vision mixer (more on that later) and making camera three’s shot go live. The gap between me saying ‘ready’ and ‘take’ can be less than a second. Ideally, it’s more – I want to give the operator time to give me a good shot – but in a fast-paced environment like professional wrestling the cuts often come quickly.

So, I am on camera three, and I need to tell the operator that I am still on them. It doesn’t need to be constant communication, but without a tally light I have found that it is best to remind the operator every few seconds that their shot is live. They are in the thick of it, potentially tired if they are two and a half hours into a show. It is your job as director to get the shots you need and to help the operator to give you them. So here I am reminding them every few seconds that their shot is still live, and that they should be aware of this and keep a useable shot. This time is also used by the other operators if they need to reposition or reframe.

Next is ‘Ready two’. Same as last time, I am telling this operator that I am likely going to use their shot next, and they should be presenting a shot that is good to be taken.

As a ringside operator, I have found that my shot really needs to be useable around 90% of the time. There are times when you need to physically move quickly and you cannot hold a good shot, and there are times when you’ll need to reframe quickly, and your shot won’t be useable. At most other times, though, you should be able to provide a useable shot. It will be useful for if a director needs to come to you and doesn’t tell you they are going to do so. It also helps for replays and for archive footage from that camera that may be used in video packages. As director, it is up to you to ensure that your camera operators are giving you what you need in this area. If you have operated camera and been able to do what I am talking about here, it is completely fair for you to ask that of your operators.

After that it’s ‘Take two’. I am pressing the button on the mixer and camera two’s shot is now live. A few seconds later, I tell the operator that I am still on them. I then decide in my head that I want to use a cross-fade rather than a cut for my next shot.

This wouldn't generally be for regular in-ring action, but perhaps if I wanted to fade to a shot of a title belt or exterior of the arena, I would consider a fade. For the fade to work, both cameras need to be holding a steady shot. So, I tell cameras two and one that this is what's going to happen. During a fade, both cameras are live for the period of the fade. If I don't remind both to hold their shots and stay steady, I have often found that the first camera operator will reposition or reframe, because they think I have cut to the next camera. All it takes is communication. Remind the operators what is going on and talk them through it. When you tell them that you are now on camera one, camera two knows they are now free to reframe or reposition if needed.

10.4 - Rehearsals

Rehearsals are very useful when you are in charge of directing a professional wrestling show. I would almost never rehearse an entire match, but I would rehearse things like a new entrance, a segment with interference or a talking segment. My general approach is that I do not need to or have time to rehearse general in-ring action. What I do like to rehearse are segments when something out of the ordinary is happening.

As director it's up to you how you would like these rehearsals to go. In the world of drama and feature films, what often happens is that the talent get together with the director to 'run' a scene. Once they have in mind how they would like it to go, the crew is invited into the room or studio, and the talent then show them what the scene looks like. By this I mean what action takes place, what is said and where the talent or actors are physically in the scene.

We can adapt this for wrestling. As director, I aim to talk to the talent from every match – particularly those higher up the card – and ask them if there is anything I should know about for filming. The more experienced wrestlers will know what information to give me, but those newer to working for cameras may need to be reminded. Here I would tell them that I need to know things like if they are going to go out of the ring during the match, if there was going to be any interference, if there were any intricate spots during the match that could be easily missed. An example of the latter could be a wrestler's manager sneakily putting their wrestler's foot on the rope during a pinfall attempt.

After talking to them, if there is anything I think I would like to see or rehearse, I will arrange a time to get them into the ring. You must prioritise here. It is likely that you are going to be very busy with the technical side of the show at this time too. The talent won't necessarily know this. If someone lower down on the card is asking to rehearse a spot that you are confident your camera operators will capture by doing what they normally do, it is absolutely fine to tell the talent so. This isn't being disrespectful; it's managing the limited time you have to rig and rehearse the show.

With this limited time in mind, you should make sure your camera operators are ready to go for the rehearsals you have arranged. In larger companies, many hours are spent on rehearsals. You are unlikely to have this luxury, so it's important to be as efficient as possible here. Get the talent to show you the spot and have your camera operators shoot it at the same time. Unlike my example of rehearsals in drama, you don't need to have a run-through without your cameras. I like to be in the gallery (directing room with all the monitors etc.) for this, and then pass notes to the wrestlers through my most experienced camera operator. You could also choose to direct these rehearsals from ringside, though.

If the rehearsal does not look good on camera, then it's your job as director to change things around. Most commonly these changes will be positional. Perhaps the interfering wrestler or manager needs to come into the ring from a different side so that the cameras can see them. Or it could be the opposite; you want their interference, move, etc. to be hidden to cameras until the last moment. The rehearsal could be of an interview segment where the talent is not aware of the best place to stand for their emotions and actions to be captured. Here you can explain to them where they need to end up in the ring or stage before beginning to talk.

If it is a wrestler's entrance you are rehearsing, then you will also need to be talking to the technical crew who oversee lighting, videos and music. If they are not close by to your position, then you may need to provide them with one of your headsets so that you can communicate cues to them. Cues are the times at which they need to start music, change lighting states etc. It will depend on your production whether you direct them to do these in the live show, or if they take notes and cue themselves.

As with all live performances – sometimes things do not go to plan, and what you rehearsed is not what will come to pass on the night. By rehearsing to the best of your ability, though, you give you and the crew and talent a good chance of getting across the intended story.

11.0 - Technical Setup of a Show

At the independent level, it is essential that you cultivate a good knowledge of audio and visual equipment. As the person setting up and recording a show, most technical issues are likely to fall at your feet. Depending on venue, you will be able to liaise and work with venue technicians, but overall, it is essential that you are on top of how all the relevant equipment works.

There are an infinite number of ways to set up the technical aspects of a show, but for our purposes it will be useful to start with one as a template which can be adapted to suit your needs. In the attached document I have drawn out the basics of a

common setup I use. I suggest opening it or printing it and having it visible while you read this.

11.1 – Example of a setup

In this setup I have four cameras – two hard and two ringside. Cameras one to three are cabled, and camera four is using a wireless video system. This system consists of two boxes. One is a transmitter (Tx) that is attached to the camera and fed with a video signal from that camera. This is usually an HDSDI signal through a BNC cable, or an HDMI signal through an HDMI cable. The other box is a receiver (Rx) that is placed within line of sight of the camera. This receiver and all of the cameras are then cabled to the switcher via BNC cable.

There are many wireless video kits on the market. A trusted brand is Teradek. Here is a kit similar to what I have used:

<https://teradek.com/products/bolt-6-lt-set?srsId=AfmBOoqyJHscbc8OCn9IZU20dlUUmXCCESq6xbtn7PCT9xILTeXGt-e6&variant=43804407660722>

The switcher is a machine that we feed with all the video signals from our cameras. At a prosumer level you could look at something like the Blackmagic Constellation HD:

https://www.eastwoodsoundandvision.com/blackmagic-design-atem-1-m-e-constellation-hd-live-production-switcher?gad_source=1&gclid=CjwKCAjw1NK4BhAwEiwAVUHPUFgSI_sK-laDEeOz1ly4IEQUHZFsOBgd52fQRJVH0Ik3WNgSUfXICBoCK-oQAvD_BwE

The switcher has buttons on the front to select the camera angle, but this isn't ideal for directing a live show. So instead we need to plug in a panel, or use a laptop as a panel. I tend to use a laptop, but you could use a Blackmagic panel like this:

https://cvp.com/product/blackmagic-atem-micro-panel-swpanelaa1me10?gad_source=1&gclid=CjwKCAjw1NK4BhAwEiwAVUHPUONwFTHDN0vMy3vr1PiHhZJC7I-j7EJ1D53d2pcjT7eaEPCZ8plfahoCZSMQAvD_BwE

11.2 - Multiview

A switcher will have multiple video outputs. One of these will be labelled 'multiview'. This gives us a screen displaying all our video inputs, as well as 'preview' and 'program'. It will look a bit like this:

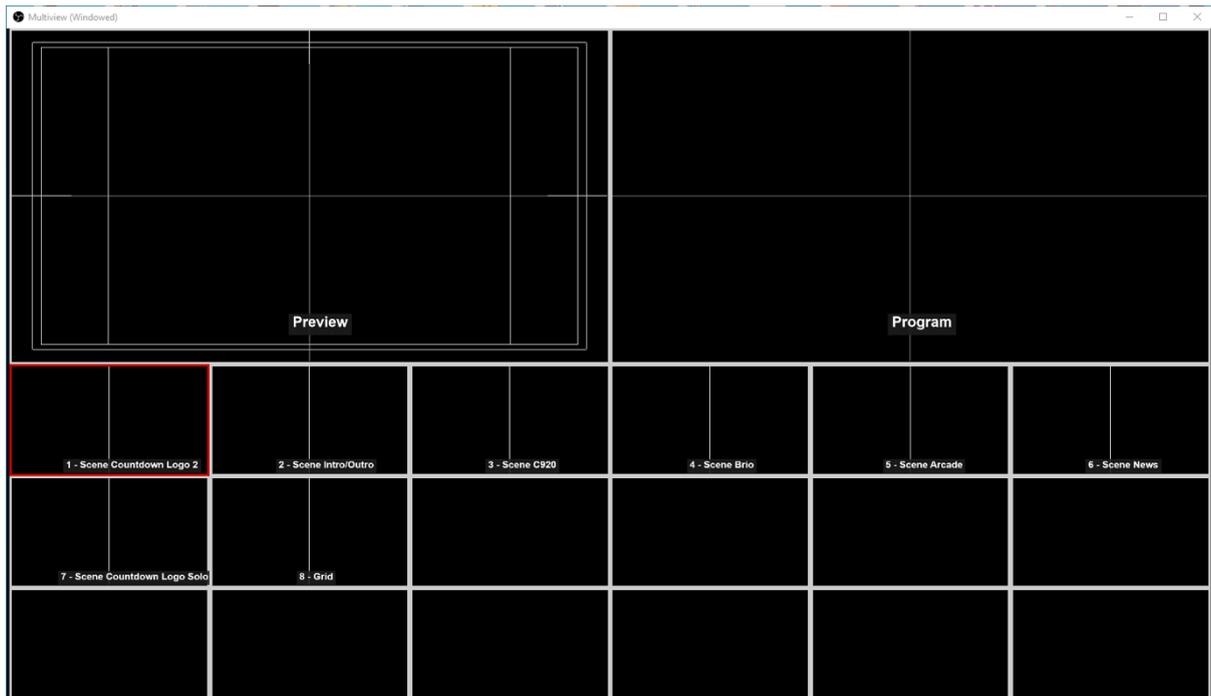


Figure 1: Blank multiview screen

Each time you plug in a camera you will see it appear in one of the smaller boxes. Think back to our 'ready two, take two' discussion earlier. When I say 'ready two', I hit number two on my panel. That shot then appears in the preview window. When I hit the cut button on my panel, that shot moves from the preview window to the program window, and is now live.

11.3 - Program

The program feed is the most important of all. That is what the viewer at home sees when they are watching the show. The switcher will have one or more program video outputs, but I usually find I need a lot of these. One way to add more is through a video splitter. I use Blackmagic ones, but there are other brands too:

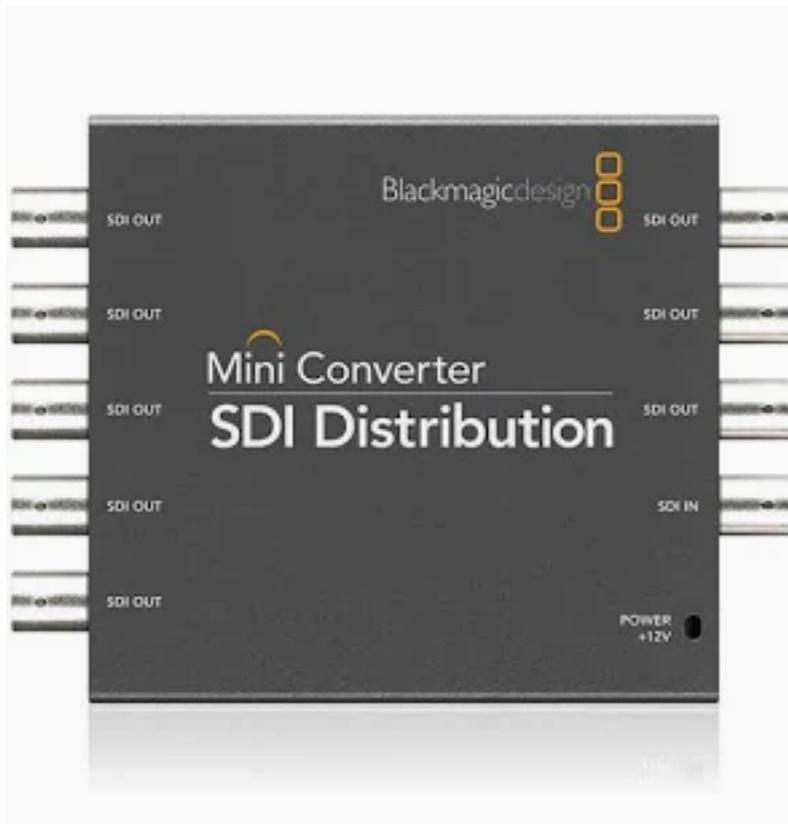


Figure 2: video splitter

This takes one signal in and gives you multiple copies of it out. These are inexpensive and really valuable on a shoot. With this I feed multiple things, including my master record.

11.4 – Other equipment

I like to have a clean master record of the show. This means a copy of what I have cut, but with no graphics or overlays. Again, there are many options here, but you could use something like the Blackmagic Video Assist, or one of the Atomos recorder range. These often have a monitor attached, which is another useful tool when shooting.



Figure 3: Blackmagic video recorder

This will usually record onto SD cards or SSD.

The program splitter can also feed all your monitors. In the diagram I have shown backstage, venue tech and commentary monitors as common examples. Just to keep you on your toes, though, these monitors will likely not take an SDI cable feed. Your TV at home doesn't have one, and unless you are using studio grade, high-end monitors on your wrestling shoot, they won't either. For this you can purchase SDI-HDMI adaptors such as this:



Figure 4: HDMI to SDI converter

Or you could output one SDI cable to an HDMI splitter and then use that for all your monitors – it's up to you to decide what is the best and most efficient setup.

If you are streaming live, then you need a way to get all this online. This is another part of the course that could span a course in itself, but for now we can look at the basics. Your computer will need to have a way to take in the program feed through SDI or HDMI. This can be achieved with a capture card such as the Blackmagic UltraStudio Recorder 3G:

https://cvp.com/product/blackmagic-bmd-bdlkulsdmarec3g-ultrastudio-recorde?gad_source=1&gclid=CjwKCAjw1NK4BhAwEiwAVUHPUFowBFD4yvhoZgZ_K9wDRdMRtcr6MhP2AVTPJMFscd-9KGMR_PFhXxoCME0QAvD_BwE

Cheaper options are also available and may do everything you need them to, but Blackmagic kit has served me well.

From here you will need software like Streamyard or OBS to stream the show. Both are used widely, but OBS is free, and I find it to be very useful for my streams.

You could also consider a hardware streamer such as the Blackmagic Web Presenter. Some users find this preferable to a laptop.

11.5 - Audio

This is an area where many streams fall apart. If you have the luxury of having someone to mix your sound, then they will be able to give you a feed, probably through XLR cables, that you can plug into your switcher.

There is a useful feature on some switchers that allow you to take audio from your cameras through SDI or HDMI. So, the same cable that is sending video to you, can also send audio. For shoots when budget is very limited, there is a way to use this to your advantage. Most cameras can set their audio inputs to be managed automatically by the camera, rather than the user having to set an audio level. If you plug your commentary, music and microphone feeds (remember these from editing?), you can have your camera automatically adjust their level and take all these audio channels into your switcher. From there you can set a general level for them, and after judging that to be OK, you should be able to mostly leave it as is for the whole show.

The shows you shoot will have their own requirements and quirks. For a basic live stream of a wrestling show, you need to think about getting the video and audio from your cameras into a switcher and/or computer and streaming that feed to the relevant place. When starting out, it is likely you will find new things each time that you want to add to your next show. Start with the basics and then keep filling in the gaps and improving your product each time.

So, as you can see already, there are a lot of moving parts and a lot of options when it comes to the technical setup of a show. All this information makes more and more sense each time you do it for real. It helps, though, to go into working in this industry with as much knowledge as possible.

12.0 – Conclusion

Thank you for reading this course on How to Shoot Professional Wrestling! What you have learned here will put you in good stead to cultivate an interest or career in wrestling production and in the entertainment industry in general. Look out for updates and further courses and activities to take part in and add to your knowledge.

Until then, thank you and good bye for now!