

## TIPS & BEST PRACTICES

For those who are interested in the video production process, these are the best practices used by Video Production Services. Also, all outside footage submitted for inclusion in a video project should display the use of these practices in order to be considered of acceptable quality.

See below for information on:

- [Writing & Planning](#)
- [Appearing/Speaking on Camera](#)
- [Recording Video with a Phone](#)
- [Recording Video with a DSLR or Camcorder](#)
- [Recording Interviews](#)
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## WRITING & PLANNING

- **PLANNING:** The more that is planned out in advance, the better. Storyboarding allows one to plot out the blocking, lighting and camera work for each shot, and also forces one to think about details like location specifics, set pieces, props and shot assembly. Even if it's only stick figure drawings, it's important to take the time to visually plan out each shot. Where will the camera be? What's the location? Where within that location will each shot take place? What's the light source? Will the existing light in the location be enough or are additional lights needed? Are the shot types different enough that they won't look strange when cut together in editing? Have all necessary resources been gathered?
- **WRITING:** Before immediately jumping to "let's just do one shot on a tripod of this person talking", one should first brainstorm some of the most creative ways to get across the goal/message of the video. Even the craziest most out-of-the-box ideas are worth writing down. The only rule of video is, 'Don't be boring.'
- **WRITING & BLOCKING:** The trick to keeping the audience watching is movement. That might mean camera movement, action and movement within the scene, or it could mean cutting to a new shot before the audience gets bored. This pacing and movement should be something that's planned out in the writing stage. Even if video is needed of one person talking, there are usually other relevant types of shots the video could cut to while they're talking. Or if there's another way to do it besides a person talking, like a comedic skit or something with action, that's even better. A good video must 'Show, don't tell' whenever possible.
- **LENGTH:** Less is more. The video shouldn't be any longer than it needs to be. It should be just long enough to accomplish its goal and deliver the intended message in an impactful, interesting way.

## BEING ON CAMERA

- **WHAT TO WEAR:** Solid colors and pastels are usually a safe bet, or very simple and subtle patterns. Clean, wrinkle-free.
- **WHAT NOT TO WEAR:** White, black, bright red. Distracting or complex patterns. Brand names and logos. Always bring at least one or two other clothing options to the video recording set. If possible, wearing glasses should be avoided. There is often glare which completely blocks the eyes. However if the on-camera talent needs glasses or feels more comfortable in glasses, the director should be able to position camera and lights to avoid glare.
- **MAKE-UP:** Basic make-up such as powder and concealer are good things to have on set. Be aware of distracting things like red facial blemishes and shine. Usually just a simple powder is fine. Thin or light-colored eyebrows can sometimes disappear on camera in certain light, a little eyebrow pencil can be helpful.
- **KNOW THE LINES:** Whether it's a scripted scene, or an interview for which one knows the questions in advance, it's good for the on-camera talent to have what they're going to say

internalized so well that they don't have to strain to remember it. Talent should not rely on a script or notes.

- **NERVOUSNESS:** For those who are shy on camera or have nervousness about speaking in public, just remember not to worry or rush. This is on camera, not in front of a live audience. There will be multiple takes and editing can later be used to remove any long silences. People tend to rush when they're nervous on camera, over-compensating for feeling unprepared. Take time to breathe, and focus on what's being said. Try to view an interview as a conversation with the interviewer. Focus on them and their questions.
- **SPEAKING:** Speaking on-camera talent should speak clearly and project enough to overpower the environment. In a quiet studio one may not need to raise their voice at all, but if it's outdoors with wind and traffic noise and people in the background, one might need to speak up. Good posture is important to remember, both for your visual stance, but also to improve vocal range.
- **BE EXPRESSIVE!:** Even if it's an interview on a boring or serious topic, talent should not be afraid to show expression and emotion in the face and body language. Don't be stiff, don't speak monotonously, and if the subject matter doesn't demand seriousness then one doesn't have to be so serious!

### RECORDING WITH A PHONE

- **VIDEO:** Phone videos should always be shot with the phone horizontal, not vertical. It must be horizontal from the very beginning of the shot, do not start recording vertically and then turn it horizontally. Not only will it be sideways, but the resolution will be lower.
- **SOUND:** Know where the microphone is on the phone and be sure not to touch it or rub anything against it while recording. A hand or book can be used to block it from wind when necessary.
- **SOUND:** Phone microphones don't work very well at long distances, so if subjects are speaking and are relying on the phone's microphone to capture it all, the subjects should be as close as possible to the mic. If clear dialogue is needed for a distant shot, consider using a second device (like a second phone) to record the dialog up close, then the video and audio can be synced together in editing later. If audio does need to be synced later, it's useful to have someone clap their hands on screen so the sound can be matched in editing.
- **LIGHT:** Phones generally don't have very big sensors in their cameras, which means they don't do well in low light. Therefore, it is very important to have enough light to work with. Daylight is always best when possible.
- **DEPTH OF FIELD:** With some higher end camera phones, if the camera is close enough to the subject and the background is far enough away, a shallower depth of field can be achieved; which can be very good for image quality. Be sure the subject is a good distance away from the background, get the camera as close as possible to the subject without losing focus, and see if

the background goes out of focus at all. This effect can give the shot a more cinematic, polished look.

- **ADVANCED SETTINGS:** Some third-party phone camera apps can be purchased or even downloaded for free, which allow more control over things like aperture, shutter speed and focus when recording video.
- **HANDHELD:** When moving while recording handheld, the phone should be held with both hands as close to the body as possible, and kept as steady and level as possible. If there's any risk of damage to the phone if it's dropped, a wrist strap can allow the camera operator to move more confidently to get creative handheld shots. Because a phone is so small and easy to hold, there is a bit more flexibility and opportunity for having fun with shot types.
- **STABILIZATION:** With most phone mounts and selfie sticks, the part that actually holds the phone can be detached, and can be used with any regular tripod, rig, mount, etc. so a phone can go on any tripod, even if it's a tripod that was made for a camera. If a tripod or mount is not available, it might be worth taking the time to set up an ideal spot to place and prop the phone for the shot, rather than going handheld. For example, books could be stacked to the right height on a desk and the phone could be leaned back against something on top.
- **ZOOMING:** Don't do it! When a closer shot is needed, the camera operator should cut, get closer to the subject, and take a new close-up shot to cut to. Zooming will cause the video to lose resolution and overall quality, plus cutting almost always looks better anyway.
- **AUTO-FOCUS ISSUES:** If the phone is constantly readjusting focus and/or exposure during a shot, this could be easily fixed if the phone has an exposure lock option. iPhones and many other smart phones should have this option. It will lock the settings at the beginning of a shot so they aren't constantly readjusting throughout.
- **OVERKILL:** Use of editing apps, effects, slow motion and other gimmicky phone options should be avoided or at least limited and only used very wisely. These can often cheapen the video, and may compress or downgrade it. As a rule, video editing should never be done on a phone.
- **AUTO EXPOSURE:** On camera phones, auto exposure can sometimes be a problem. The important part of the frame is often too light or too dark, and can't be adjusted manually. The auto exposure can often be manipulated based on where in the frame the focus is. For example, if the picture is too dark, auto exposure will lighten the picture if the darkest part of the frame is tapped as the focus point. Or the reverse, if it's too bright, auto exposure will darken the picture if the brightest part of the frame is tapped. Unfortunately, this also causes the focus to be affected so it isn't always the best choice. Works better for wider shots in which almost everything is in focus anyway.

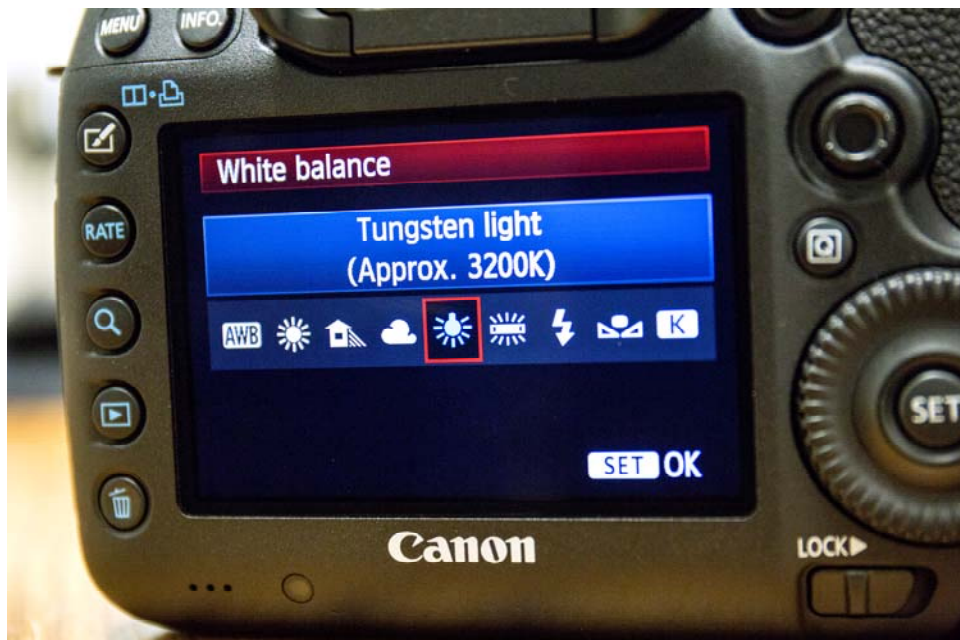
## RECORDING WITH A DSLR OR CAMCORDER



- **AUTO-FOCUS:** Generally not recommended, unless the auto-focus in the camera being used is particularly good. Most cameras and camera phones often have trouble keeping the right subject in focus. Either way, make sure the correct subject is more in focus than anything else.
- **MANUAL FOCUS:** To be sure something is in focus, zoom all the way into it, focus, then zoom back out. With a human subject, zoom all the way into their eye to focus. If the distance from the camera to the subject changes, the focus changes; so the camera and subject should be in their final places before focusing.



- **SET THE DIOPTER:** There should be a little wheel or lever right next to the eye piece, called the diopter. This needs to be set to the camera operator's eye for best focusing. Set the focus on something close, then adjust the diopter until it looks as crisp and clear as possible.



- **COLOR:** If the color looks too orange or too blue or green, the white balance needs to be adjusted for the light conditions. Most cameras will have default white balance settings for sunlight, indoor tungsten light, fluorescent light, etc.; as well as custom white balance options



for when the light is mixed. For example, if the location is getting both sunlight and tungsten light, the white balance might need to be set manually.

- THE THREE IMPORTANT NUMBERS:



- **F-stop/Aperture:** Controls how much light is let in. The numbers will look something like this: 1.4, 2.8, 4, 5.6, 8, 11... The lowest number lets in the most light for a brighter picture, and the highest number will be the darkest. The lowest number also has the shallowest depth of field, whereas with the higher numbers, more of the scene will be in focus. In general, a shallower depth of field tends to look better, but it depends on the shot. If achieving a shallow depth of field by selecting a lower f-stop makes the image too bright, the shutter speed and ISO can be adjusted to compensate. The f-stops available depend on the lens being used. If the lowest f-stop is 5.6 or higher, darker locations might be difficult to get bright enough. Again, shutter speed and ISO can be adjusted to compensate; or a lens that goes as low as 2.8 or 1.4 will let in more light.
- **Shutter Speed:** The shutter speed determines how quickly the shutter opens and closes. These numbers might look like this: 1/1000, 1/500, 1/250, 1/200, 1/60... or maybe just like this: 1000, 500, 250, 200, 60... These numbers represent, in fractions of seconds, how long the shutter stays open for each frame of the video. This affects light, motion blur, and overall image quality. The longer the shutter is open, the more light it lets in; so the image will be brighter. However, if there's any movement of the camera or the subjects, there will be significant motion blur if the shutter is open for any longer than 1/200 or 1/60 of a second. Generally, 1/200 is a safe bet for good light exposure and quality without too much motion blur. If there's a lot of action/movement in the video or if it's being shot handheld, then a faster shutter speed is better. If the camera is on a tripod and is focused on a still subject like an interviewee sitting on a stool, a slightly longer exposure can work if more light is needed.

- **ISO:** The ISO is essentially the "film" type, only in a digital camera since we don't have film, it's just a number to adjust for the lighting conditions. These numbers will look something like this: 100, 200, 400, 800, 1600, 3200... The lower the number, the darker the image but the quality will be higher. The higher the number, the brighter the image but it will also be grainier. If recording outdoors on a very bright sunny day, one might be able to record at 100 or 200 and still have plenty of light, plus beautiful image quality. For indoors or a cloudy day, one might be recording somewhere between 400 and 800. At night or for dark indoor spaces, 1600 or higher might be necessary but if the ISO is too high and the location is too dark, there will be a lot of grain.

## RECORDING INTERVIEWS

- **BLOCKING:** There should be a distance of at least a few feet between the subject and the backdrop. They should never be right up against a wall or backdrop.
- **SHADOWS:** Look out for hard shadows behind the subject. A second light placed behind them or to the side can eliminate that, diffusing the light, or placing the light higher up so the shadows are instead cast on the floor, could also help. If more distance can be put between the subject and whatever they're casting a shadow on, that is often the best solution.
- **LIGHTING:** People always look best in either diffused tungsten/LED light indoors, or in daylight on a cloudy day. See the 'Tips for Lighting' section below for ways to diffuse/soften light.
- **LOCATION:** Unless there's a particular reason for needing to record indoors or use a plain backdrop, it's often a good idea to record outside or near a window for some natural light and a nice outdoor backdrop. There should be enough space to put some distance between the subject and the background. If possible, it is best to use a location which is relevant to the subject matter of the video. For example, if interviewing a firefighter, an ideal location might be standing in front of a fire truck or sitting in an interesting area of the fire station.
- **DEPTH OF FIELD:** The shot will look better if the subject is more in focus than anything else. The background should be out of focus, as well as the foreground if there is one. This looks better and naturally brings the eye to the subject. The range in which things are in focus is called the Depth of Field. If everything in the shot is in focus, then that's a very wide depth of field. If only one thing is in focus, that's a shallow depth of field. In order to get the background more out of focus, one may need a shallower depth of field.
  - The closer the camera is to the subject, the more out of focus the background will be. Try getting closer to the subject, zoom all the way into their eye, focus, then zoom back out. See if the background is a bit more out of focus now.
  - When using a camera with manual settings, the f-stop (aperture) setting can be used to make the depth of field narrower. These numbers are usually something like 1.4, 2.8, 4, 5.8, etc. The f-stop range depends on the lens and camera. For a shallow depth of field, turn this setting to a lower number. This will also make the image brighter, so adjust accordingly.



- Putting more distance between the subject and the background can also help.
- SHOT OPTIONS: There should be at least one other shot to cut to besides the main shot. This might just be a different angle of the interview subject, or it could be other footage that pertains to what the subject is talking about. Having at least one additional shot to cut to allows the editor to cut out any bits of the interview that aren't wanted; mistakes, long silences, etc. and it's also much more interesting to watch if it cuts around to different shots.
- SECOND CAMERA: Whenever possible, an interview should be shot with at least two cameras. They should ideally be similar to one another, or at least recording in the same resolution with the same settings. Set one camera up in a standard wide or medium shot of the subject head-on, and set the other up in a close-up or medium close-up of their face at a slight angle. If there's a light source to one side of their face, the close-up camera should be slightly to the opposite side. The angle of each shot should not be too similar.

### RECORDING ACTION

- MOTION BLUR: If using a camera with adjustable shutter speed, a faster shutter speed will be able to keep up with fast-moving subjects on screen to reduce or eliminate motion blur. Shutter speed will definitely need to be faster than 1/200. Turning up the shutter speed will make the image darker, so make sure there's enough light to work with and compensate by adjusting the f-stop and/or ISO to let in more light if necessary. (See more info on shutter speed, f-stop and ISO in the 'TIPS ON RECORDING WITH A DSLR/CAMCORDER' section above.)
- CAMERA SHOT OPTIONS: Usually, action scenes are composed of many short shots rather than few longer shots. This is usually done in cases when trying to fool the audience. The only time action scenes are done in longer shots are when there is something very real happening on camera that the audience should see clearly; there's no fooling anyone. So unless the action on screen is so real and so impressive that the audience should see it in longer shots, it's generally best to get many shorter shots that can be cut together for the pacing and look desired.
- SHOT TYPES: When recording an action sequence with many different shots, it's important to get a good mix of wide, medium and close-up shots. Two shots that will be next to each other should be different enough that they don't look like a jump cut or mistake. For example, if there's a wide shot of a subject running to the camera head-on, then it cuts to another wide from only a slightly different angle, it's going to look strange. Instead, cut from the wide shot to (for example) a close-up of the subject wiping sweat from their brow, then cut to a medium or different wide shot from there; or if it's a completely different shot, it could even cut to another close-up from there.
- THE 180 DEGREE RULE: Draw a straight imaginary line down the middle of the scene. If recording a dialogue scene of two people facing each other, the line might cut through the middle of both of them. If recording a scene of a single subject facing camera, more like a stage, then the line might go across that stage. The camera must stay on the same side of that line throughout the whole scene. If the camera crosses that line, there's risk of confusing the audience by throwing their orientation off. For example, let's say it's a dialog scene of two

people facing each other, and that line that's been drawn goes right through the middle of both of them. Both sides of the conversation can be shot from the same side of that line. However, if the camera crosses the line and the video suddenly cuts to a shot coming from the other side, it will look as if the two people have switched places.

- **PREPARATION:** All actions should be choreographed and rehearsed before recording. Even if it's just running through it a couple times right before rolling, it's important that everyone on set knows exactly where everyone will be in the scene. This will usually end up taking a lot less time than "winging it" and constantly having to re-record and make corrections would take. Also, especially with action scenes, rehearsal is important for safety.
- **SAFETY FIRST:** Safety is always the top priority! Never attempt illegal or potentially dangerous acts or stunts for the sake of a video. Always have a plan for what to do if someone on set is injured. Always take more safety precautions than seem necessary. Be aware of blocking exits, driveways, walkways and other high traffic areas while recording. Be aware of extension cords and other cables and equipment which could be a tripping hazard. Be considerate of any other people who might be in the area.

## LIGHTING

- **BEST LIGHT:** The sun is always the best light source. Use natural light whenever possible. Next best is soft/diffused tungsten or LED light.
- **REFLECTORS:** It's quite amazing how well something white can reflect and direct light. Even just a cheap white poster board or foam core board can be a great tool to have on set when a little extra light needs to be pushed in one direction. For example, in an interview, the white board can be angled near the subject to put more light on their face.
- **LIGHT POSITIONING:** The light source should generally be as high up and as far away from the subject as possible. Once the general area is well lit with the main light, an additional smaller light can be placed to add definition to the subject's face by putting it to one side of them. This light should be on the opposite side of their face that the close-up camera will be recording from, if there is one. A third light can be placed to the side and behind the subject to create a bit of a halo or backlight.
- **TIME OF DAY:** If it isn't cloudy, the best times to record video outdoors during the day are just after sunrise and just before sunset. The worst time to record is noon/midday. Right around sunrise, or right around sunset, is called "the golden hour" because the light has a warmer, more golden quality and is at more of a side angle rather than coming directly from above. These times are when colors are the richest, faces the most alive. Recording at these times also helps avoid hard shadows and blown out highlights.
- **DIFFUSION:** Light can be diffused by putting a sheet of diffusion in front of it (clear foggy sheet, kind of looks like wax paper), or pointing it through something thin and white like a softbox or even a large piece of tracing paper (must not be touching the light if the light is hot, fire hazard!). Another technique is to aim the light at a wall or into a corner of the room so the light

bounces off the wall, rather than hitting the subject directly. (Sheets of heat-resistant diffusion can be purchased online for about \$7 per sheet – bhphotovideo.com).

- **COLOR:** Daylight and indoor light have different color temperatures, which is why white balance settings must be set properly; to avoid the picture being too orange or too blue. The type of light used is also important. For example, if an indoor tungsten light is brought outside to add more light to an outdoor scene on a dark day, the color will look strange on camera because the color temperature of the indoor light and the sunlight are very different. Or if recording indoors with tungsten or fluorescent lights on and there's a lot of sunlight coming in through windows, that can also imbalance the color. In these cases, if auto white balance doesn't work, most DSLRs or camcorders should allow the color temperature of the white balance to be adjusted manually. Heat-resistant gels can also be used over lights to adjust color, either to compensate for an imbalance of daylight or indoor light, or to create a specific style or effect. (Heat-resistant gel sheets can be purchased online for about \$7 per sheet – bhphotovideo.com)

## RECORDING SOUND

- **QUIET LOCATION:** One of the most soundproof spaces that can be easily found to record in is a car parked in a quiet area with all the windows up. This is great for recording voice-overs and over sound bits in which there can't be any background noise; especially if it's hard to find a perfectly quiet echo-free room at home.
- **DELIVERY:** There must always be a clean break between takes/lines so that they can be cut together in editing. For example, if an actor/interviewee messes up a line, the director must make sure they completely stop and take a breath before starting over. If the end of the previous take runs into the beginning of the next, it will be hard to cut smoothly.
- **ROOM TONE:** When recording video with audio or just recording audio, always record "room tone." This is the natural sound of each recording location, the background noise. Later in editing if the editor needs to remove a word or something, deleting that section of audio will create a very obvious and unnatural silence. If they have background noise from the location that they can replace the word with, it sounds much more natural; and when done right, the audience shouldn't notice that there's a sound cut there. Immediately at the finish of each location recording, tell everyone on set to be perfectly quiet and record 30-60 seconds of sound.
- **BACKGROUND NOISE:** Be aware of background noise and any potentially annoying or distracting sounds which could be eliminated. For example, when recording indoors, is there a running refrigerator or dishwasher which could be temporarily turned off? (If so, don't forget to turn it back on after recording!) Is there traffic noise that can be avoided? Is there noise coming from another room which could be reduced by simply closing a door or window? Be aware of even the little humming and distant noises people normally don't notice.
- **ADR:** If the sound quality on a shot is compromised due to something like wind or background noise or echoing, one potential solution is recording ADR; which is basically scheduling time with the actors to record the lines separately in a studio and lay them over the video in editing. The words have to match the lips on screen perfectly, and acoustics and background noises also

need to match up. One should not try to do ADR themselves without experience or help, as it is a very difficult thing to do right. The best method is to get usable sound at the actual video shoot; don't rely on getting it all again in ADR later.

## EDITING

- **TRANSITIONS:** The only transitions that should be used between shots are a hard cut or a traditional fade-in/fade-out/cross-fade. No page peels, no wipes, no dip to color dissolves, no checkerboard or curtain or barn doors or spin-away, none of it! Hard cuts always look best and are the least distracting. Even fades should only be used sparingly, often just for the in and out of the video.
- **MUSIC:** If there's music in the video, pay attention to the video's cuts in conjunction with the beats of the music. It's always nice when a video cuts with the beats of the song playing; not necessarily every shot or every beat, but in general.
- **MOVEMENT:** There should always be some movement in every shot, even if it's a still photo for a slideshow or something. When using still photos in a video, rather than just a static image, set the photo to slowly zoom in or zoom out or scroll up or down or to the side. It can be extremely subtle, the audience might not even consciously notice it, but it will make the shot more engaging. The one exception is text and title cards against a plain black or white backdrop, those shots can be static as long as each one doesn't last for too long. If it is a longer shot or there's a lot of text for the audience to read, then a slow zoom into the text might be a good idea. Or even better yet, see if there's a way to visually show rather than explaining in text.
- **DEVICE:** Even if the whole video is shot on a phone, it should not be edited on a phone! Use a proper editing app on a computer.

