

Welcome. Video number 2: recording techniques.

So, now that you have some sort of recording setup, you're going to want to go and obviously record some sound. And so this video is about how to get the best sound, and it's really important. This is probably the most important video of the three because if you don't get good sound coming in, your life is going to be miserable later.

There's that phrase, "garbage in, garbage out." That's absolutely true for audio. You really do want to try to spend a little bit more time, a little bit more energy at the front to get good audio, and not have to deal later on with trying to fix it, because fixing audio in post is super hard.

So, here is rule number one of recording --and honestly, if you remember nothing else from this entire video series this whole week, I hope you remember this-- which is: wear headphones, you must wear headphones. It's so important to wear headphones. If you don't wear headphones, you will kick yourself later, I promise you. Please wear headphones when you're recording.

So, right now you are in a room of some kind and there's a lot of noise happening in that room that your brain is very good at filtering out, right? You don't hear the weird refrigerator sound or the air conditioner hum or the fan, or your neighbors walking around upstairs. You don't hear that stuff because your brain is really good at saying, "Hey, that doesn't matter. I'm not going to bother you with that." Microphones are very, very stupid. They record everything because they don't know what anything is and so if you have a sound in the background of your recording, you will not be able to get rid of it. It will be very hard to get rid of it later probably because the hum will probably be multiple frequencies. It's going to be a nightmare. So, the way to prevent this is to wear headphones because that's going to allow you to actually hear some of the things that your brain is already kind of filtering out.

So, let me just show you with a quick lesson that you can do about how important it is to be able to hear what's going on in the room. So, if you don't currently have headphones, if you're not listening to this lesson on headphones go get them ---- [instructor is waiting] ---- come back. Okay, get your headphones. Also, get your smartphone ---- [instructor is waiting] ---- great. I'm assuming you've got your smartphone now. Plug your headphones into your smartphone. Fire up your audio recording app and record 30 seconds of sound. I will wait. ---- [instructor is waiting] ---- Okay, you've recorded your 30 seconds. Now, I want you to put those headphones in and listen to those 30 seconds of silence at a pretty high volume. I want you to hear everything. ---- [instructor is waiting] ---- What you probably heard is a lot of stuff that you didn't realize was happening in that room, whether that was a fan or people in the other room, or traffic outside your window, all that stuff the microphone is going to pick up. So, you really want to be wearing headphones so that you can tell whether or not you've got some weird sound in the background. Wear the headphones, I promise you, it's going to be so worth it. If you can get these kinds where it's got the over-ear bit, that's great. These are much better than earbuds. But if you don't have that, earbuds work fine. Some sort of headphone is better than no headphones.

Okay, so let's talk about recording situations. Let's start with the situation in which you're recording somebody in a space that's not your own. So, you don't control the space. You've shown up to someone's house and you need to interview them and you want to record them. Now, there are a couple things you want to keep in mind.

The first one is to be very aware of the rooms that you're in. So some rooms are going to sound way better than other rooms. Let me show you using the rooms of my house. Bathrooms, not a good place to record. Kitchens, also tend to be bad. Living rooms with wood floors, also not that great. There's my dog. So, carpeted living rooms are great. Bedrooms are great. Anywhere that has curtains- curtains are your friend. Air conditioners are your enemy.

Okay, so hopefully I've imparted the importance of headphones onto you so now we can move on and talk about recording tips, tools, techniques, how you should record. So, number one: Where should you put the microphone? How close to someone's mouth do you actually need to get? The answer is: pretty close, closer than you probably want to at the beginning. So, the general rule of thumb, and this changes, again, depending on the microphone that you're using, but the general rule of thumb is that you want to put your microphone about a fist width's distance away from someone's mouth. So, like that. So you're going to want to hold it close to their mouth so you can make sure that you're getting a good sound and you want to monitor your levels at all times. So, if I've got my recording device, I'm looking at it and I'm interviewing.

A tip here, you're going to want to find a place to put your elbow because if you are doing an interview for a very long time and you're having to hold the microphone steady for that whole time, it can get really tiring. Now, you're going to be tempted to let your interviewee hold the microphone. That makes it less awkward, you don't have to find a place for your elbow, you don't get tired, you can focus on this. Don't give in to this temptation. There are a couple of reasons you really want to be in control of the microphone. The first one is that there is something called mic handling noise, which means that anytime you touch a microphone like this, the mic picks up that noise. So, you want to be able to be really clear on holding it firmly, calmly, not moving your hand around. Most people who are being interviewed, they're going to move the mic around, they're going to move it, they're going to kind of not realize and because they don't have headphones on, listening to the interview, they're not going to be able to hear that noise. The other thing is that the microphone is a great way to modulate how loud someone is being. So, if you have someone telling you a story and they get really quiet and then they get really loud, you can actually use the microphone distance from their mouth as a way to keep the levels pretty consistent instead of having to constantly dial up and down on your little levels here.

Speaking of levels, what you want to do is make sure that you're watching these and you want to watch them to make sure that you're not peaking and that you're not too low. Too low is better than peaking. Now, what is peaking? Peaking is something that happens when there's too much audio, too much volume, coming into the microphones. And what happens is you get this really crunchy sound. Peaking basically cannot be fixed in post. It's really hard to fix it. Essentially, you're just overloading the microphone and there's nothing you can really do about it. Most recording devices have some way of indicating that you've peaked. So, this one, whichever channel is peaking, the little light flashes. Some of them, like the ecam that I'm using to record my audio right now for this video, they actually have a little light on them that says "Peak," and when that red light flashes, that means you've peaked. You want to watch that. It's much easier to make a quiet piece of tape a little bit louder than to fix peaking; that stuff's really hard to fix. Let me show you what peaking sounds like. You've probably heard it without even realizing it. So, this is what it sounds like when you peak in your audio. "Hello. Are you enjoying this class? I hope so." You hear how crunchy that is? It just sounds bad. You don't want that.

Okay, so you want to make sure that when you set up your audio, right, you've got your mic, you got your elbow stand, you're ready to go. The first question you ask someone should not be an important question because you want to get them comfortable and you also want to check your levels and make sure that they're

really in the right range. So how loud do you want your interview to be, right? If you have a device like this that actually shows you decibel levels, you want to keep it between -12 and -6ish, you want to keep it in that range. If you're using an iPhone and it doesn't give you that kind of range, or using a smartphone or some recording device like that, you just want to make sure that the little lines are not touching the top and the bottom of whatever app you're using. That usually is a bad sign. You want to keep it kind of in between so you can see all those little lines.

Now, like we said earlier with the whole headphone rant, your mic picks up everything. So if you are interviewing someone and you say things like “hmm, mmmhmm, oh, interesting,” your microphone is going to pick that up and it's going to hear it. That might be fine. That might be the vibe that you're going for. Some people think that's fine. Other times if you really just want their audio and you want to be able to use it and cut it and not have your sounds in the background, you're going to want to stay quiet. Now, that doesn't mean you want to just be stone-faced and not like interacting with the person. You do want to kind of emote, but you just want to emote silently. The Kitchen Sisters, who are a great audio production duo, have this thing that they say that when they are done with interviews, often their faces hurt because they've been emoting so aggressively with their face because they can't make any noises. Now obviously if someone makes a funny joke, you should feel free to laugh, you are a human being, you want them to feel comfortable and not like you're just this sort of weird mime person that they're talking to. But you do also want to be cognizant that anything that you do, anything you say, will get picked up by the microphone.

Okay. So, you do your interview. The last thing that you're going to want to do is you're going to want to collect something called room tone. Room tone is exactly what it sounds like: it's the tone of the room. So, remember earlier I talked to you about different rooms having different sounds. I played you those clips where I'm in different rooms. You want to make sure that you gather some of that sound in silence because if you are trying to later mix two different things together, like you as the narrator in a studio with tape that you gathered in the field, you're going to want to be able to blend those together and blending those together is going to be a lot easier if you have room tone to put as a bed underneath. We'll talk about this a little bit later in the next video on editing. So, what this means is that at the end of every interview you're going to want to gather 30 seconds of room tone. I generally do it at the end because at the beginning it's a little weird to ask someone to sit in silence with you for 30 seconds. So, at the end what you do is you just sit there and you just stay quiet for 30 seconds, and you record what the room sounds like. It's going to be a little awkward, but it's totally worth it later when you're trying to blend things together. It's going to make it a lot easier on you.

Okay, so those are some tips for recording somebody in their own space. But what if you have your own recording space? What if you have a studio or what if you want to record at home and not have one of these things [instructor lifts microphone]? Well, a lot of these tips still apply. You still want to find a quiet room. You still want to find a place that's as quiet as you can get. I don't know if you could hear that there's a plane going by right now. If you had headphones on and you were recording this you'd probably be able to hear it. But what you want to do when you're at home and you're recording is that you want to find a place that's really quiet. Now, there are a couple of ways you can do this. The easiest one is to get under a blanket. I'm serious, people get under a blanket and they record things underneath the comforter. It creates this beautiful cocoon of sound, it's perfectly silent, it's lovely. It does get kind of hot though. Other people will record in their closets. They'll set up little pillow forts to record in. If you really want to get clean, nice, crisp, beautiful NPR sound, recording under a blanket or in a pillow fort is the best way to do it. Or you can build yourself a little recording studio. So, do you want to go to a field trip to my recording studio? Too bad, you have no choice because we're going anyway, because it's my video.

This is my recording studio in my house. I got these curtains at Ikea. We had a little corner of the house and I commandeered it and I made a recording studio. Would you like to come inside? So, this is what the recording studio looks like. This is a reclaimed piece of wood that I glued a bunch of foam to that I got on the internet for very cheap. 10 bucks, good investment. These are curtains from Ikea and inside, it's very dark. Here we are. So, I usually use these clips to clip this closed, but I only have one hand right now so I won't do that. And then inside what you'll see is I've got this, which I found at a thrift store, which is another piece of acoustic foam basically. Got some boxes here that I put my microphone on and I record in here. That's the ceiling, I've draped some drapes over it. The point here is that you don't have to spend a ton of money and get a fancy recording setup. You can make one of these from stuff from Ikea, stuff from thrift stores, stuff you bought on the internet.