

Depending on the the media you are using, sound production can be an essential component to your multimodal project. Whether you are making a video or producing a podcast, having good quality audio in your projects gives your audience a good experience.

Sound Measurement

Unit: Decibel (dB)

- 10 dB - 18 dB - 24 dB

A horizontal line with seven blue square markers. Below the line, there is a thumbs-up icon and a small icon of a person's head and shoulders.

Audio volume, or loudness, is measured in decibels. When you see the lines on your recording device or track start to oscillate between the decibels, it means that sounds are being recognized. According to Musician's IQ, the dynamic range of a vocal recording should be between -10 dB and -24 dB, with the ideal level at -18dB.

Recording Sound

A small icon of a person's head and shoulders, located in the bottom right corner of the slide.

Your multimodal project may require recording sounds yourself. This section will talk about the different settings of recording sounds and equipments accordingly.

Recording Sound



- **Inside**

Studio, narration,
pod-cast, sit-down
interview

Purpose + Setting



Depending on the type of project you are doing, you may need to record sounds either in a quiet space or a noisy space. You can record in a professional studio, and this setting is usually for podcasts or sit-down interviews. The less disturbing elements in the recordings space -the better. Noises or irrelevant sound cues in a project can make them seem unprofessional. Nowadays, it is also common for people to record in their closets to get clean background noise.

Recording Sound



- **Outside**

Street interview, public
speech, protest, etc..

Purpose + Setting



On the other hand, recording in a noisy place can give you evidence of the environment by including background sound of the surroundings. It better explains the time and space the recording took place, and is often carried out in street interviews. Comparatively, the noise in street interviews adds to the realness of the situation, walking the audience vicariously through the interview setting. However, background noise should never exceed the volume of the main voices and steal the attention. In order to guarantee that, we now need to look into the sound recording equipment -microphones.

Equipment



To get started, you will need some equipment.

Equipment

USB vs. XLR

Blue Yeti is a USB microphone
Available at the Chapman Learning Commons



Let us start with microphones. The first decision you will have to make is if you will purchase a microphone with a USB or XLR port. An XLR would need extra equipment plug in, such as an audio interface. But it can be useful if you need more than one microphone for your recording. You can connect right into your USB port of your laptop and start recording right away with a USB microphone. If you don't have the budget to set up an elaborate home studio, or need portability, a USB microphone would be the one to go for. UBC has the Yeti by Blue model that you are able to borrow at the Chapman Learning Commons.

Equipment

Condenser Microphones

Blue Yeti is a USB microphone
Available at the Chapman Learning Commons



There are a variety of microphones that work better for capturing different kinds of sounds. The Yeti blue is a condenser microphone. Condensers have a bigger range, and more transparent sound that comes across as more conversational, and can capture a sense of the space of a room. The microphone shown here has a "pop" filter on it, which is a net that helps eliminate the breath's drum effect, it gets rid of that wind blowing sound that can come from saying the letter "P". It needs to be placed about 2 inches from the microphone to work well. Because condensers are sensitive to open sounds in a room, they will pick up more, so be sure to record in a quiet room!

Equipment

Dynamic Microphones

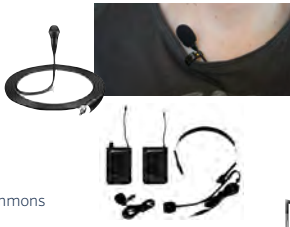
Shure SM58.
Available at the Chapman Learning Commons



Dynamic microphones are less sensitive and only pick up what is directly in front of them, therefore they are better at eliminating distracting sounds, or sudden lifts in your voice. You should speak directly in to a dynamic microphone, and because of this proximity it captures a more intimate sound. UBC has the ubiquitous SM-58 that you can check out at the Chapman Learning Commons.

Equipment

Lavalier



Available at the Chapman Learning Commons



A lavalier microphone is often used for recording in a public place because it is the best for capturing sounds in a noisy environment. They are easy to hide and allow for hands-free operation and come as both wired and wireless. Some people sometimes prefer to clip the microphone on a collar or shirt, and some prefer to hold the receiver as a mic, either way it is one of the most user-friendly microphones to use. The Chapman Learning Commons also has some for you to borrow.

Equipment

Boundary



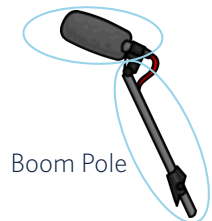
The boundary microphone, like its name, is mounted to a surface, like a wall or a table. You may have seen one in a conference room. The parallel set up of a boundary mic allows it to collect sounds that are reflected on the boundary it is located on.

Equipment

Shotgun Microphone



Blimp Windscreen



Boom Pole



They are highly directional and must be targeted directly towards the sound source which is why a shotgun microphone usually comes with a blimp windscreen, and a boom pole. The operator needs to be careful when holding the mic because small movements can be captured, which can make the sound go in and out in waves.

Tips

- Bring headphones to test levels while recording.
- When exporting a file format, remember that WAV files are lossless and uncompressed compared to MP3 files.
- Always be aware of the ambient sound of the space you are recording.



Some of the tips from the UBC Chapman Learning Commons during recording include (<https://learningcommons.ubc.ca/tech-support/recording-101/>)

- Bring headphones to test the levels while recording.
- WAV files are lossless and uncompressed compared to MP3 files. If the original tones of the sound is lost or compressed, the quality can be distorted and human voices might sound like robots.
- Always be aware of the space you are in and the ambience sounds it has. Wind can be unnoticeable on a daily basis, but the microphones will capture the sound waves that are going in. You also don't want to record in a big room that echoes. If you are recording at home, putting pillows around you and the microphone. This will create a semi closed space for your microphone to capture the sounds within.

Recording Studios

UBC resources

- [Chapman Learning Commons](#)
- [UBC Studios](#)
- [CiTR Radio](#)

Off-campus

- [VPL Inspiration Lab](#)
- [VIVO Media Arts](#)



UBC has amenities for a studio recording, such as the Chapman Learning Commons located on the third floor at Irving K Barber Learning Center, CiTR Radio in the Nest, and UBC Studio at the south of campus. Off campus you can try the VPL Inspiration Lab and VIVO media arts.

Finding Sounds

- Paying attention to the overlooked sounds around you
- Online sound libraries
- Note useful music tracks



You may need ambient sounds or background music tracks. If so, a good habit is to listen to the sounds around you. Even in the quietest settings you will still notice sound animates our lived experience. You can find stock sound libraries on the internet, with categorizes and collections of various sounds and sounds effects. I also recommend writing down music tracks as you come across them that might be useful, creating your own sound library which can save you time in the future.

You have finally made it to the last stage of sound production: editing.

Editing Sound



Editing Sound

Pro

- Free
- Cross-platform and open source
- Relatively straight-forward to use
- Lots of online help



Audacity

Con

- Lossy
- The program can be glitchy



The Chapman Learning Commons has computers and useful information, including this list of pros and cons of Audacity. Audacity is a free to download software and is relatively straight-forward to use. If you run into questions using this platform, there is lots of help online. On the Con side, this software doesn't automatically save your progress, unlike Adobe softwares, and in one crash you might lose all of you work. As well, the program can be glitchy and you should remember to intermittently save your project as you work on it.

Editing Sound

Pro

- Has one of the best restoration and repair tools
- Can collaborate and update changes across Adobe Cloud softwares



Audition

Con

- Subscription fee is expensive
- More difficult to learn



The other common software belongs to the Adobe Creative Cloud Suite. Audition is one of the best restoration and repair tools and meets most industrial production needs. Being part of the creative cloud, Audition can collaborate and spontaneously update changes across Adobe Cloud softwares. If you are editing on Premiere or After Effects, it is super easy to link audio to edit in Audition. The changes are updated automatically and it saves many exporting and importing steps. However, all of these great features come with a price, the subscription fee is quite expensive and the learning curve is steeper.

Compare the two softwares and find which one most suits your production needs.



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