

Record a Podcast

Important

This interactive video will introduce you to the podcast equipment. The equipment is self-service. Staff will not assist with your recording. Please be advised that this tutorial is not narrated.

Recording Studio

The studio space is located in AC286, in the new renovated space to the left of the library entrance. Along with podcast equipment there is a One Button Studio to create visual presentations.

Helpful Terms

Before we start, let's become familiar with some recording terms.

Track: a singular audio recording or sound source. For example, when recording music there is usually a separate track for each instrument, e.g., guitar track, drums track, etc.

Channel: a "storage" space on a recording device for each track.

Multitrack recording: recording multiple inputs (voices, instruments) at the same time, with each input on a separate track.

Mixer: an audio device that can record multiple inputs simultaneously. Users have control over settings such as volume and tonality to create a complete audio production.

Equipment

Microphone: The Procaster is a broadcast-quality dynamic microphone designed for voice applications such as podcasting, streaming, voice-overs and radio broadcasts. The microphone features an internal pop filter that prevents the recording of "plosive" sounds, such as heavy consonants like "P"s and "B"s. The foam covers are regularly changed.

Headphones: There are no speakers so you must wear headphones to hear yourself and others. Headphones are essential when recording, as it isolates your voice and allows you hear others clearly.

Mixer: The Rodecaster Pro II can be used for podcasting, live streaming, creating music and other audio projects. It can support up to 4 microphones (the recording studio has 3). Up to three other people can join the recording via a USB or Bluetooth device. Each microphone is plugged into a channel. The first 3 channels are for microphones. The fader controls the volume of the channel. The display is a touch screen. To return to the start, select the Home icon.

External Devices

You can connect an external device to the mixer. For example, others can join your podcast via USB or Bluetooth. Additionally, you can have audio streaming from a device to a channel on the mixer.

USB-A or USB-C: channels 7- 9 are for USB-A or USB-C connected devices. The channel faders are virtual, accessible using the touch screen. Any audio signal coming out of the virtual channels will be heard through all the headphone sets. At the back of the mixer, there are 2 ports to plug in external devices. Port 1 is for the main computer or laptop. The library's iMac is plugged into it but you can use your own laptop. Port 2 is for a secondary device, like a smartphone or another computer. If connecting your own computer, ensure that the **Rodecaster Pro II Main** is selected as the input and output for your audio settings. If you have a computer plugged into Port 2 then it will appear as **Rodecaster Pro II Secondary**.

Virtual Connections

If you want to connect with someone using a computer, the iMac in the space has Skype and Zoom installed. If connecting with someone virtually, make sure that **Rodecaster Pro II Chat** is selected, which is optimized for applications like Skype. Ensure it is selected for both input and output. You also need to select Rodecaster Pro II for the input and output on the software that you are using. On the mixer the call will be on channel 9, which is accessible using the touch screen.

Bluetooth: Channel 5 is dedicated to Bluetooth devices. To make the mixer discoverable, press the channel button. If someone is calling in, make sure you select the **Rodecaster Pro II** as your output device. For iPhone users, you can only connect with a caller via Bluetooth. It will not work using a Lightning cable.

Mix Minus: When connecting with an external caller, be sure that the Mix Minus routing option is selected. You want to make sure that audio signal coming in from a caller is not sent back out to them. It will cause a distracting echo effect. See the User Guide (located in the studio) for instructions on how to select Mix Minus.

How to Record

There are two ways you can record your podcast:

Record using the mixer and save the audio files to a device.

Record using an audio recording program such as GarageBand or Audacity.

It is recommended that you use the mixer to record your production. You can easily drag audio tracks into software to further edit your project.

Microphone volume: Before you start recording, adjust your microphone volume level. Slide the fader up and down to adjust the volume. To check your volume level, select the channel button to see the settings on the display screen. Place the microphone in a

comfortable position in front of you. Speak into the microphone at your recording volume level. Your volume level should remain as a green line on the display. VoxLab is a built-in processing editor that allows you to further adjust the microphone output. Depth enhances the low end of your sound. Sparkle = adds brightness for more clarity. Punch – adds more compression and cuts down on background noise. Use the Rotary Encoder to adjust any of the VoxLab microphone settings. Access the video link below if you want more information on all the available microphone settings.

<https://youtu.be/bRPvvCnjQII?si=YH65couGay7f5FB3>

Headphone volume: Adjust the volume level of your headphones. The headphone channel will correspond with the microphone channel, e.g. the first microphone channel will be matched with headphones 1. The volume level of your headphones does not affect the recording.

SMART pads: SMART pads are connected to channel 6. They can be used to add sounds or voice effects to your production. There are 16 preset sounds like applause, as well as voice effects such as a megaphone. Select the arrow keys to move from one bank of sounds to the next. You can add your own audio samples. See the User Guide for instructions.

Record button: Once you have adjusted your volume level(s), simply press the Record button, which will turn red. If you want to pause recording, short press the Record button. To end the recording, press the Record button and hold for a few seconds. It will take a moment to save.

Markers: While recording you can add markers, as a way to bookmark places in your recording. Tap on the timer at the top of the display screen.

Stereo or multitrack: You can create a stereo (default) or multitrack recording. If you record in stereo, that means when you export your recording, it will only be one audio file. You can upload the file to audio software, but you cannot edit individual tracks, only the overall sound. If you are going to further edit the recording using audio recording software, then you should record in multitrack mode. When you export your file, each track will be its own audio file. That way, you can further edit each recorded track.

Pre-fader versus post-fader: If you record in multitrack mode, select either Pre-fader or Post-fader. **Pre-Fader** means all the tracks will be recorded at the same level, which makes the fader position on the channel irrelevant. You can adjust the volume of the track using audio editing software. **Post-Fader** means that whatever level you have the fader at during recording, that is what the volume level will be if you upload the file to audio editing software.

Playback your recording: Once you finish recording, you can play it back. The only editing option you have is the ability to shorten its length. Any further edits will require audio editing software.

Save your recording: There is an SD card in the mixer. Your recording will be stored on the card. You must transfer the recording to your own device before you leave the space. You can also use your own SD card or connect a USB storage device.

Export your recording: To export your recording, use the **Transfer Recordings** function

on the Rode Central app on the iMac. The default format is WAV but you can change it to MP3.

Record using software: The Rodecaster Pro II can be used with software to record your audio production. Listed are software options that work directly with the Rodecaster Pro II:

Available on the iMac:

- GarageBand
- Adobe Audition
- Audacity (also a free download)

Not available on the iMac:

- Reaper (PC or MAC)
- Pro Tools (PC or MAC)
- Logic Pro (MAC only)

If you want to use an audio program to record, make sure that you are familiar with the software. Remember that you can record directly to the mixer, then import the tracks into audio software to further edit. Here's a link to resources on how to record using the various compatible software. Please note that Audacity is not listed but it is possible to record using the software. A simple Google search will guide you through the process.

<https://rode.com/en/about/news-info/how-to-use-multitrack-with-the-rodecaster-pro-walkthroughs-for-your-daw>

Recording Tips

Come to the studio with a completed script. Rehearse your script beforehand. Find a comfortable spot in front of the microphone. Make sure you keep the same distance from the microphone throughout the recording. Once you press the Record button, wait a few seconds before talking. You can use that sample to reduce background noise using audio editing software afterwards. Create a quick test recording to ensure everything is working right. Mute other channels that are not being used, to reduce unwanted noise.

Policies

The studio is available to current students, staff, and faculty. No food or drink is permitted. Recordings must be saved to personal devices. Any recording left on library equipment will be deleted the next day. Along with this video, users must complete the Makerspace interactive orientation video. See the link below for information.

<https://makerspace.utsc.utoronto.ca/get-started/>

<https://forms.office.com/r/GYi2Gi7E2n>

For more information

Website: makespace.utsc.utoronto.ca

Email: makespace.utsc@utoronto.ca