

ART NO STOP: THE SOCIAL WORLD AT THE SERVICE OF ART
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SOUND PRODUCTION MANUAL

CHAPTER 3: SOUND PRODUCTION



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INDEX

[00. Introduction](#)

[01. Recording a podcast](#)

[02. Editing](#)

[03. Improving the sound of the recording](#)

[04. Free programs for recording](#)

[05. Beats](#)

[06. Platforms](#)

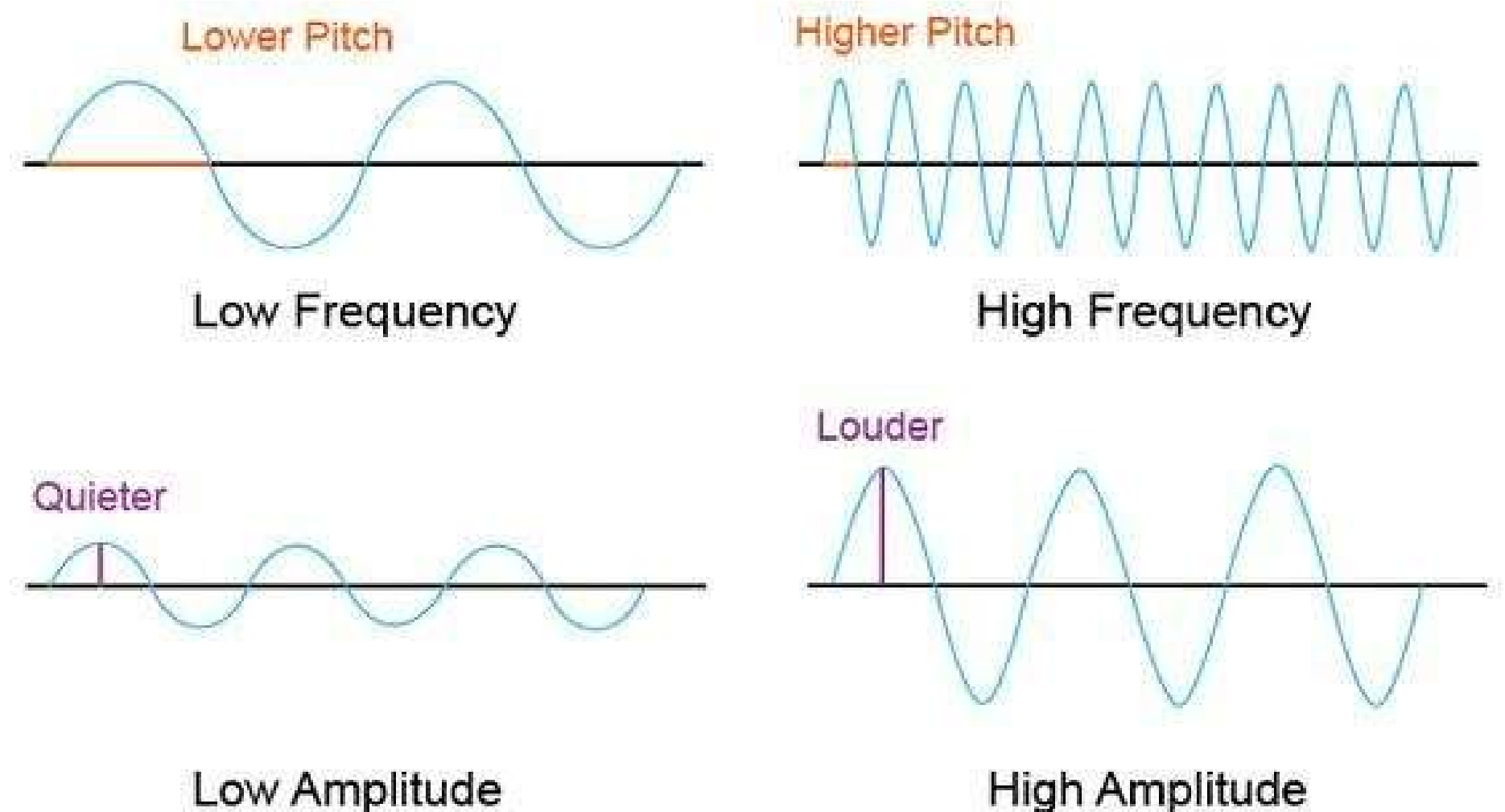
[07. Uploading recordings to Spotify.](#)

00. INTRODUCTION

What is sound?

Sound is vibrations that travel in waves through air, water and the ground. Once they reach our ears, they cause the delicate membranes in our ears to vibrate, allowing us to hear.

The total number of waves produced in one second is called the frequency of the wave. The number of vibrations counted per second is called frequency. Here is a simple example: If five complete waves are produced in one second, then the waves' frequency will be 5 hertz (Hz) or 5 cycles per second.



Recording music and podcasts on a computer has never been easier or more accessible.

With the current software, you no longer need a professional recording studio or expensive equipment to make **high-quality recordings**. Don't worry too much about having the fanciest equipment or the perfect sound quality. Just focus on creating inspiring content and engaging with the listeners. Whether you're a musician looking to record your own music or a podcaster looking to share your message with the world, recording on a computer can be a **convenient** and **cost-effective** option.



Being able to record, edit, and distribute your content on a computer gives you the power to create and share your work with the whole world.

In this article, we will explore the basics of recording music and podcasts on a computer, including equipment, software, and techniques to help you produce high-quality recordings at home.



01. RECORDING A PODCAST

Here are some steps you can follow to record a podcast using basic equipment:



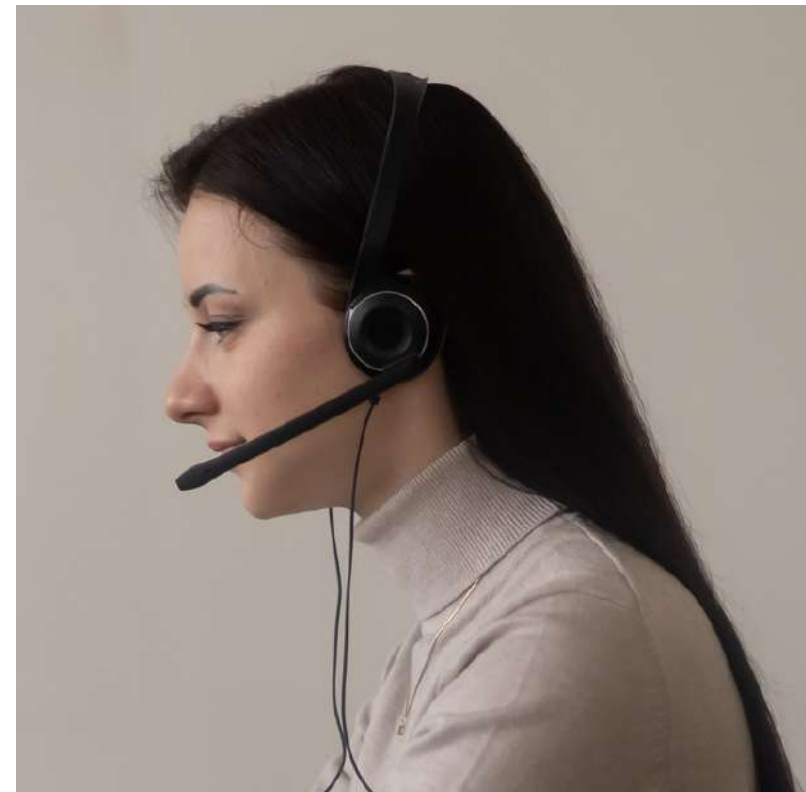
1. Before you start recording, plan what you want to talk about in your podcast. Choose a topic and prepare some notes or points that you want to cover.

2. To record, you'll need a **microphone** and a **recording device** (phone or computer). You can use the built-in microphone on your computer or smartphone, but for better sound quality, you might want to invest in an external microphone. A USB microphone is a good option for beginners.

External mics

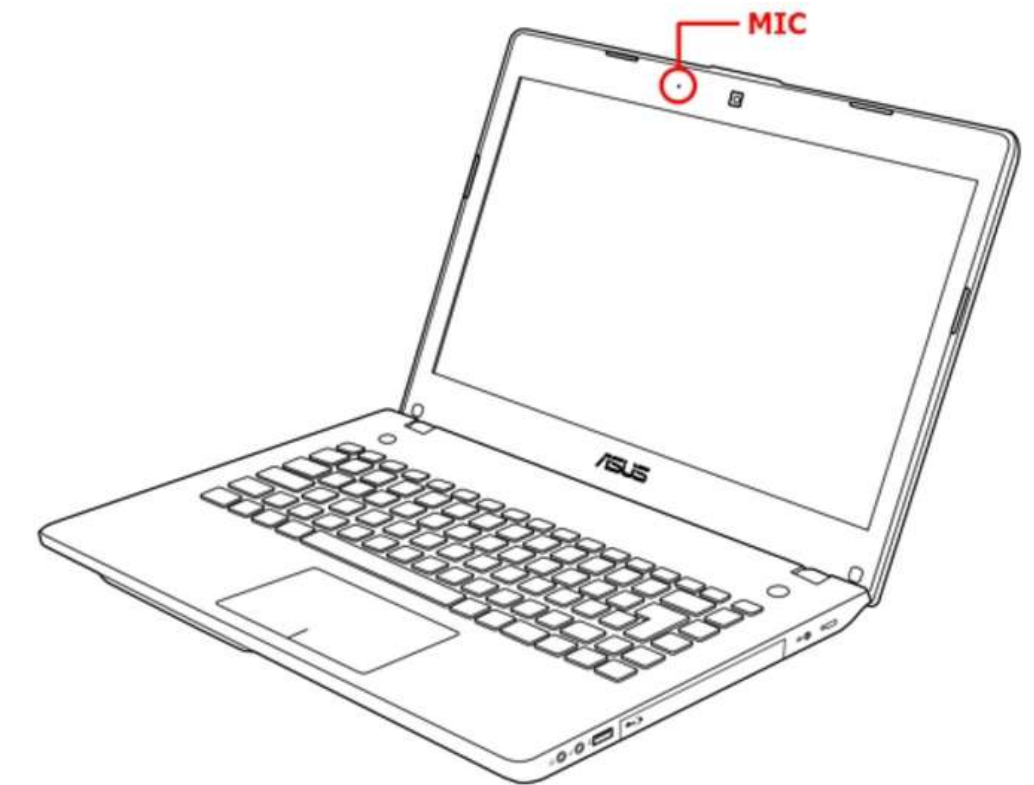
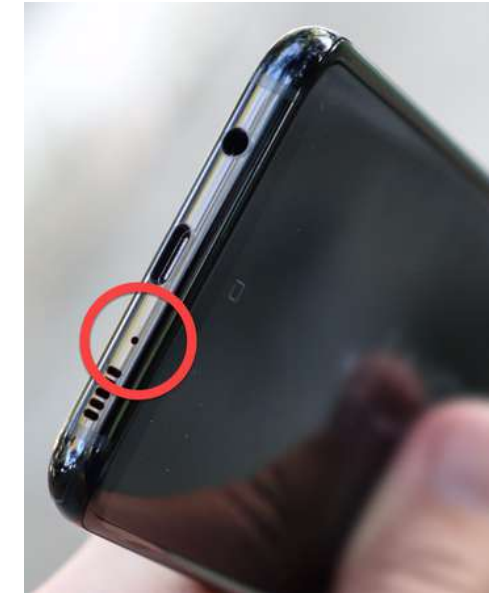


USB mic

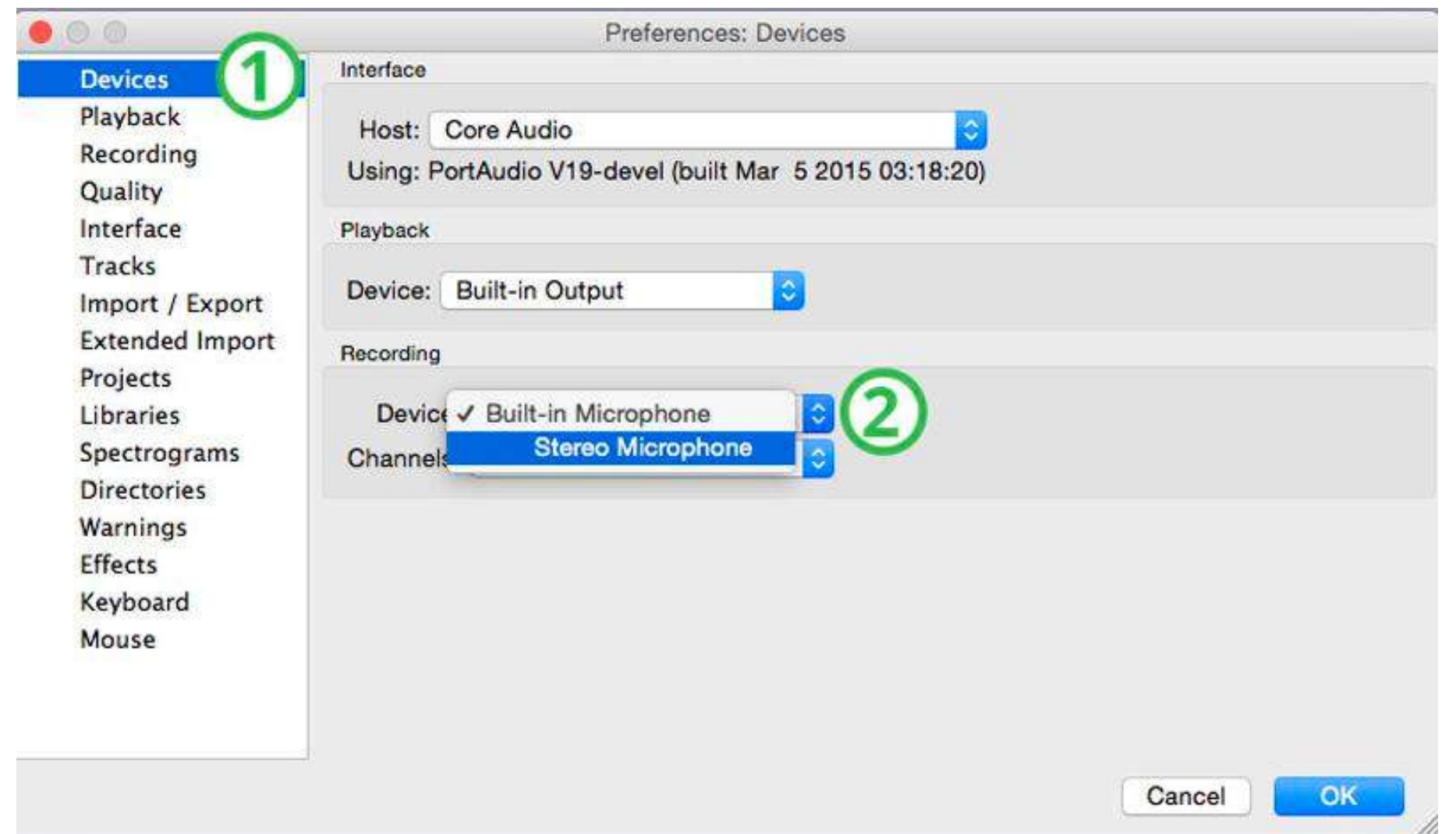
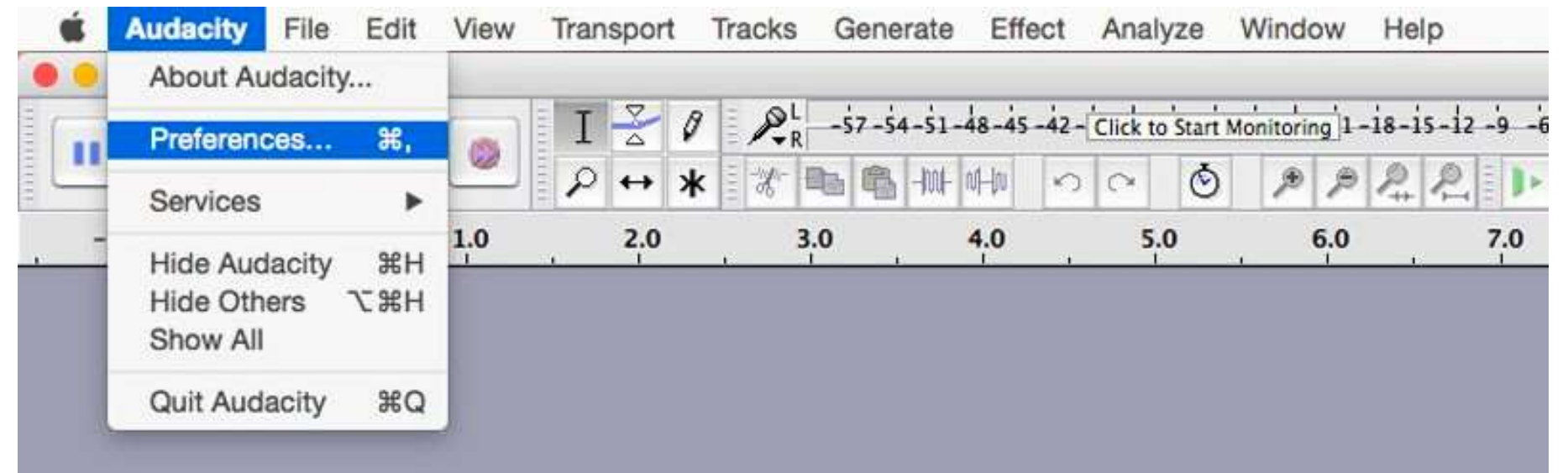


Headpiece mic

Built-in mics



Make sure after deciding what type of microphone you are going to use, to set the preferences right so the audio gets recorded well. Regardless if you are using Audacity or Garage Band, go to "Audacity" or "Garage Band", then "Preferences" and then "Devices". Adjust the setting accordingly in the "Recording" section.

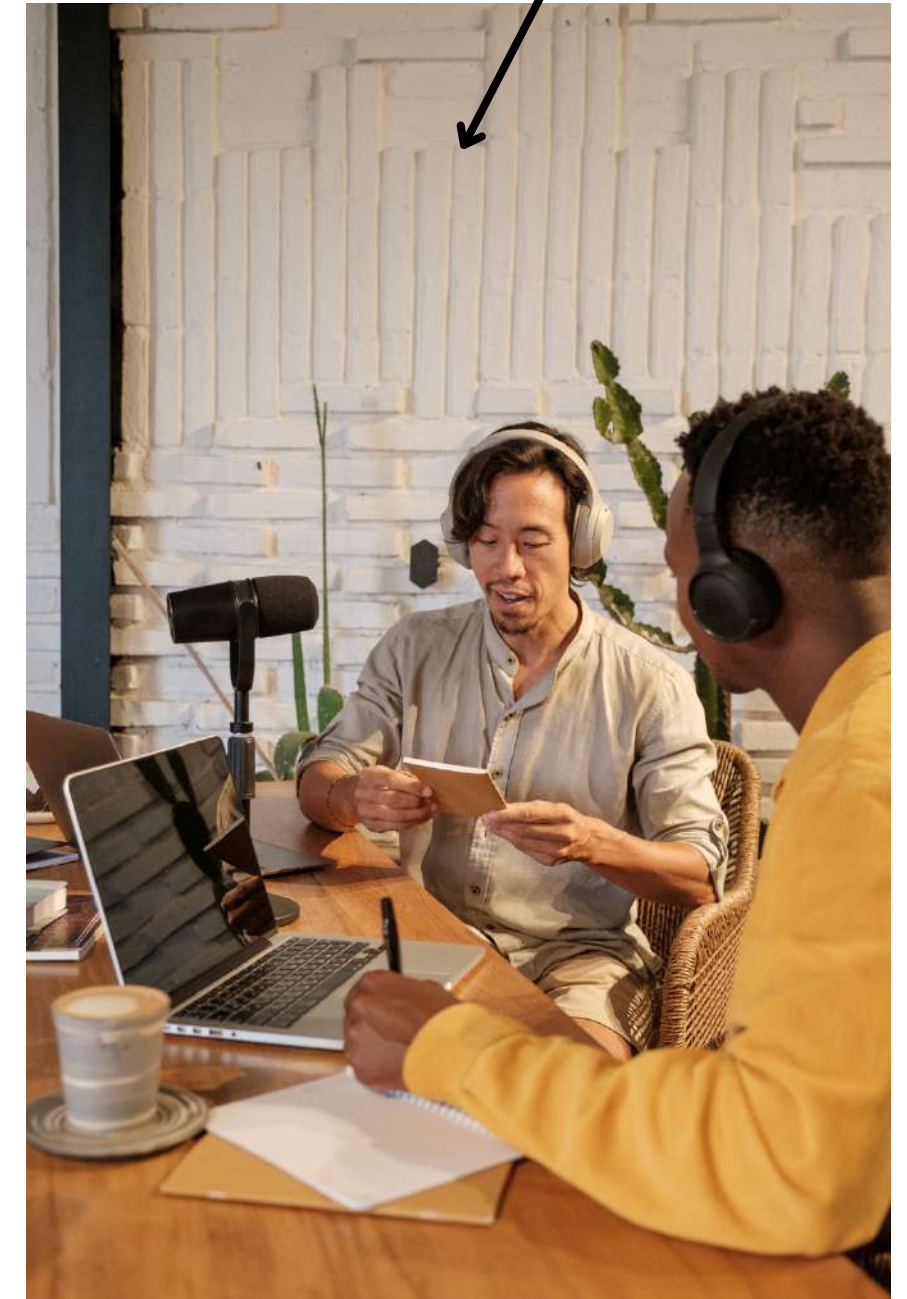
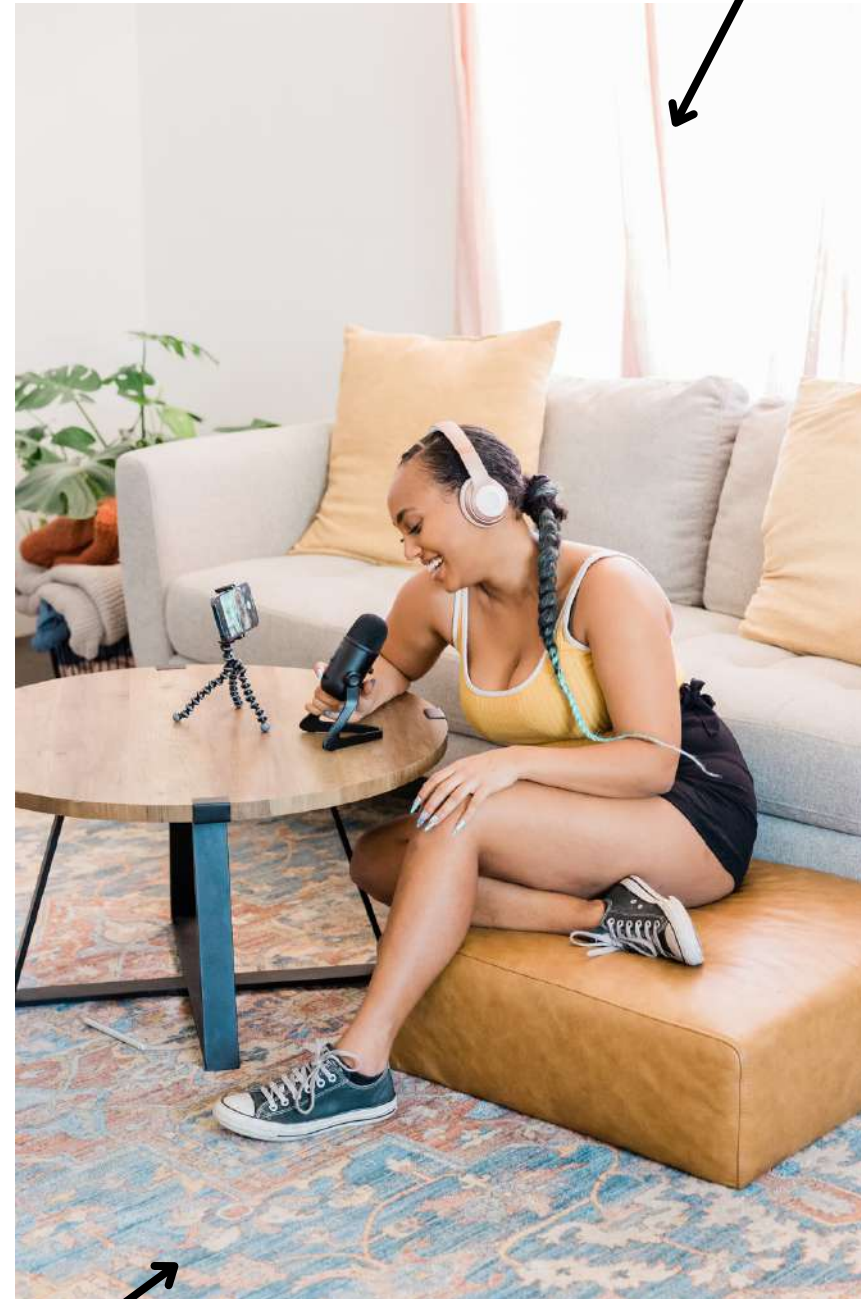


3. Choose a quiet, enclosed space to record your podcast.
A room with carpeted floors, curtains, or other sound-absorbing materials will help reduce background noise.

Acoustic foam panel to absorb background sound and echo

Curtains (preferably thick so they can absorb / block sound better)

Quiet, enclosed room



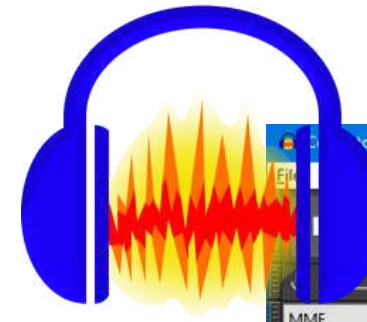
Carpet

Potential podcast questions that could help spark interesting conversations:

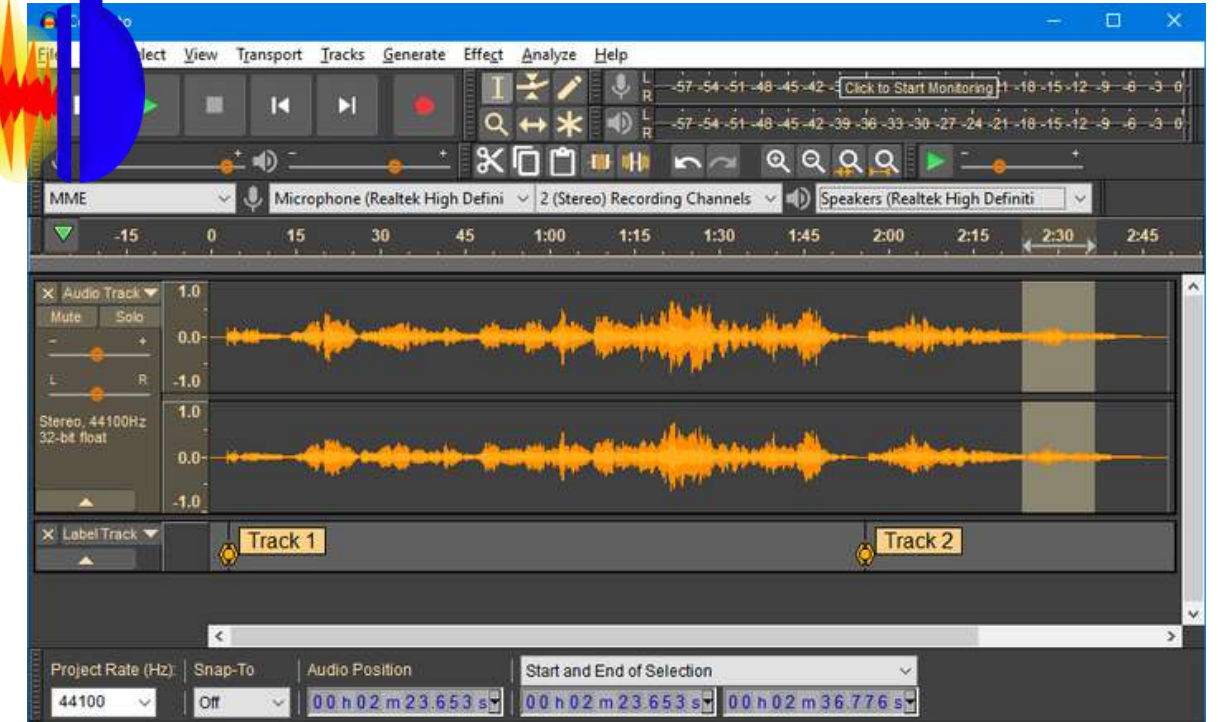
- What inspired you? What challenges have you faced?
- How do you stay motivated when faced with obstacles or setbacks?
- Can you share a personal experience that taught you a valuable lesson or changed your perspective?
- What are some common misconceptions or stereotypes that you encountered and how do you address them?
- How do you balance your activities with your personal life and relationships?
- What advice would you give to someone starting?
- How do you stay up-to-date on trends, innovations or developments?
- What role do you think technology and social media play in your personal and professional life? How do you manage their impact?
- What does success mean to you? What do you want to achieve before you call yourself successful?

02. EDITING

Editing a recording can seem intimidating at first, but it's actually fairly straightforward!



Audacity



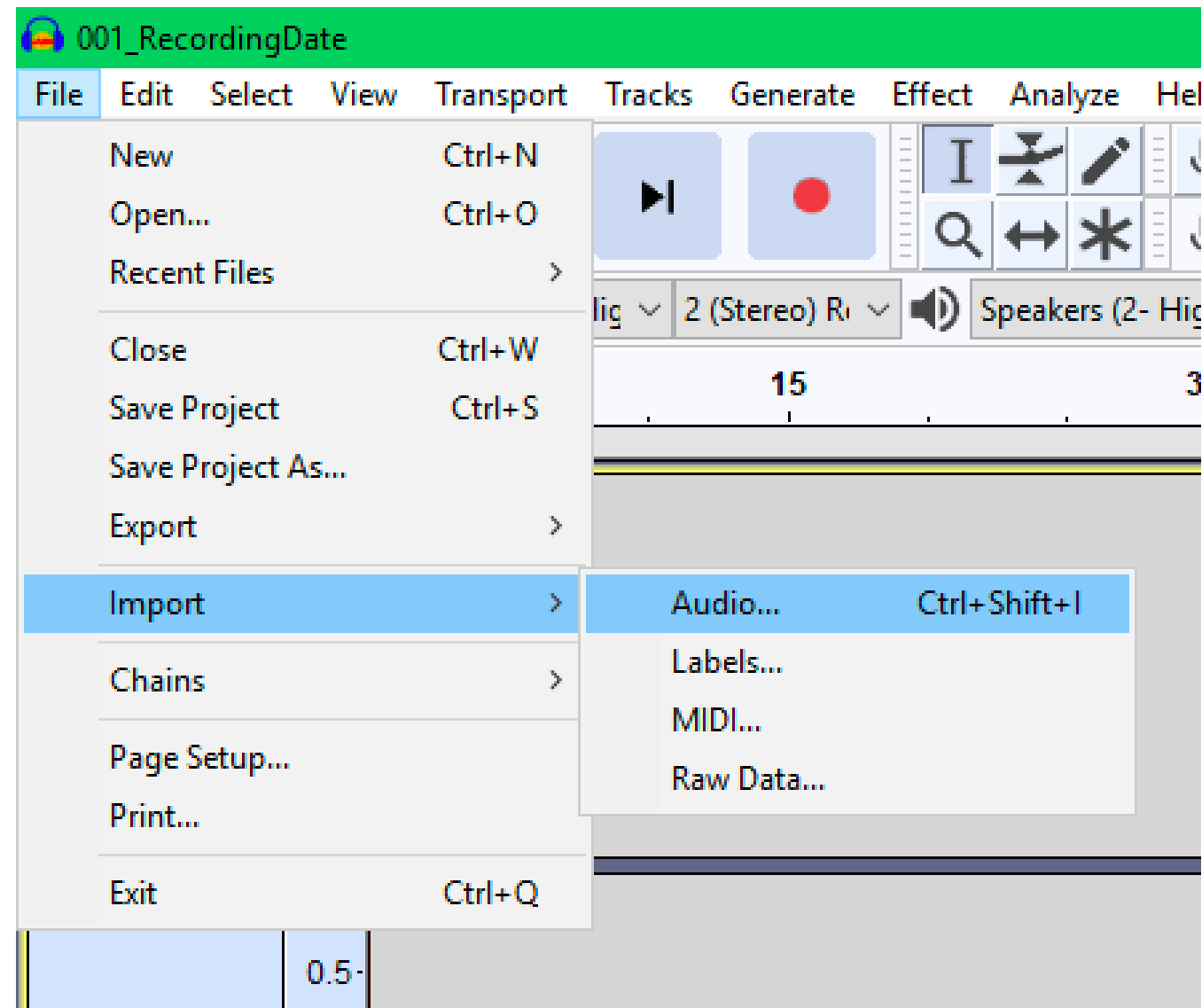
Garage Band



Here are the basic steps to edit a recording:

- 1. Choose your editing software:** There are a lot of different editing software options, including free options like Audacity or GarageBand. Choose the one that you feel most comfortable with.

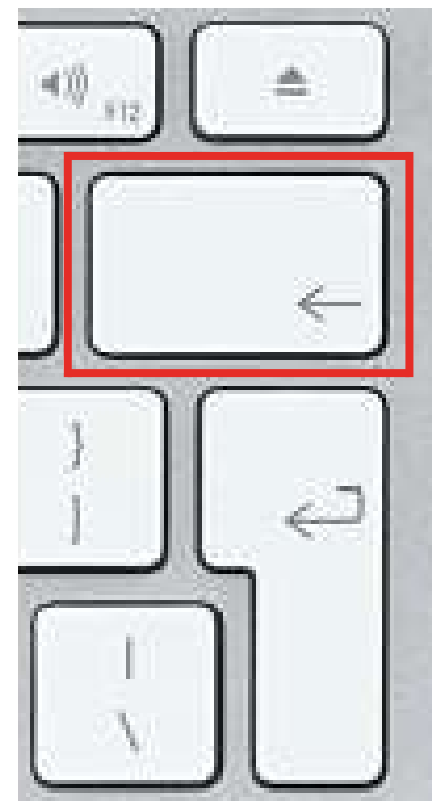
2. Import your recording: Open your editing software and import the recording you want to edit. You can usually do this by clicking "File" and then "Import" or "Open."



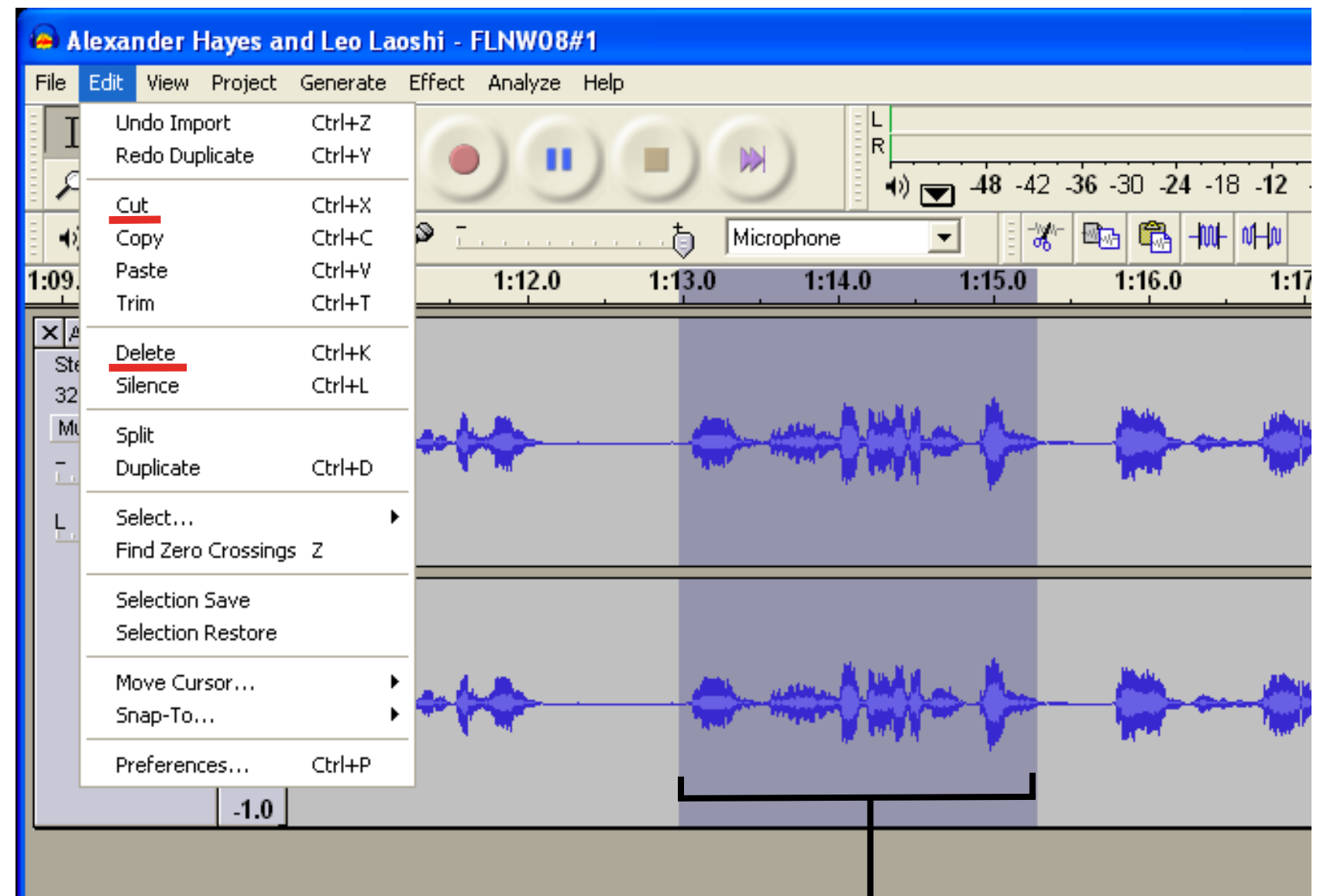
3. Listen to your recording: Play through your recording from beginning to end, taking note of any sections that need to be edited out, or areas where you want to add in music or sound effects.



4. **Cut and edit your audio:** Once you've identified the sections you want to remove or adjust, use the editing tools in your software to cut or edit the audio. You can usually do this by selecting the section you want to remove and pressing the delete key, or by going to "File" and then clicking on "Cut" or "Delete".

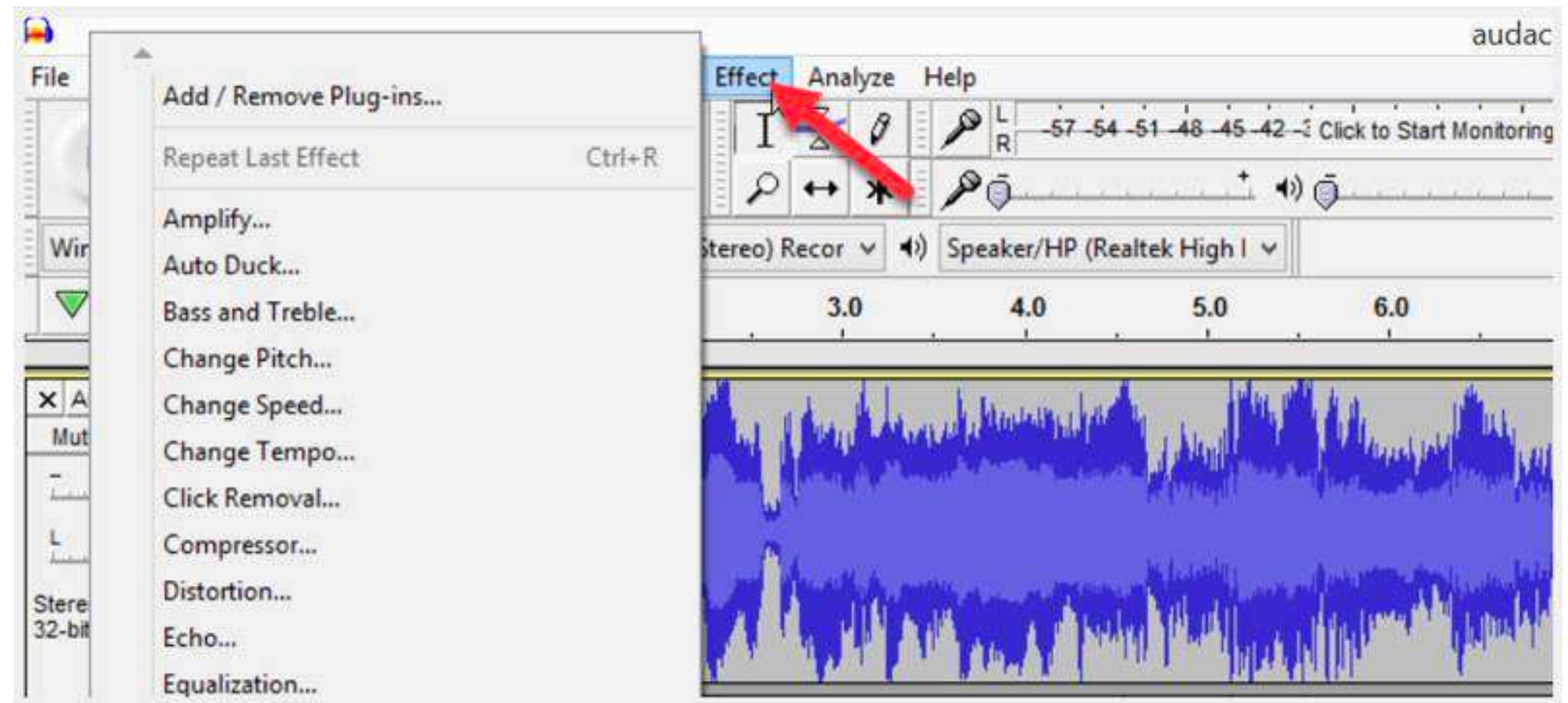
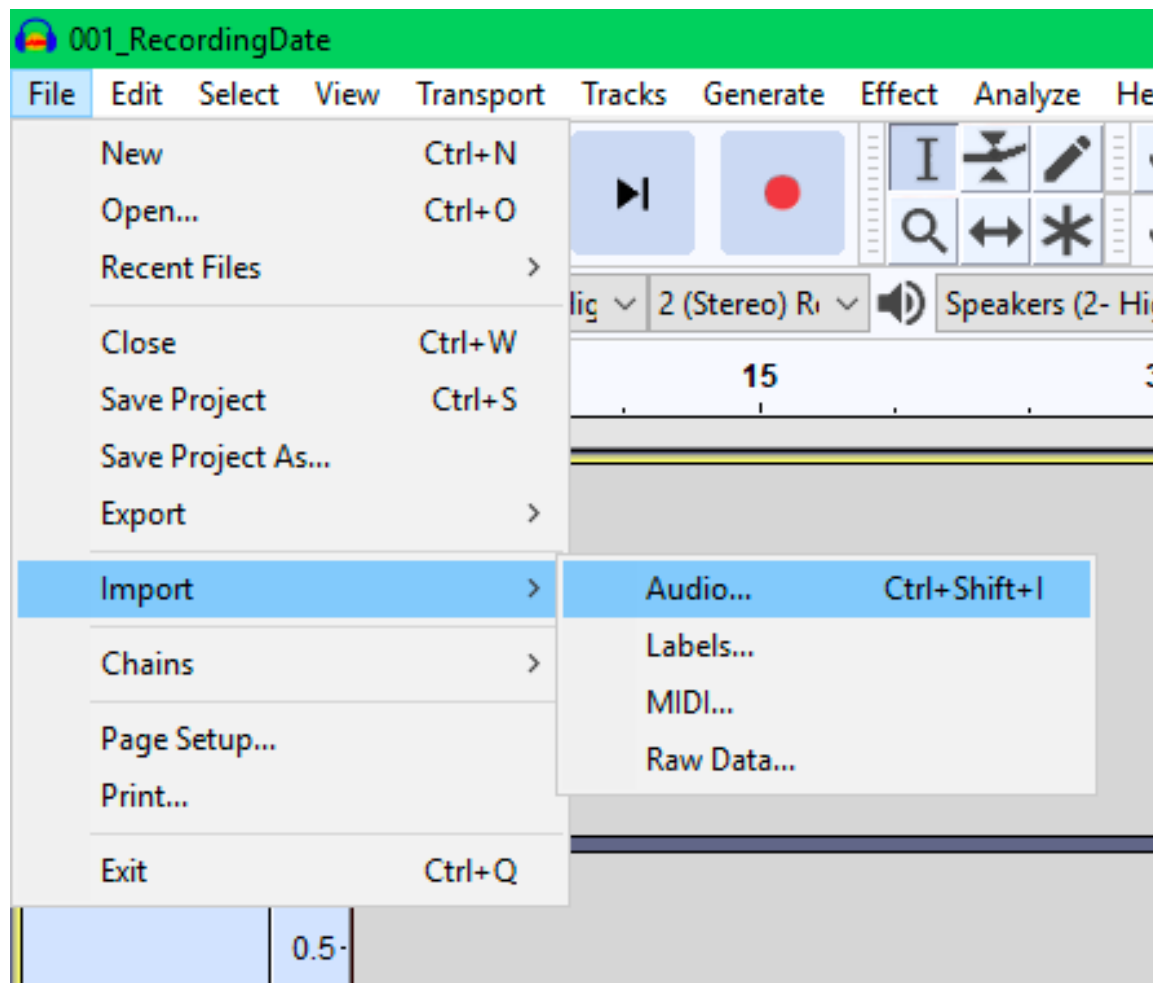


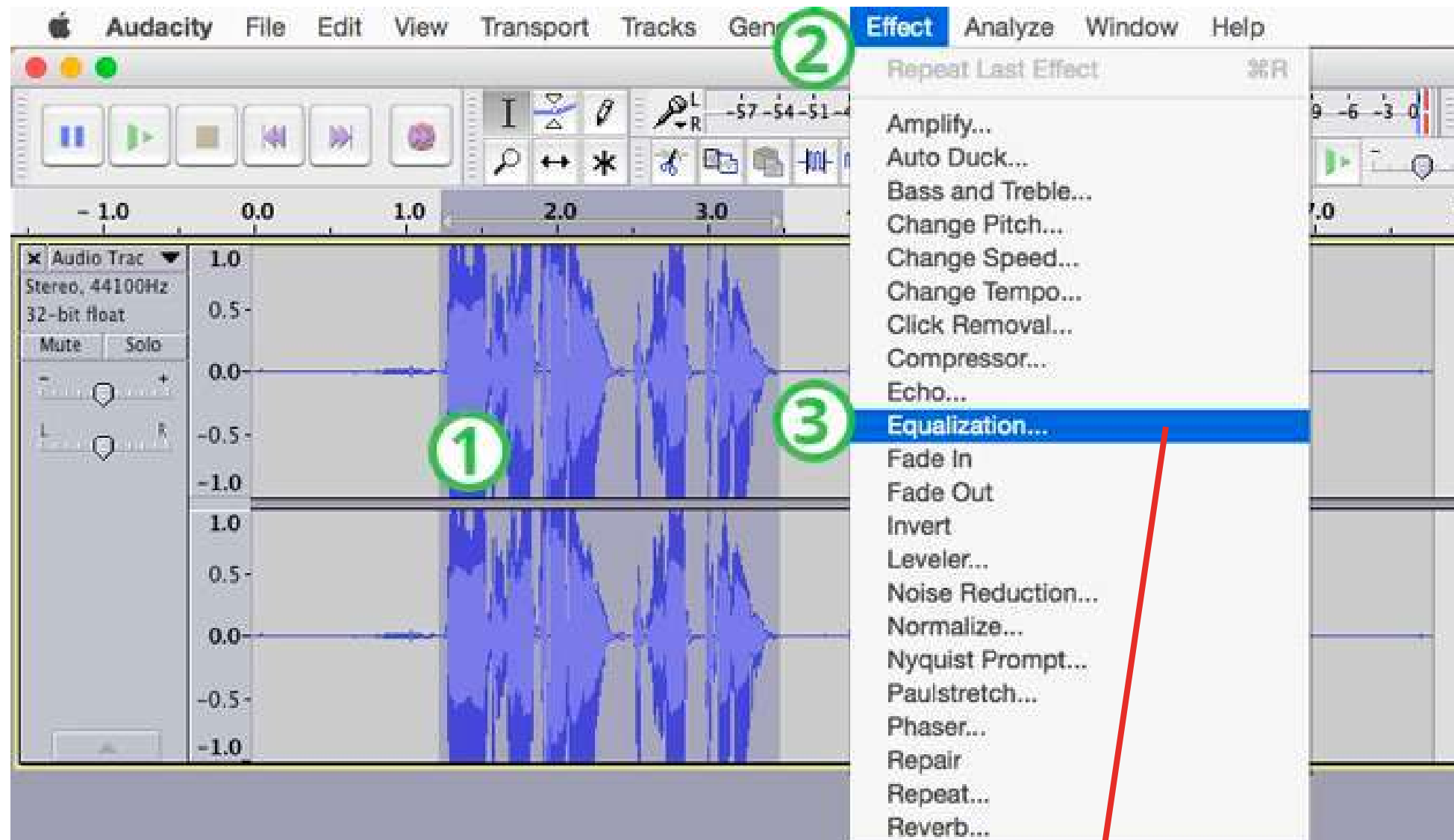
Delete/Cut keys



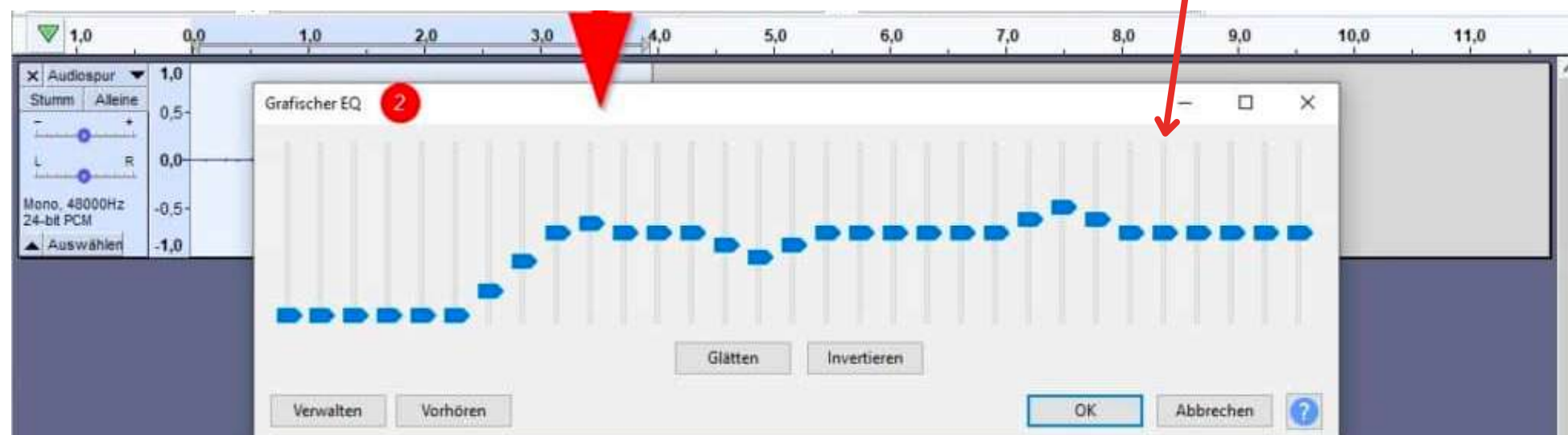
Selected section

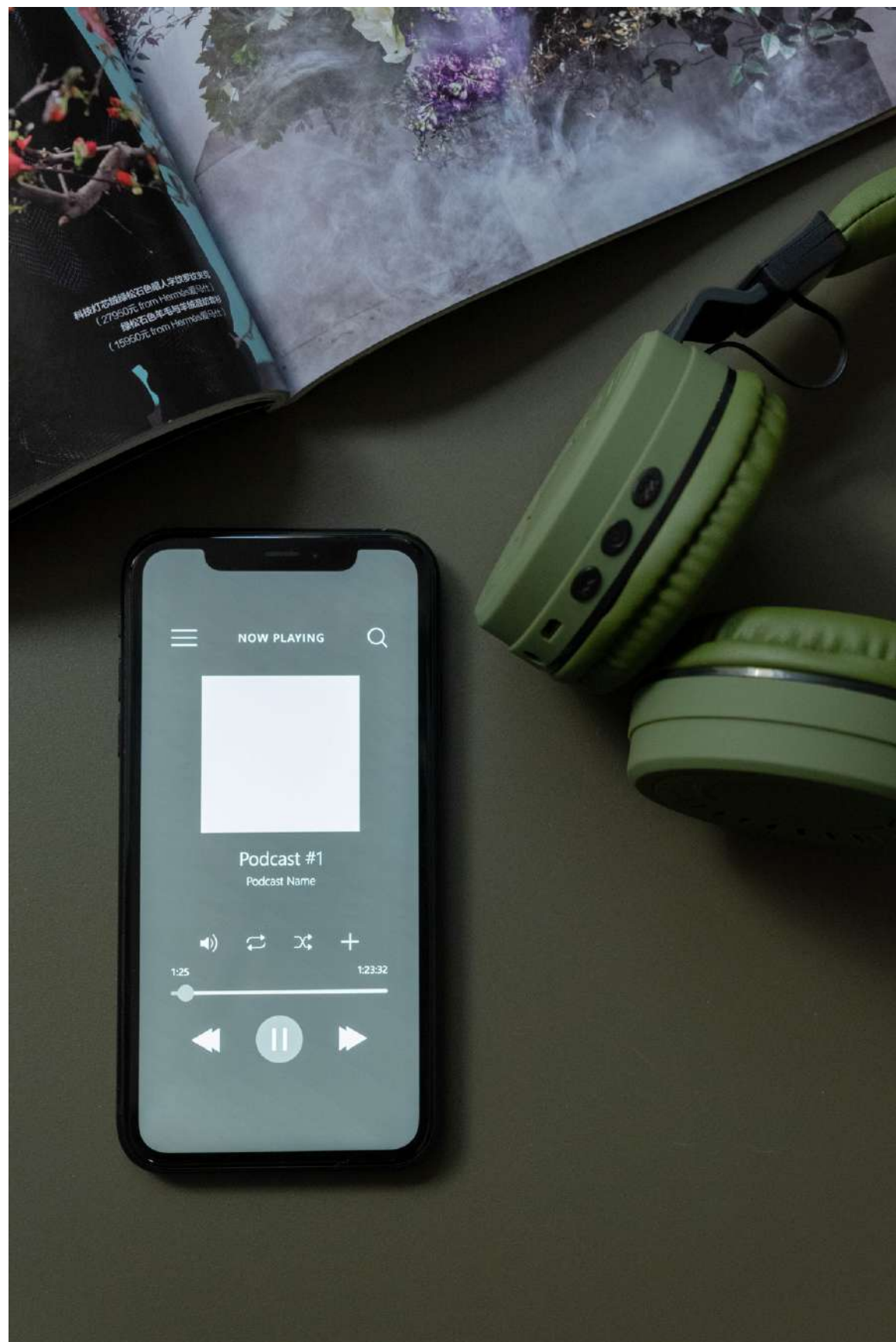
5. Add in additional audio elements: If you want to add music, sound effects, or other audio elements, you can import them into your editing software and place them where you want them to go in the recording.



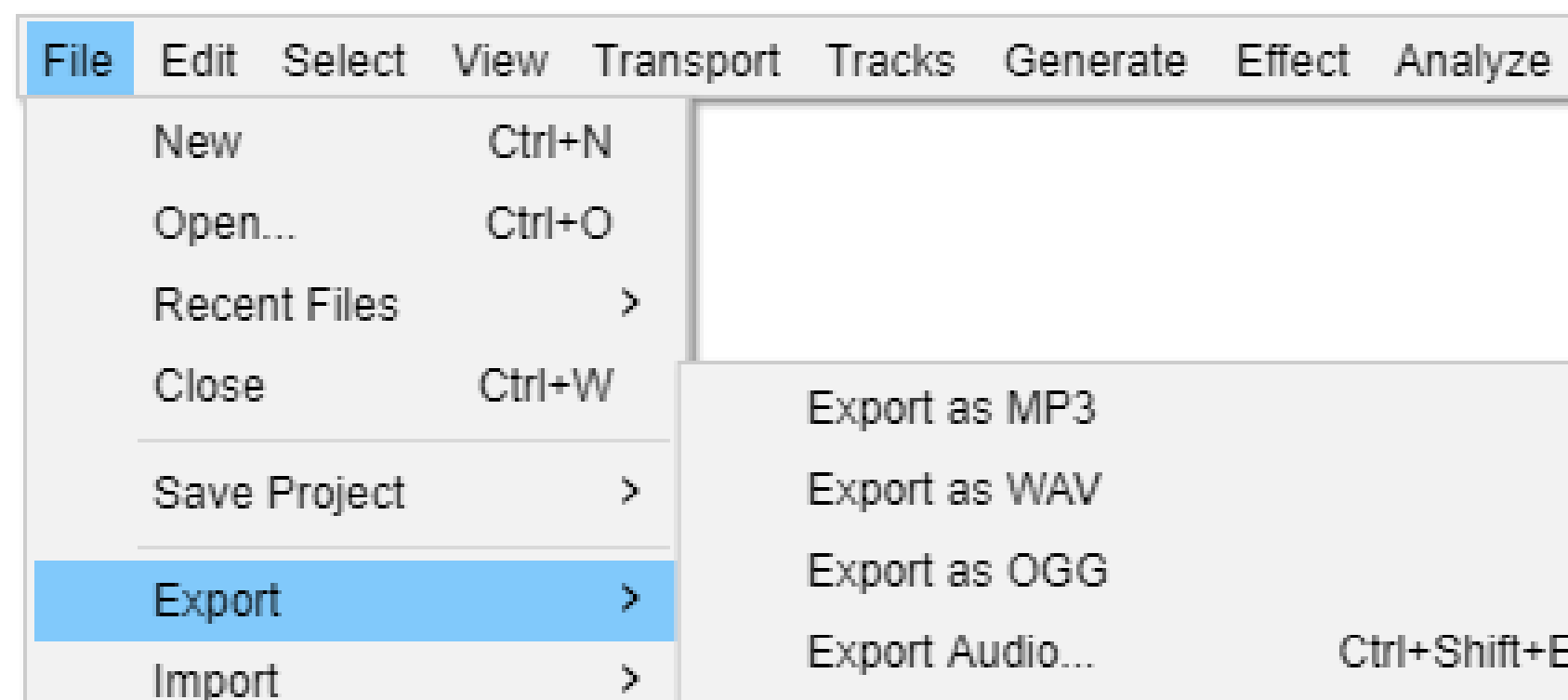


6. Adjust levels and EQ: To make sure your audio sounds clear and balanced, you may want to adjust the volume and EQ (equalization) of your recording. Equalization is the adjustment of the different frequencies of sound, to make it sound better or make it sound as desired. Select the part you want to work on, go to "Effect", then "Equalization" and adjust as wished.





7. Export your edited recording: Once you're happy with the edits you've made, export the file as an MP3 or WAV so that it can be easily shared or uploaded.



Remember, the key to editing a recording is to be patient and take your time. It can be tempting to rush through the process, but taking the time to make sure everything is polished and well-edited will make for a better final product.

03. IMPROVING THE SOUND OF THE RECORDING

Remember to have fun and being yourself. Don't worry too much about having the fanciest equipment or perfect sound quality.

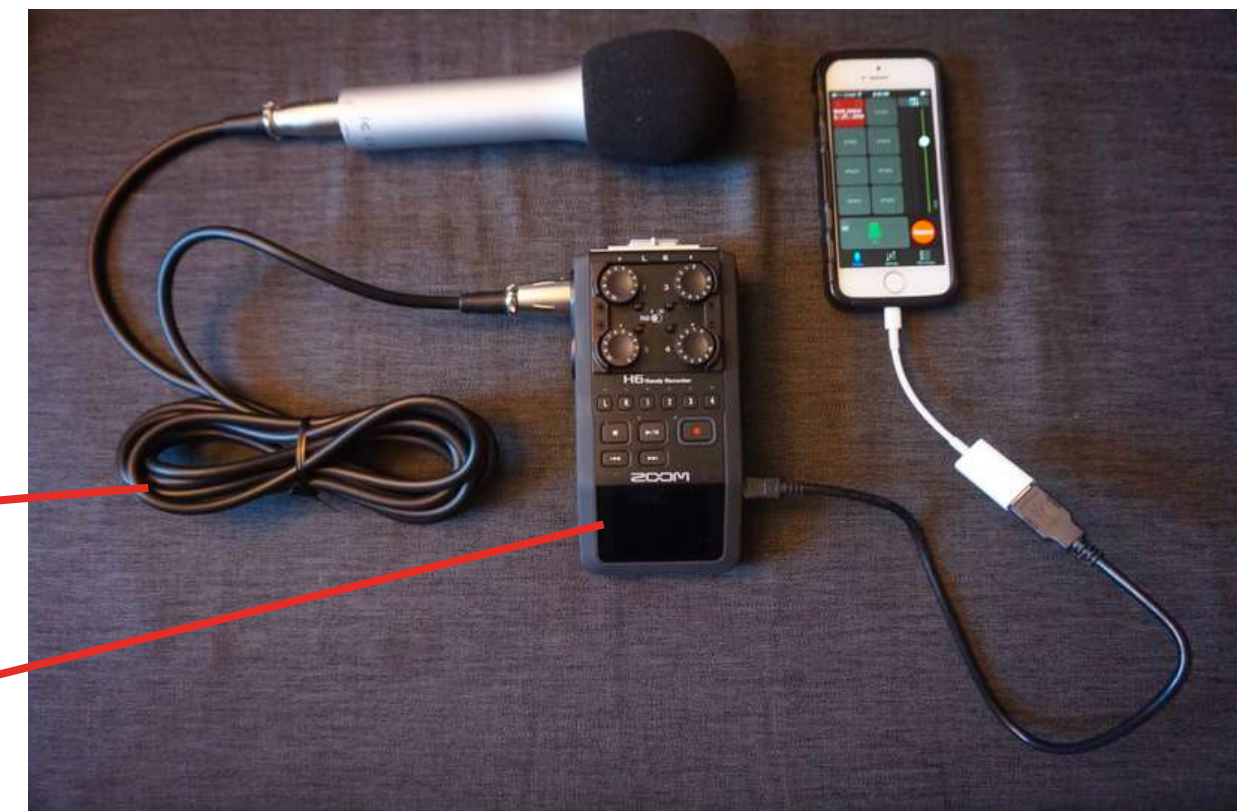


Improving the sound quality of recorded music begins with **choosing the right recording environment**. Try to find a quiet space where you can record, edit and uploading your music. Using good equipment helps. Other important factors are: **Proper microphone placement, applying EQ and compression, and effective mixing and mastering**. It's also important to **take breaks** to rest your ears and come back to the recordings with fresh ears.



There are several good and affordable microphones that you can use to record sound. Here are some popular options:

- **Audio-Technica ATR2100x-USB:** This is a dynamic microphone that is easy to set up and use. Its design helps to reduce background noise and capture clear audio. It has a cardioid polar pattern, which means the mic is the most sensitive and picks up best the sound that comes directly from the front of the mic. It also has a headphone jack so you can hear the audio levels are right while recording. It can be easily connected to your computer with one cable via USB. For better sound quality, there is also the option of connecting the microphone through an XLR cable. However, this requires having an audio interface, which is the device the microphone would be connected to, since laptops don't have XLR ports, and the device would be connected to the laptop.



XLR cable

Sound interface

- **Blue Yeti:** The Blue Yeti is a popular USB microphone that can be directly connected to the recording device and offers excellent sound quality for the price. Its design allows for different ways of recording sound (pickup patterns) depending on the purpose. For instance, you can select the bidirectional option if you are recording an interview, or cardioid if you're recording a podcast as it only focuses on the sounds coming from the front side of the mic. Besides that, it has a headphone jack so you can hear and monitor whether the audio is right while recording. The mute and gain knobs can be useful for podcasting. Gain, is the microphone's sensitivity. By increasing it, the mic will be more sensitive and pick up quieter sounds.





- **Samson Q2U:** The Samson Q2U is a dynamic microphone that is similar to the Audio-Technica ATR2100x-USB in terms of features and performance. It has a built-in headphone jack and can be connected to your computer or another recording device via USB or XLR.





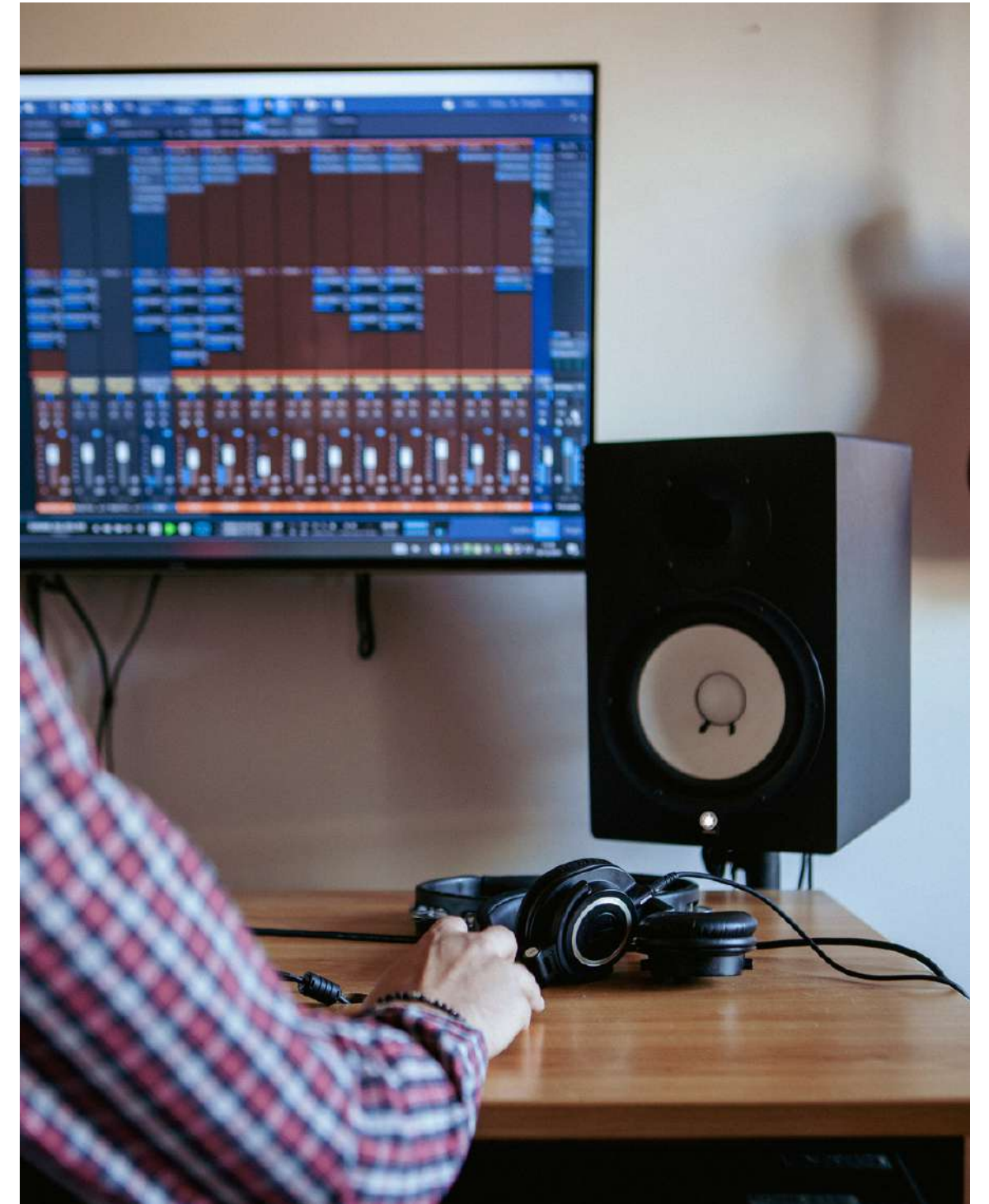
- **Rode NT-USB Mini:** The Rode NT-USB Mini is a compact USB microphone that offers excellent sound quality and is easy to use. It has a cardioid polar pattern, which means the mic is the most sensitive and picks up best the sound that comes directly from the front of the mic. Its built-in pop filter helps improve the sound quality and the microphone can be mounted on a desktop stand or stand. It also has a headphone jack so you can hear the audio levels are right while recording.

These are just a few examples of good and affordable microphones. Ultimately, **the best microphone for you will depend on your budget, recording environment, and personal preferences.** It's also important to **consider other factors like the type of recording you are planning to make.**

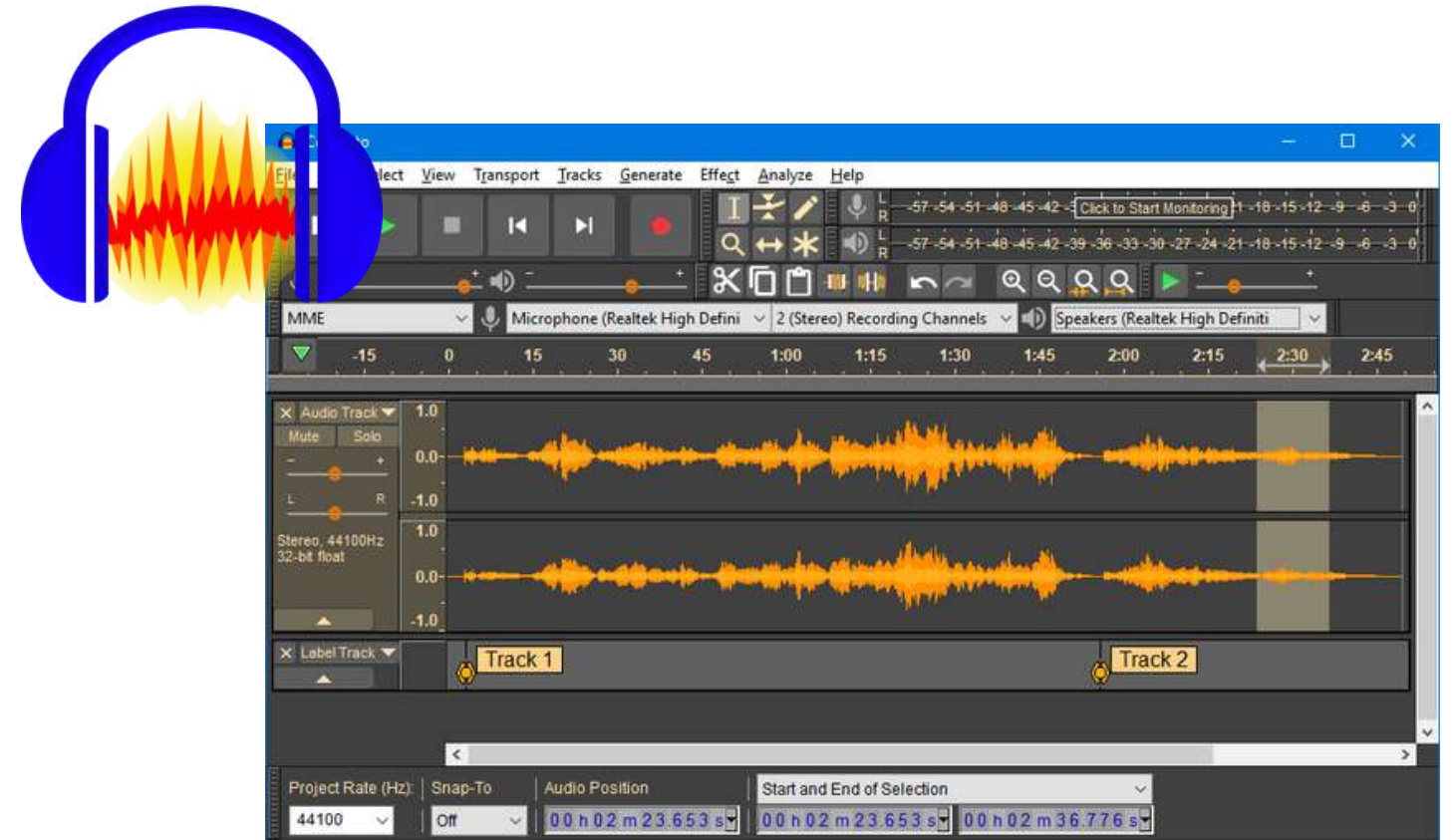
04. FREE PROGRAMS FOR RECORDING

Several free and simple tools or apps can be used to record and produce music.

All the apps and tools on this page are easy to use and can provide a great starting point for anyone who is interested in producing and recording music. However, keep in mind that the features and capabilities of the free version may be limited compared to the paid version.



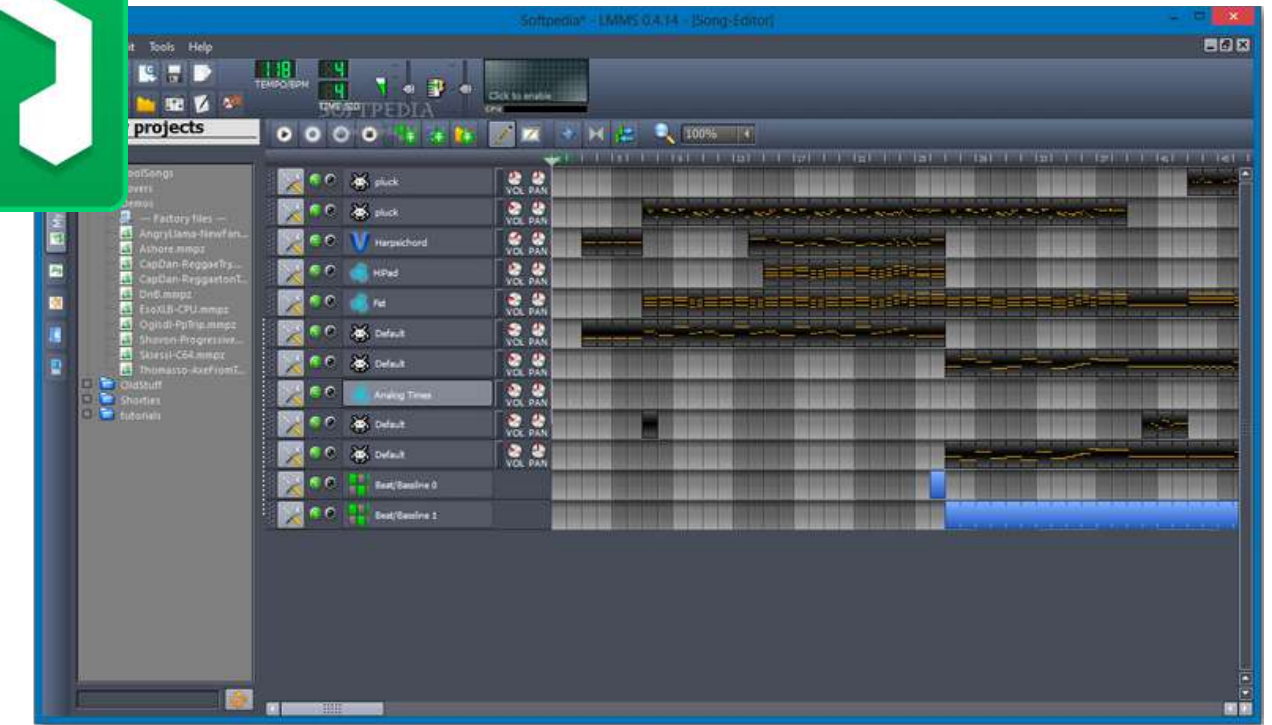
- **Audacity:** Audacity is a free, open-source digital audio editor and recording software. It is available for Windows, Mac, and Linux and can be used to record, edit, and export audio files.



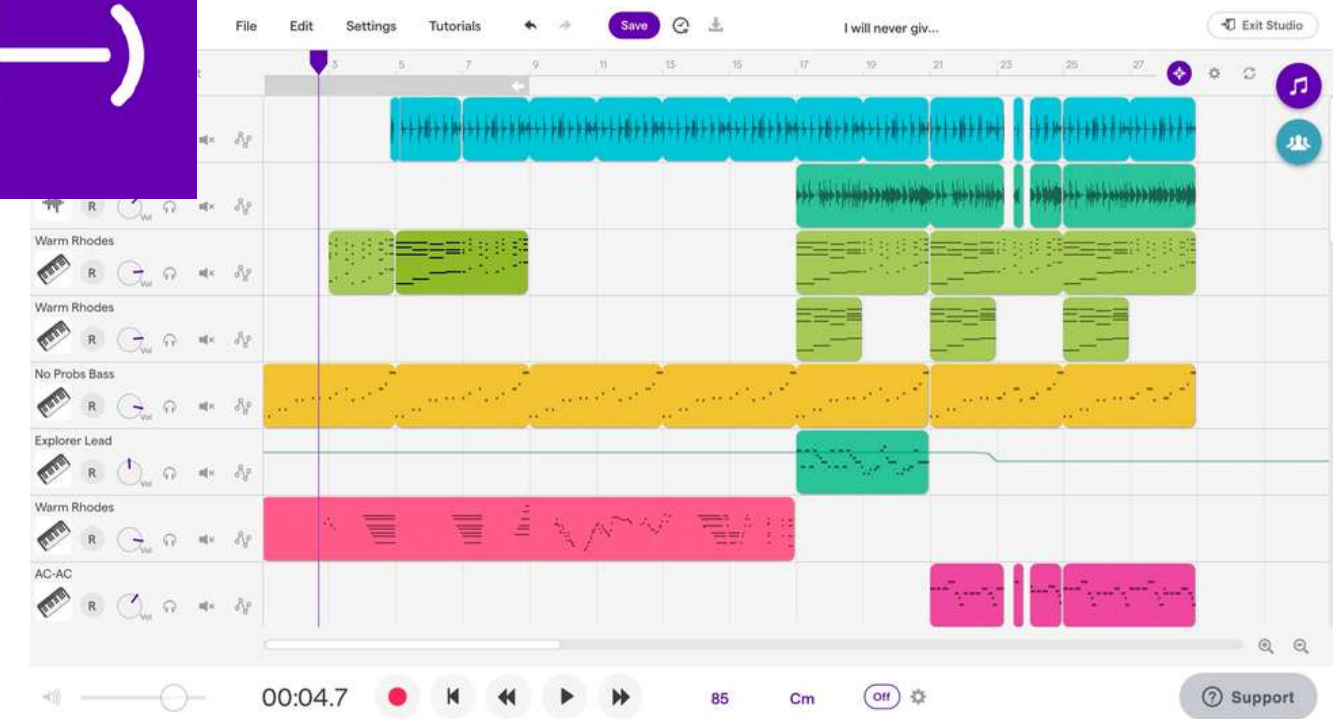
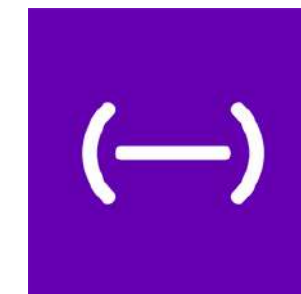
- **GarageBand:** GarageBand is a digital audio workstation and music production app that is available for iOS and macOS devices. It includes a variety of virtual instruments, drum kits, and other features that can be used to create and edit music.



- **LMMS:** LMMS (Linux MultiMedia Studio) is a free digital audio workstation that is available for Windows, Mac, and Linux. It includes a variety of features such as synthesizers, drum machines, and effects, and can be used to create and edit music.



- **Soundtrap:** Soundtrap is a free music production platform that can be used to create and edit music online. It is available for Windows, Mac, iOS, and Android devices.



- **Music Maker JAM:** Music Maker JAM is a free music production app that is available for iOS, Android and Windows devices. It includes a variety of virtual instruments, drum kits, and other features that can be used to create and edit music.



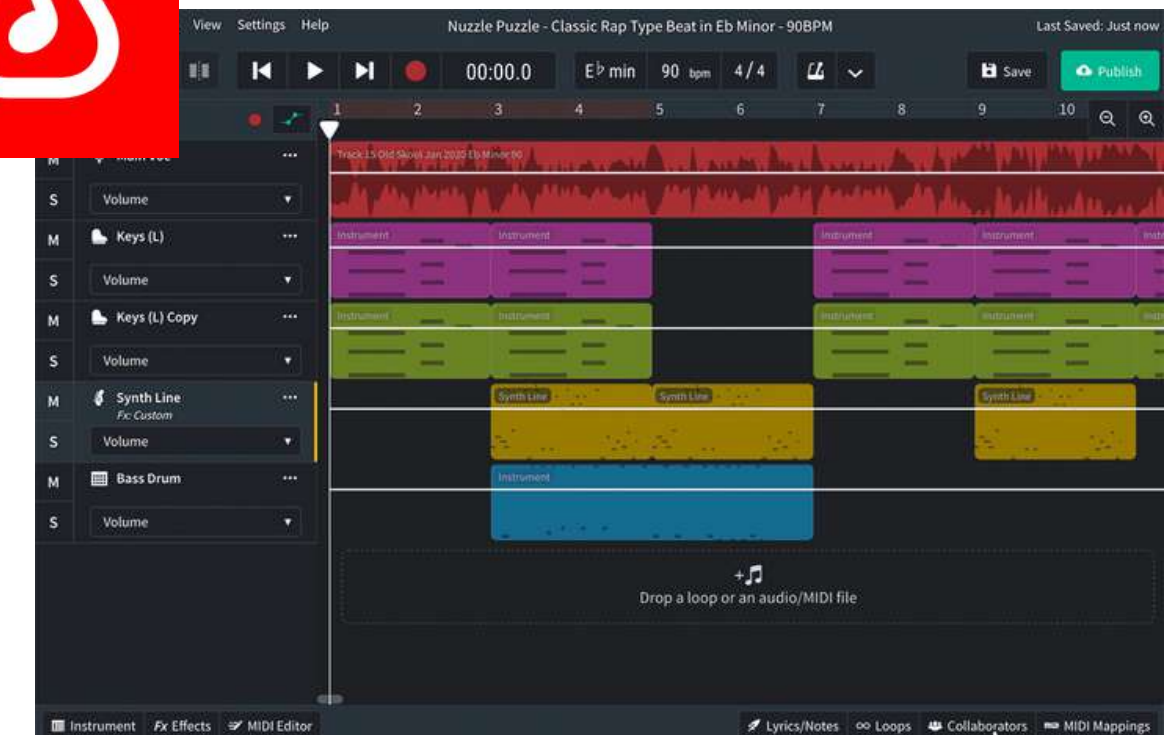
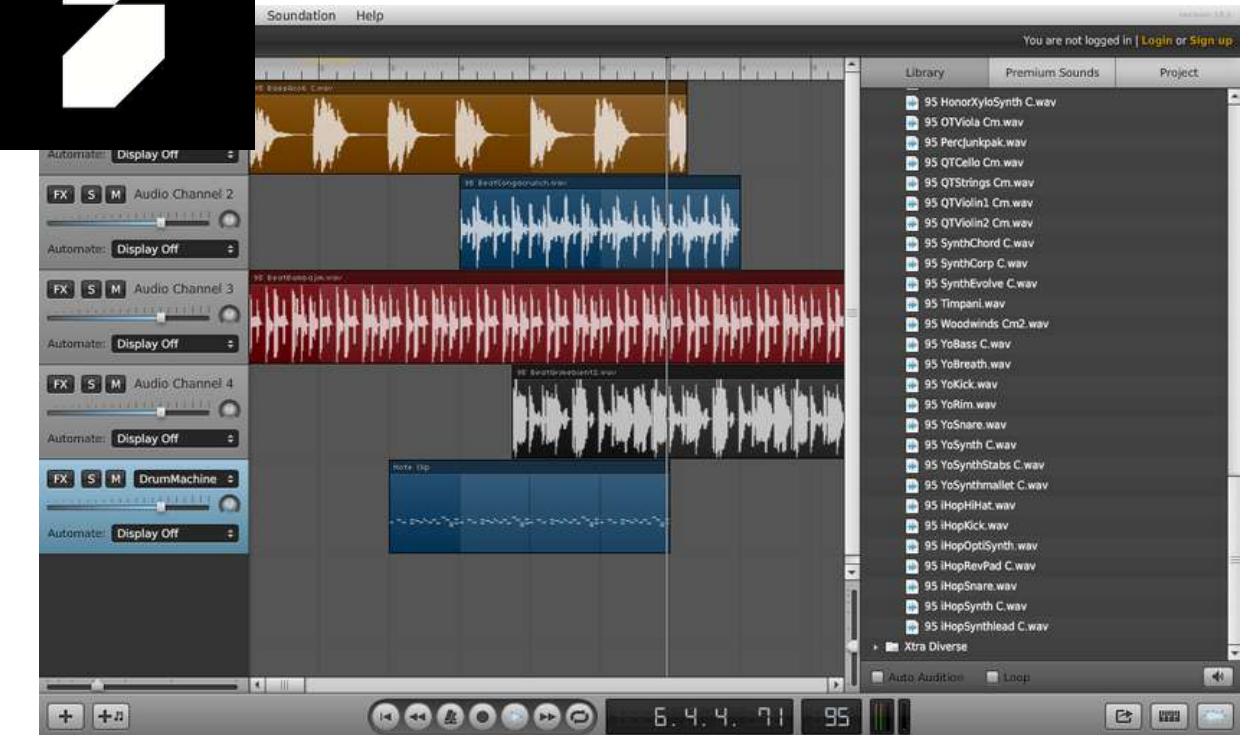
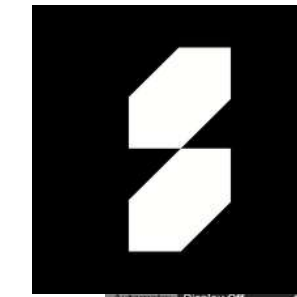
- **BandLab:** BandLab is a free music production platform that can be used to create, record, edit, and share music. Available for Windows, Mac, iOS and Android, it includes a variety of features such as virtual instruments, effects, and collaboration tools.



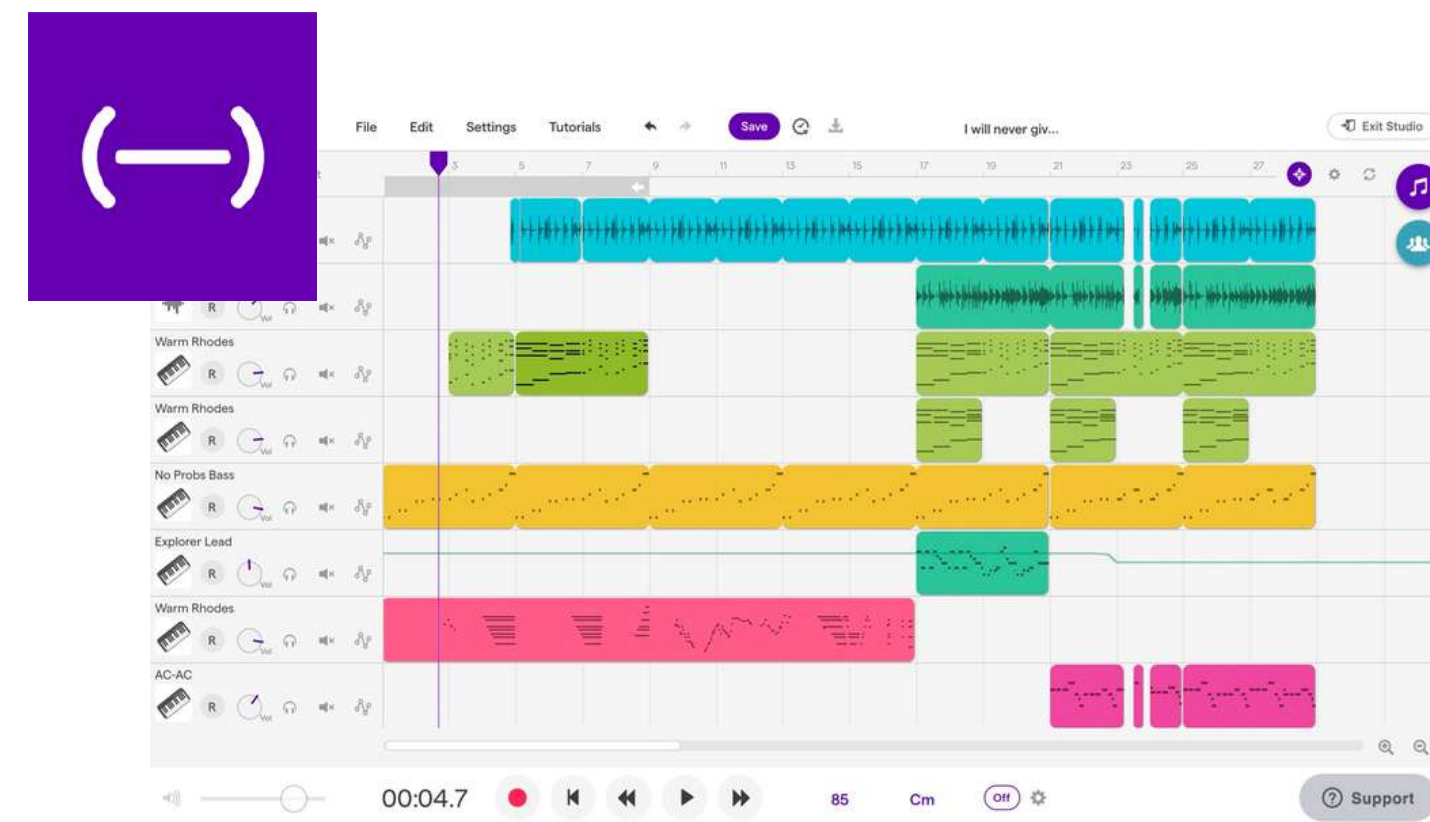
05. BEATS

There are several free online tools that you can use to make beats on the internet. Here are a few options to consider:

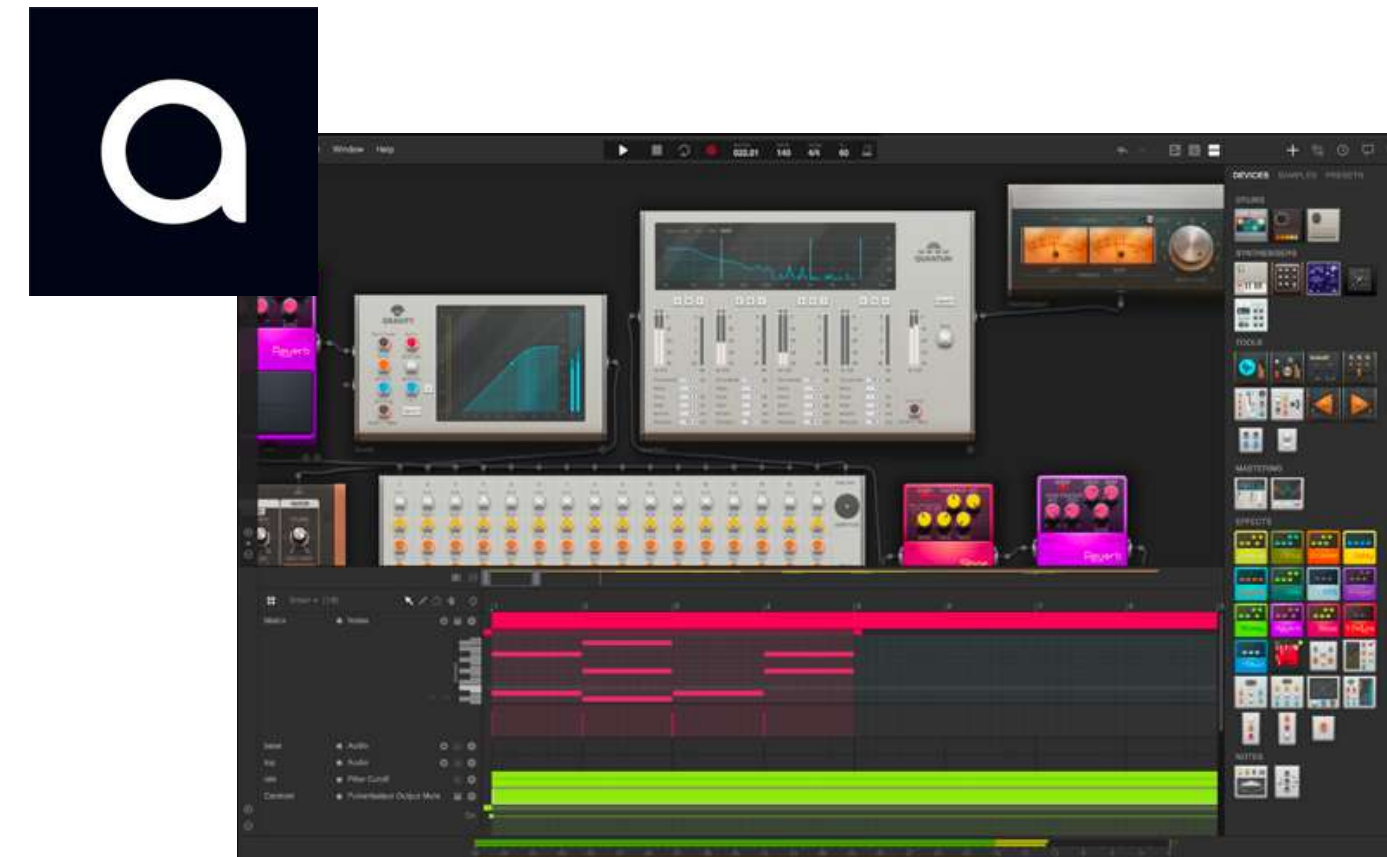
- **Soundation:** Soundation is a music production platform that offers a range of virtual instruments, effects, and loops. You can use it to create beats, record and edit audio, and collaborate with others online.
- **BandLab:** BandLab is a free workstation that lets you create music, remix tracks and collaborate with other musicians online. It also has a range of virtual instruments and effects that you can use to create beats.



- **Soundtrap:** Soundtrap is a workstation that lets you create music and podcasts. It offers a range of virtual instruments, loops, and effects that you can use to make beats, as well as a collaborative online environment where you can work with others.



- **Audiotool:** Audiotool is a workstation that lets you create and share music online. It offers a range of virtual instruments, effects, and tools, including a step sequencer that you can use to create beats.



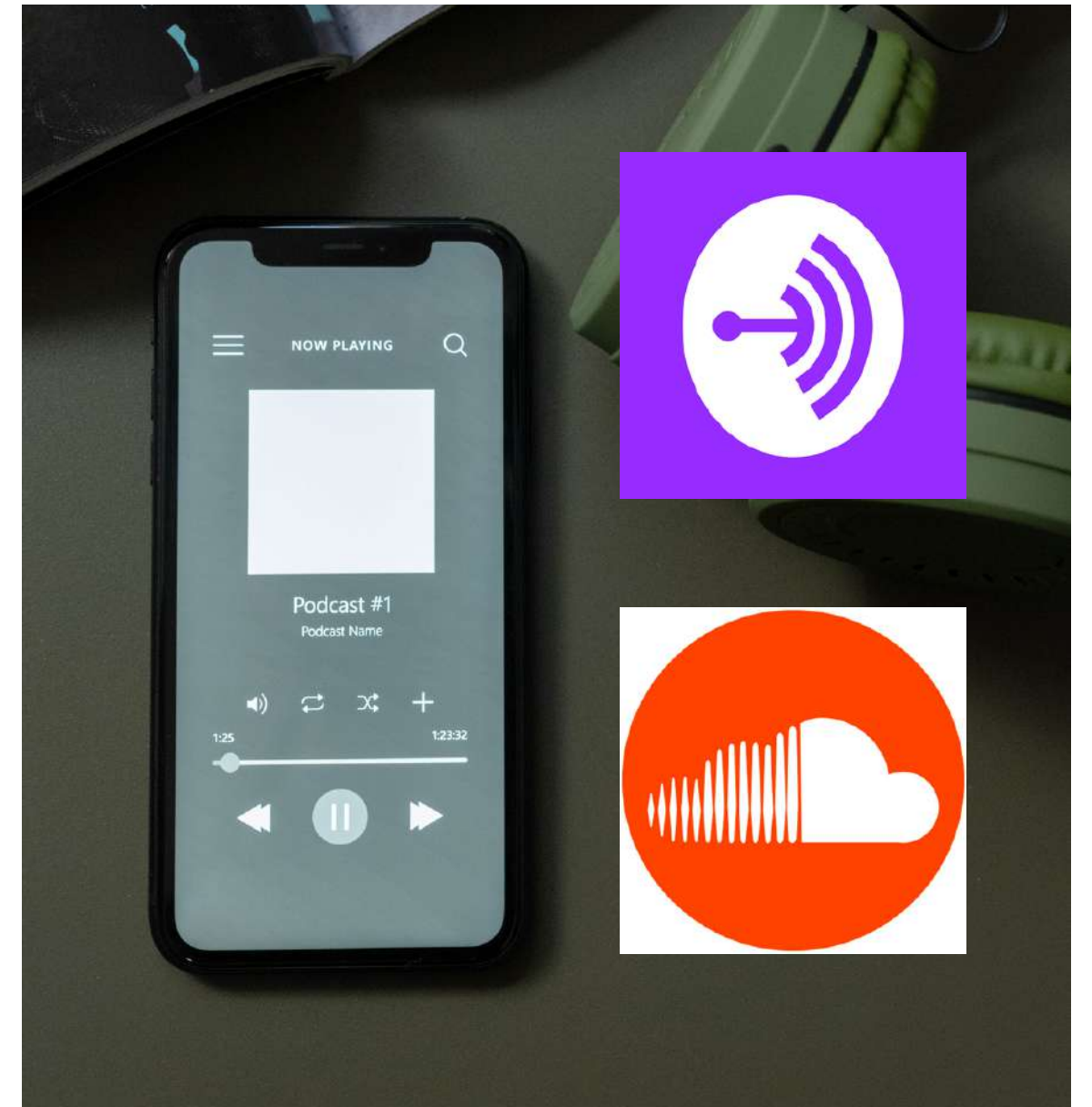
Although these tools are free, they may have limitations in terms of functionality or sound quality. However, they are also a great way to get started with making beats and exploring your creativity!

06. PLATFORMS

If you're looking to upload your podcast recordings for free, there are a variety of options available.

Here are some popular platforms:

- **Anchor:** Anchor is a platform for hosting and distributing your podcast for free. They also provide podcast recording and editing tools, as well as distribution to major listening platforms like Spotify, Apple Podcasts, and Google Podcasts.
- **Soundcloud:** Soundcloud is a platform where you can upload and share your podcast recordings for free. They offer basic analytics to track your podcast's performance.



- **Podbean:** Podbean provides a free podcast hosting plan with basic features such as unlimited storage, distribution to major listening platforms, and basic analytics.
- **Buzzsprout:** Buzzsprout offers a free podcast hosting plan with 2 hours of audio uploads per month and 90 days of hosting. They also offer tools for distributing your podcast to major listening platforms.



Remember that each platform has its own unique set of features and limitations, so it's important to do some research and choose the one that best fits your needs.



07. UPLOADING RECORDINGS TO SPOTIFY

To upload a podcast on Spotify, you'll need to go through a hosting platform that integrates with Spotify. Here are the general steps:

1. Choose a podcast hosting platform that supports Spotify distribution, such as Anchor or Buzzsprout.
2. Sign up for an account and follow the instructions to create your podcast profile and upload your audio file.
3. Once your podcast is ready, select Spotify as one of the distribution options.
4. If you haven't already, create a Spotify account and sign in.

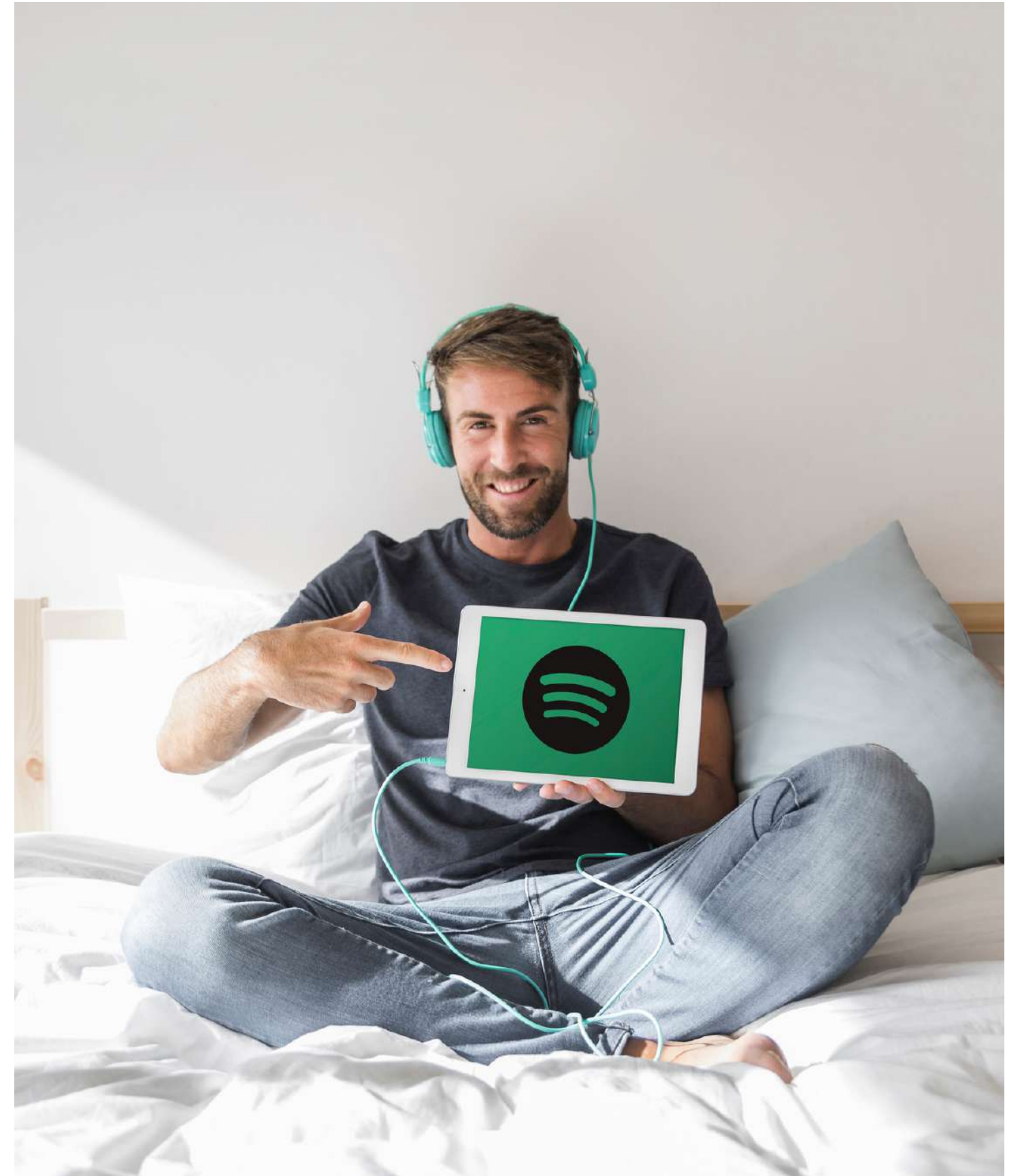


4. Follow the instructions on your hosting platform to connect your podcast or music to your Spotify account.

5. Your podcast will then be submitted to Spotify for review. This process can take a few days to a few weeks.

Once your audio file is approved, it will be available on Spotify for listeners to find and listen to.

It's important to note that the exact steps may vary depending on the hosting platform you choose, so be sure to follow the specific instructions provided by your platform.



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