How to filter noise using Audacity

Noise is one of the most common problems during recording. Finding a quiet space to record isn't always easy, and editing the audio after recording is another hassle. However, Audacity offers a very effective noise removal feature. In this article, TipsMake will guide you on how to filter noise using Audacity.

Getting clear audio recordings can be difficult, especially in noisy environments. Sometimes there's nothing you can do to avoid capturing background noise in your audio file. So how do you deal with audio files containing noise? The good news is there's an easy way to remove background noise from your recordings using Audacity.

How to filter noise using Audacity

Audacity is a free audio editing program created by a community of audio professionals. Audacity supports almost any audio file type and has a noise removal tool specifically designed to address the problem you're trying to solve. It's powerful software, yet very easy to use and completely free. Here's how to use Audacity to remove noise from an audio file that you can apply.

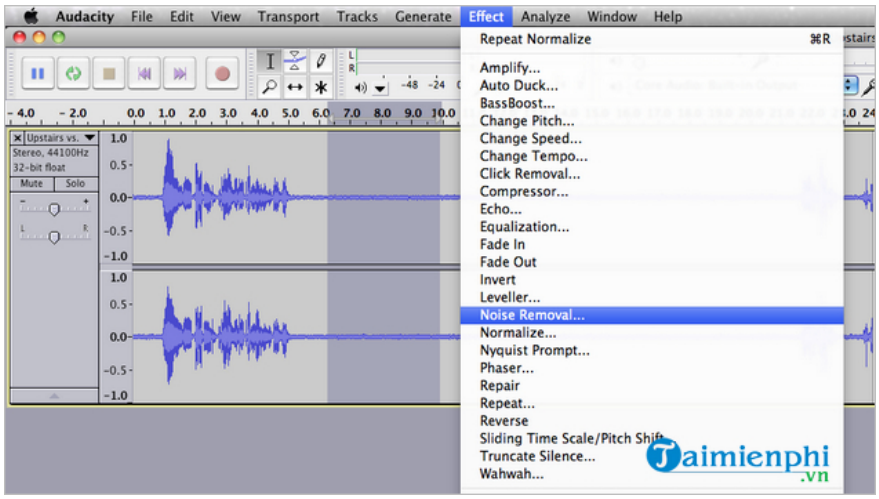
I. Guide to removing background noise using Audacity

To filter noise using Audacity, first download Audacity and install the software on your computer.

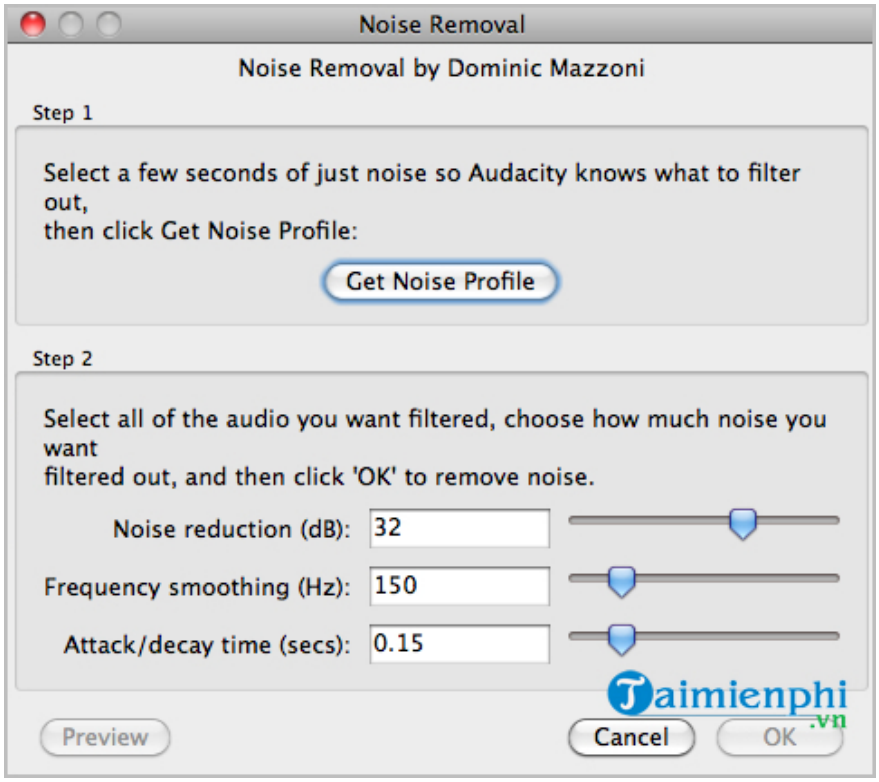
Then, follow these steps:

Step 1: Open Audacity and select **File > Import** to import the audio recording you want to remove noise from into the program.

Step 2: Select the area of ??the recording that contains only ambient noise.
Step 3: Go to the **Effects** menu and select **Noise Removal.**

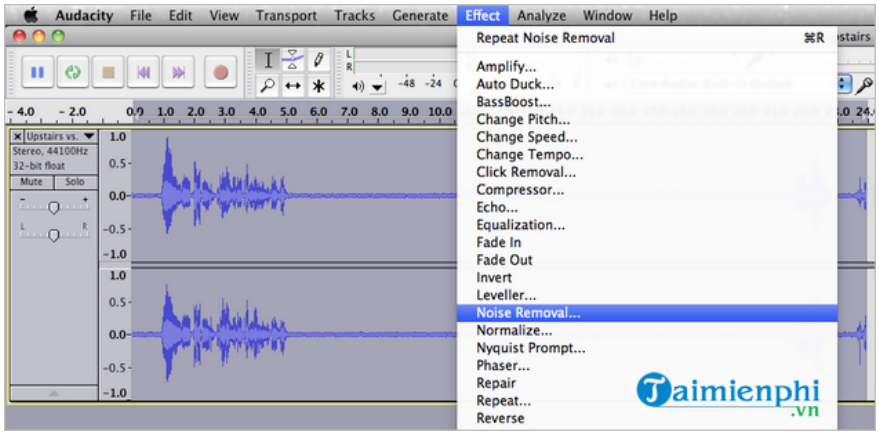


Step 4: In the Noise Removal window , click the **Get Noise Profile** button . This lets Audacity know what to filter out. Essentially, this function selects what it considers ambient noise. It creates a profile of the ambient noise to remove from your audio file.

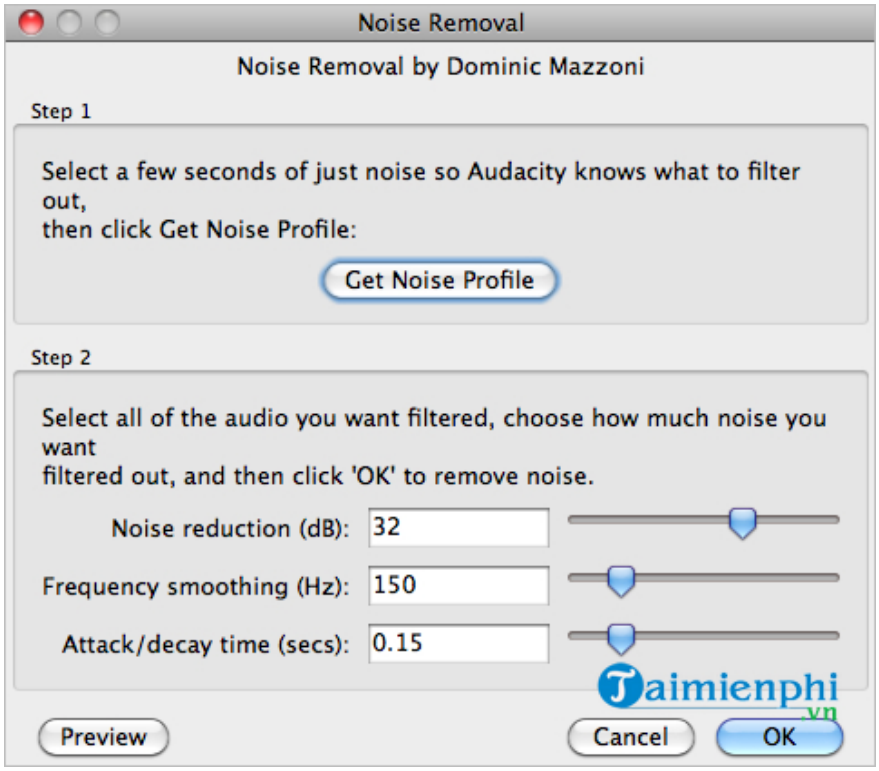


Step 5: Now select and mark all the sounds you want to remove.

Step 6: Go to the Effects menu and select **Noise Removal.**

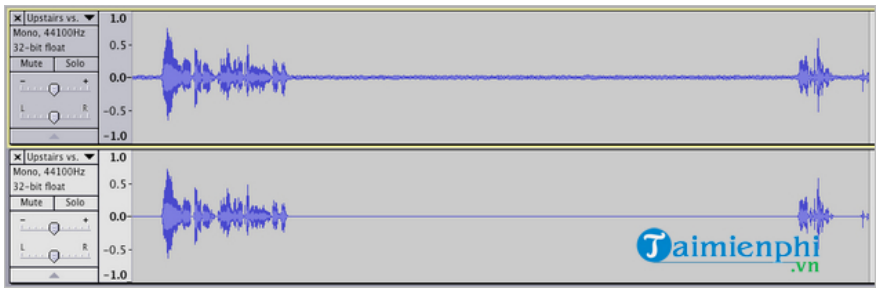


Step 7: Adjust the settings if necessary, or keep the default settings and click **OK.**



Step 8: Listen again to ensure your audio file is no longer affected by background noise.

This is a waveform diagram of the audio file before and after noise removal using Audacity:



II. How to reduce noise before you record

Before recording, you can apply some methods to reduce surrounding noise as follows:

1. Turn off any machines or equipment that make noise.

Fans, air conditioners, refrigerators, computers, and many other devices can create noise in your recordings. Therefore, before you start recording, turn these devices off if possible.

2. Find a quiet place.

If you can't turn off noisy machinery and equipment, you should consider moving to a quieter workspace.

3. Reduce computer fan noise.

Turn your microphone away from the computer and position it as far away as possible. If you're using a laptop, try closing programs you don't need to prevent the fan from turning on.

4. Switch to Dynamic Microphone or Electrodynamic Microphone

Condenser microphones can capture a beautiful range of sound, but they are more sensitive to room noise. Dynamic microphones, on the other hand, are traditionally not as good as condenser microphones in terms of captured sound range (such as low frequencies), but they focus more on what they capture and are less sensitive to room noise.

5. Reduce gain and sit close to the microphone.

You might think that sitting too close to the microphone will distort your sound, and you'd be right, but that's why you reduce the Gain, which is the sensitivity of the microphone. The more sensitive the microphone, the more noise it picks up.

6. Use a USB adapter.

If you're recording directly to your computer, converting the analog audio signal to digital before transmitting it to your computer has proven to be an effective method for reducing computer noise. Use a 3.5mm jack adapter or a Behringer U-PHORIA UMC202HD recording sound card for RCA jacks. This works well for both desktop and laptop computers.

In the article above, TipsMake has guided you on how to filter out background noise using Audacity. But before you start recording, you should also apply some of the necessary steps as shared above to minimize the noise captured in your audio file.

Additionally, users can also separate the vocals from a song using Audacity to keep only the music they like best.