

## **Remix – Challenge #5 – Step 1**

### *Recording, Engineering, and Mixing*

To create a remix song, the first step is to find the tempo (and all tempo changes) in the original song. To do this:

1. From the Options menu, choose “Preferences”. Click on “Audio”, then “Device”. Choose “WDM Kernal Streaming” from the “Audio System” menu. Set the buffers to 3 x 256 – if the sound is crackly or distorted, you might need to increase the buffers to 4 x 256 or 5 x 256.
2. Import a song into REAPER by dragging and dropping it into a new project.
3. Turn off the automatic time-snapping feature by clicking on the horseshoe magnet symbol.
4. Find the initial tempo of your song by selecting four full beats (it helps to put REAPER in “loop” mode when you do this by clicking on the curved arrow on the transport bar). Once you can count along with your selection, right click above the selection and choose “Set Project Tempo from Time Selection”.
5. Add a drum machine as a virtual instrument. Put kick drum and hand claps (or something similar) in for four full beats (it’s helpful to turn automatic time-snapping back on just for this part). Right click on the MIDI item and choose “Item Settings”, then choose “Set Item Timebase to Beats (Position Only)”. This will ensure that as you make changes to the song tempo, your drum beats will “stick” to the tempos that you make.
6. Move the song slightly so that one of the first beats of the song lines up with the first kick / clap combo of a measure.
7. Adjust the initial tempo of your song by 0.25, then by 0.1 beats until it plays perfectly in time with the song for at least 10 – 12 measures. This may take a while!
8. When you hear tempo changes in the song, right click above the tracks and choose “Insert Time Signature Marker”. This will allow you to choose a new, adjusted tempo for future parts of the song. You may need to do this several times.
9. You can edit a tempo by double-clicking the marker or by changing the tempo in the tempo box below the tracks. You can remove a tempo change by right-clicking on the marker and choosing “Remove Time Signature Marker”.