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Music Mixing

Learner Guide

Whether you are watching a movie, listening to a streaming music channel, or even riding in an elevator, you hear music everywhere – it is the harmony backdrop in our lives. Music Mixing is exciting work performed by sound engineers and music producers as they blend recorded audio to make the mix tracks you hear every day!

Just like YouTube producers edit raw footage to create a finished video, Music Mixers edit raw audio recordings to create finished music tracks. Raw audio comes from acoustic and electronic instruments, percussion, vocalists, events, background sounds – almost anything recorded that produces a sound! It takes skill to mix, or blend, many different recorded loops together. Music Mixers change volume levels, adjust tempos, and remove background noise to transform all the individual parts into a seamless whole.

In this activity, you will use the Music Maker JAM application to mix music samples and loops to create music tracks of your own. You will explore the app to create a few practice tracks and then listen to them to assess the mood of each. With the skills you gain you will mix a new track to fulfill a specific need for audio within a selected scenario. Let us get started!

Explore

Start Music Maker JAM and play with its functions.

1. Watch the Music Mixing video to learn how a professional music producer or sound engineer uses a music mixing tool to assemble and edit mix tracks.
2. Open the Music Maker JAM application on your tablet or smartphone. When the app opens, it is ready for you to start a new mix track (complete piece of music).
3. At the Make Music menu, build your mix track by pressing the (+) sign to add a loop to your track.

Note: When you add a loop, you can play with and set an attribute of *an individual loop* as shown on the Music Maker JAM Reference Chart.

4. Set the Genre of the loop → Digital Pop or Radio Rock.
5. Set the Instruments or vocals of the loop → Guitar, keyboard, drums, sound effects, ... etc.
6. Set the Style of the loop. Each instrument or vocal offers additional choices, featuring different styles.
7. Set the Volume of the loop → Loud, medium, or soft.

Tip: Press Play/Pause to play or pause the mix track you are creating. Press Activate/Mute loops to temporarily turn loops on or off as you are listening to your mix track.

8. Think aloud and discuss your answers to the question associated with each attribute:
 - a. How would you describe the “feel” of each genre?
 - b. Where would you use a specific instrument or vocal in a song – throughout the mix, or just in short sections?
 - c. How do different styles affect the unique sound of an instrument or vocal loop?
 - d. How does volume affect the impact of the specific instrument or vocal?
9. Continue adding loops and setting loop attributes until you have completed your mix track.

Note: After adding all the loops you want, you can further refine the *entire mix track* using features shown on the Reference Chart.

10. Adjust the Equalizer/Add FX feature of the mix track.
11. Adjust the Chord Keys of the mix track. Major keys (letters without a sharp or flat sign) sound bright or relaxing while minor keys sound dark or ominous.
12. Adjust the Master volume of the mix track.
13. Adjust the Tempo (in Beats Per Minute) of the mix track.
14. Think aloud and discuss your answers to the question associated with each adjustment you made on the entire mix track:
 - a. How does adding effects (FX) change the overall mix track?
 - b. How does changing the chords affect the mood of the mix track?
 - c. How does adjusting the overall volume of the mix track affect the listener?
 - d. How does adjusting the speed affect the feel of the track?

Create

Instant Design Challenge: Create a mix track and evaluate its theme.

Now that you know how to use Music Maker JAM, complete this fast and fun activity. In five minutes, create a mix track with *no specific goal*. Your only job is to make sure that the loops work together to produce something “better than noise.”

15. Create a new mix track by tapping the three bars in the top left of the application window and selecting New Project (you do not need to save your previous work).

16. Put together as many loops as you want, using any instruments, and adjusting loop volumes as you like. To the mix track, add sound effects (if desired), adjust chord keys (if desired), then set the master volume and tempo.
17. Play your track for a friend or teacher.
18. Evaluate the theme of your track (action, danger, celebration, playtime, sadness, relaxation, etc.) and describe a location where you think it could be played (while exercising, in a commercial, in a movie, as background music in a grocery store, etc.)
19. If desired, save your track.

Given a theme, design and produce a mix track

Music producers – often tasked with creating mix tracks for television shows, live events, recording artists, and other purposes – team with sound engineers using music mix technology to capture, assemble, and edit sound as desired. Working together, these professionals use the design process to plan and conduct their creative work. In the design process you perform the following steps:

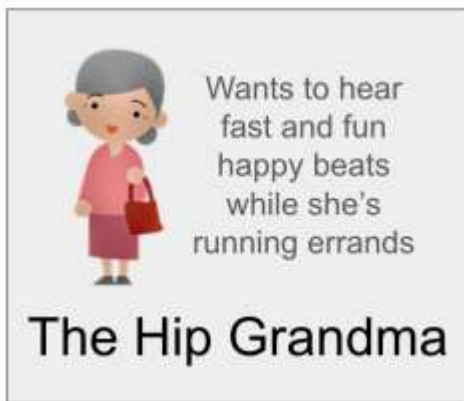


- Ask questions to understand what the user needs or wants.
- Explore possible ideas, listening to sample loops that may satisfy the user's needs or wants.
- Model one or more ideas by creating and recording short sample tracks, called prototypes.
- Evaluate your prototype designs by determining how well they solve the needs or wants of the user.
- Explain your final mix track design to your user.

You can use this process to design and record a mix track to meet the needs of a pretend client at your music studio, Tone Def Jams, Inc.

Now create your mix track by following the steps of the Design Process.

20. ASK what is the theme of the music the client seeks? Where will the client use the music track? Your client may be a friend, a peer, a family member, or yourself. Or, you may choose of these sample clients:



21. EXPLORE loop options and attributes by listening to sample genres, instruments, and tempos which match the theme.
22. MODEL your first mix track idea in Music Maker JAM, saving your sample. Then model your second mix track idea, again, saving your sample. Remember – these are model tracks and NOT intended to be perfect – spend no more than 10 minutes on each track. The intent is to provide the client some choices.
23. EVALUATE your two models using the decision matrix chart.
24. EXPLAIN your sample tracks. Play them for another person, and then share how you selected and arranged loops to transform the client's stated need or want into a sample mix track
25. Using your decision matrix, select the best sample track, then complete production of the track by adjusting volumes and fine-tuning other attributes of the track. Save and share your completed track.

Connect

Throughout this project, you have been using the same skills as those used by a music producer and a sound engineer. Music producers work mostly in entertainment fields, collaborating with vocal artists,

instrumentalists, and bands to create music for distribution in a wide variety of formats. These may include streaming music tracks, background music for other media (movies, online, etc.), live televised programming, and outdoor festival events.



Sound engineers work on a wide range of projects, including many in collaboration with music producers. They may design and build new equipment for recording, clarifying, or sharing audio. Or they may make sure guests on a talk show, satellite radio broadcast, or podcast can be heard from locations around the globe. But sound engineers may work in other roles, too. They may help crime investigators filter noise from a recording to isolate key voices from a conversation. They may work in research, capturing sounds outside the range of human hearing, like the vibrations of the sun or the “conversations” of sealife. They may work with computer scientists to compress (make smaller) file sizes, reducing storage needs and speeding transmission rates. They may even work at companies creating cars or space capsules, testing noise levels in new vehicle designs to ensure they are safe for human use.



Extend

Record and add custom audio

Are the recorded loops in Music Maker JAM in need of a little extra flair? Are you an undiscovered singer with vocals that will add that perfect personal touch to your mix track? Then record and add them! Use the Record Menu for help on capturing any acoustic source. Look to the Reference Chart for help. You can add vocals, guitar riffs, bongo drums, and even Foley effects, which are any sound you can physically make. Then add your new, custom, recorded loop to your track. It is a fun and easy way to really make that track your own!

Share your mix track with the world

After you record a mix track, Music Maker JAM prompts you with an invitation to share your mix track by sending it via email or text. The Reference Chart shows you how.