# Lesson 2: Exploring Electronic Instruments

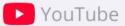
**Theremins** 

Exploring theremins and gesture-based control.

Sound

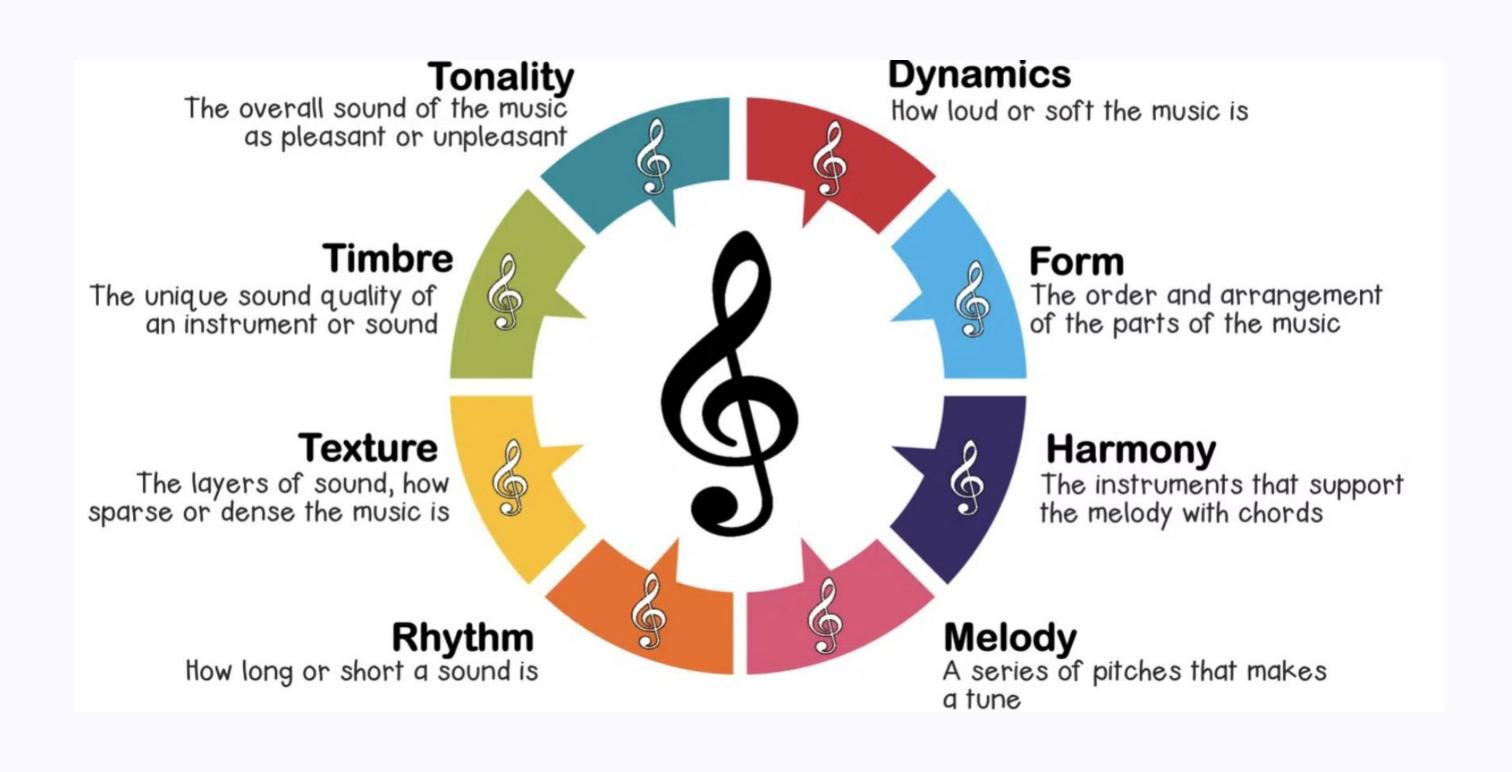
Understanding electronic sound generation.





#### 01 Music Basics - What is Music?

Music theory from the very beginning. If you want to know how to write music, want help revising for exams at school, or just interested in how music works, then this...



# Core Elements of Music for Electronic Instruments



# Rhythm

The pattern of time in music - controls when notes are played and for how long. In electronic instruments, rhythm can be precisely controlled through programming or touch patterns on conductive surfaces.



# Tone/Timbre

The quality and character of sound that distinguishes different instruments. With our Arduino and VS1053 setup, we can manipulate electronic signals to produce various timbres from a single interface.



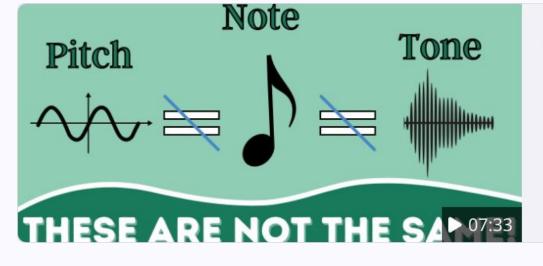
# Melody

The sequence of notes that form the main recognizable theme. Our Inkstrument will allow different conductive ink patterns to trigger melodic sequences.



# **Dynamics**

The variation in loudness or softness of notes.



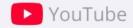
YouTube

# The Difference Between Pitch, Note, and Tone

If you'd like to support my channel, consider joining on Patreon: https://shorturl.at/Tw3Mu This is episode 1 of the music fundamentals series!...

What do Electronic Waveforms Sound Like

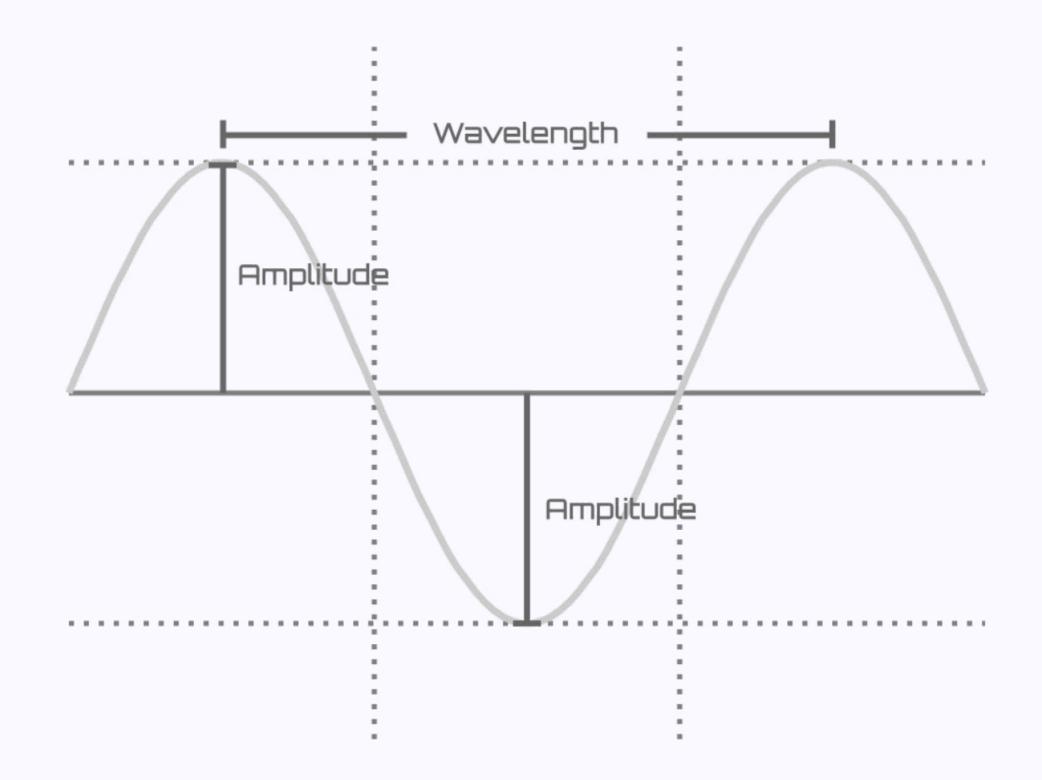


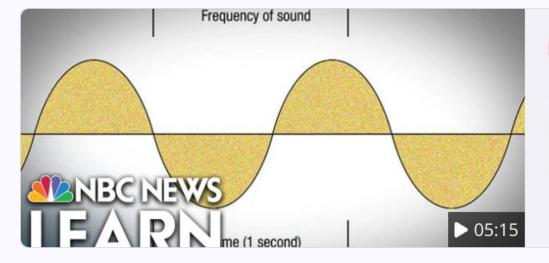


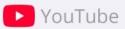
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#### What do Electronic Waveforms Sound Like

This video gives you the key information about common waveforms found in electronics and lets you hear what they actually sound like. The waveforms include...

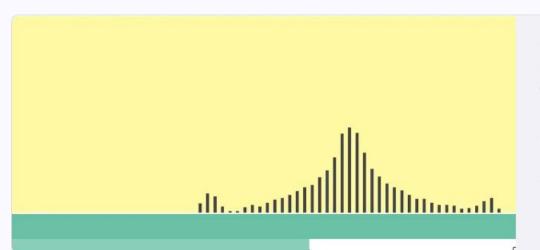






#### **Sound Waves**

Sound, Sound Waves, Waves, Vibration, Matter, Vibrate, Vibration, Guitar, Singing, Song, Vocal Chord, String, Frequency, Pitch, Energy, Volume, Amplitude





#### [7]

# Theremin | Web Synths Collection by Playtronica & Chromatone

Experience the magic of the theremin with this interactive web-app by Femur Design. Harness the power of motion to create ethereal music without physical...

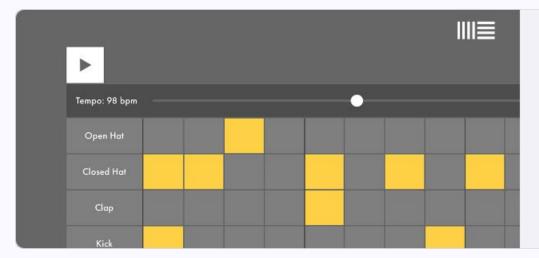






#### Roland50.studio

Emulate the sound of Roland's most famous and influential musical instruments from Yuri Suzuki and Roland.

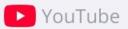


**IIII** learningmusic.ableton.com

# **Get started | Learning Music**

Explore the fundamentals of music via Ableton's interactive website. Experiment with beats, melody, harmony, basslines, and song structure in your web browser.





## **Sounds of a Glass Armonica**

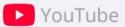
Composer William Zeitler plays a glass armonica, invented by Benjamin Franklin in 1761. For more on this fascinating story read the full article here on the Toronto...

▶ YouTube

# Я сделал Ambient Box на основе EBow | I made an Ambient Box bas...

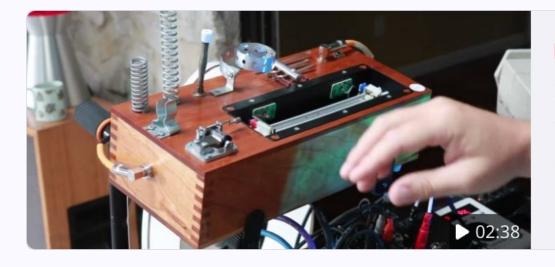
Взял за основу принцип работы EBow и создал Ambient/Drone Box I took the principle of EBow and created an Ambient/Drone Box based on it

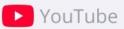




#### KontinuumLAB WORKSHOPS: Recorder MIDI Controller.

In this video tutorial I show you how to make a recorder type MIDI controller from corrugated cardboard and other cheap materials and components. This is one of t...

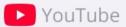




# Noise Box 5 - experimental music instrument

Wooden noise box instrument (#5 of my collection). Perfect for film scoring, experimental music, or just improvising with friends. Reverb tank has an output, a...





# 10 Years of the Korg Volca Keys

April 2023 marks ten years since Korg's Volca Keys debuted. Chris Cline revists the popular synth to go over the features and sounds that have made it such a popula...

