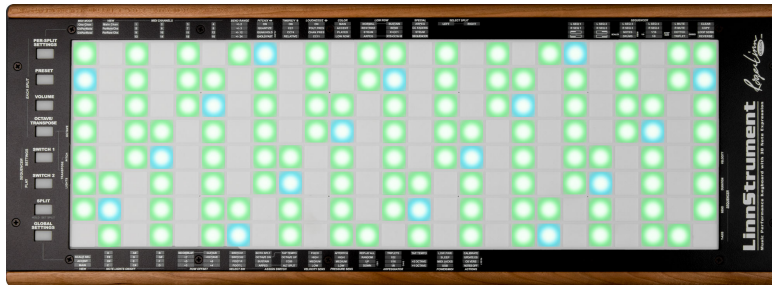


Week 2: CSP 2 Synthesis

David Borden - The continuing story of counterpoint Part 1 (live 1977)

Recap: used simpler within ableton - time stretch sound, creative sample. Using midi, musical instrumental design interface - Dave, Yamaha. They only recently released 2.0 after 40 years. Music Concrete.recapitulation



Do something that ties in with the lesson after.

Sound is continuous when working with voltage. 44,100.



Analog synth

Square pulse - insert photo

Low pass filter means the low frequencies are allowed to pass, this can be through analog or EQ

Resonance is in relation to the frequency it accentuates the frequency around a certain point.

Gain staging allows you to bring down the volume and stop peaking. You don't want the digital distortion. You want it between -6 and -12.

A notch doesn't allow sound through it makes a hole in the sound, it's the opposite of a bell curve.

ARDS

Attack is the amount of time it takes for sound to fade in. Release is how long it takes the sound to fade out when you let go of the key. These are time based. Decay the amount of time it takes to get to a second volume stage, a certain amount of volume is determined by how low the synth is set. Sustain is a volume level.

LFO: Low Frequency Oscillator

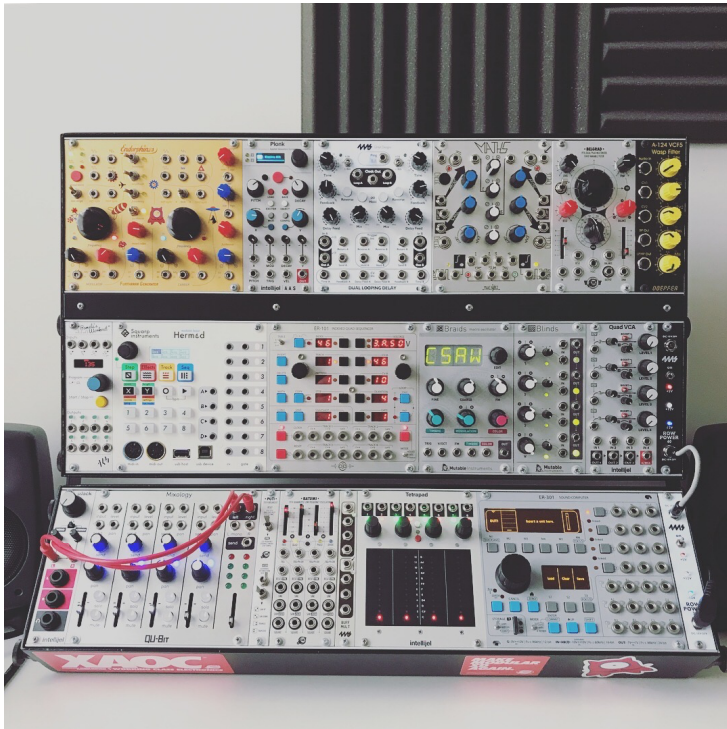
So low you can't hear it but affects the other sounds. You can send it in many configuration in many directions. It chops into the sounds, can be slowed down. If the rate is too fast, the sound goes so fast.

Modulation:

To change the sound. LFO is a type of modulation. Pulse Width Modulation.

Eurorack:

You can join various modules together, various synths. They are designed to physically fit together, they're the same height and voltage. You can access it virtually. VCVrack.



Synthesizer example: Moog Model 10

Monophonic:

Only one note playing at a time

Can be advantageous when playing a lead line

Polyphony:

Multiple notes playing at a time

Some synthesisers take each oscillator to each filter.

Avoid patches at all costs - doesn't allow you to learn anything. You can save a sound or note to the drop down analog tag on ableton. Use preset to save your own works don't use others.

If the filter has the highest release and the amp has no release the filter release becomes obsolete, the amp is basically the master.

Cents:

Minute tuning. Dividing 1 semitone in 100th. Interesting dissonance.

Vibrato: modulation of pitch

Tremolo: varying volume

East coast: They were made on the east hand side of the US

West coast: made on the west of the US, no normal filter. Sounds produced differently.

Ligeti - hungarian composer