

**FM-Synth**

- tickSynth()
- FMsynthCalc()
- SetMidiNote()
- getSampleSynth()
- setModulationDepth()
- setModulationFreq()
  - CarrierFreq
  - ModulatorFreq
  - ModulatedFreq
  - modulationDepth
  - userModulationDepth
  - userModulatorFreq

**Add Synth**

- addSynthCalc()
- tickSynth()
- getSampleSynth()
- setMidiNote()
  - CarrierFreq
  - modulator1freq
  - modulator2freq

**Saw**

- calculate()

**Synthesizer**

- tickSynth() (virtual)
- getSampleSynth() (virtual)
- midiToFreq()
  - Frequency
  - midiNote
  - interval
- setOscillator()
- setMidiNote() (virtual)
- setModulationDepth(virtual)
- setModulationFreq(virtual)

is a

is a

is a

is a

**Oscillator**

- calculate() (virtual) - getSample()
- setFrequency() - getFrequency()
- setSampleRate()
- tick()
  - Frequency
  - Amplitude
  - Phase
  - Sample
  - SampleRate

↑ is a

**Sine**

- calculate()

↑ is a

**Melody**

- getPitch()
- melody[g]
- index

Has a

**Utilities**

- RetrieveSelection()
- RetrieveSelectionIndex()
- RetrieveValueInRange()
- RetrieveInput()
- ValidateSelection()

is a

**Square**

- calculate()