

Measure 1 : standard waves

Measure 2 and 3 : Fade In and Fade Out: The idea of sound cross-fading is that you generate a single note from more than one set of sound definitions. You might start with note with sound A, then gradually change to sound B by interpolating between them. Cross-fading allows for richer sounds, since the sound varies over its period.

Measure 4: Polyphony: Polyphony simply means playing more than one note at a time. When you strum a guitar, you are playing six notes at a time. Polyphony means being able to start and stop more than one note at the same time.

Measure 5: Vibrato: Vibrato is a musical effect where the frequency of the note is varied repeatedly up and down. It's a common effect in both voice and instruments

Measure 6: ADSR : How an instrument starts the sound and sustains it varies, but usually has a volume characteristic to it. An example, a violin may slowly start the sound of a note or quickly start it for different songs. This is called an "attack". Many instruments have a rapid decay after the attack, then sustain at another level, only to gradually decay at the end. In all cases for a wavetable synthesis component you will need to be able to fade the sound at the end over several milliseconds to avoid a "pop".

Each measure has a amplitude sound definition.