

Synthesis Recipe

TR-808 Clap

The Roland TR-808 clap sound is based on filtered noise. A carefully designed envelope is needed to recreate the attack of the sound.

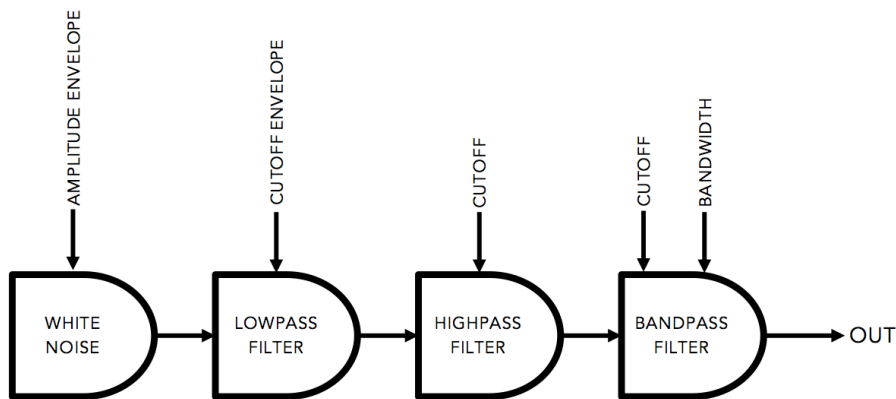


Figure 1: Schematic for the TR-808 clap sound

The cutoff frequency of the lowpass filter should also be modulated with an envelope.

The cutoff frequency of the highpass filter can just be a fixed value (a typed number), as can the cutoff and bandwidth of the bandpass filter.

Use a combination of examination of the waveform (in Audacity or Sonic Visualiser), spectrogram (in Sonic Visualiser) and aural observation to choose appropriate values for the filters, lowpass filter envelope and the amplitude envelope. The original sound is available on Moodle.

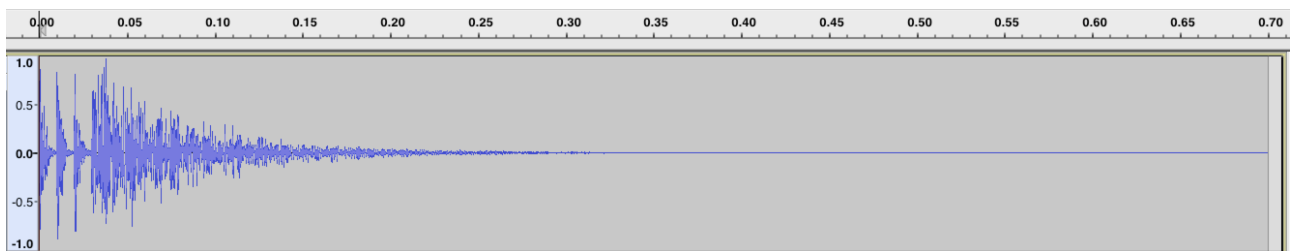


Figure 2: Waveform of the TR-808 clap sound (<https://www.audacityteam.org/>)

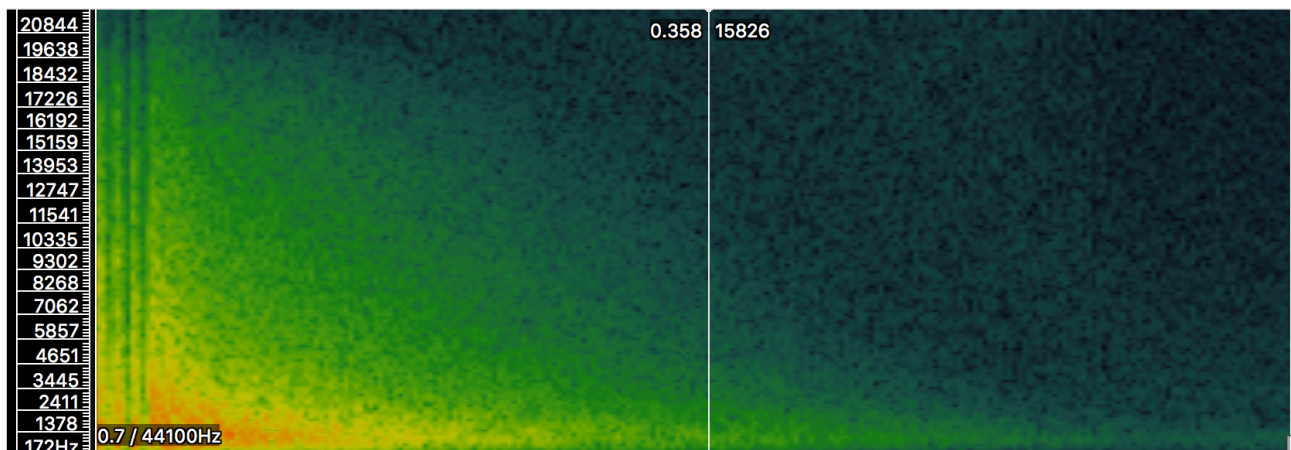


Figure 3: Spectrogram of the TR-808 clap sound (<https://www.sonicvisualiser.org/>)