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Max Martenot - concept

# Max MaRTENOT

Max Martenot is a Max Patch inspired by Ondes Martenot, an early electronic musical instrument invented in 1928.

The main component of the patch is a combination of oscillators and filters that emulate a vocal sounding tone. The max patch will have a combination of oscillators for different timbres. The patch will also incorporate smoothing of the wave, filters, envelopes.

I plan to control the input using three ways

1. a hand glove accelerometer/gyro meter to control oscillator and envelope parameters. It provides a number of intuitive motion parameters to be mapped to the max patch.
2. An expression pedal for dynamic volume control.
3. A moveable ring-and-ribbon based controller (found of the original Ondes Martenot) to the control pitch and vibrato. I will be focusing on this control as a part of Project 3. It provides a continuous input, microtonal output and a haptic feedback. The main challenge will be to detect subtle motions of the string in the y-axis and translate them into vibrato.

I expect the system to be a playable synth with much more continuous sound than a piano based synthesizer.