Beatitude

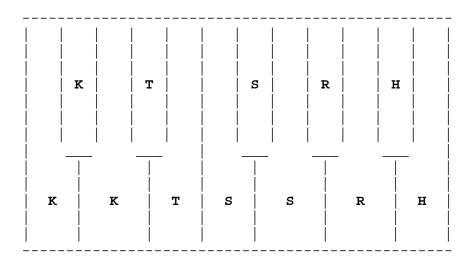
A Drum and Bass synth with real-time drum sequencer for the ArduTouch.

How to use:

----- Playing Drums -----

Play the keys on the keyboard. Different drums will sound depending on the note played, as shown in the diagram below:

 $\mathbf{K} = \text{Kick Drum}, \ \mathbf{T} = \text{Tom}, \ \mathbf{S} = \text{Snare}, \ \mathbf{R} = \text{RimShot}, \ \mathbf{H} = \text{High Hat}$



----- Recording a Drum Sequence -----

To record a drum sequence press the right button.

The blue LED will turn on, and a "click track" (metronome) will start.

When the blue LED is on, but not blinking, it means that the ArduTouch is playing a "cue measure". This is a single measure which plays before the actual recording starts, and lets you get ready for your performance.

Any notes you attempt to play during the cue measure will not sound, and will not be recorded.

By default there are 4 beats in a measure.

When the cue measure ends the blue LED will start flashing. This means that the ArduTouch is now recording anything you play (but it doesn't blink in time to the beat). By default the sequence is 4 measures long, after which the blue LED will turn off.

	Playing	back	a Drum	Sequence	
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To play back your drum sequence press the left button.

The red LED will start blinking (but it doesn't blink in time to the beat), and your sequence will begin playing.

When the sequence reaches its end it will loop back to the beginning and continue to play (forever) until you *press* the left button again.

----- Playing Bass -----

When a drum sequence is playing back, the ArduTouch keyboard will turn into a bass instrument, and you can play bass along with the recorded drums. The octave setting for the bass can be bumped up and down by tapping the right and left buttons respectively.

To revert to playing drums, stop the sequence (by *pressing* the left button).

----- Controlling the Tempo -----

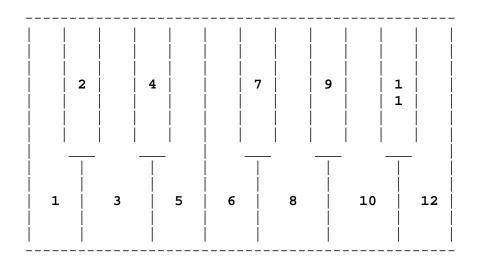
Rotate the bottom pot to slow down or speed up the tempo.

----- Setting Beats per Measure & # of Measures -----

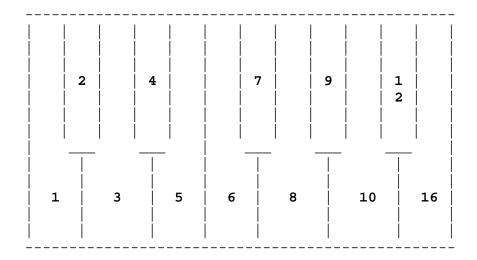
To change the # of beats per measure, and the # of measures in a sequence, tap-press the left button (think of this as a "double-tap" but with the second tap being of a longer duration.)

The red LED will turn on, indicating that the ArduTouch keyboard is now in "Menu" mode.

Select the # beats per measure by pressing a key:



Now select the # of measures by pressing a second key:



The red LED will now turn off.

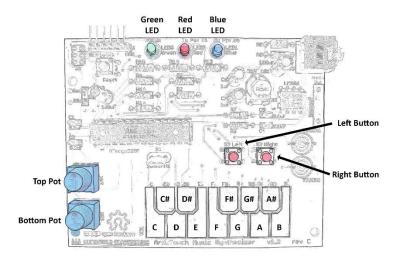
Types of button presses:

Tap: quickly tap a button Press: long-press a button

Double-Tap: quickly double-tap a button

Tap-Press: think of this as a Double-Tap but with the second tap being of a longer

duration.



Note:

The Snare will sound a little better if you use Arduino software v1.6.6 and uncomment the line "//#define BUILD 166"

in the file Model.h of the ArduTouch library.

(Arduino software v1.6.6 compiles allowing more memory for ArduTouch code, so we could include a better Snare sound when using v1.6.6.)