

Microtonal Keyboard

by Dan Lindgren

- The left hand keyboard section is a mirror version (albeit usually octave transposed) of the right hand section.
- The buttons are normally played using only four fingers of each hand, while the thumbs operate the sustain bars.
- Buttons are similar to accordion bass buttons (same size and relative placement).
- All buttons C have concave tactile markings; and all buttons F are cross-hatched.
- White buttons could be used for the naturals (A B C D E F G), while all other buttons would be black.
- Buttons, and thumb operated sustain bars, should ideally be touch sensitive, and possibly also have aftersustain for various purposes; like modulation, for instance.
- The thumb operated sustain bars work independently for each hand, and could also be programmed to have alternate functions.
- There could be more than one sustain bar running in parallel. Alternatively, pitch bend ribbon controllers could be added.
- The tuning should be Pythagorean (adjusted to 53-ET); but other tunings, like ordinary equal tempered tuning, are also possible.
- It's possible to add more buttons to each octave so that all 53 notes per octave could be represented.
- Octave transposing buttons, and other function buttons, could be added.
- The keyboard could be implemented as a simple MIDI device that would transmit signals via USB; thus eliminating the need for a separate power supply.
- LH and RH could be assigned separate musical instrument voices when needed.
- The keyboard allows the distinction between enharmonic equivalents, as well as keeping LH and RH separated, when using musical notation software.

Isomorphic structure:

