DuoPoly

Quick Operation Guide

Version 2.05

Cornfield Electronics

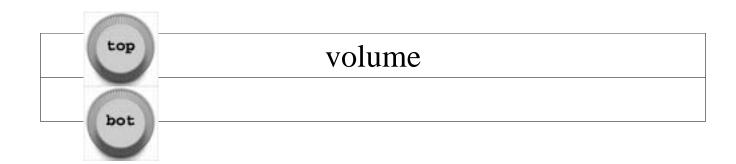
main>

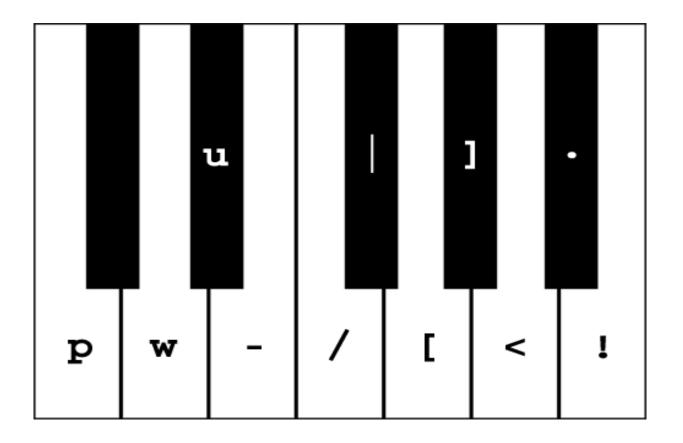
```
right panel
        r
              left panel
        1
              select preset (0, 1, 2, 3, 4)
        p
             set volume (0 to 255)
        V
             select waveform (0, 1, 2)
        \mathbf{W}
              latch oscillator frequencies (geometric)
        /
              latch oscillator frequencies (arithmetic)
              unlatch oscillator frequencies
        u
              start sequencers
              stop sequencers
              pause/resume sequencers
              toggle mute status (overrides unmute at reset; use in presets)
        #
              mute
              unmute
        <
              reset
              display info
ESC or
              exit sketch
```

main

top button

press	left panel	press	right panel
tap		tap	
tap-tap	exit sketch	tap-tap	





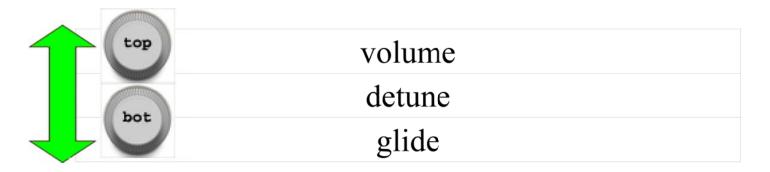
right> or left>

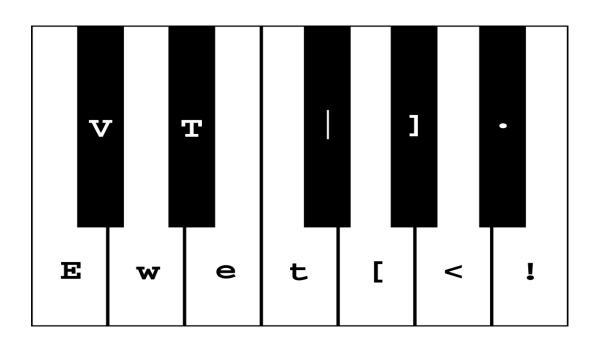
```
d
              detune oscillator (-128 to 127, total range is a quarter tone)
              effects panel
        e
              envelope panel
        \mathbf{E}
              set oscillator frequency (20.0 to 20000.0)
        f
              set glide speed (0 to 255, 0 = off)
        g
              play console's virtual keyboard
        k
        S
              program a sequence
              set sequencer tempo (15.0 to 20000.0)
         t
        \mathbf{T}
              tremolo panel
        \mathbf{V}
              vibrato panel
              set volume (0 to 255)
        V
              select waveform (0, 1, 2)
  * or /
              latch frequency as a ratio
              latch frequency as a difference
  + or -
              start sequencer
        1
              stop sequencer
              pause/resume sequencer
              mute
        <
              unmute
              reset
              display info
              return to main panel
ESC or
```

right or left

top button

press	scroll pots up	press	scroll pots down
tap	- 1 octave	tap	+ 1 octave
tap-tap	return to main panel	tap-tap	run key menu once
tap-press		tap-press	program a sequence





sqnc>

```
SPACE or .
                  ++duration
                  \mathbf{C}
            Z
            S
                  C#
                  D
            X
            d
                  D#
                  \mathbf{E}
            \mathbf{c}
                  \mathbf{F}
            V
                  \mathbf{F}#
            g
                  G
            b
            h
                  G#
                  A
            n
                  A#
                  B
            m
                  high C
     0 thru 8
                  select octave 0 thru 8
  ESC or ?
                  display current octave
                  commit sequence
```

top button

press		press	++duration
tap	- 1 octave	tap	+ 1 octave
tap-tap	commit sequence	tap-tap	

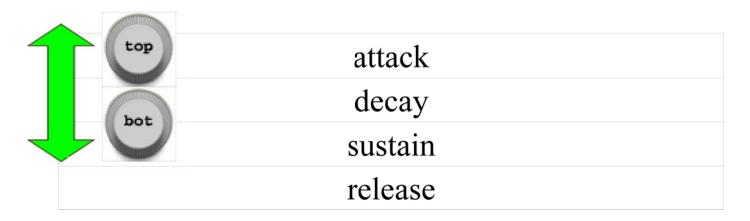
envelope>

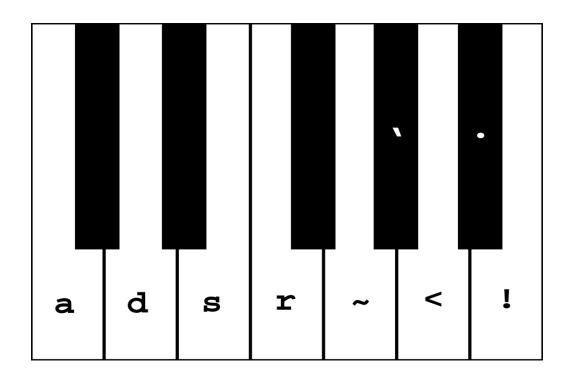
```
set attack time (0 to 255)
        a
              set decay time (0 to 255)
        d
        r
              set release time (0 \text{ to } 255, 0 = \text{hold})
              set sustain level (0 to 255)
        S
              set legato retriggering
              set staccato retriggering
              mute
        <
              unmute
              reset
              display envelope state
              exit emvelope panel
ESC or `
```

envelope

top button

press	scroll pots up	press	scroll pots down
tap	-1 octave	tap	+1 octave
tap-tap	exit envelope panel	tap-tap	run key menu once





tremolo>

f set tremolo frequency (0.01 to 20.0) d set tremolo depth (0.0 to 1.0) set trigger count (# half-cycles to traverse: 0-255) t set legato retriggering set staccato retriggering trigger starts af "softest" level, and increases + trigger starts at "loudest" level, and decreases mute unmute < reset display tremolo state

exit tremolo panel

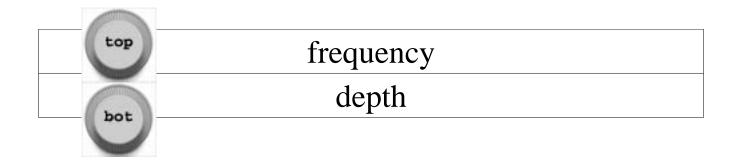
ESC or

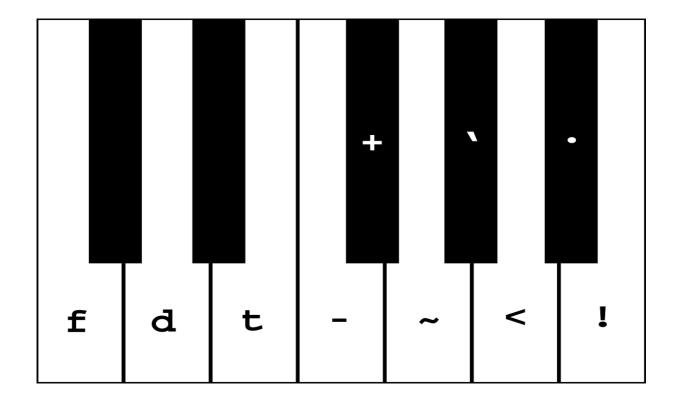
(continued ...)

tremolo

top button

press		press	
tap	-1 octave	tap	+1 octave
tap-tap	exit tremolo panel	tap-tap	run key menu once





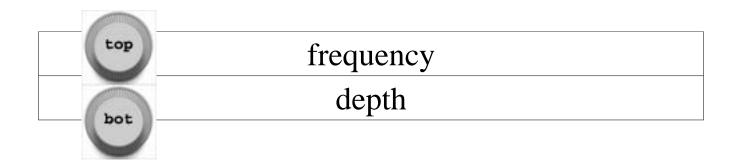
vibrato>

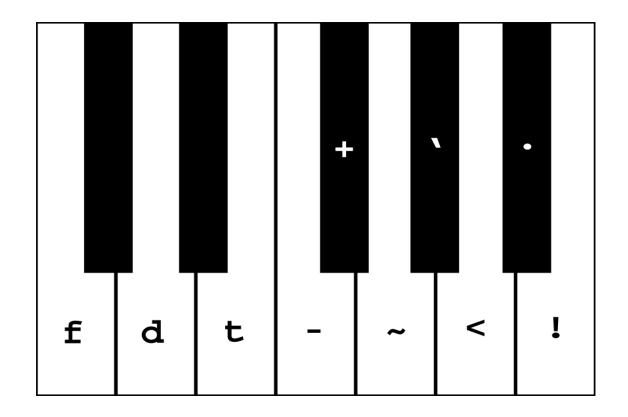
```
f
              set vibrato frequency (0.01 to 20.0)
              set vibrato depth (0.0 to 1.0)
        d
              set fade time (in 1/8ths of sec: 0-255)
        t
              set legato retriggering
              set staccato retriggering
              set positive polarity ("fade in")
        +
              set negative polarity ("fade out")
              mute
              unmute
        <
              reset
              display vibrato state
ESC or `
              exit vibrato panel
```

vibrato

top button

press		press	
tap	-1 octave	tap	+1 octave
tap-tap	exit vibrato panel	tap-tap	run key menu once



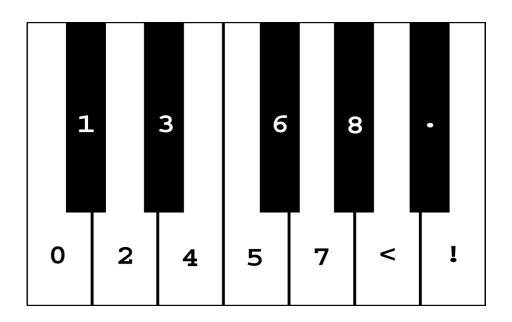


effects>

- b select bsf effect
- x select xmf effect
- 0 thru 8 select effect by number (0 bsf; 1 xmf)
 - . mute all effects
 - < unmute all effects
 - ! reset all effects
 - ? list effects
- **ESC** or ` exit effects panel

top button

press		press
tap		tap
tap-tap	exit effects panel	tap-tap



bsf> (Binary Shift Filter)

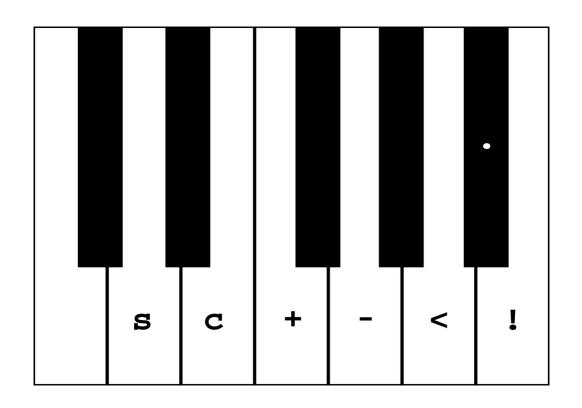
- c set number of bits to clip (0-7)
- s set number of bits to shift (0-7)
- + normal filter output
- complement filter output
- . mute
- < unmute
- ! reset
- ? display filter state
- **ESC** or ` exit filter panel

bsf

top button

press		press	
tap	-1 octave	tap	+1 octave
tap-tap	exit filter panel	tap-tap	run key menu once

nift	top
lip	
пр	bot



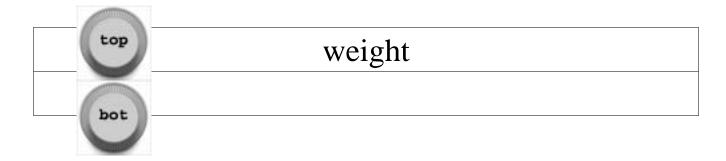
xmf> (eXponential Movavg Filter)

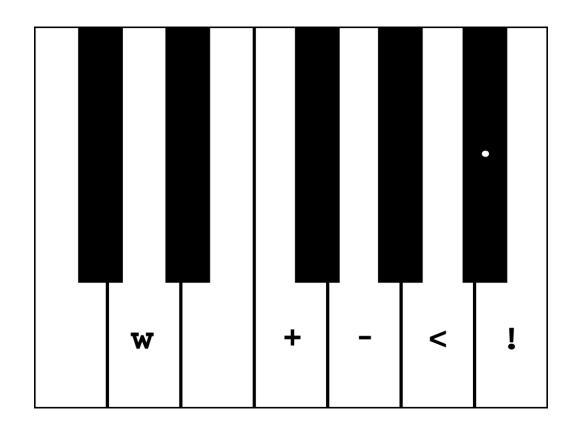
- w set weight applied to input (parts per 255: 0-255)
- + normal filter output
- complement filter output
- . mute
- < unmute
- ! reset
- ? display filter state
- **ESC** or ` exit filter panel

xmf

top button

press		press	
tap	-1 octave	tap	+1 octave
tap-tap	exit filter panel	tap-tap	run key menu once





preset>

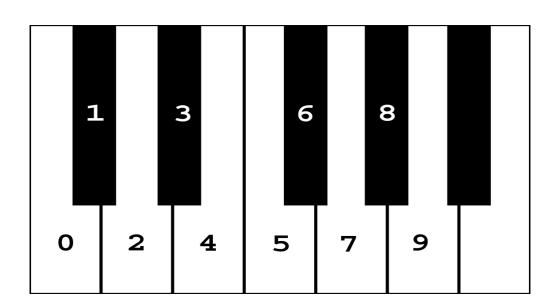
0 thru 9 select preset by number (0, 1, 2, 3, 4)

? list presets

ESC or ` abort preset selection

top button

press		press
tap		tap
tap-tap	abort preset selection	tap-tap



waveform>

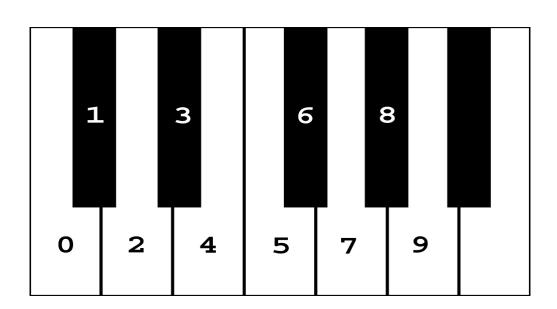
0 thru 9 select waveform by number (0, 1, or 2)

? list waveforms

ESC or ` abort waveform selection

top button

press		press
tap		tap
tap-tap	abort waveform selection	tap-tap



(numeric input)

0 thru 9 decimal digit

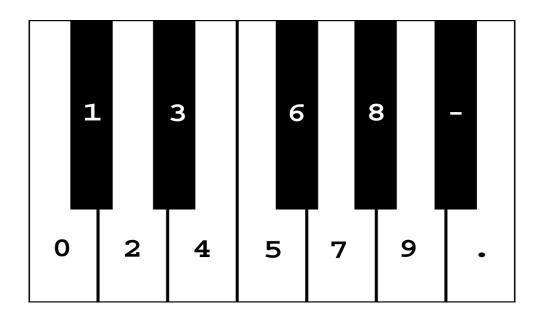
- minus sign

. decimal point

CR or / commit input abort input

top button

press		press	commit input
tap		tap	commit input
tap-tap	abort input	tap-tap	



keybrd>

```
\mathbf{C}
         \mathbf{Z}
               C#
         S
         X
               D
         d
               D#
               \mathbf{E}
         c
               F
         V
               F#
         g
               G
         b
               G#
         h
               A
         n
               A#
               В
         m
               high C
  0 thru 8
               select octave 0 thru 8
               display current octave
ESC or `
               exit virtual keyboard
```

top button

press		press	
tap	- 1 octave	tap	+ 1 octave
tap-tap	exit virtual keyboard	tap-tap	