# **DuoPoly**

# **Quick Operation Guide**

Version 2.16

Cornfield Electronics

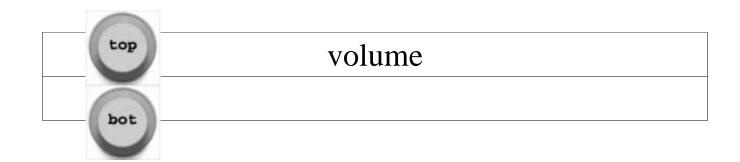
#### main>

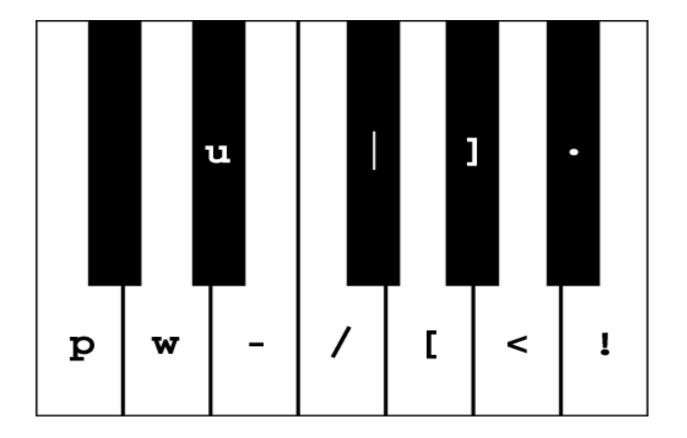
```
right panel
        r
              left panel
        1
              select preset (0, 1, 2, 3, 4)
        p
             set volume (0 to 255)
        V
             select waveform (0, 1, 2)
        \mathbf{W}
              latch oscillator frequencies (geometric)
        /
              latch 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

left button

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





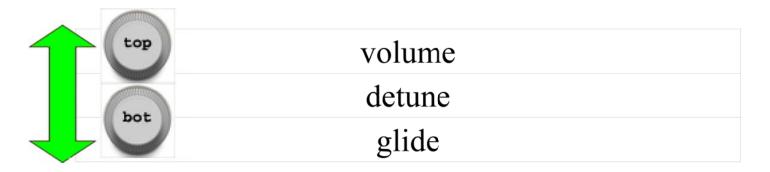
### right> or left>

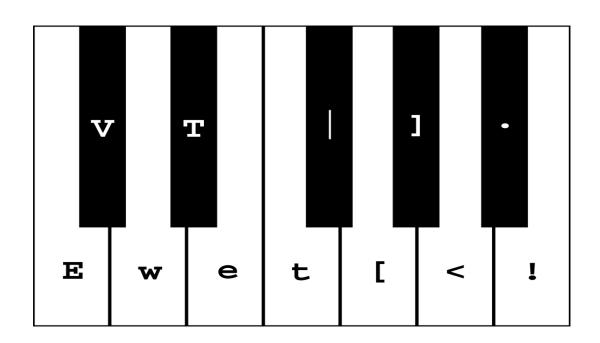
```
d
              detune oscillator (-128 to 127, total range is a quarter tone)
              effects panel
        e
              envelope panel
        \mathbf{E}
              set oscillator frequency (20.0 to 20000.0)
        f
              set glide speed (0 to 255, 0 = off)
        g
              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

left 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
                   \mathbf{A}#
                   B
             m
                   high C
      0 thru 8
                   select octave 0 thru 8
                   display current octave
   ESC or `
                   commit sequence
```

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

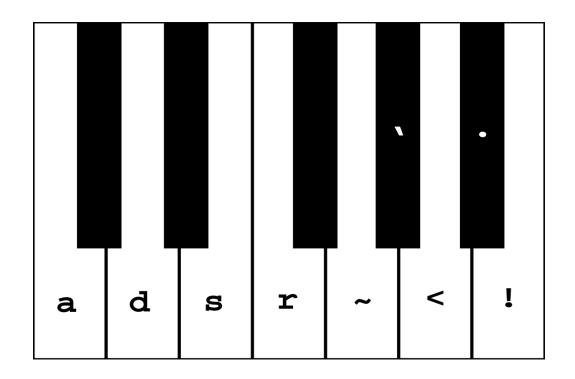
### envelope>

```
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

	left button		right 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

top	attack	
bot	decay	
Bot	sustain	
	release	



#### 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

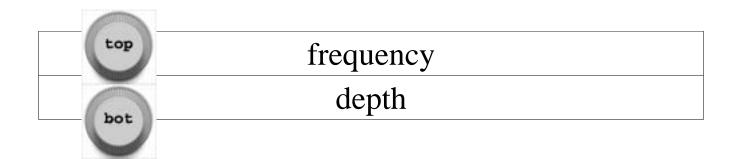
exit tremolo panel

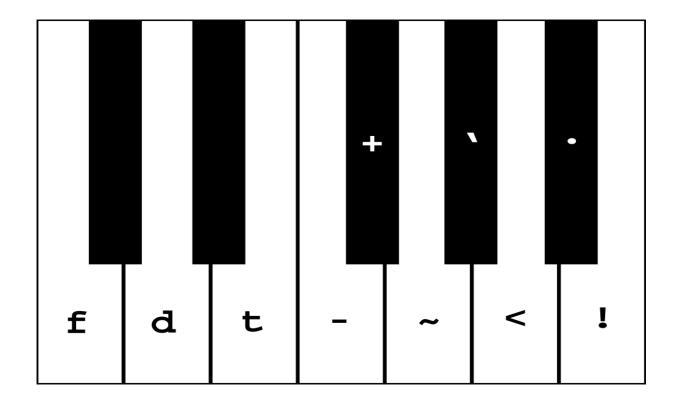
ESC or

(continued ...)

### tremolo

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



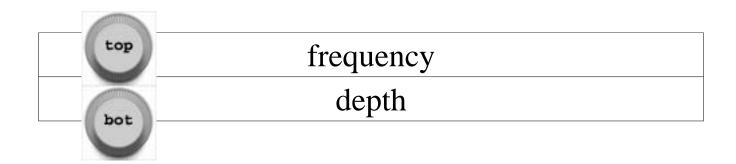


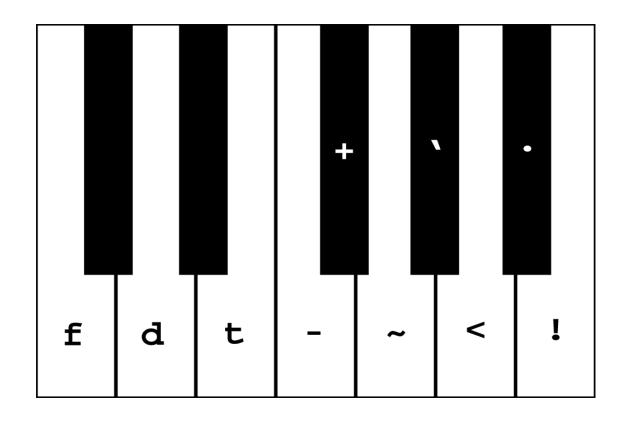
#### vibrato>

```
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

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



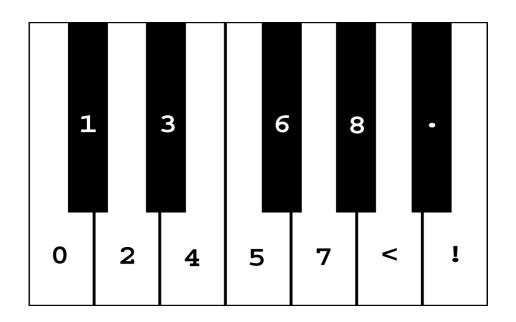


### effects>

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

**left button** 

	press		press
	tap		tap
to	ap-tap	exit effects panel	tap-tap

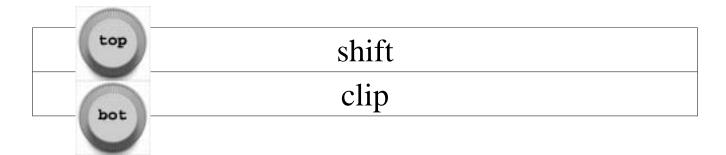


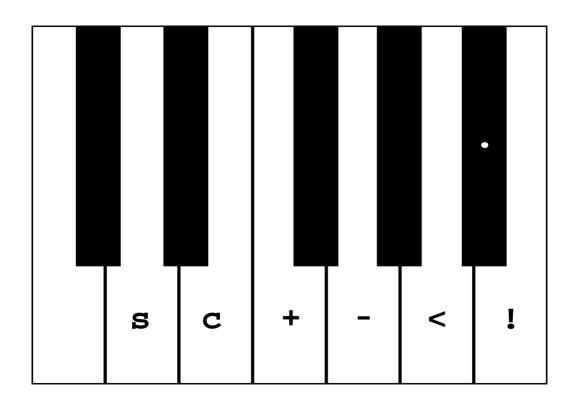
### **bsf>** (Binary Shift Filter)

- 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

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





### **lpf>** (Low-Pass Filter)

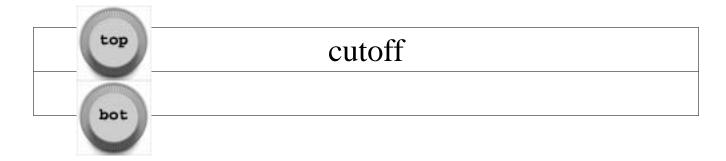
- c set cutoff freq level (parts per 255: 0-255)
- . mute
- < unmute
- ! reset
- ? display filter state
- **ESC** or ` exit filter panel

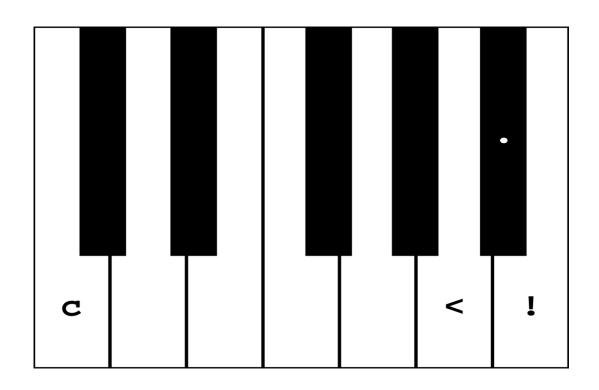
(continued ...)

lpf

left button

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





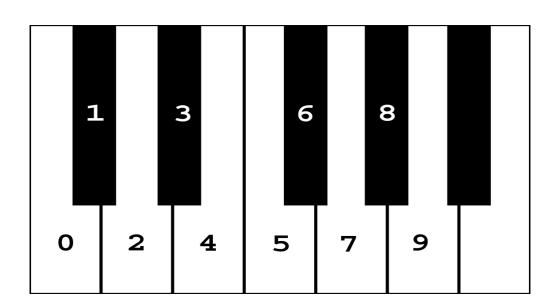
### preset>

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

? list presets

**ESC** or ` abort preset selection

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



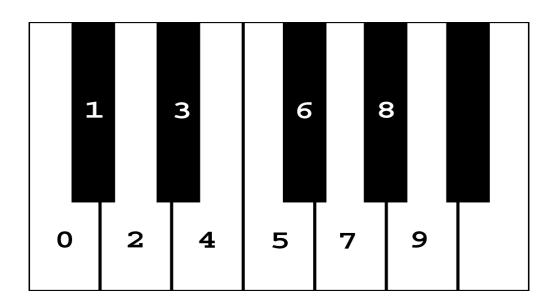
### waveform>

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

? list waveforms

**ESC** or ` abort waveform selection

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



### (numeric input)

0 thru 9 decimal digit

- minus sign

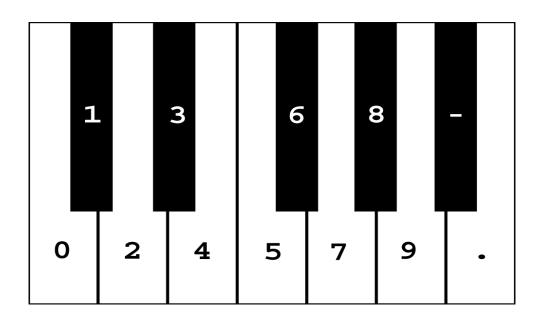
. decimal point

CR or / commit input

ESC or abort input

#### left 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  $\mathbf{F}$ # g G b h G# A n **A**# В m high C 0 thru 8 select octave 0 thru 8 display current octave **ESC** or ` exit virtual keyboard

#### **left button**

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