

# parameter reference

selector knob	knob a parameter	knob b parameter
1	sample	break
2	filter	stretch
3	gate	gate %
4	jump %	retrig %
5	tunnel %	reverse %
6	sequencer rec	sequencer play
7	save	load
8	volume	tempo

**sample** changes the sample being played.  
**break** modifies all likelihoods simultaneously.  
**filter** is a resonant low-pass filter.  
**stretch** performs a lo-fi time-stretch effect.  
**gate** controls the amount of gating on the sample.  
**gate %** controls the likelihood of gating.  
**jump %** controls the likelihood of jumping to a different step in the current sample.  
**retrig %** controls the likelihood of retriggering.  
**tunnel %** controls the likelihood of jumping to a different sample.  
**reverse %** controls the likelihood of reversing direction.  
**sequencer rec** will record sequences, up to 128 steps (fully cw = record, ccw = erase). after recording, turn **sequencer on** (knob b).  
**sequencer on** turns on the sequencer (cw = on, ccw = off).  
**save** saves probabilities, sample, volume, and tempo (fully cw = save).  
**load** recalls the last save (fully cw = load).  
**volume** changes the volume and adds a wavefolding effect.  
**tempo** controls the tempo in steps of 5 bpm (50-305), encoded in binary. see [pikocore.com/#tempo](http://pikocore.com/#tempo) for more info.

# pikocore

.com

## open-source

all code is open-source and available to hack, check it out at [pikocore.com/code](http://pikocore.com/code).

## updates

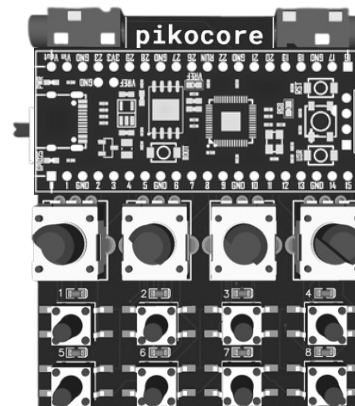
go to [pikocore.com/#update](http://pikocore.com/#update) to get information on new firmware updates or to customize the firmware with your own samples.

## help

send any questions / feedback to [zack@infinitedigits.co](mailto:zack@infinitedigits.co) or find me on insta [@infinitedigits](https://www.instagram.com/infinitedigits).

## video guide

go to [pikocore.com/tutorial](http://pikocore.com/tutorial) or scan this:



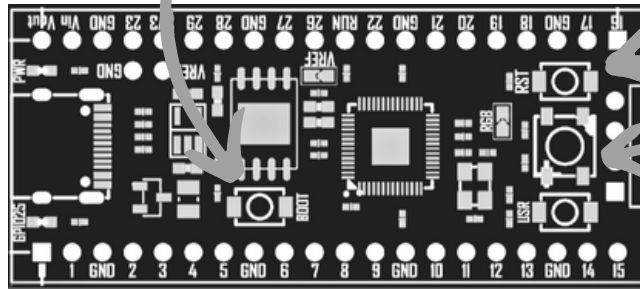
# quick reference

**boot button** - hold this and press reset to upload firmware.

(brain)

**reset button.**  
press to reset.  
hold boot button and press this to upload firmware.

USB-C jack for **powering** or **uploading** new firmware or adding new samples  
(more info at [pikocore.com/#update](http://pikocore.com/#update))



**led indicator** for knob a and knob b

(body)

**sync input** (e.g. Pocket Operator set to SYN1, 3.5mm stereo)

**audio out**  
(3.5mm stereo)

off/on switch (when not powered by USB-C)

**audio+sync out** (e.g. to Pocket Operator set to SYN4, 3.5mm stereo)

**selector knob**  
see back page for parameters that become available to knob a and knob b

**knob a knob b**

**attenuator knob**

a **single button** will change sample in real-time. **two buttons** will initiate retriggers. retrigger rate increases across buttons. button mash!

pressing these four buttons simultaneously will **stop/play**.

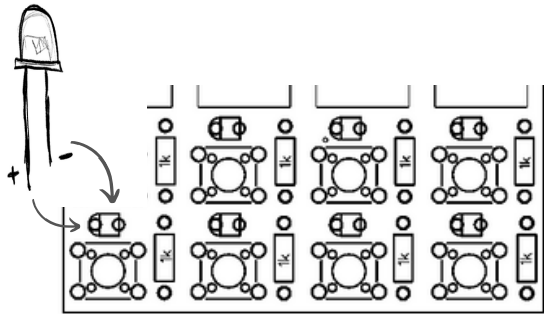


# soldering guide

there are multiple ways to solder. feel free to find your own, or use this guide to get you through the process. if you need help, goto [pikocore.com/diy](http://pikocore.com/diy) to watch a tutorial video.

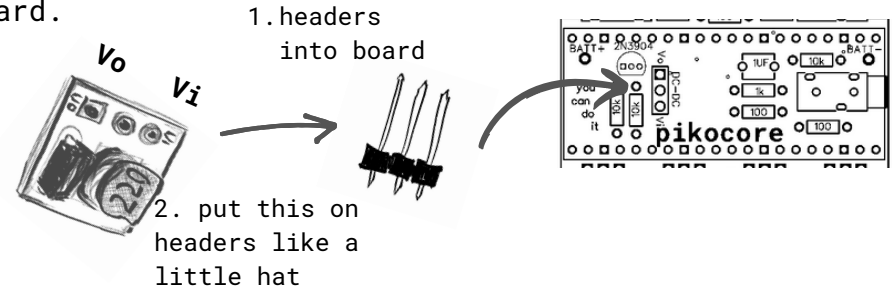
1) solder all the resistors and capacitors. the resistors have three stripes in the middle that color code them. the 10k resistors have "black-black-red" in the middle. the 1k resistors have "black-black-brown" in the middle. the 100 ohm resistors have "black-black-black" in the middle. the code on the capacitors says 105 for the 1 uF and 104 for the 0.1 uF.

2) solder in the leds. the long leg of the led should go through the hole that has the curved outline on the board.



3) solder in the buttons, the switch, the transistor (2N3904), and the three 3.5 mm jacks. if you haven't already, its a good time now to clip off any legs of leads sticking out.

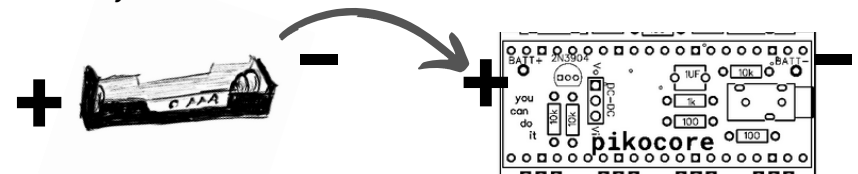
4) solder in the 1x3 header into the middle. next, solder the dc-dc transformer atop the 1x3 header. CAREFUL: make sure that the "Vo" on the dc-dc transformer is on the same side as the "Vo" on the board, i.e. put the tall coil facing down towards the board.



5) solder in the 1x20 female headers. once those are in, add in the 1x20 male headers into the female headers. place the pico on the male headers and solder the pico header pins together.

6) insert the four potentiometers above the buttons and flip the board over and solder them in from the other side.

7) remove the pico and solder the battery holder from the back. tip: clip the battery holder legs a bit before soldering. CAREFUL: make sure that the "BATT +" corresponds to the positive end of the battery.



8) clip off all remaining legs and then goto [pikocore.com/#factory-reset](http://pikocore.com/#factory-reset) and upload the latest firmware to the board!