Terminal tedium (for the impatient)

/* a simple eurorack breakout board for the raspberry pi (A+, B+, odroid w). it's meant to be used *headless* (hence the name (a.o.)) */

*** proper documentation to follow ASAP ***

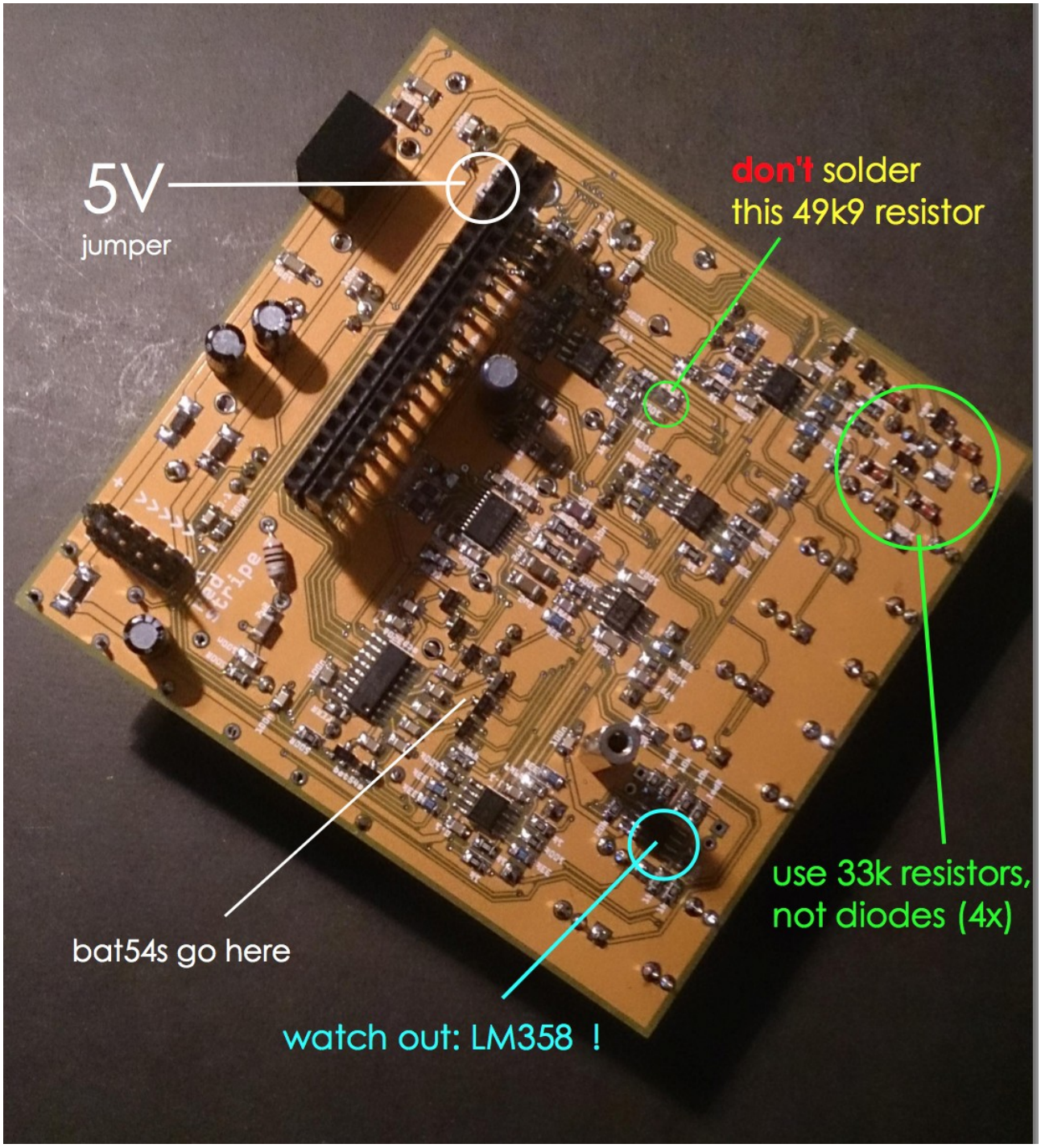
building it up should be easy even so – you can follow the values indicated on the pcb. no special precautions required except:

- don't solder the one 49k9 resistor in the vicinity of the top-right TL072 (as shown on the next page)

- substitute diodes with 33k resistors (near the bottom right side of the board)

Essentially, the board features a TI pcm5102a stereo codec (i2s), and a 12bit ADC (MCP3208) for the CV inputs (CS = CE1). So, basically, it's a soundcard + controller. In total, there's two audio outputs (L/R - 10VPP), 8 CV inputs (+/- 5V; six of which with offset/pot, and two bipolar/aux); four digital inputs (GPIO2/3/4/17); three tact switches (GPIO23/24/25); and two digital outputs (10v, GPIO16/26). The focus was entirely on the DAC/getting decent audio out; the ADC bit of things is less satisfying (though still useable for many purposes).

for everything else (software), for now, see the rpio-docs – (https://github.com/mxmxmx/rpio) these should get you pretty far. Make sure you update to the latest kernel)


5V
jumper
don't solder
this 49k9 resistor
use 33k resistors,
not diodes (4x)
bat54s go here
watch out: LM358 !