clee Bits rate control update

This hardware and software update to the clee Bits module adds a third mode to the RATE control. The 3 modes are AUDIO RATE, SUB-AUDIO RATE and a new EXTERNAL TRIGGER MODE

ORIGINAL DESIGN:

UP: Audio rate - LED is off

DOWN: Sub-audio - LED flashes sample rate

WITH MOD:

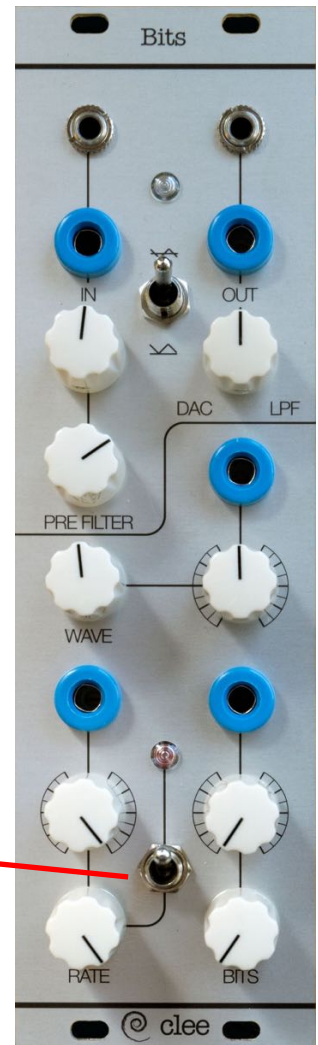UP: EXTERNAL TRIGGER - LED is on when input is above threshold

CENTER: Audio rate - LED is off

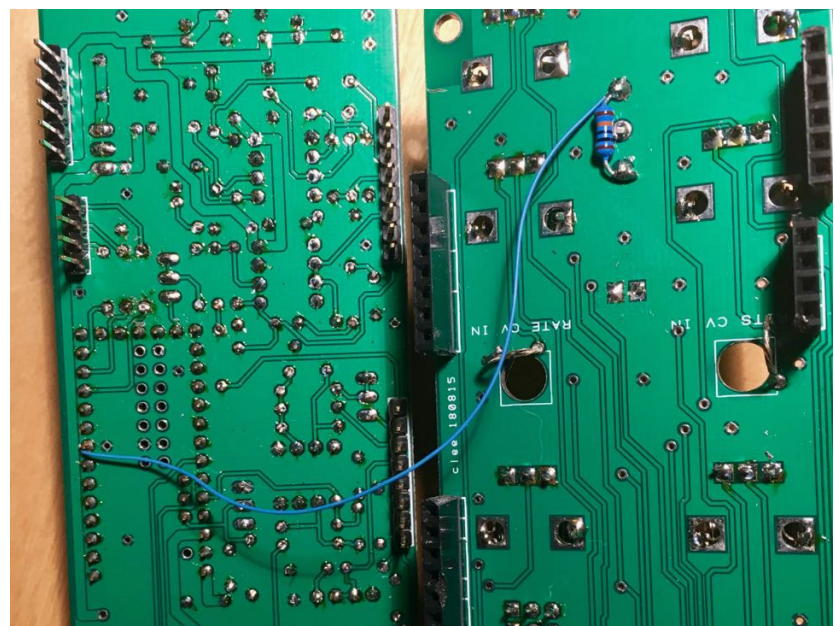DOWN: Sub-audio - LED flashes sample rate

With external triggering the RATE CV IN becomes a TRIGGER IN.
Start with the RATE CV pot fully CW and the RATE MANUAL CONTROL fully CCW
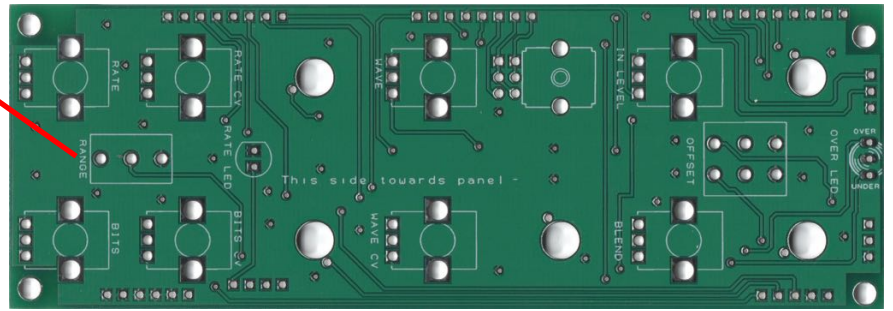
RATE SWITCH

The update involes using an ON-OFF-ON switch instead of ON-OFF (or replacing if updating a current build), installing a ~~100K~~ 33K resistor, and adding a jumper wire between boards.
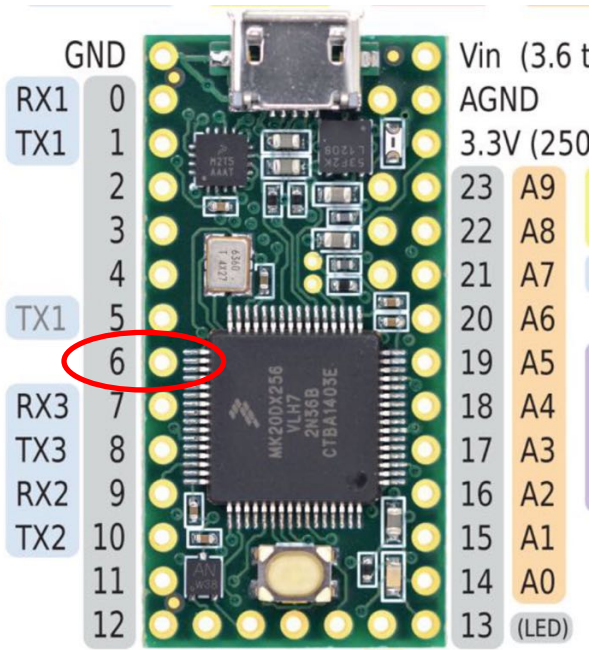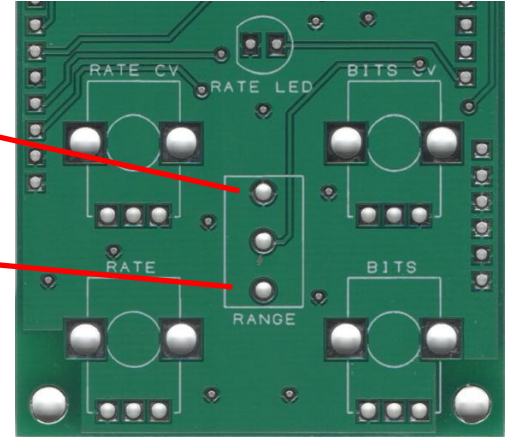
Locate the range switch on the PCB.

You should have installed 3 position ON_OFF_ON switch

One side of the switch is ground and the other is no connection

ground connections with thermal relief pads

No connection

IMPORTANT!
You are connecting a jumper wire to PIN 6 of the Teensy 3.2.

This is actually PIN 8 of the Teensy board, Pin 1 is ground and PIN 2 is Teensy PIN 0

1) Connect the jumper wire to the Teensy pin 6 (board 8)

2) Solder a ~~100K~~ 33K resistor between the outer lugs of the range switch

3) Connect the other end of the jumper wire to the pin of the switch that was no connection

4) Program the module with software version 1.4