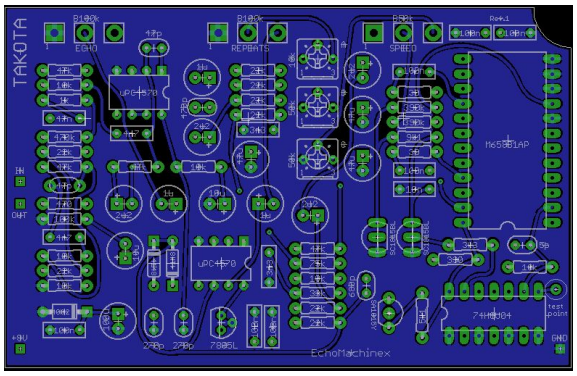
Visit TAKOTA on Facebook https://www.facebook.com/Takota-393986571453497/



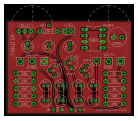
TAKOTA

Echo Machinex

Ibanez EM5

It compares to Ibanez EM5 Echo Machine - a hiden gem from the 90s. By far, one of the best tape echo simulations you can get for any money. Based on a Mitsubishi M65831AP chip, it's much better sounding than anything with the PT2399. The tone is not too dark, and the repeats sit in the mix perfectly without getting in the way of the original signal.
This PCB is true-bypass.

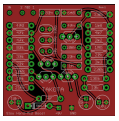
FEATURED PCBs



Vegetable Man Fuzz

Selmer Buzz-Tone

The Pink Floyd tones of Syd Barrett era.



Slow Hand Boost

EC Mid Boost 25db

A nice mid boost found in Eric Clapton's signature guitars.

PART LIST

CAUTION!!!

- **ignore the "7805L" printed on your PCB and in schematic.**
- **carefully check your 78L05 regulator pinouts. Some devices may have their pinouts reversed. I. e. your regulator should be inserted other way round than printed on the PCB to work properly.**

ICs
M65831AP
74HCU04
uPC4570C … 2x (or TL072)
78L05 regulator

Tranzistors
2SC1815(L) (NPN) … 2x
SA1015(Y) (PNP)

Both transistors can be purchased from Tayda.

Diodes
4002
4148 … 2x

Potentiometers
B50k
B100k … 2x

Trimers
10k
50k .. 2x

Resistors
30 … 2x
330
470

1k
3k3
5k1
9k1
10k … 6x
22k … 8x
33k
47k … 4x
75k
100k
390k … 2x

470k

<u>Capacitors</u>

5p
47p … 2x
270p … 2x
470p
680p

3n3 … 2x

4n7 … 2x
10n
47n
100n … 7x

1u … 3x
2u2 … 4x
10u … 2x
47u … 3x
100u

BIASING

In case you only used the above listed parts for your build (i.e. no subs), try to set the trimmers as follows:

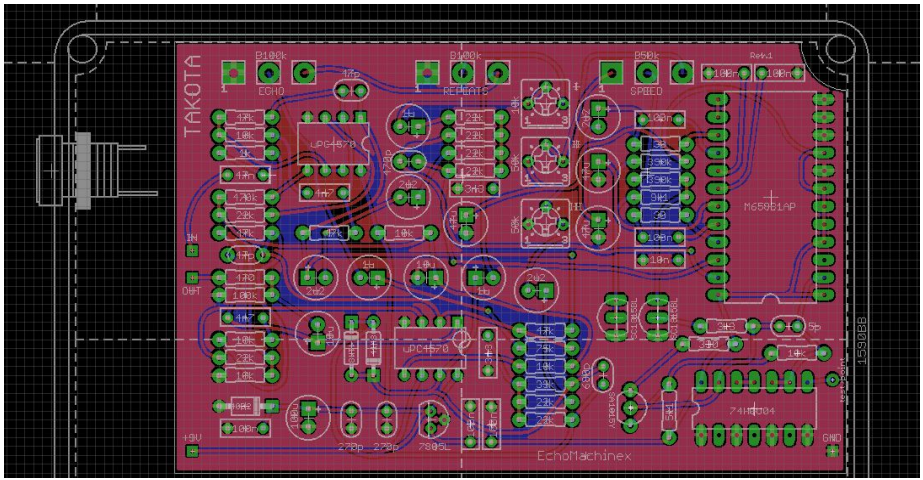
- A = MIN
- B = MAX
- C = 11 o'clock

There is a big chance that this setting will work for you perfectly (as it always worked for me in all my builds). If not...

- Start with all trimmers set to noon
- Set **Speed** and **Echo** pots to MAX, **Repeats** pot to NOON, and adjust **trim C** to get about 1 sec delay intervals. (You should be able to measure 0,5 MHz at the test point)
- Set **Speed** pot to MIN, and adjust **trim B** for the shortest delay intervals (should sound kind of like a “metal can echo”). (4 MHz at the test point)
- Set **Repeats** pot to MAX and adjust **trim A** for the highest number of repeats (or for the infinite repeats, if required)

Note that the Speed control works the other way round than one would expect. The Speed pot all the way left (MIN) gives the highest speed. While the pot set all the way right (MAX) gives the lowest speed.

1590BB ENCLOSURE



SCHEMATIC