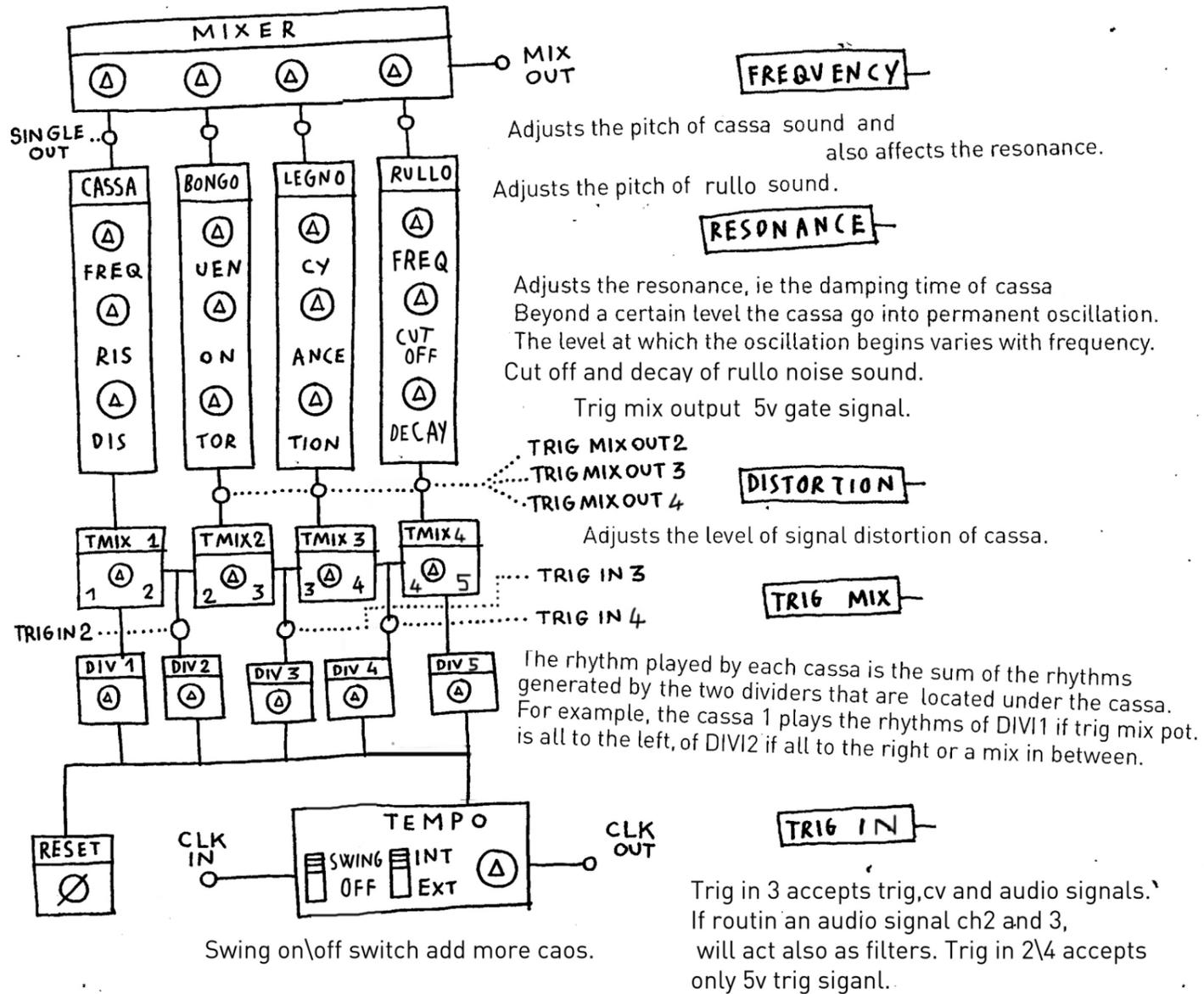


BLOCK DIAGRAM



FREQUENCY

Adjusts the pitch of cassa sound and also affects the resonance.

RESONANCE

Adjusts the pitch of rullo sound.
Adjusts the resonance, ie the damping time of cassa. Beyond a certain level the cassa go into permanent oscillation. The level at which the oscillation begins varies with frequency. Cut off and decay of rullo noise sound.

DISTORTION

Adjusts the level of signal distortion of cassa.

TRIG MIX

The rhythm played by each cassa is the sum of the rhythms generated by the two dividers that are located under the cassa. For example, the cassa 1 plays the rhythms of DIV1 if trig mix pot. is all to the left, of DIV2 if all to the right or a mix in between.

TRIG IN

Trig in 3 accepts trig, cv and audio signals. If routin an audio signal ch2 and 3, will act also as filters. Trig in 2\4 accepts only 5v trig siganl.

POWER

The two power in accept, 12v DC tip+, 200ma or more. One power in it's for the unit the other it's for another instrument. The unit it's protected, you can try different power supply till 20v, recyle an old'one!

CLK DIVIDER

These set the clock divisor, ie how many clock pulses (white LED) it takes to get a shot of cash (colored LEDs). If the potentiometer all the way left, to each pulse of the white LED will have a shot (divisor 1), slowly moving forward we will have dividers more and more high (shots more and more slow). The max divider is about 64 (potentiometer fully right).

BPM

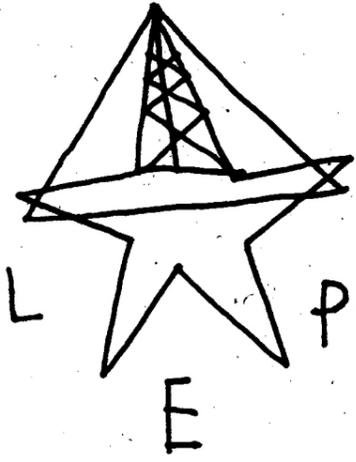
In internal clock mode adjusts the speed of the basic clock, and then all of the rhythms. All on the left, minimum speed, maximum speed all right. When you are on the external clock acts as a divider (clock prescaler) in the same way of the clock divider, in this case the we will have the maximum speed with the potentiometer all at the left. All left 2ppqn, all right 24 ppqn, tempo pot divide x1 at zero 2ppqn, x6 at max 24 ppqn, and the value in the middle.

Power also non-stabilized 12 volts with + central tip.
The multicassa accepts any type of clock pulse or square wave of 3-12 volts amplitude, with any polarity including the Midi clock, as long as the midi line is present only midi clock and no other messages (notes, control changes, sysex, etc.).
The clock can be generated internally or applied externally through jack on the left side of the unit.
Each cassa has a pitch, resonance and distortion control.
- An output mixer allows you to adjust the volume of each speaker.

- Dividers act not to the notes but on the rhythms, by dividing a basic rhythm (clock) for a variable number (with the command Clock Divider) rhythms are then mixed 2 by 2 (Trig Mix) generating a complex poly rhythms.
- The valves are replaced by solid-state trigger circuits.
The same principle is used here with two differences:
Early versions of Mixturaonium use as frequency dividers the Thyatron (a type of gas valve that could be used to build oscillators and frequency dividers), these dividers acting on the notes producing subharmonic that could be mixed (hence MIXTURA) for produce complex sounds.
The term trautoritwica is inspired by a vintage instrument, the Mixturaonium, invented by Oskar Sala musician, a student of Hindemith, which elaborate it, since the 30s on the basis of another instrument more simple, the Heimtraonium, manufactured by Telefunken in the '20s, one of the first electronic instruments for the living room.
The multicassa is an electronic instrument composed of 3 cassa generators controlled by an analog trautoritwica like rhythms generator.

MULTICASSA TRAUTORITWICA

MULTICASSA TRAUTORITWICA



DESIGN - LEP LABORATORIES TONYLIGHT & PEPPOLASAGNA

ARTWORK - RUGGGE.com

USER MANUAL

