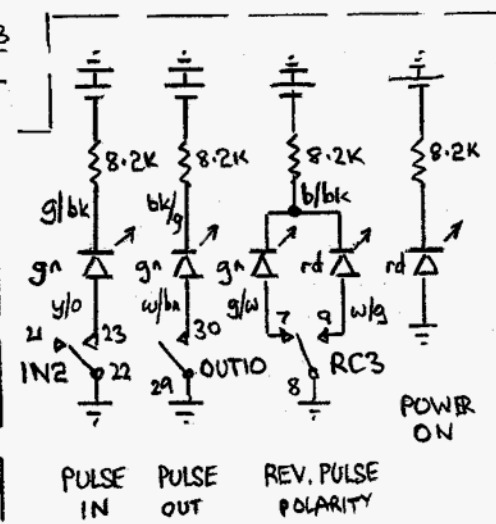
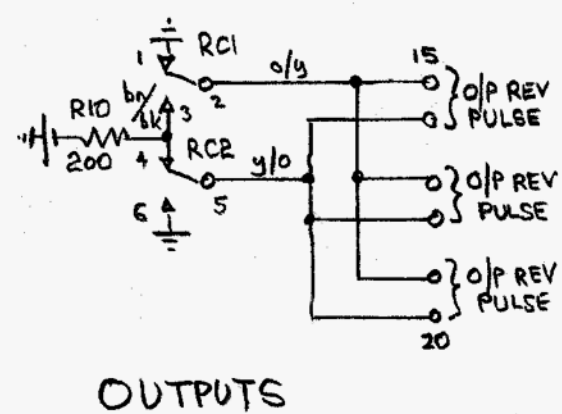
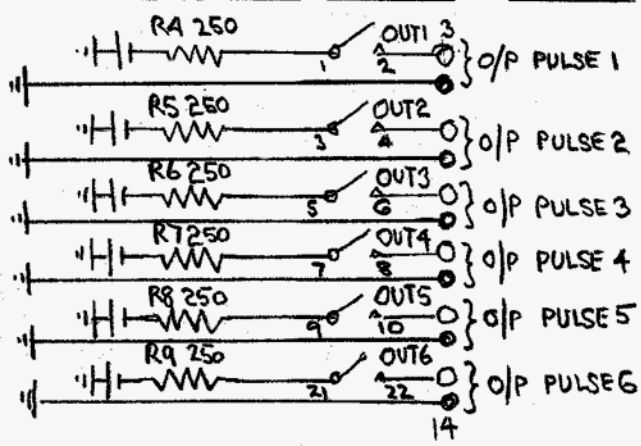
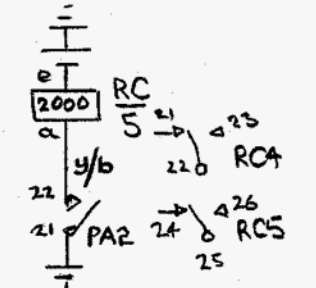
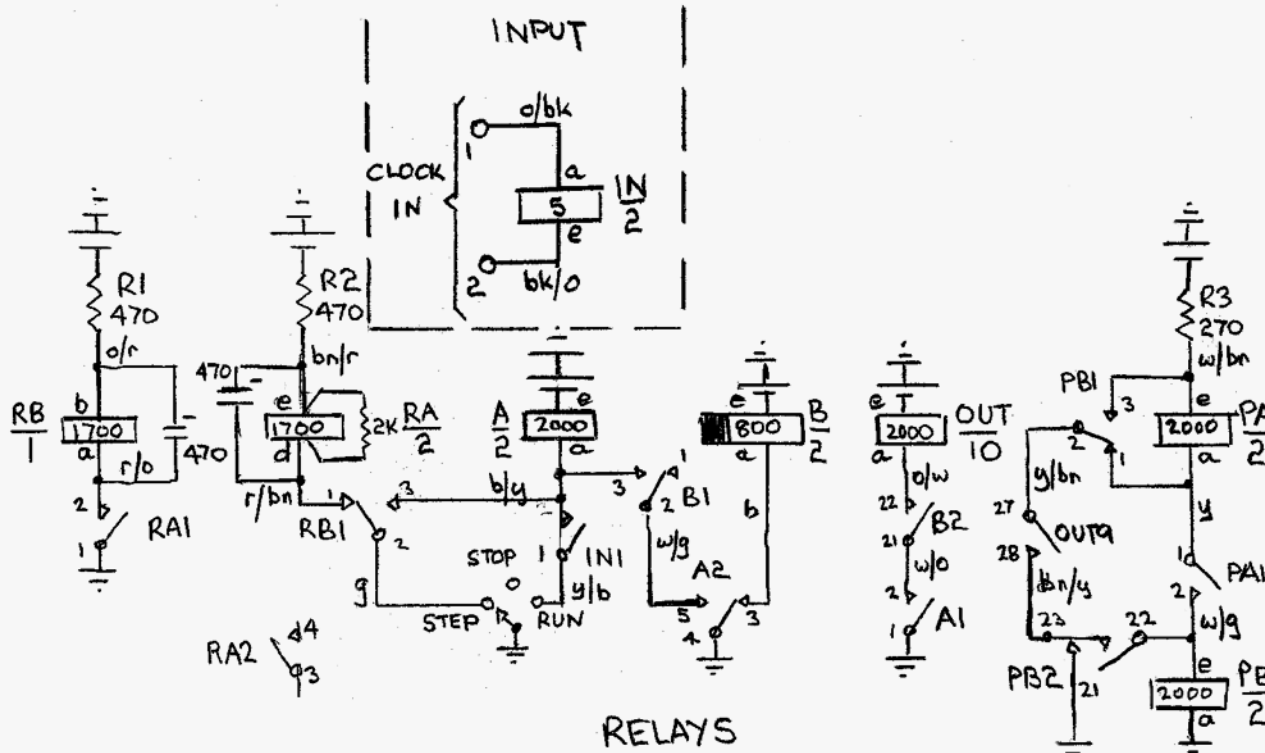


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OUTPUTS

INDICATORS

Krone Block Connections

- 1 clock in
- 2 clock in
- 3 pulse clock out 1
- 4 pulse clock out 1 earth
- 5 pulse clock out 2
- 6 pulse clock out 2 earth
- 7 pulse clock out 3
- 8 pulse clock out 3 earth
- 9 pulse clock out 4
- 10 pulse clock out 4 earth
- 11 pulse clock out 5
- 12 pulse clock out 5 earth
- 13 pulse clock out 6
- 14 pulse clock out 6 earth
- 15 reverse clock out 1
- 16 reverse clock out 1
- 17 reverse clock out 2
- 18 reverse clock out 2
- 19 reverse clock out 3
- 20 reverse clock out 3

- 21 PA transformer primary common
- 22 PA transformer primary 0.625 watts
- 23 PA transformer primary 1.25 watts
- 24 PA transformer primary 2.1 watts
- 25 PA transformer primary 5 watts
- 26 PA transformer primary 10 watts
- 27 PA transformer secondary common
- 28 PA transformer secondary 4 ohms
- 29 PA transformer secondary 8 ohms
- 30 PA transformer secondary 16 ohms

- 31
- 32
- 33
- 34
- 35
- 36
- 37
- 38
- 39 50 volts -ve battery
- 40 50 volts +ve earth

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Introduction

The unit accepts a pulse from a clock circuit and regenerates it. It then produces six separate outputs to feed up to six clock circuits. It also produces an output suitable for a reversal type clock. The single output can feed up to three reversal clocks.

A front mounted switch can be set to "run" (the normal setting), "stop" (when the clocks it feeds do not step on) and "step" where the unit will drive the clocks on around once every two seconds. Any pulses still arriving from the main clock will be ignored whilst clocks are being stepped on.

Indicator lights show the input pulses, the regenerated pulses, the polarity of the reversal clock pulses and there is also a power on lamp.

Operation

Input pulses normally come from the main clock circuit by operating the 5 ohm relay IN. This relay is in a position usually occupied by a pulse clock. The front mounted switch is in the "run" position. IN1 provides input pulses to relay A every thirty seconds.

Relays RA and RB interact when the switch is set to "step". The speed of interaction is set by the R1 and R2 resistors and the 470 microfarad capacitors across the relay coils. RB1 provides input pulses to relay A every two seconds.

Relays A and B regenerate the input pulses so that no matter the length of the input pulses, the output pulses are always the length of the release lag of relay B. Note that relay B is normally operated. When an input pulse operates relay A, A2 holds relay A until relay B releases. While relays A and B are both operated during the release lag of B, relay OUT is operated. The relay provides six output pulses during the release lag of B.

Contact OUT9 starts the PA and PB divide by two circuit.

OUT9 operates relay PA but has no effect on PB as this relay is short circuited when PA1 operates. When OUT9 releases, the short circuit is removed from relay PB which then operates in series with PA.

When, thirty seconds later OUT9 reoperates, it short circuits PA but maintains a holding path for PB via the PB1 and PB2 contacts. PA releases, but PB holds via the PB and OUT9 path. When OUT9 releases the holding path is disconnected and relay PB releases.

This sequence means that for thirty seconds, relays PA and PB are operated and for the next thirty seconds are released. Relay RC operates for the thirty seconds that PA is operated.

RC1 and RC2 provide a reversing 50 volt supply for reversal type clocks.

PA Transformer

A PA transformer is included in the unit for use as a testing aid for speakers. It is not connected in any way to the clock circuitry. It is simply wired out to the krone terminal block.

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