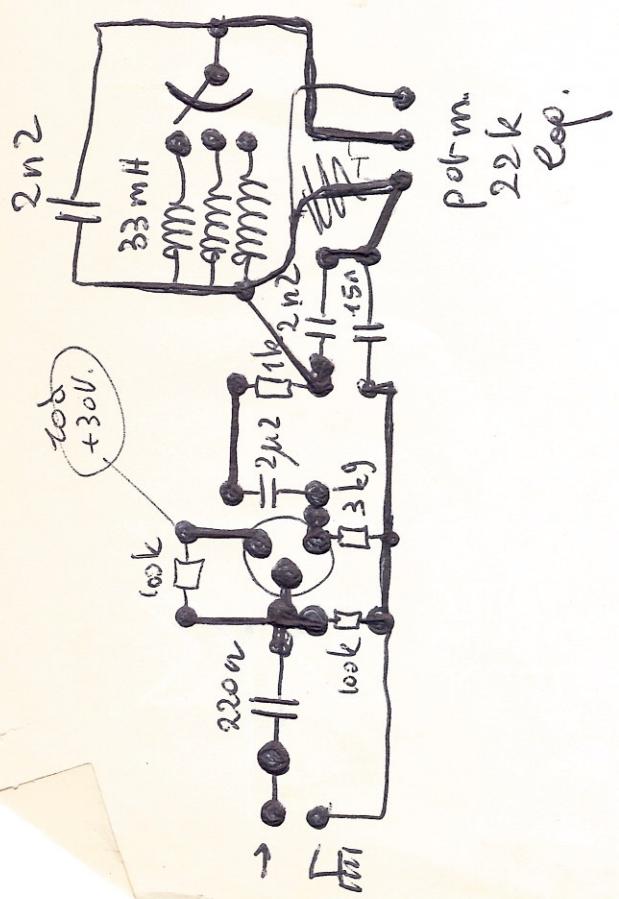
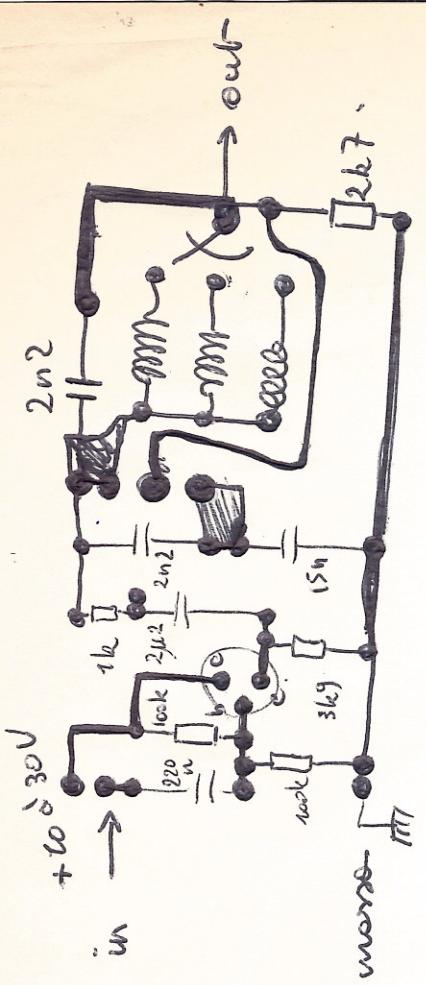


Dual
Syntheleg
83.11

Plexicover-model

made by
Godfried-Willem Raes.

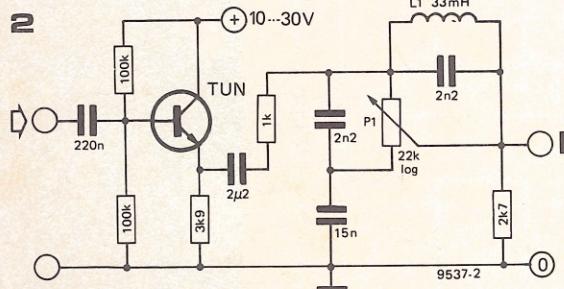


5 ruisfilter met regelbare helling

6 molestatie-alarm

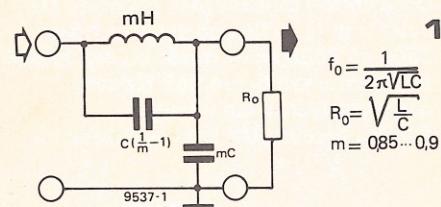
Voor het ijken van de schakeling worden de beide NTC's op een aluminium plaat bevestigd, welke daarna in bijna-kokend water wordt gedompeld. P1 wordt vervolgens zodanig afgeregeld dat de uitgang van het IC laag is als de plaat afkoelt. Hiermee wordt bereikt dat de temperatuur van de 'dak-NTC' altijd hoger moet zijn dan die van de 'reservoir-NTC' om het relais te kunnen laten inschakelen.

5 Met vast ingestelde RC-ruisfilters ligt de helling van de filterkarakteristiek voor frequenties boven de kantelfrekentie vast. In de duurdere commerciële apparatuur is de steilheid van het laagdoorlaat ('hoog-af') filter vaak 12 dB per oktaaf; simpele versies bestaan veelal uit een enkelvoudig RC-netwerk met een helling van 6 dB per oktaaf. Er kunnen zich situaties voordoen waarbij 'te veel van het goede' wordt uitgefiterd: ruis of hoogfrequent vervormingen zijn minder hinderlijk hoorbaar, maar er gaat eveneens een groot deel van het hf-muziekspektrum de mist



in. Het is daarom wenselijk om over een filter met een variabele helling te beschikken.

Figuur 2 geeft een schakeling voor een ruisfilter met een kantelfrekentie van ca. 7 kHz en een helling die met P1 instelbaar is tussen 0 en ca. 25 dB per oktaaf. De schakeling is, evenals het soortgelijke filter in de Quad 33 voor-



versterker, gebaseerd op het m-afgeleide laagdoorlaatfilter van figuur 1, waarbij m een waarde dient te bezitten van 0,85 à 0,9. Het filter dient te worden afgesloten met een weerstand R_o , welke in ons geval 2k7 is (zie figuur 2). De spoel is een 33 mH-printspoel (5%) van Toko.

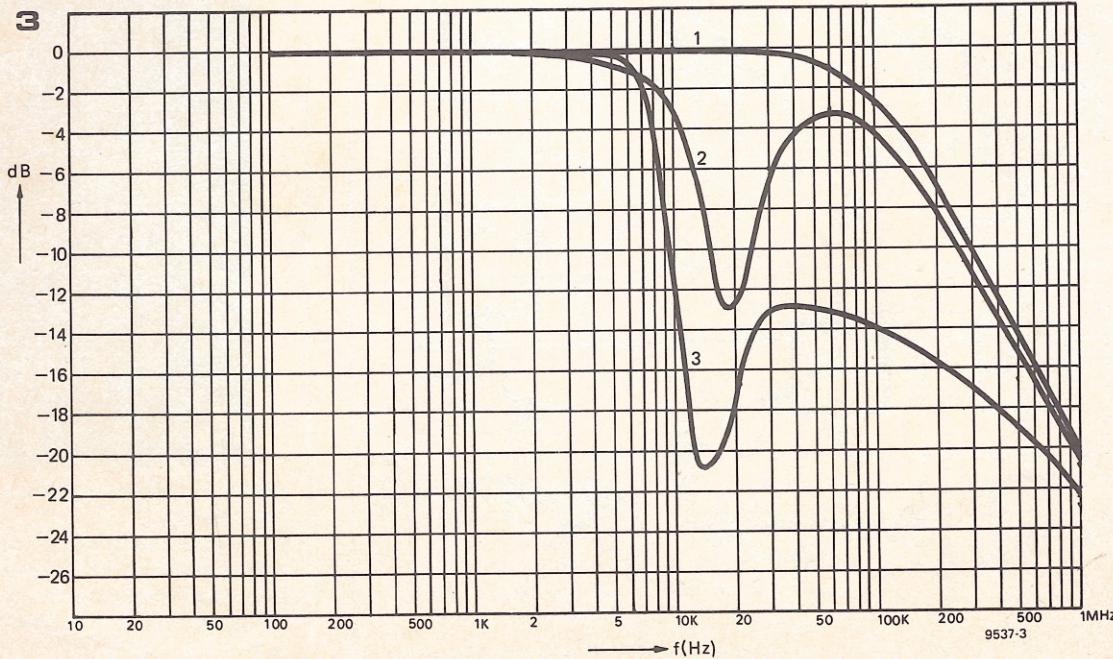
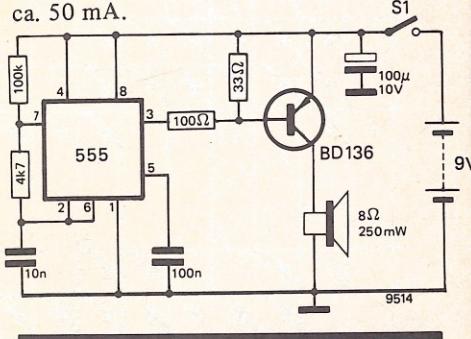
In de grafiek is een drietal karakteristieken opgenomen. Kromme nummer 1 komt overeen met een verzwakking van 0 dB per oktaaf, de loper van P1 staat

dan helemaal 'boven' en de spoel is dan kortgesloten. Kromme 2 geldt voor een loperstand op 50% en kromme 3 is opgenomen bij een maximale shuntweerstand over de spoel.

De doe-het-zelf-ontwerper kan aan de hand van de formules bij figuur 1 het filter aanpassen aan een andere zelf-inductie danwel een andere afsnij-frekentie ($f_o = \frac{1}{2\pi\sqrt{LC}}$).

6 De 555 is geschakeld als een astabiele multivibrator met een duty-cycle van ca. 5% die de BD 136 stuurt. Het door de schakeling geproduceerde geluid is van dien aard dat de aankondigende neiging van een molesteerder wordt getransformeerd tot de welbekende vluchtnaam, terwijl bij in de omgeving vertoevende personen nieuwsgierigheid wordt gewekt, al dan niet gepaard gaande met de wens de geluidsbron op te sporen en te elimineren.

De schakeling kan zeer kompakt worden gebouwd; het stroomverbruik bij 9 V voedingsspanning bedraagt ca. 50 mA.

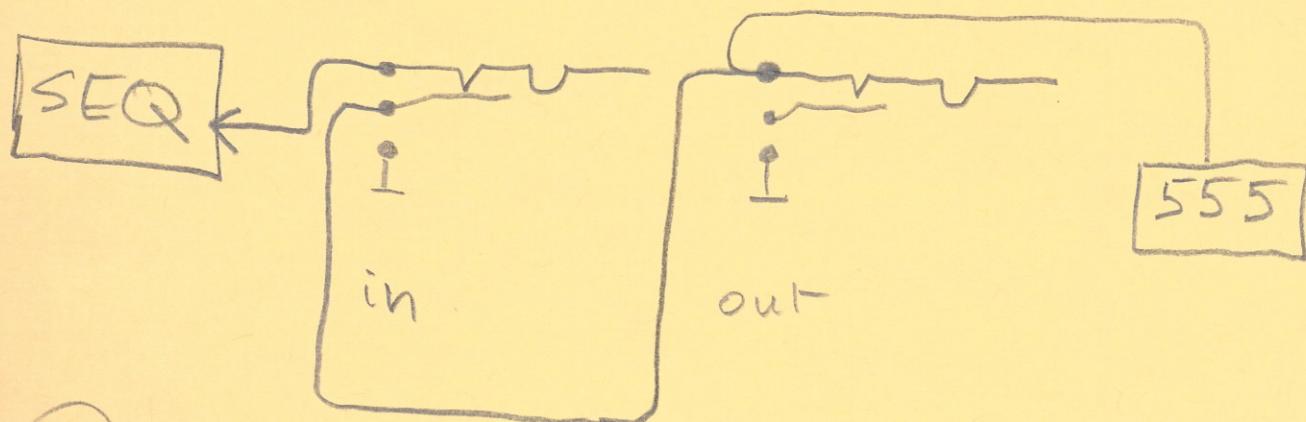


Synthelog - Dual VI

Δ' 's

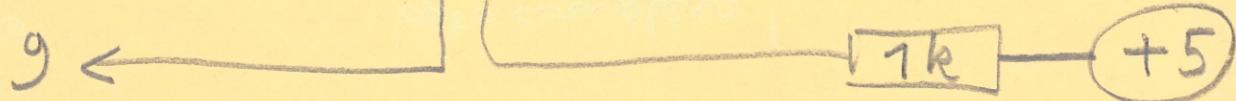
- * $\text{O}7072$: + input op h. potentiometer
brengen
Kev. Av vergroten.

Clock's in - out:



- * Clock pot meters: Extreme standen trimmen met serie R

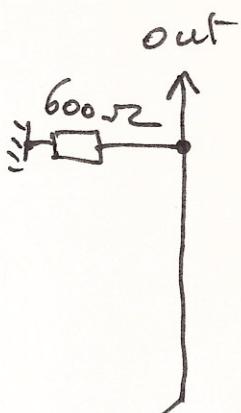
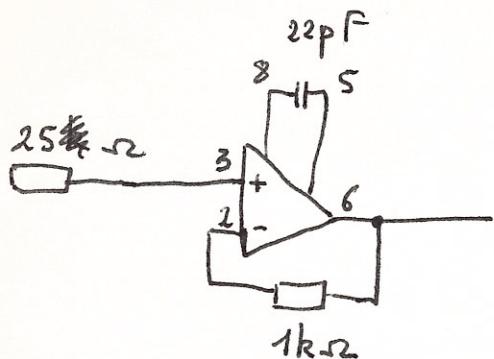
* pin 9 jack:
(Synthe I)



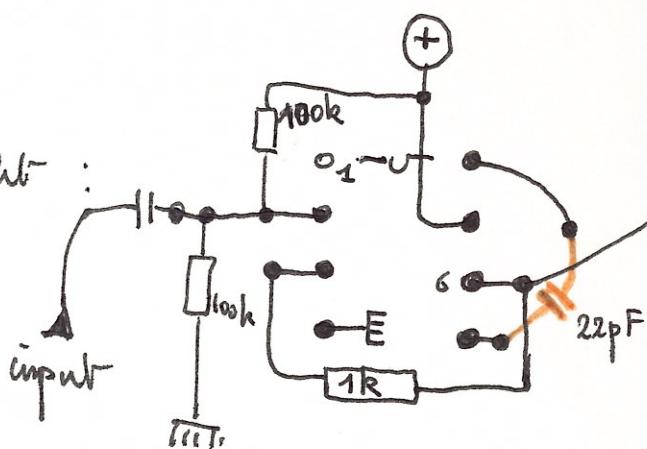
Synthelog 83 Plexi

output buffer .

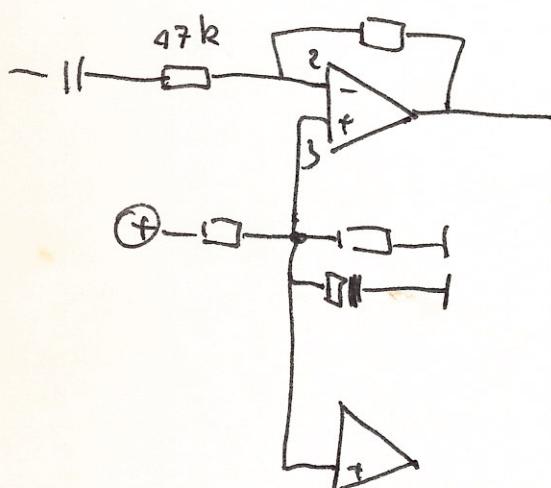
NE5534



topaanzicht:

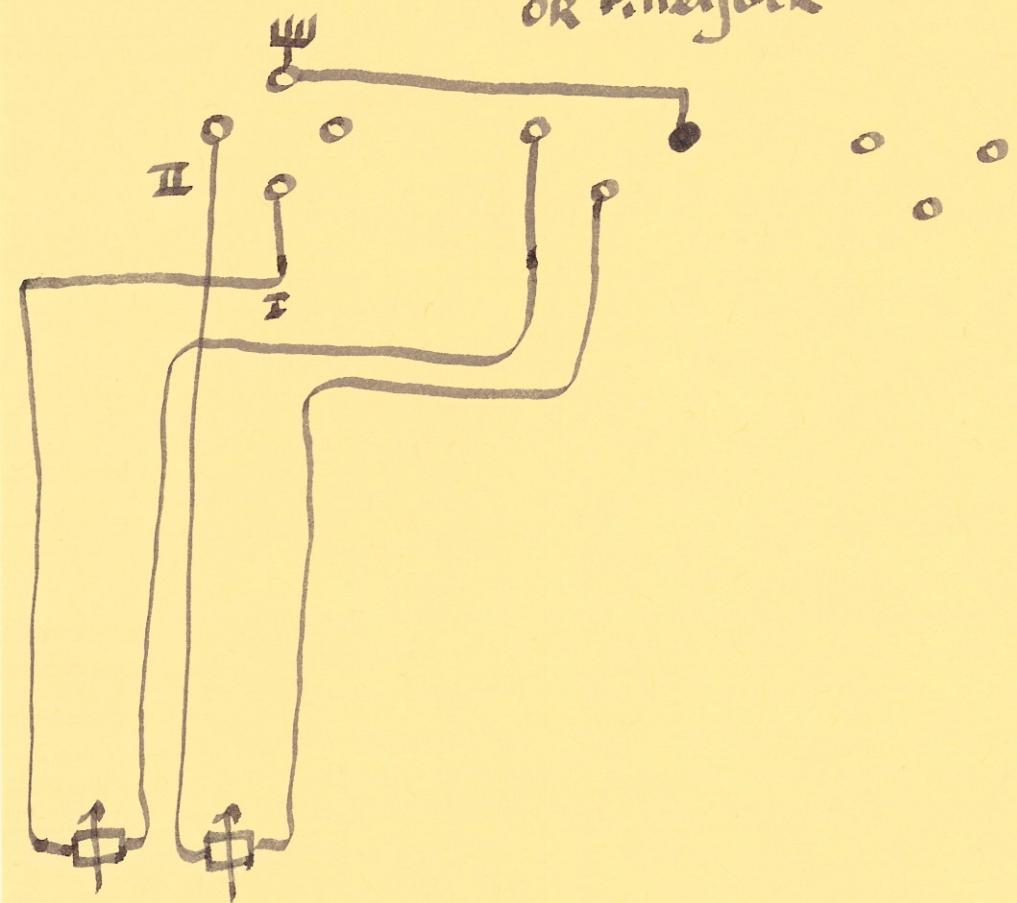


buffer: inverting Buffer:



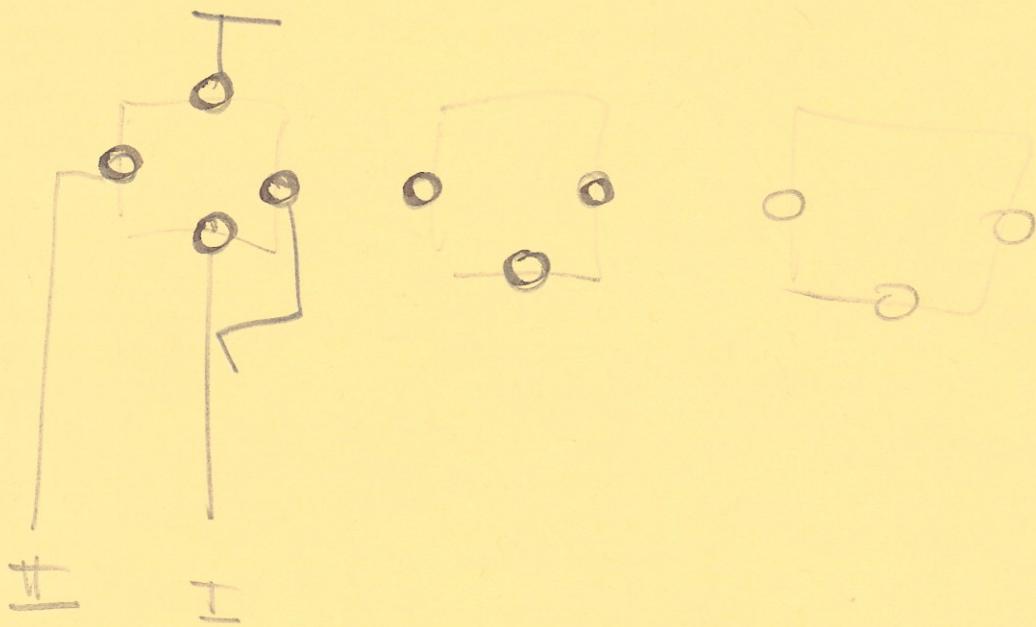
Bedrode line
output.

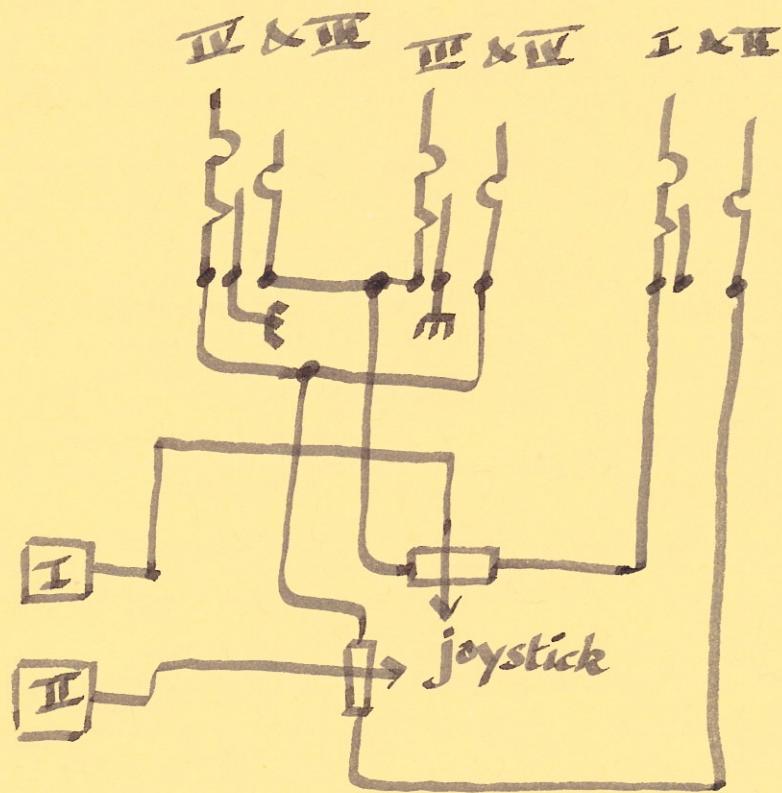
III & IV out
OR Filterjock



* ohoed eindjes solderen op uitgangsjack! !!!

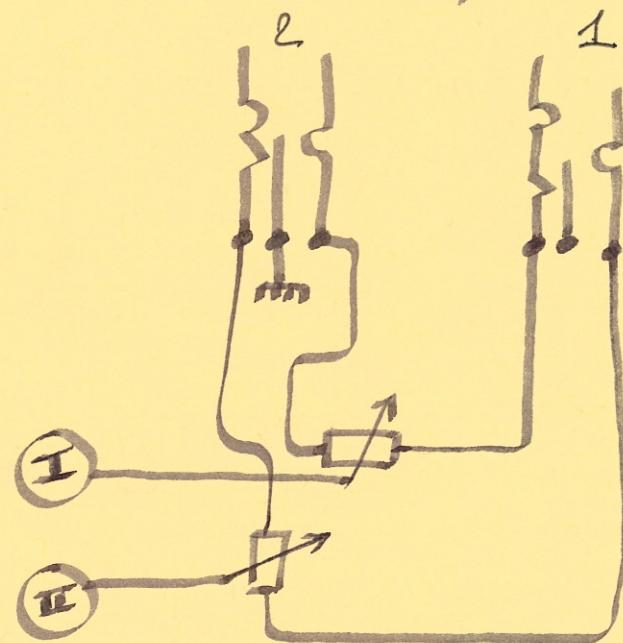
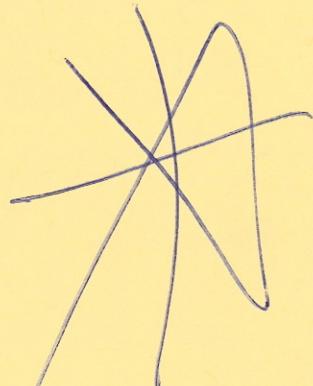
print aanzicht.





for quadraphonic:
insert a stereo jack
in all outputs

OR:

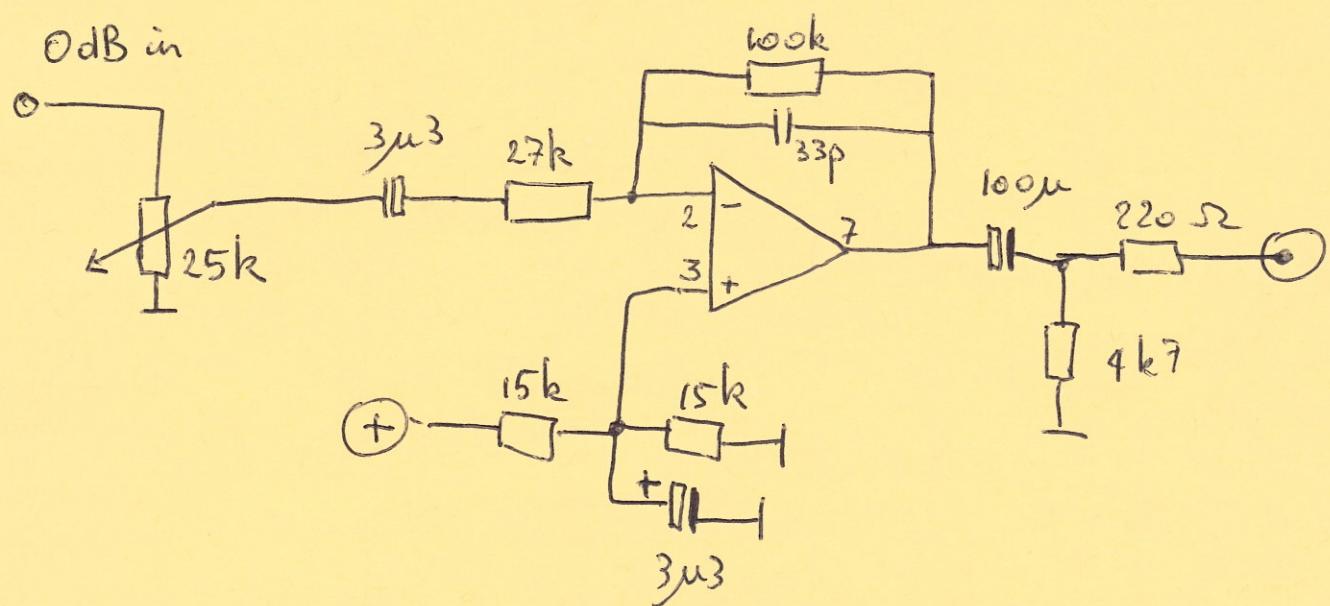


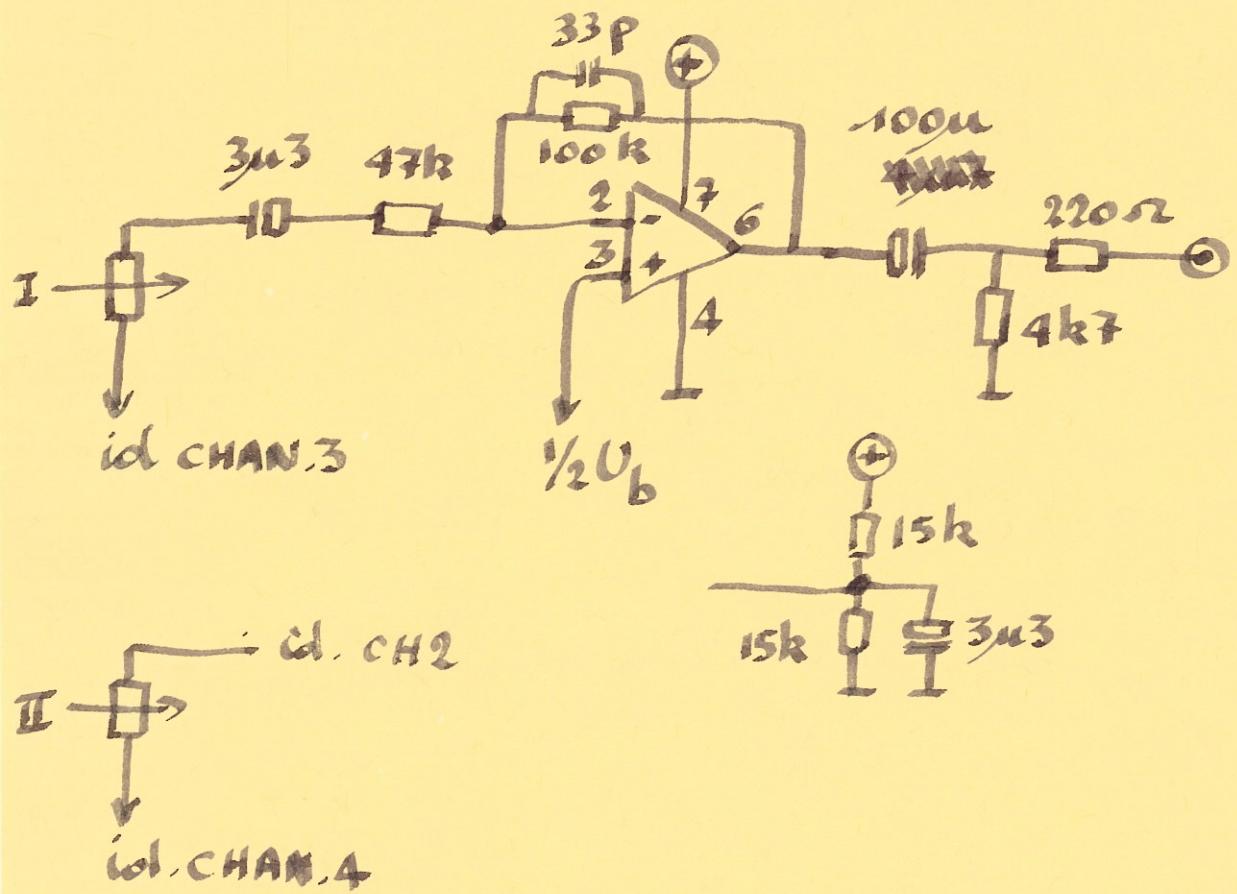
for quadraphonic: use stereo
jack's on both inputs

for stereo: use output 1
& insert empty
mono jack in 2.

Headphone Amp PR99

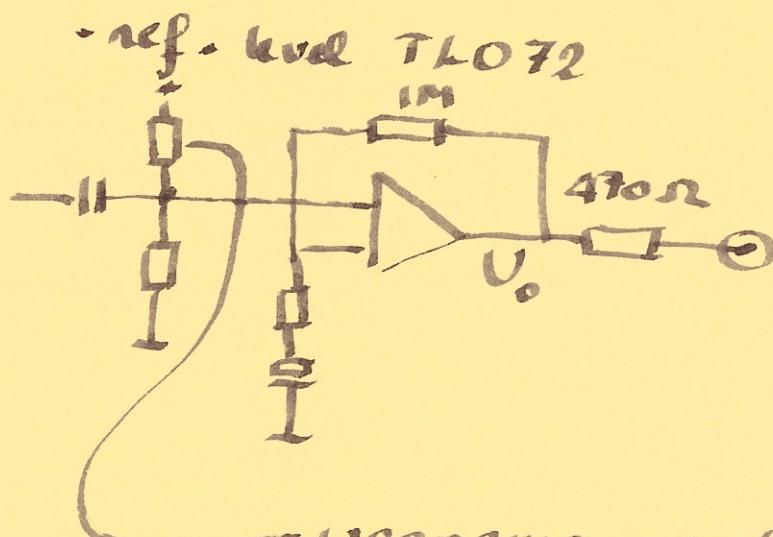
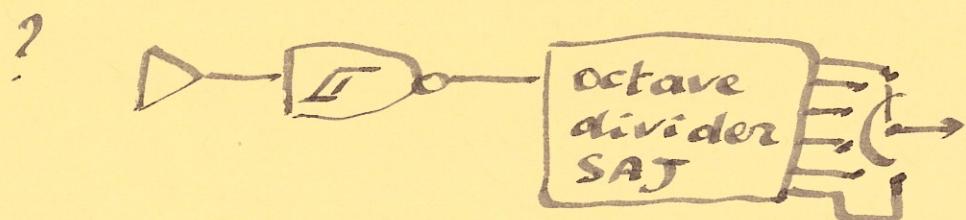
RC4558P





"naziën = clock 1 & 2 ? draadlen pat's verwisseld

- man's door verbinden
- output-versterker OK,
- external input-control



wegnemen, zodat V_o in rust = OV
konditie: latch-up free op-amp.

!

VCO potmeter naziën!

(VCO zelf werkt.)

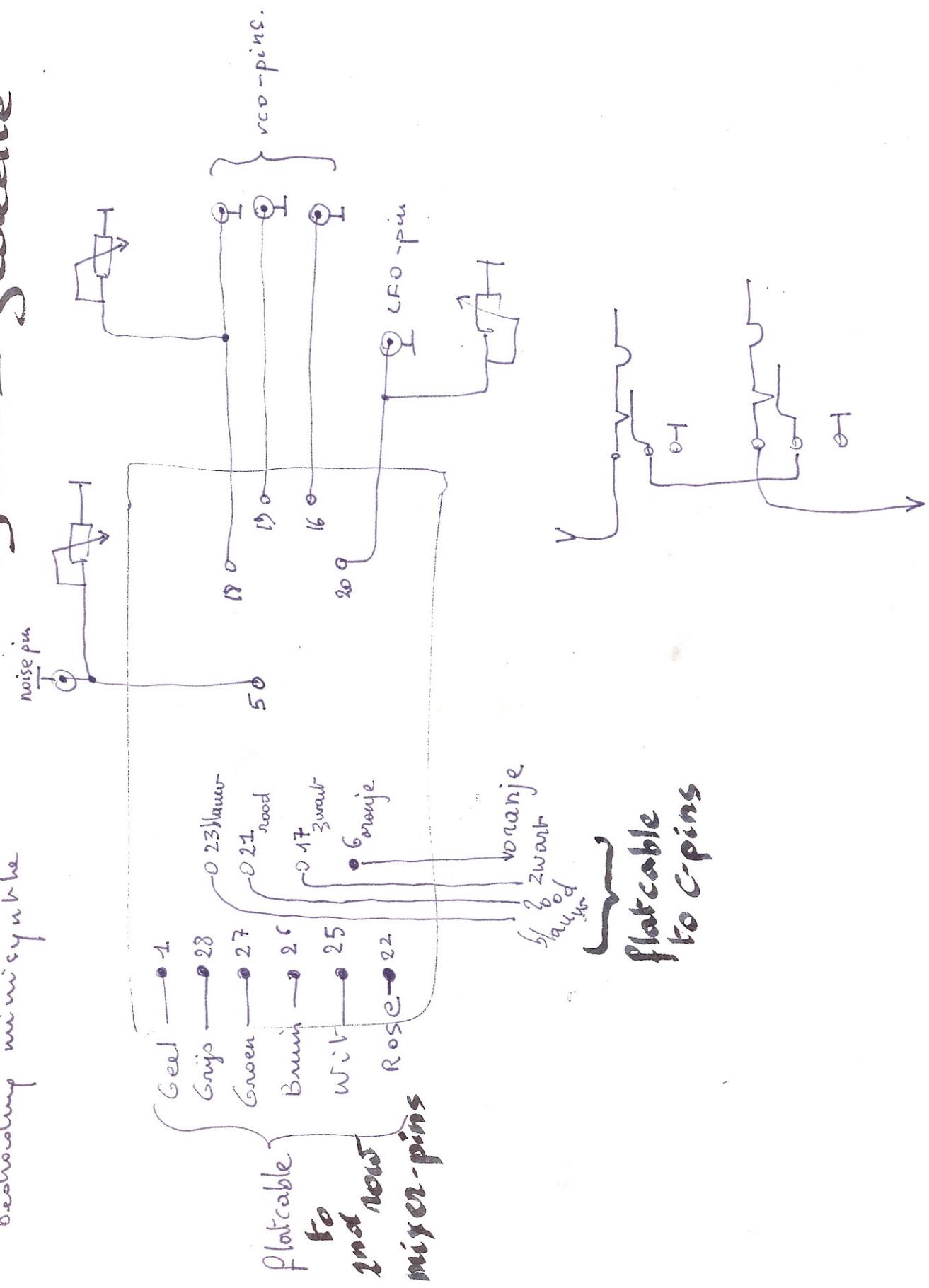
→ pin 3 in rust hoog houden
= op Symbole 1.

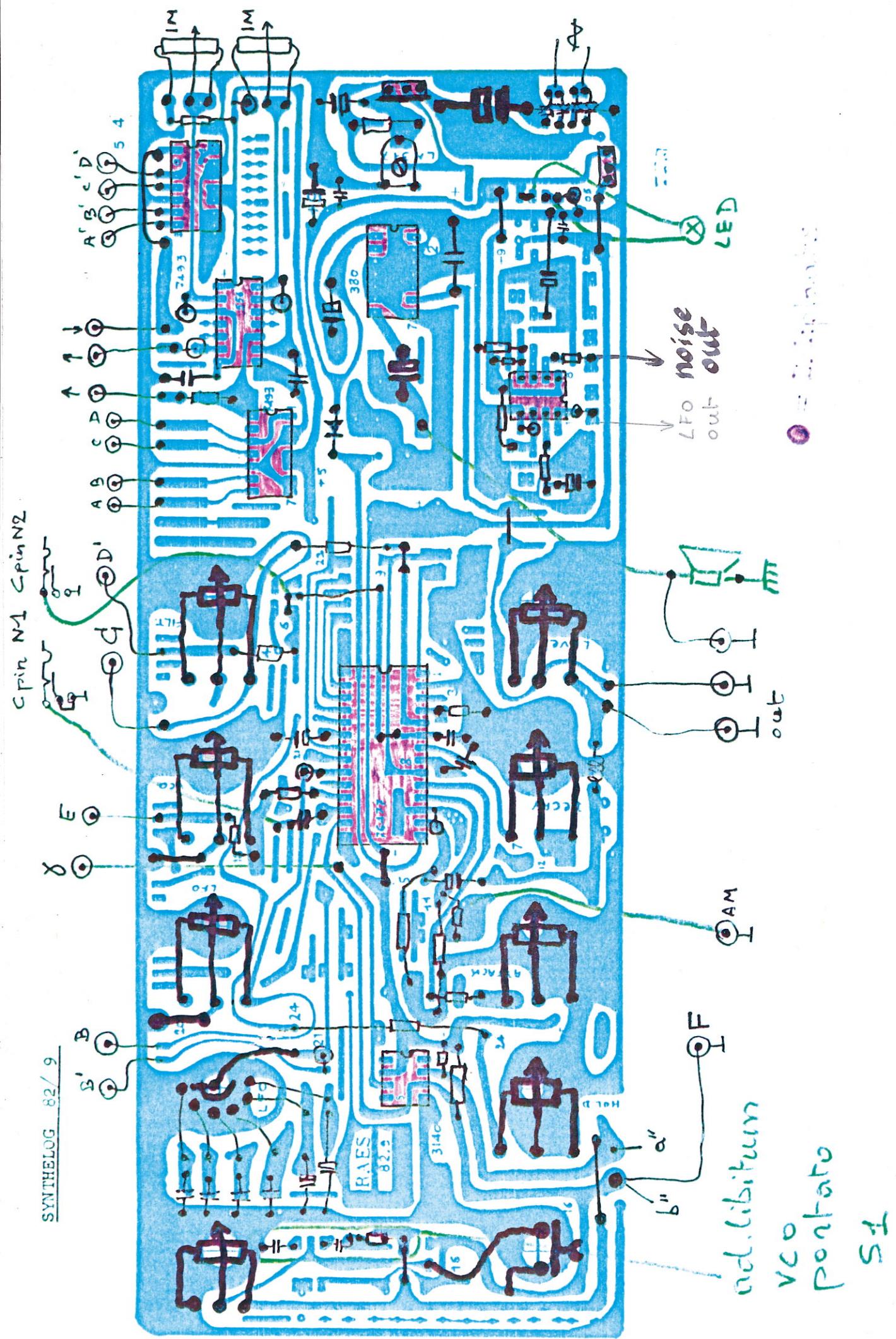


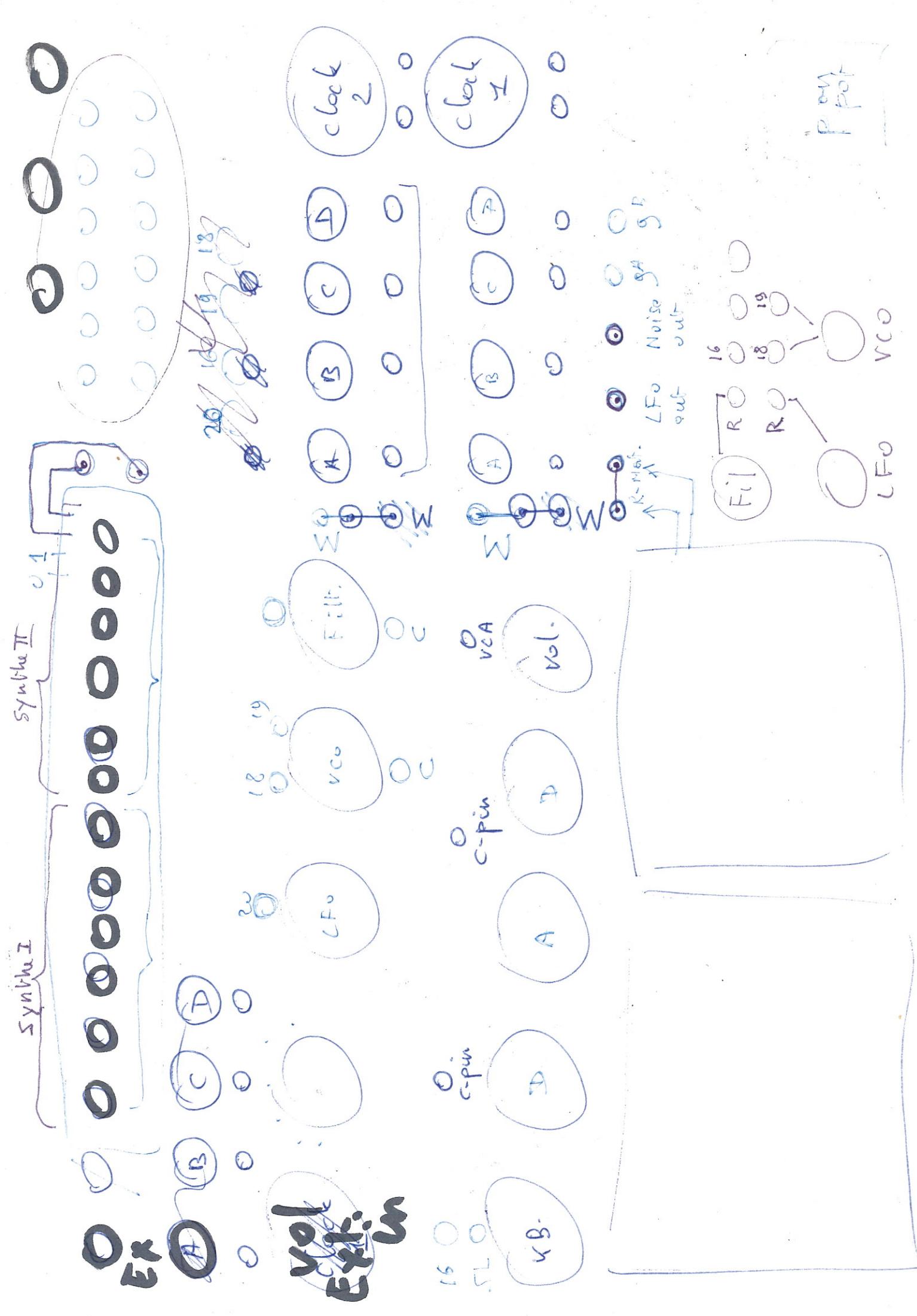
1

behandeling minisynchro

Synthe II Gedekte





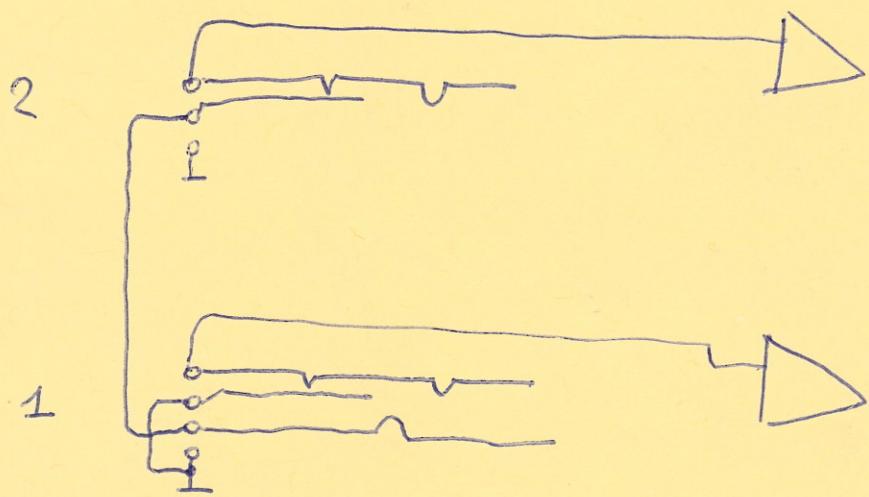
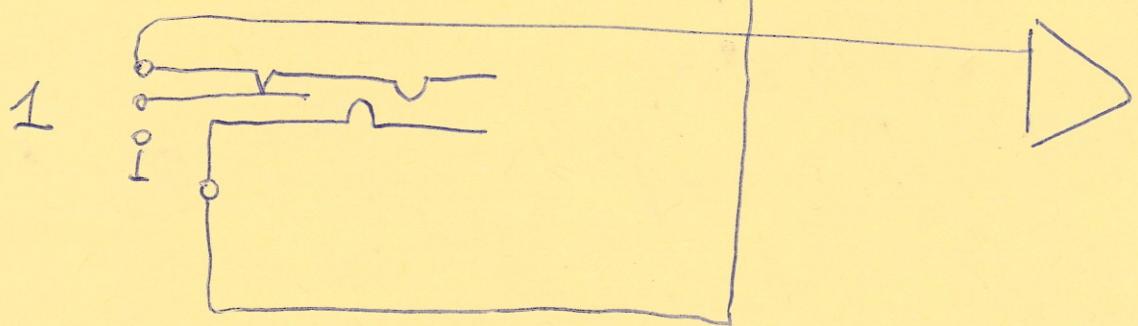
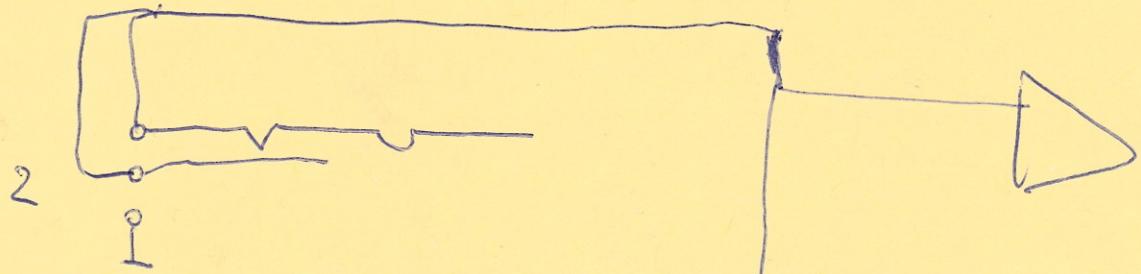


uitbreidings en aanpassingen t. b.v. Puntkabel.

* 5L + 15 volle vegetaties

Prijsberekening

1 pot	35,-
2 minipot	80,-
Kop	27,-
2 miniknop	84,-
print	100,-
I C's.	300,-
+ SOS	40,-

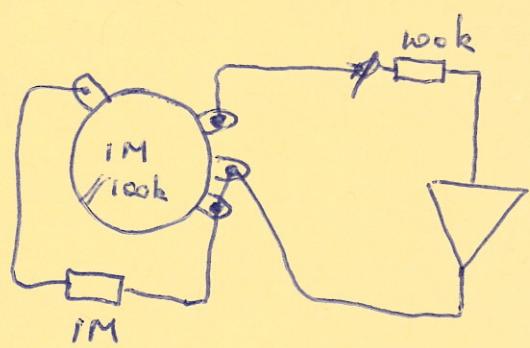
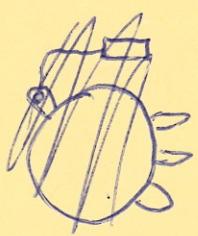


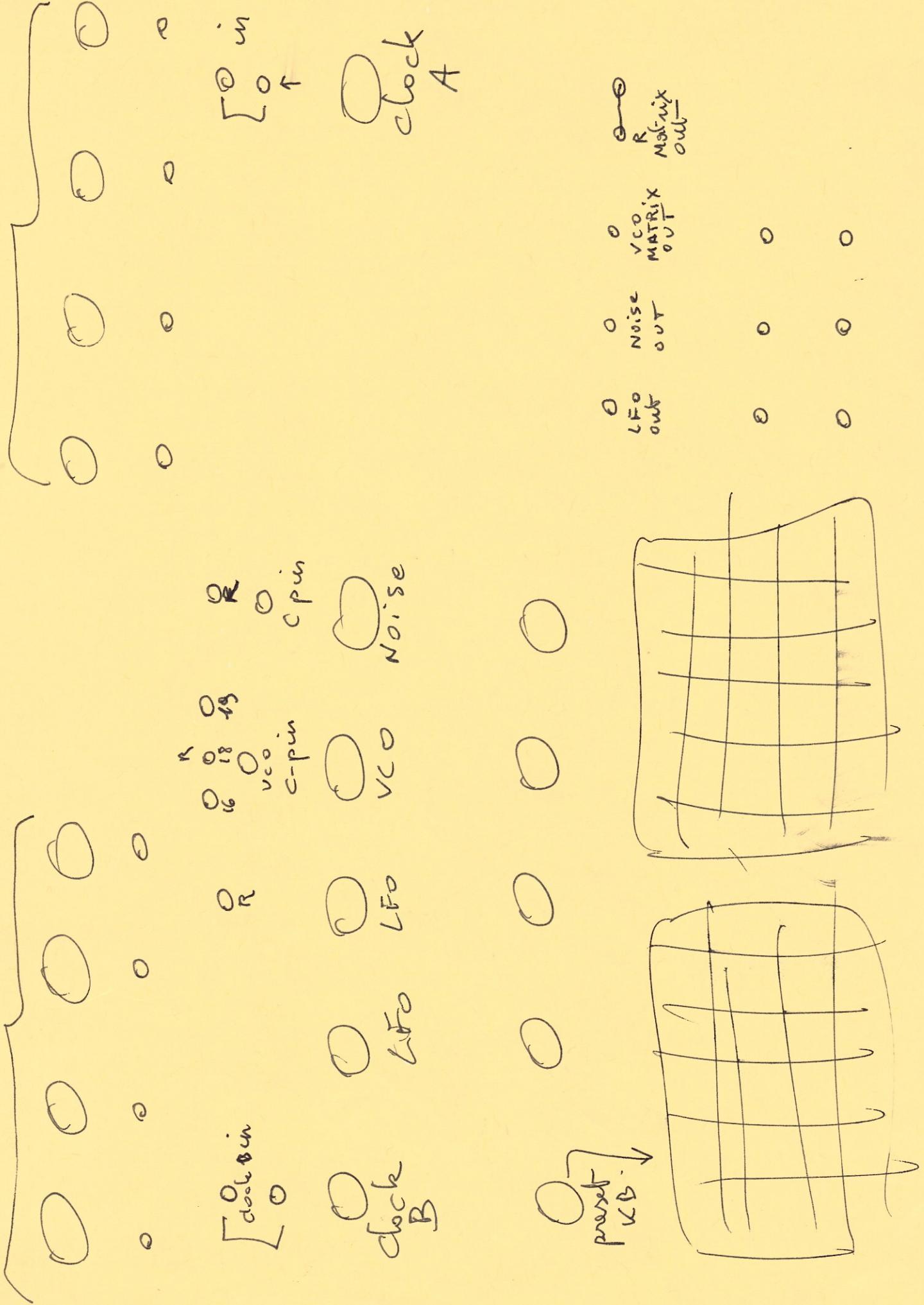
Stereo Mike Jack in 1 : → Stereo out

Mono Mike Jack in 1: CH1 OK, CH2 : Messe = 0

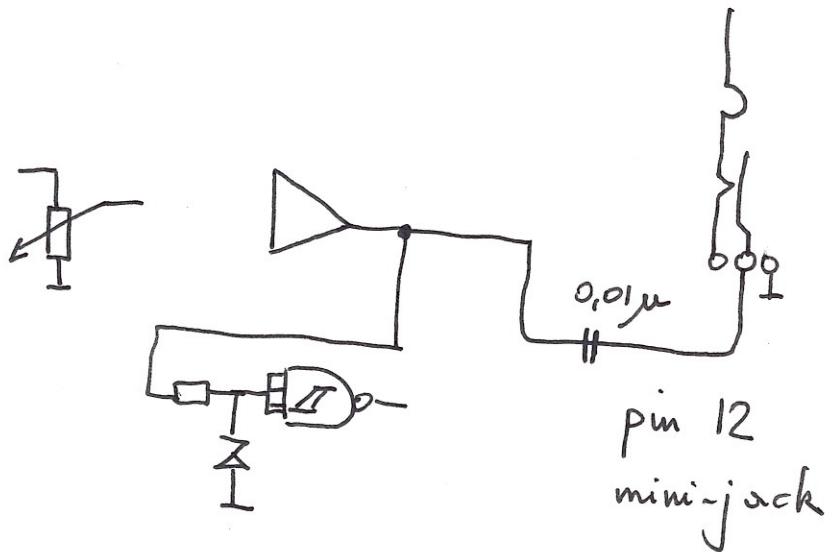
Mono Mike Jack in 2: CH2 OK, CH1 : Messe = 0

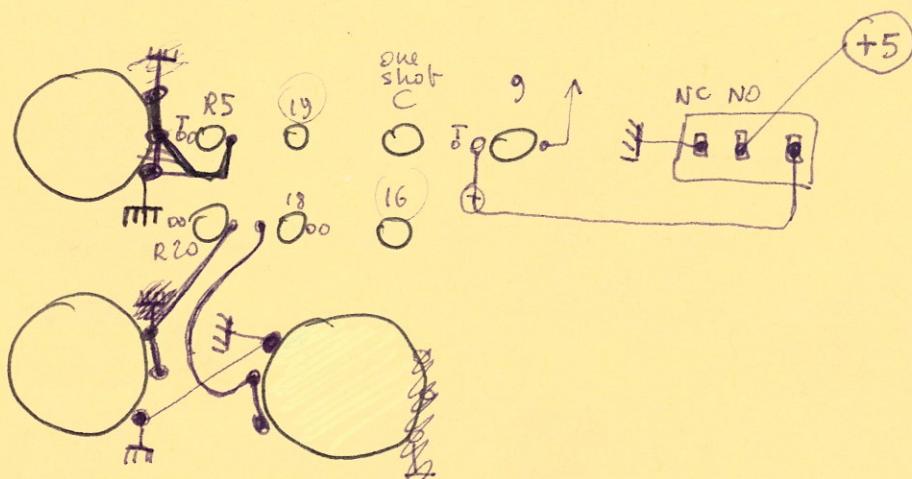
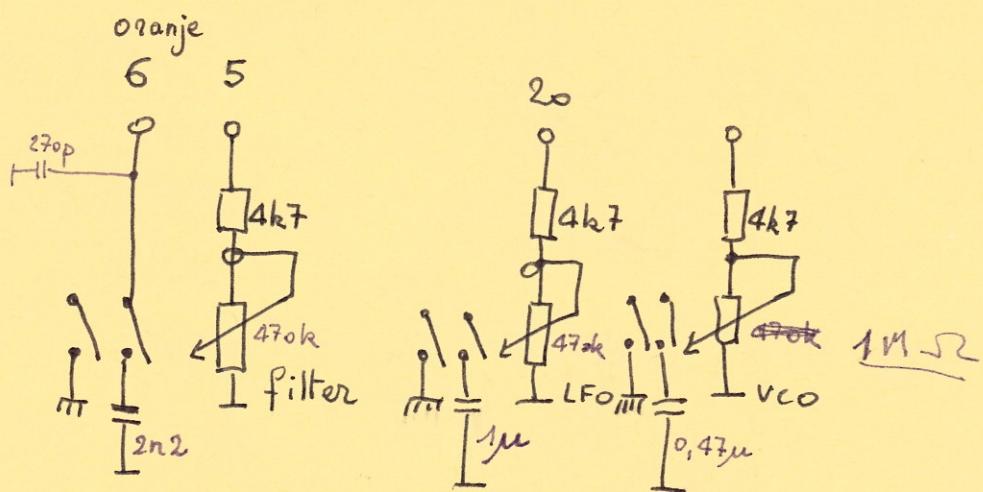
Mono jacks in 1 & 2 : CH1 OK, CH2: OK.





External input





onderdelenzijde

15 februari
 • Venise projekt
 Poème Electronique
 1958
 + rekonstruktie
 Philips
 paviljoen

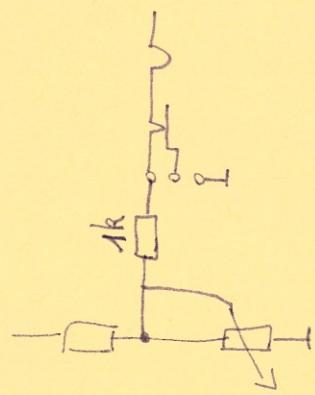
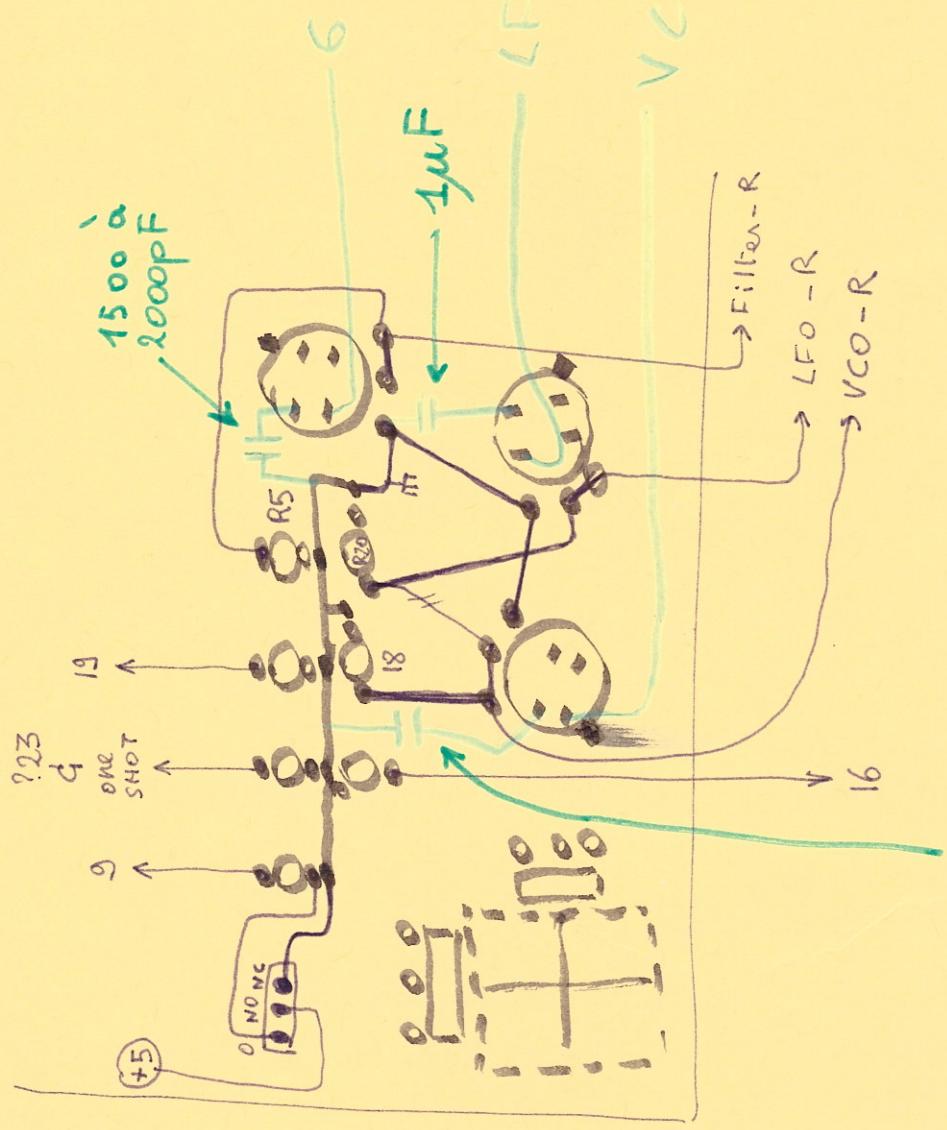
← BRT
 documentatie

* circle.
 { Oct.
 Dessert
 Integrator
 Density

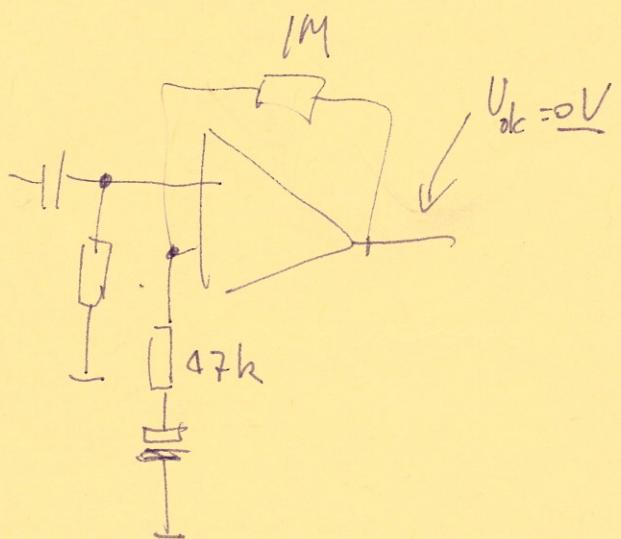
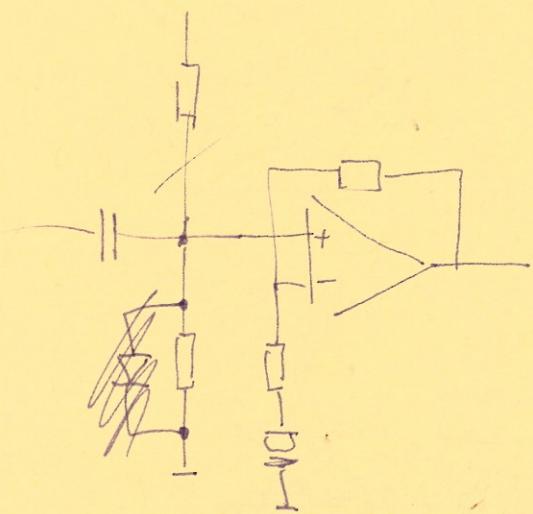
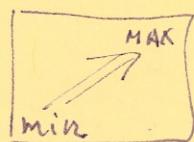
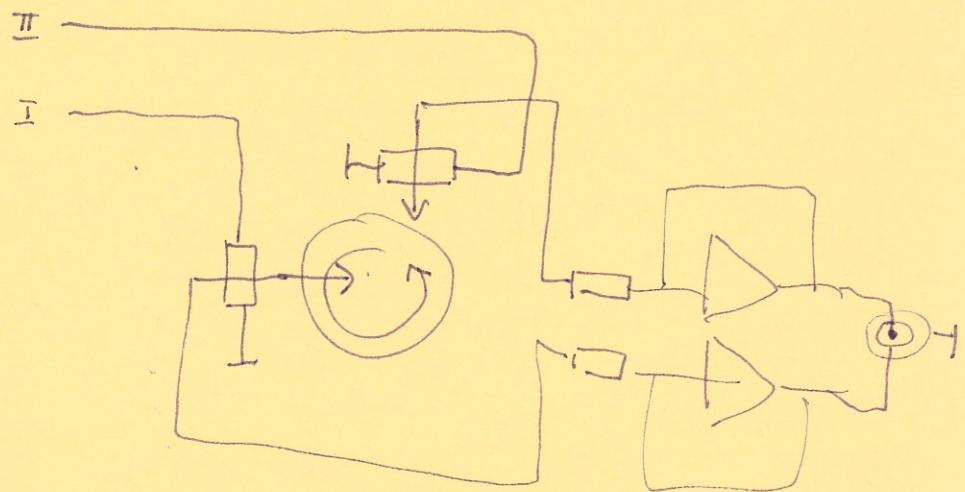
11 februari

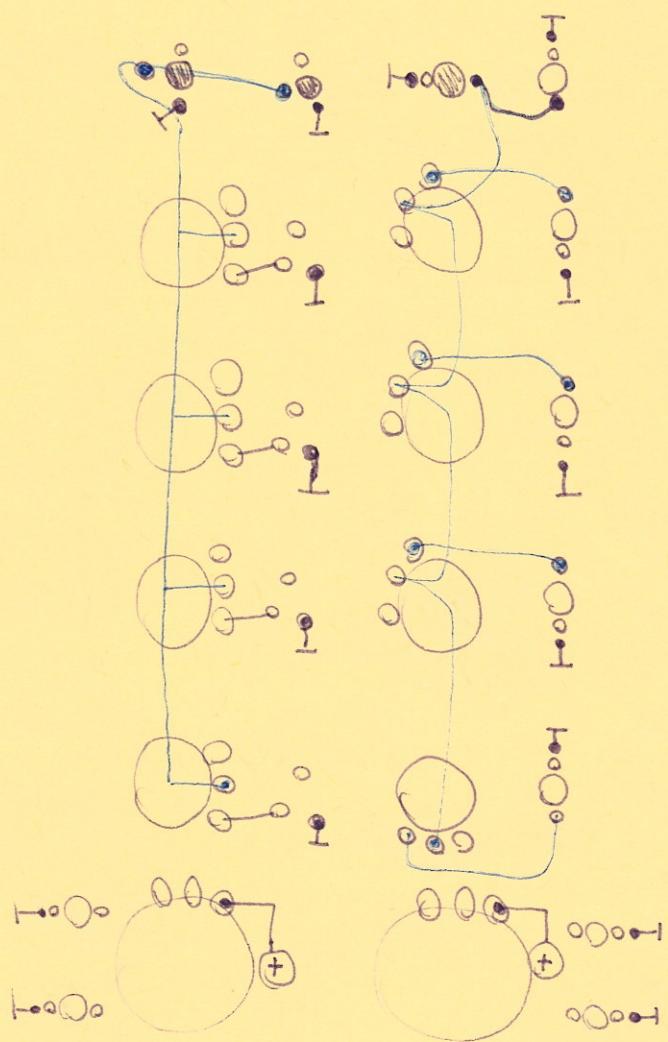
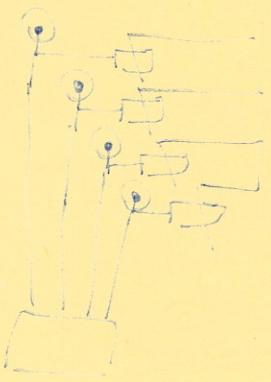
Bedieningsplan synthet II - paant

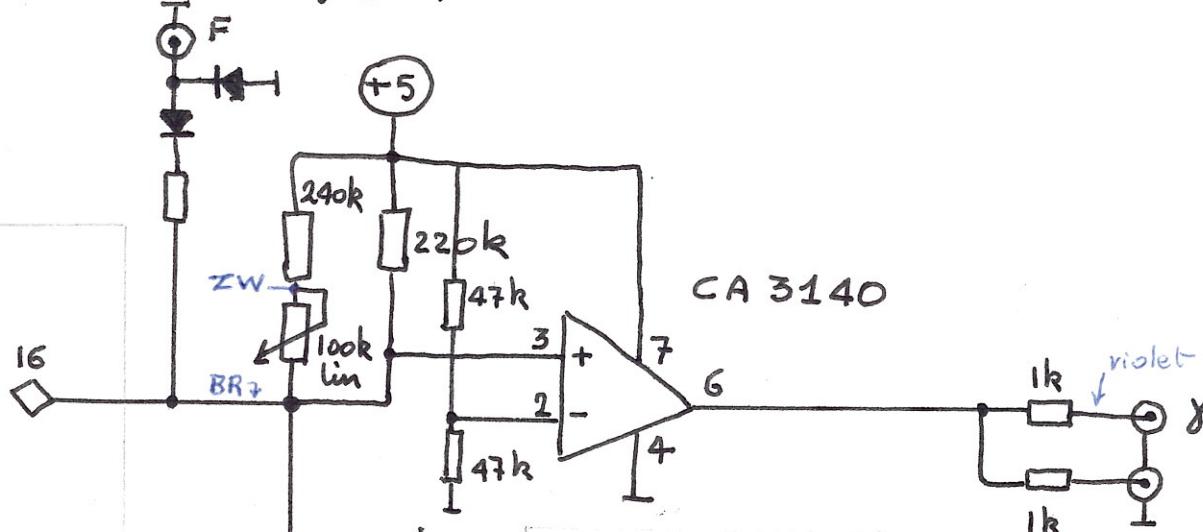
Onderdelen zijde



Model Godfried

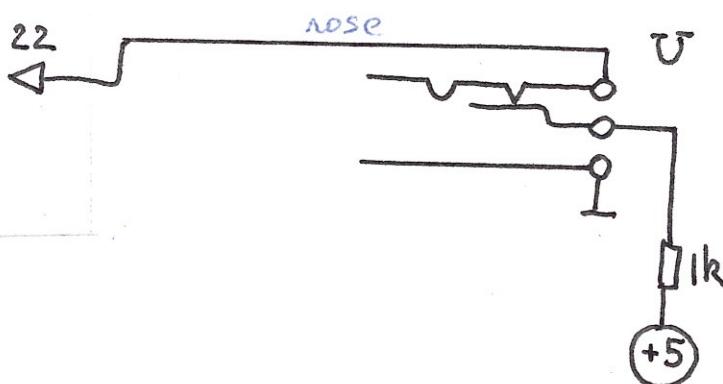




V.C.O. $U_i \leq 2.4V$ calculator
key board matrix
 4×5 19 3k3 BR duty cycle
voltage control
input

18 2k7 1M 4k7 wit E R-control f

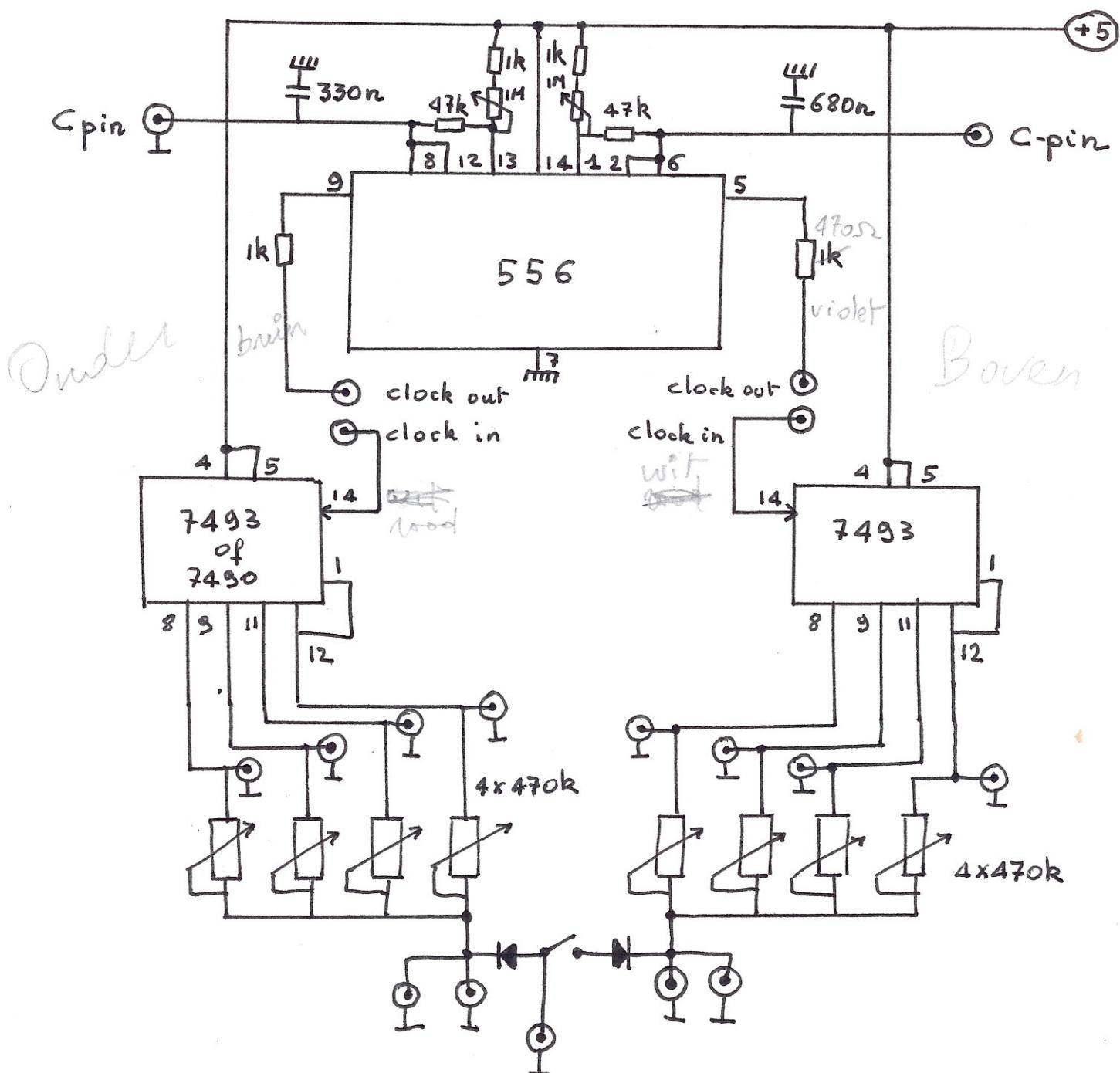
17 blauw 100n C-pin 1μ - 10μ f-course range



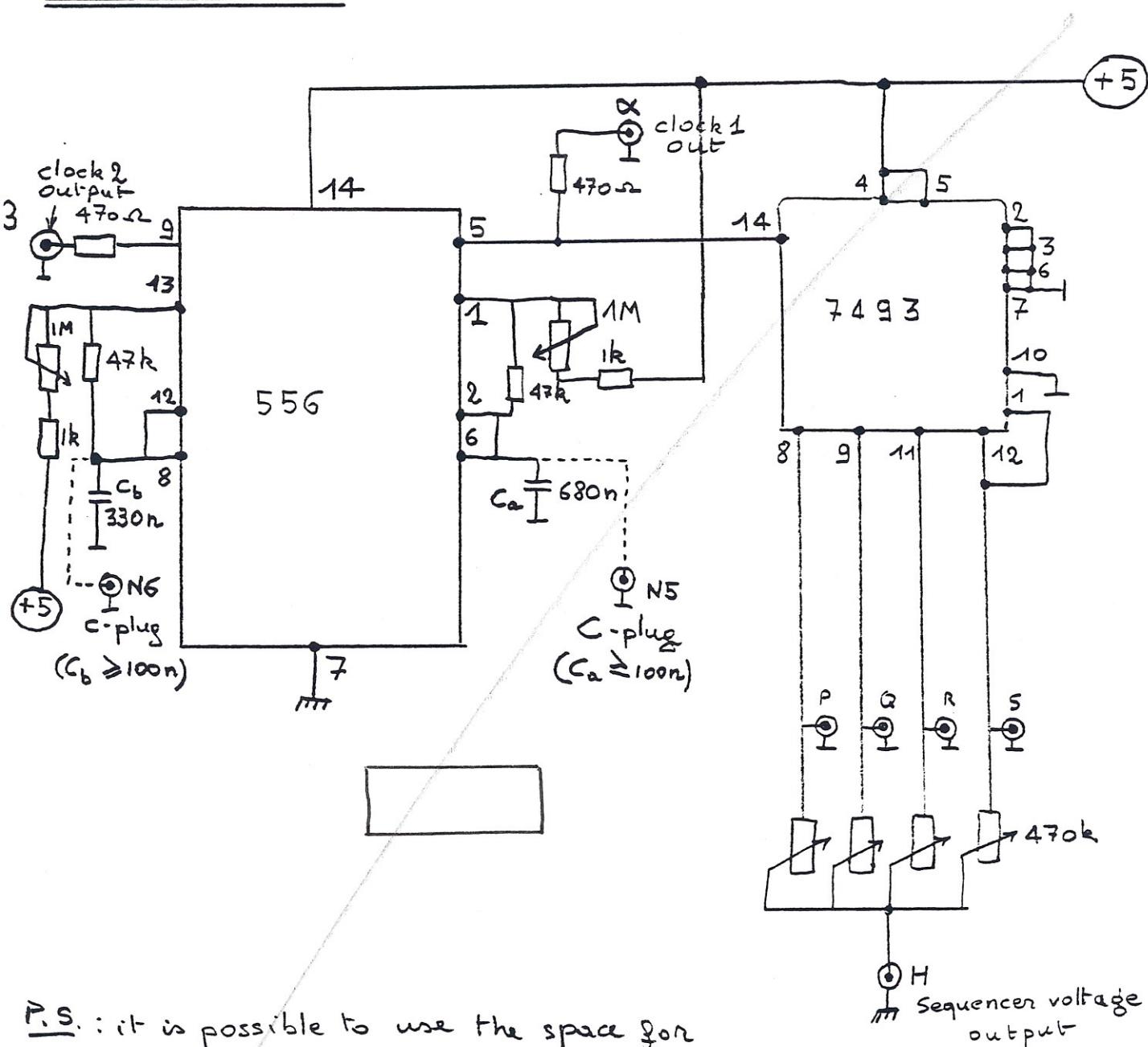
logic-pin

{	no pin : 1
pin : 0	
pin-wire : Ext.	

SEQUENCER



SEQUENCER

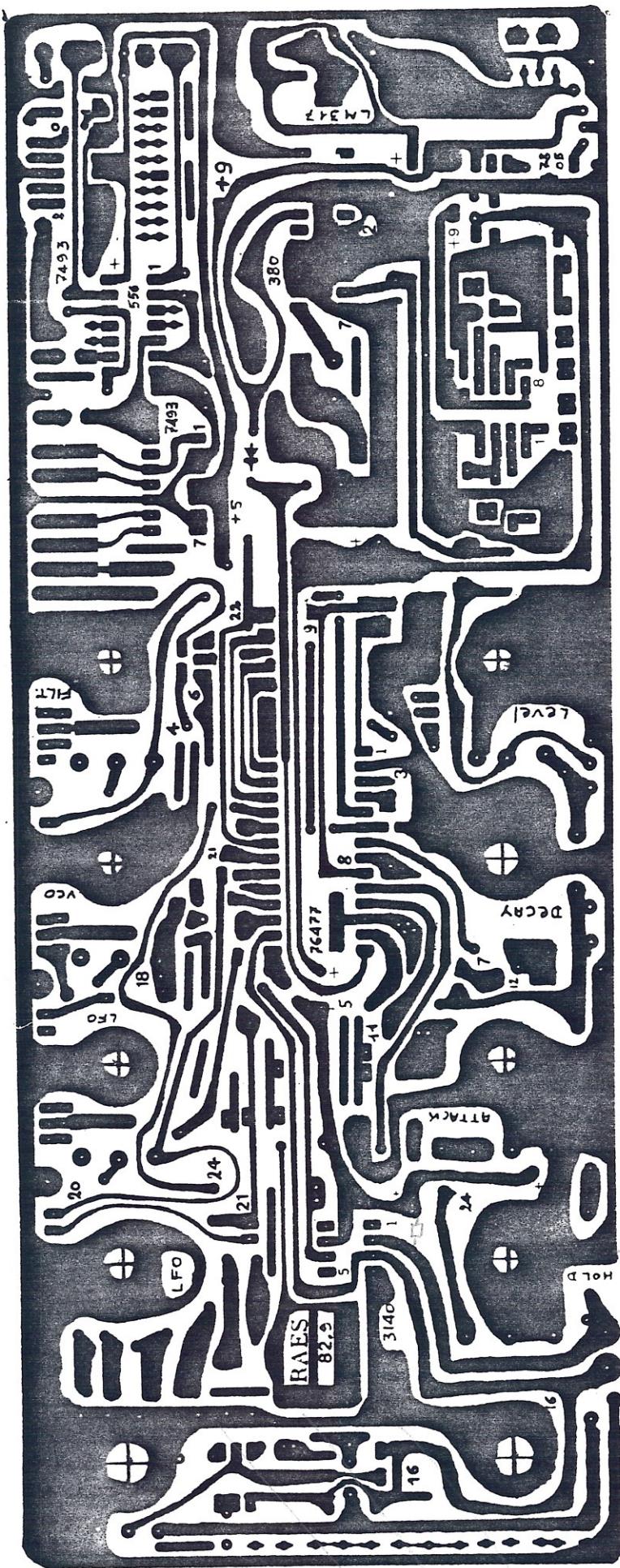


P.S.: it is possible to use the space for
1 I.C. to make a second 13CD
Sequencer. Use of 7490 chip
results in different patterns.

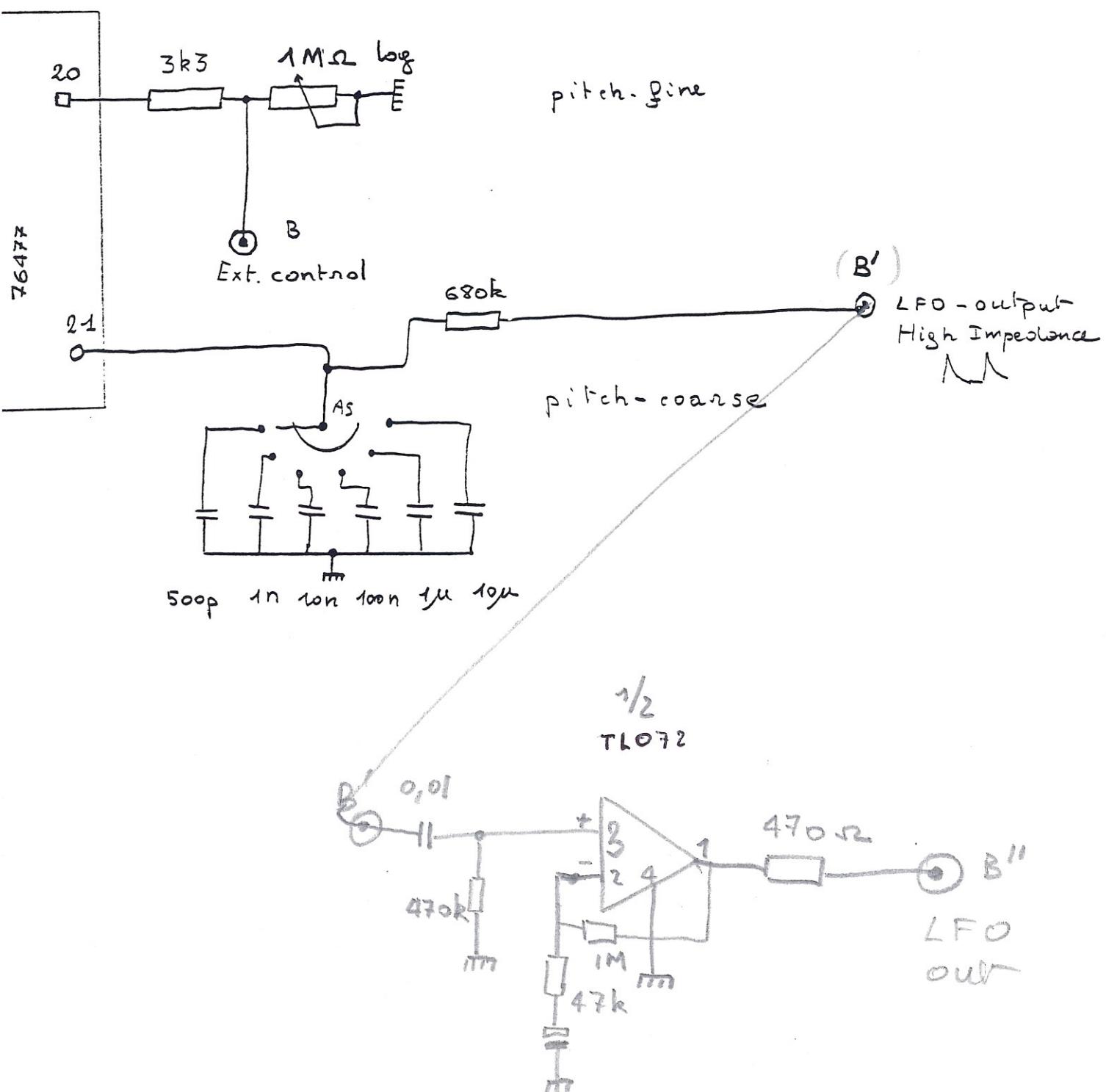
STICHTING LOGOS

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Kongostraat 50
B - 9000 Gent
tel. 091-23.80.89

RAES
08 82



LFO



STICHTING LOGOS

Instelling van openbaar nut

Kongensstraat 30

B-9000 Gent

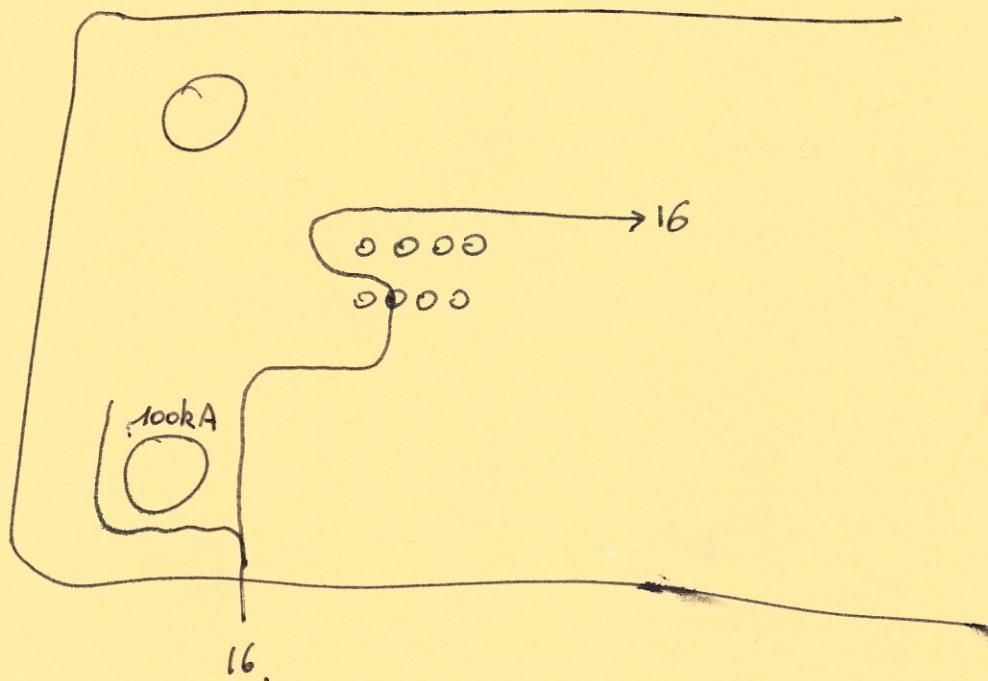
tel. 091-23.80.89

RAES
82.92

Δ's

* VCO - oefel:

pin 2 vfd CA 3140 met 47k nuon messen!



Stichting Logos

S Y N T H E L O G III Type 82.9

Bouwinstucties

Synthelep III

Plexicover

83.11.

S Y N T H E L O G III

Type 82.9

Bouwinstucties

Gebruikte I.C.'s :

SN 76477

LM 317

7805

556

7493

7493

CA 3140

LF 353

LM 380

Diodes :

5 stuks 1N4007

Potmeters:

1 M ohm vco log.

1 M ohm lfo log.

470 k ohm filt.log.

47 k ohm volume , log.

47 k ohm vco-preset KB. log

4,7k ohm trimpot voeding

220kohm attack log.

1 M ohm decay log

470 k ohm hold log

1 M ohm clock log.

1 M ohm clock 2 log.

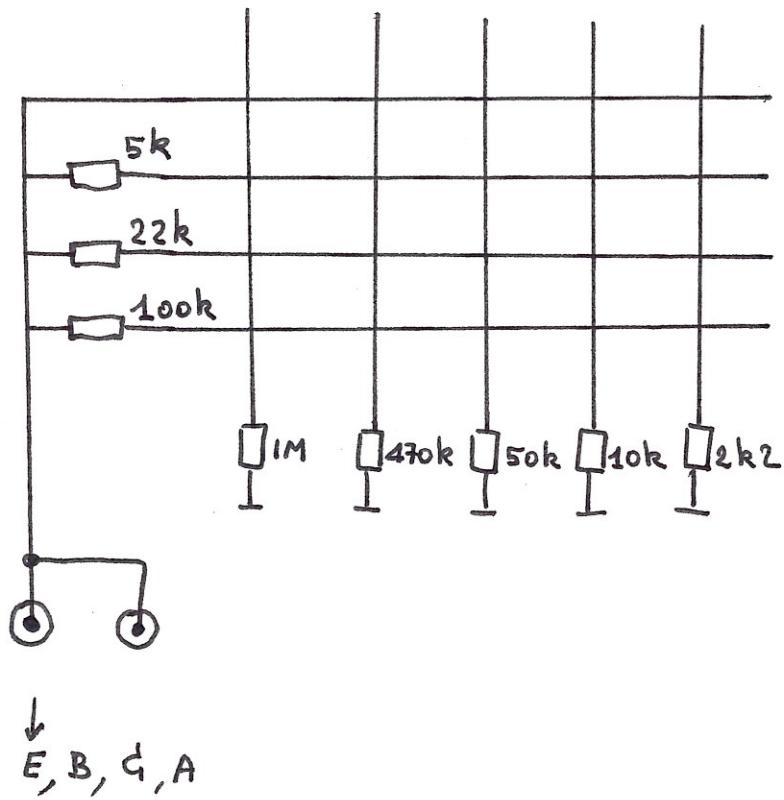
4x 470kohm sequencer 1 , log.

4x 470kohm sequencer 2 , log.

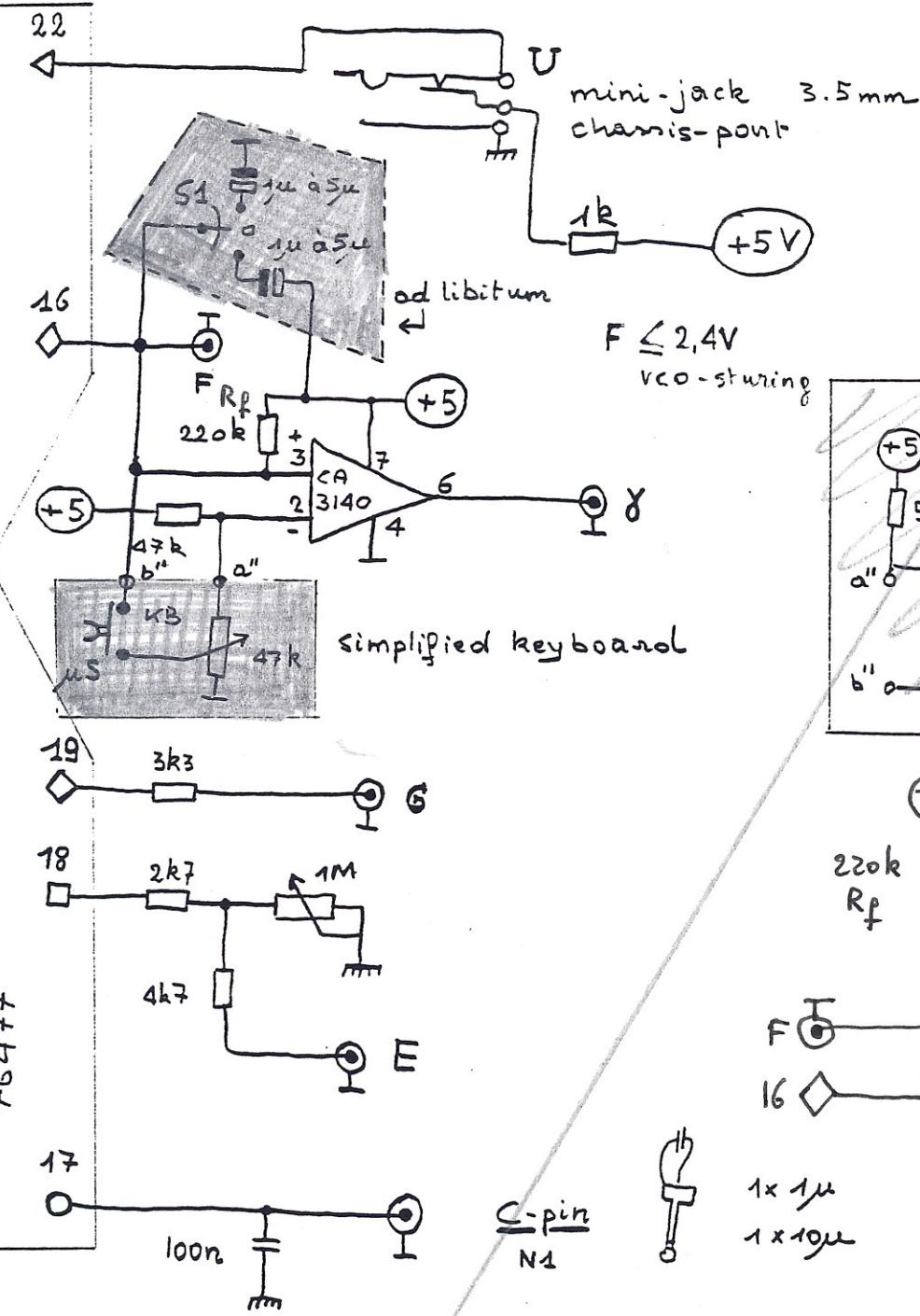
ad. lib.:

100kohm reverb send

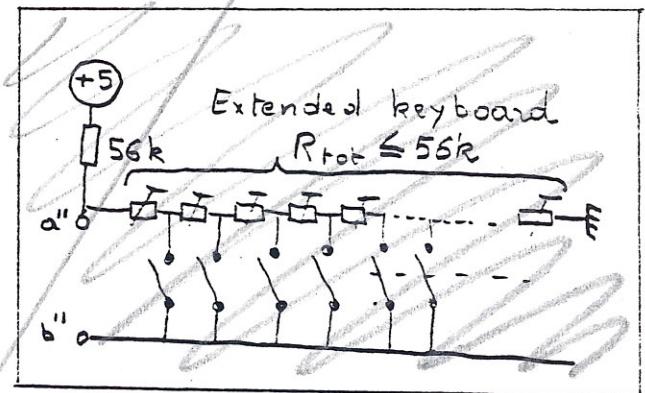
10 k reverb return , log.

MATRIX KEYBOARD

VCO



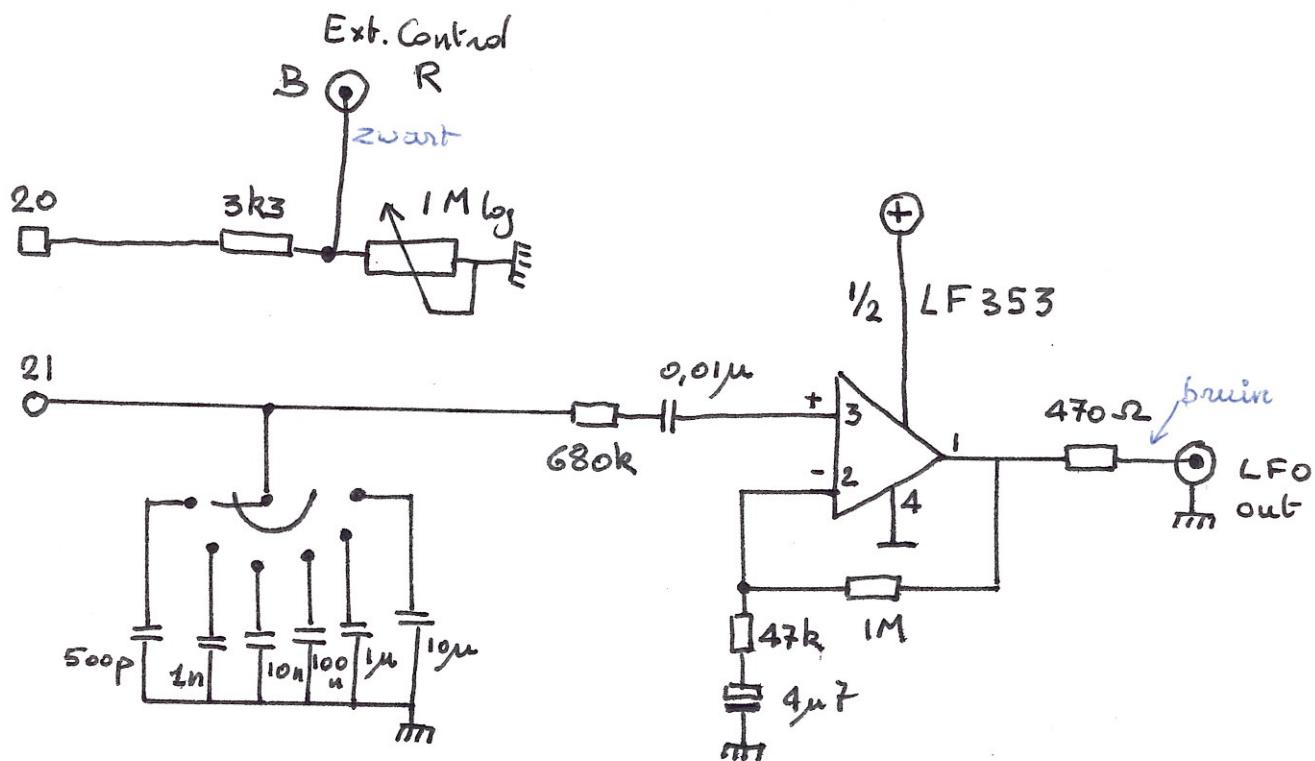
ZONDER PIN : logisch 1
MET PIN : logisch 0
MET PIN & DRAAD :
Extern



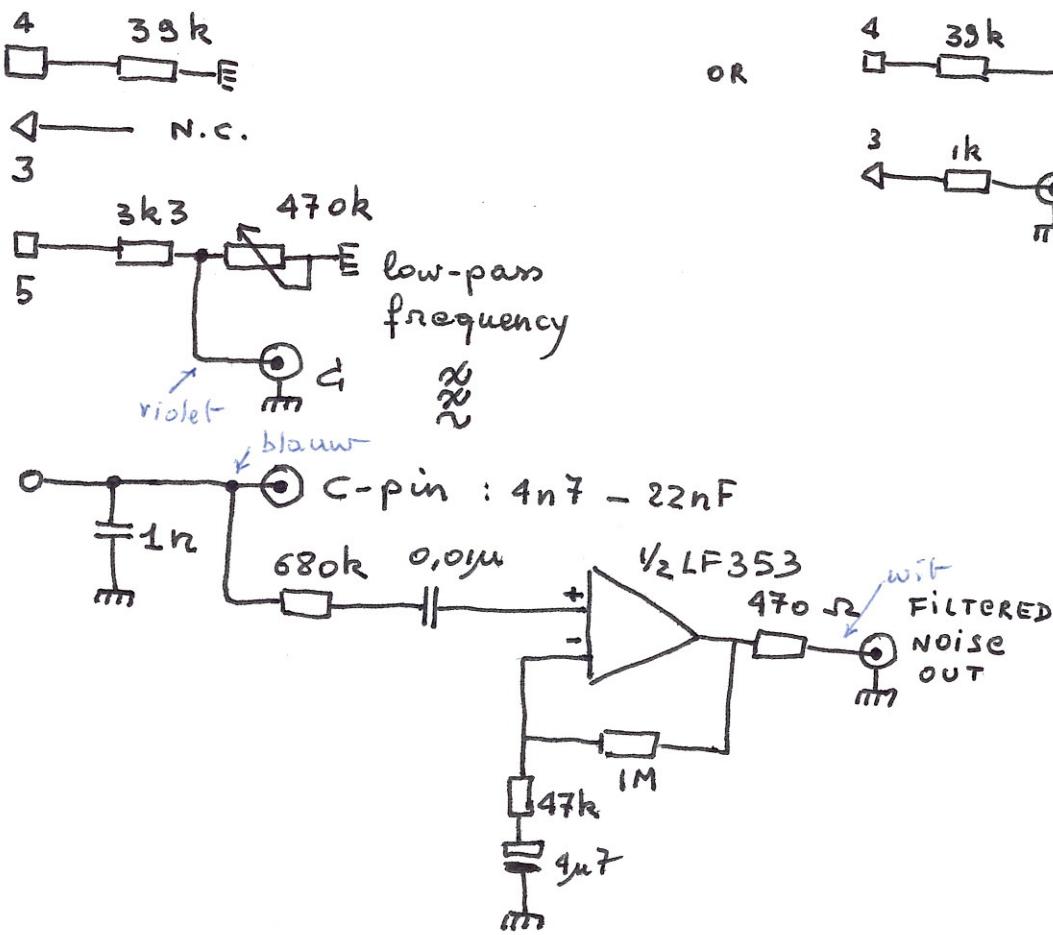
STICHTING LOGOS

instelling van openbaar nat
Kongostraat 35
B-9000 Gent
tel. 091-23.80.89

82.9 G
RAES
08.82

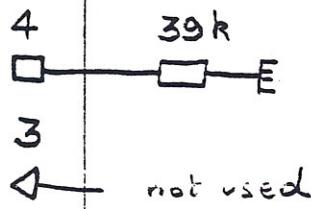
L.F.O.

NOISE & FILTER

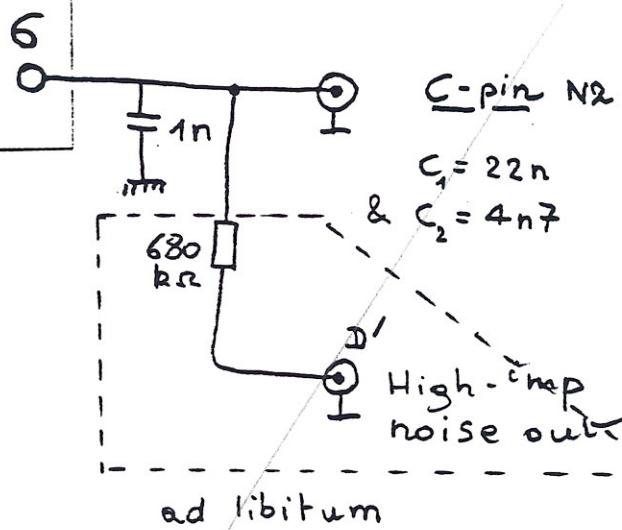
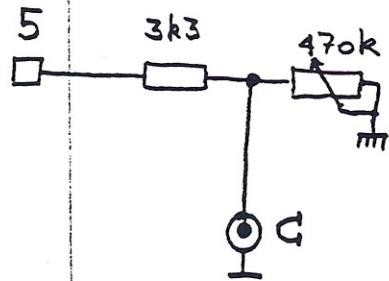
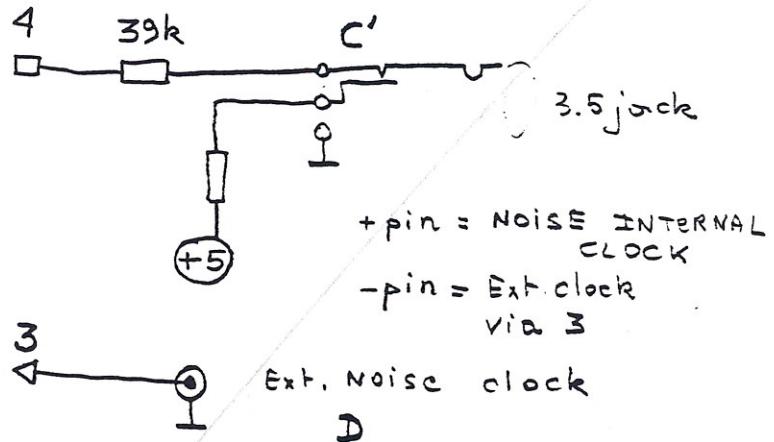


NOISE & FILTER

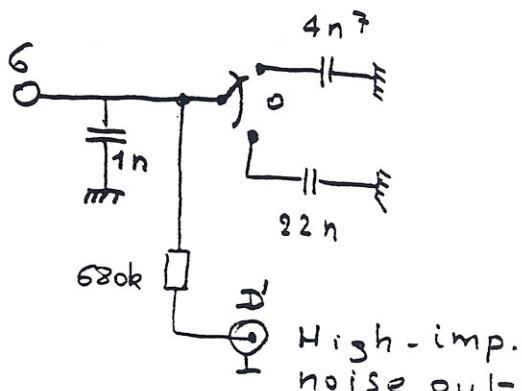
76477



OR



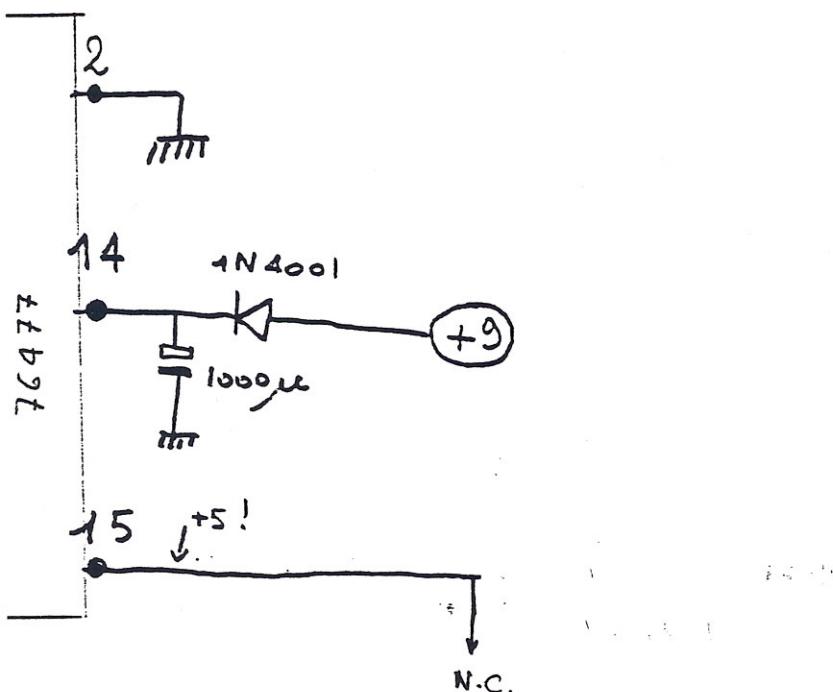
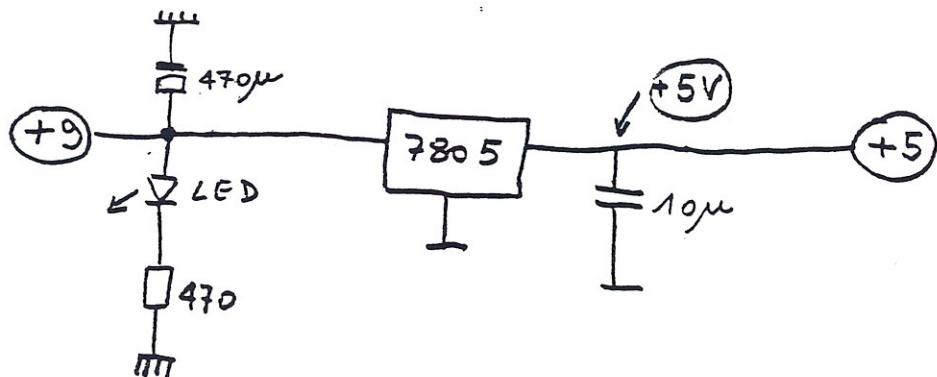
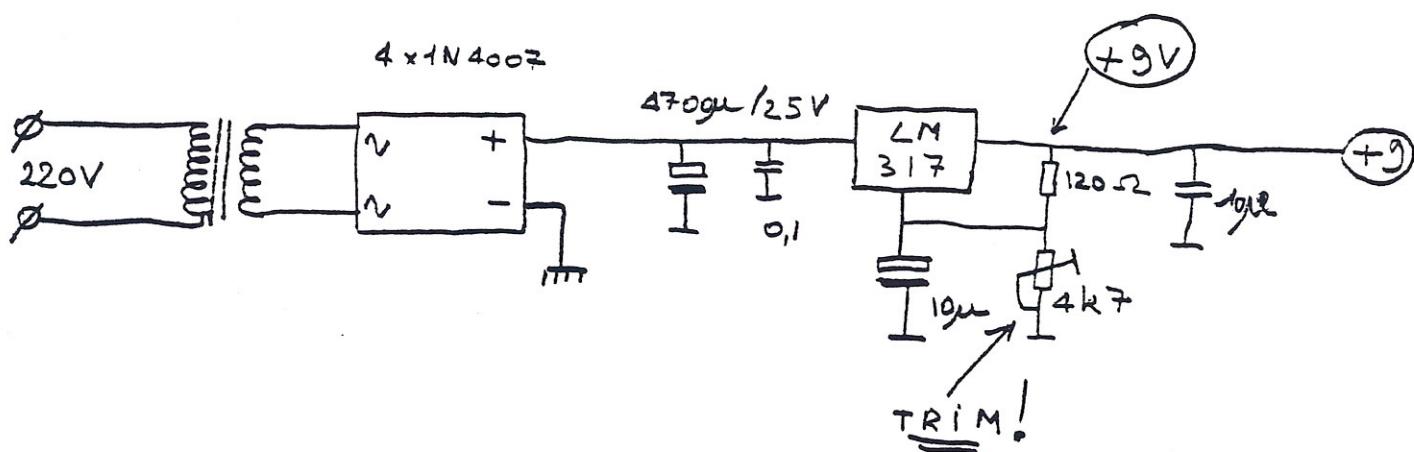
OR

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tel. 091-23.80.89

82.9
RAES
0232

POWER SUPPLY



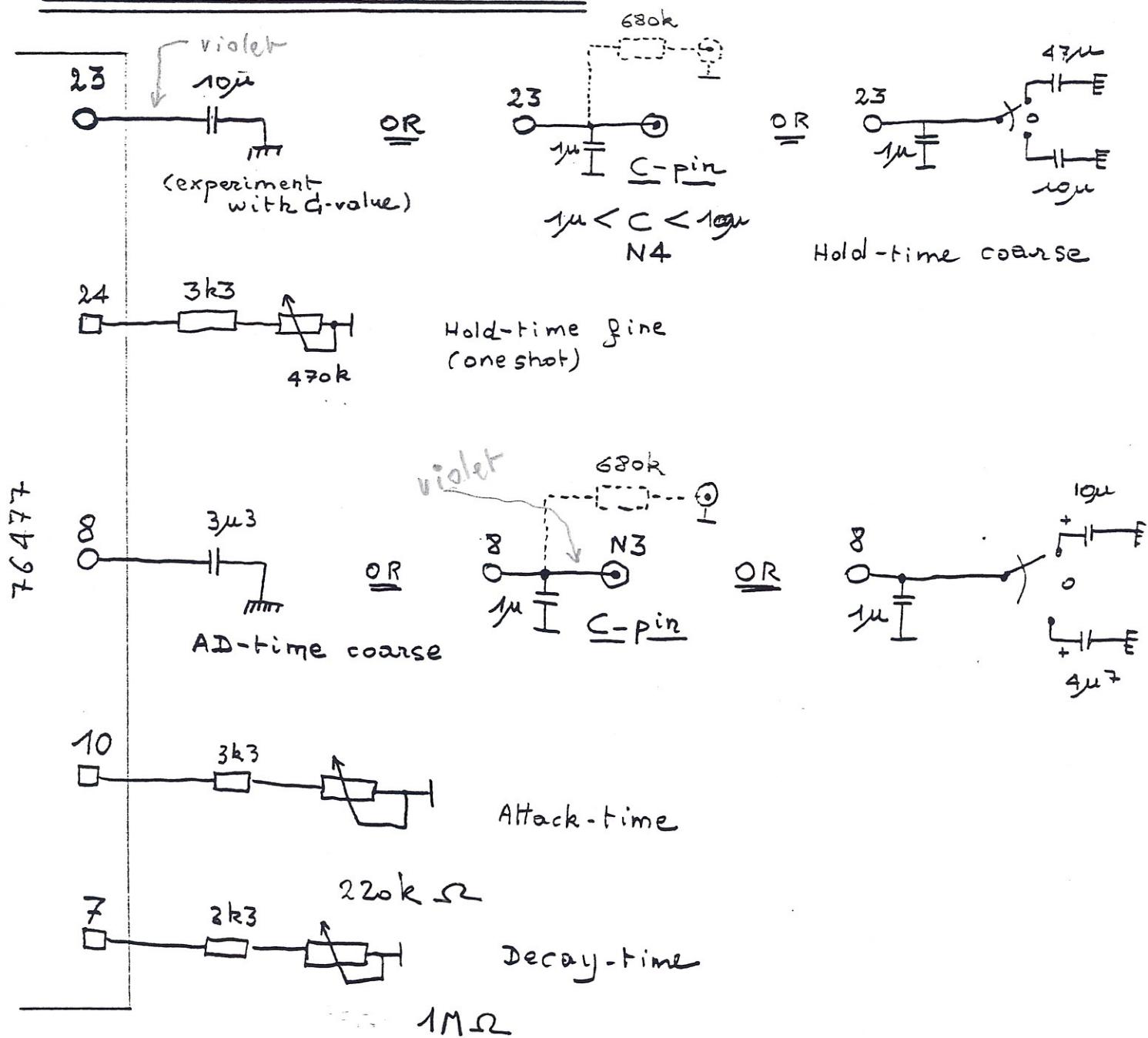
control: +5V! internal power supply
76477.

STICHTING LOGOS

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Kongestraat 30
B-9000 Gent
tel. 091-23.80.89



ONE SHOT & ENVELOPE

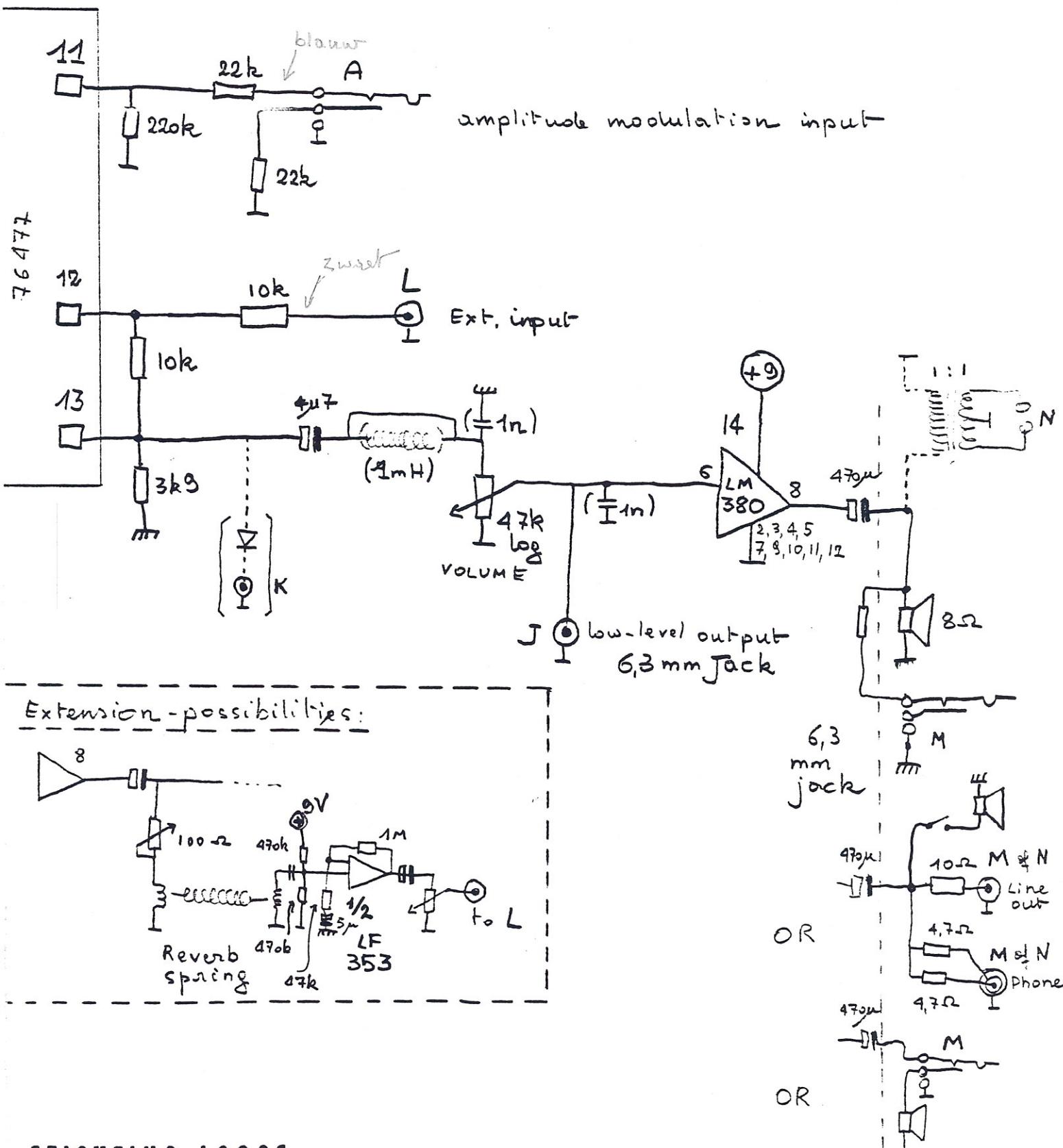


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 Kongosstraat 35
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PAES
 08/82

OUTPUT OP-AMP / VCA



STICHTING LOGOS

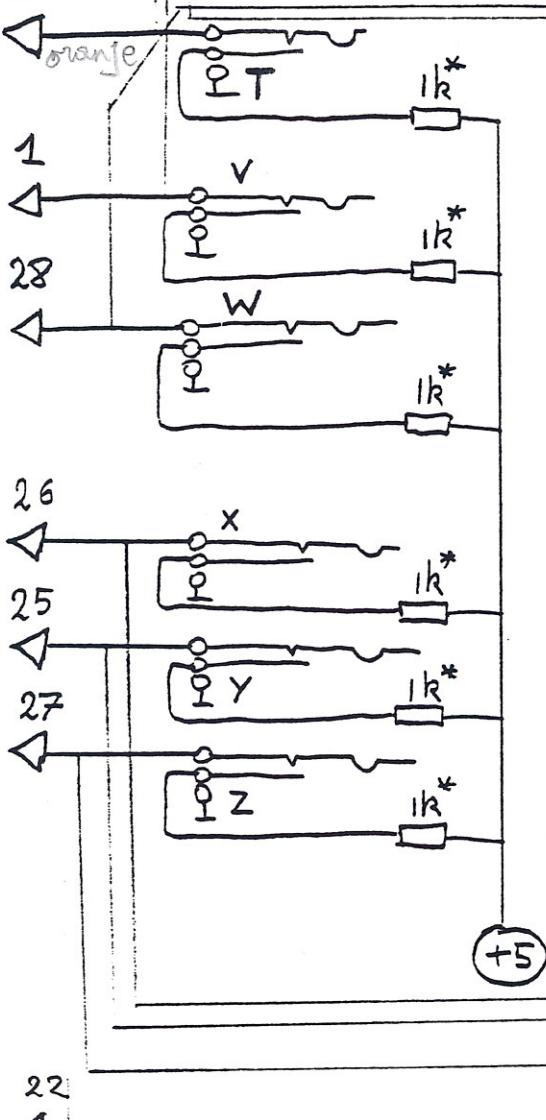
instelling van openbaar nut
Kongestraat 50
B-9000 Gent
tel. 091-23.80.89

G. 82
RAES
22

LOGIC - CONTROL

(3)

g

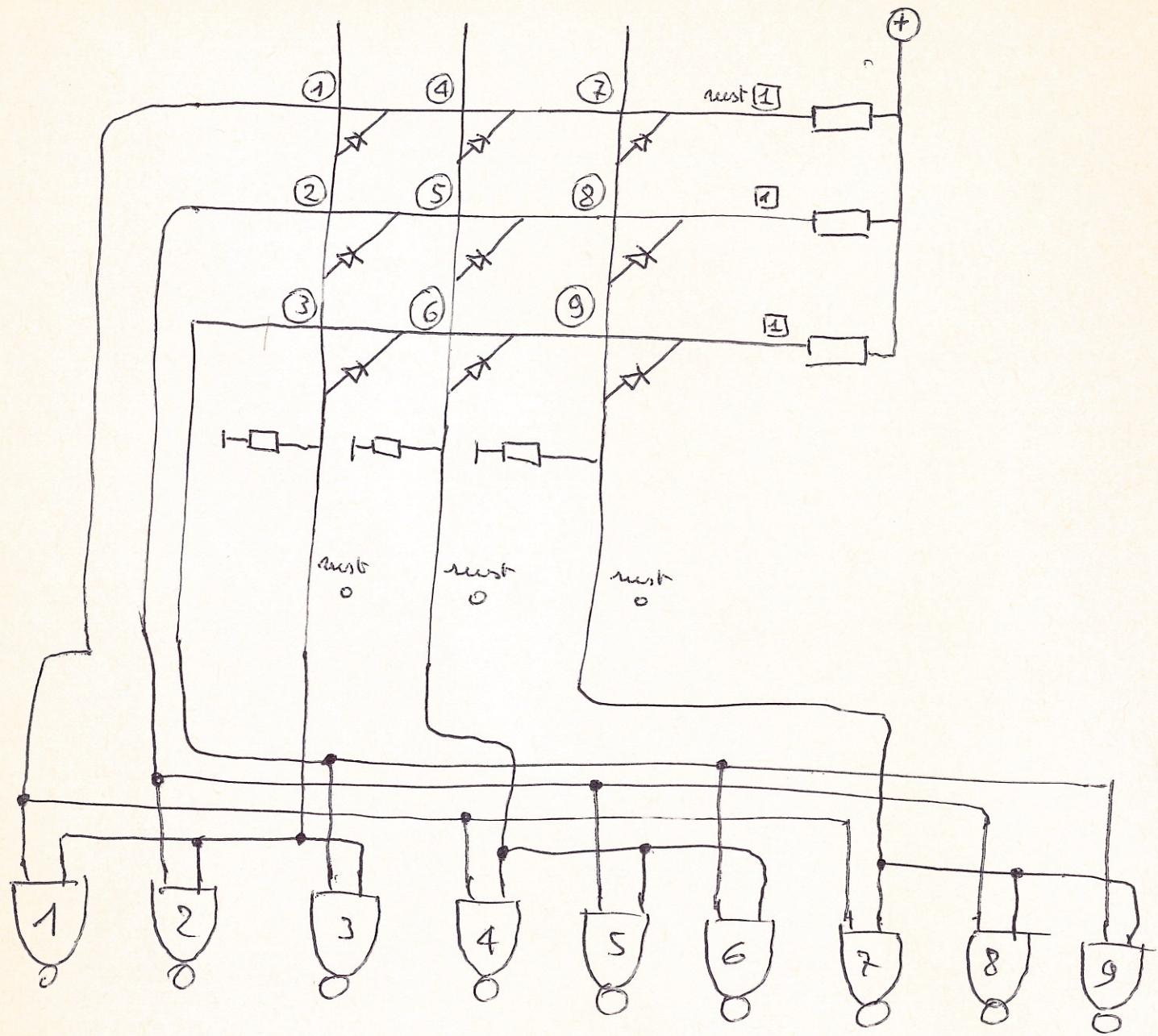


MP-bus
or RAM-memory
read-write 3-state
logic

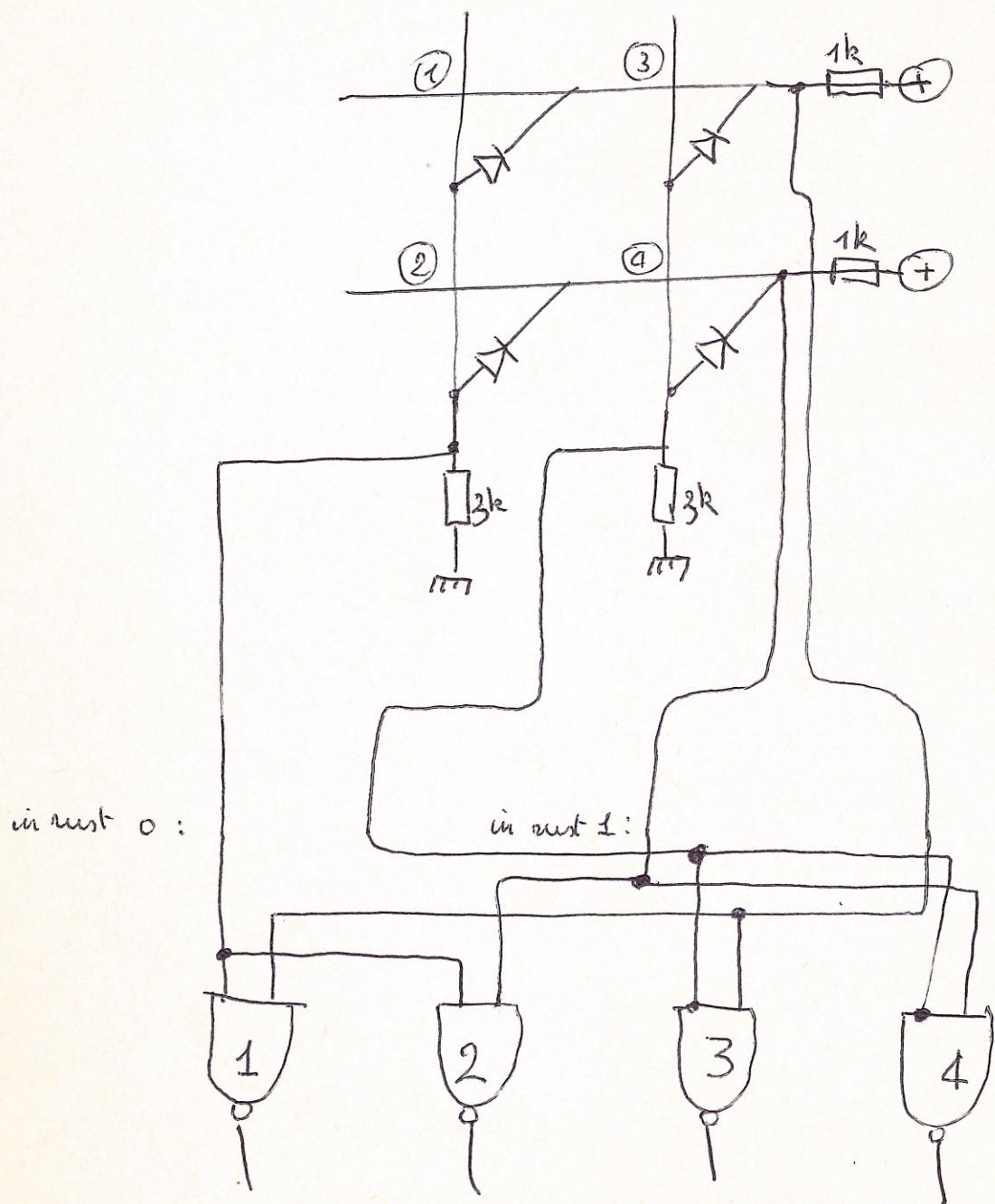
* For μP interfacing,
higher values may
be required.

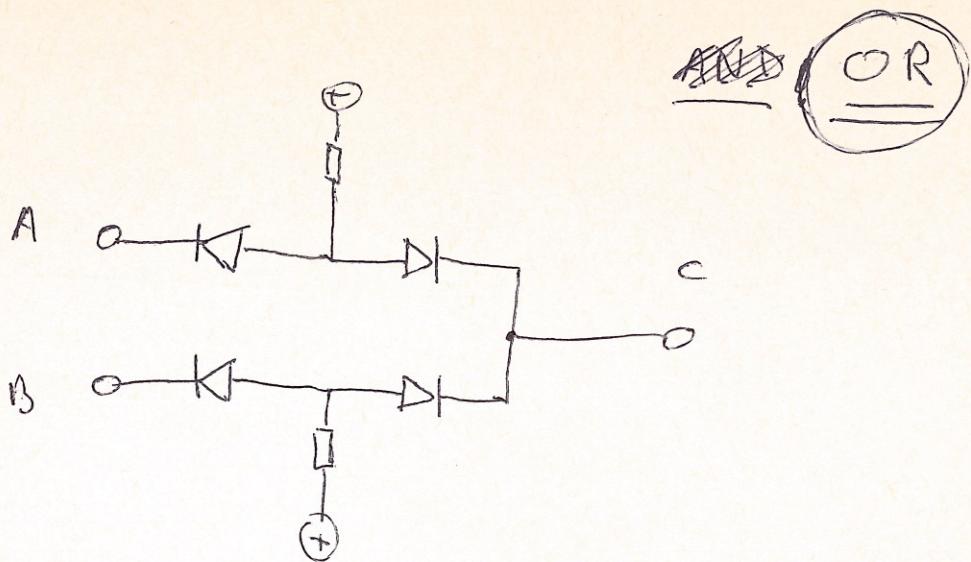
(OR) When μP is used,
plugs should be
inserted in the
sockets.

3 X 3 matrix

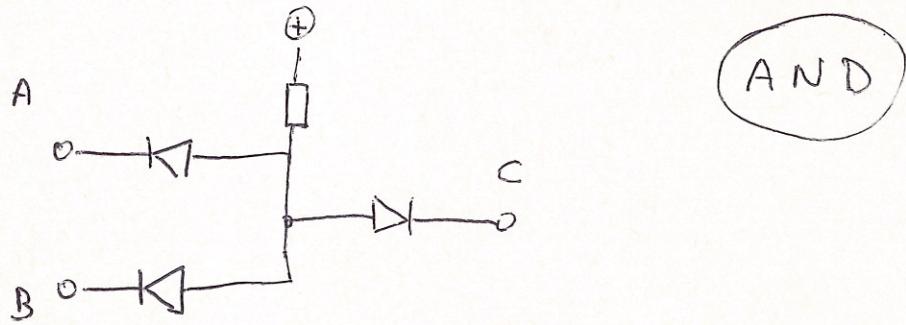


2×2 matrix.

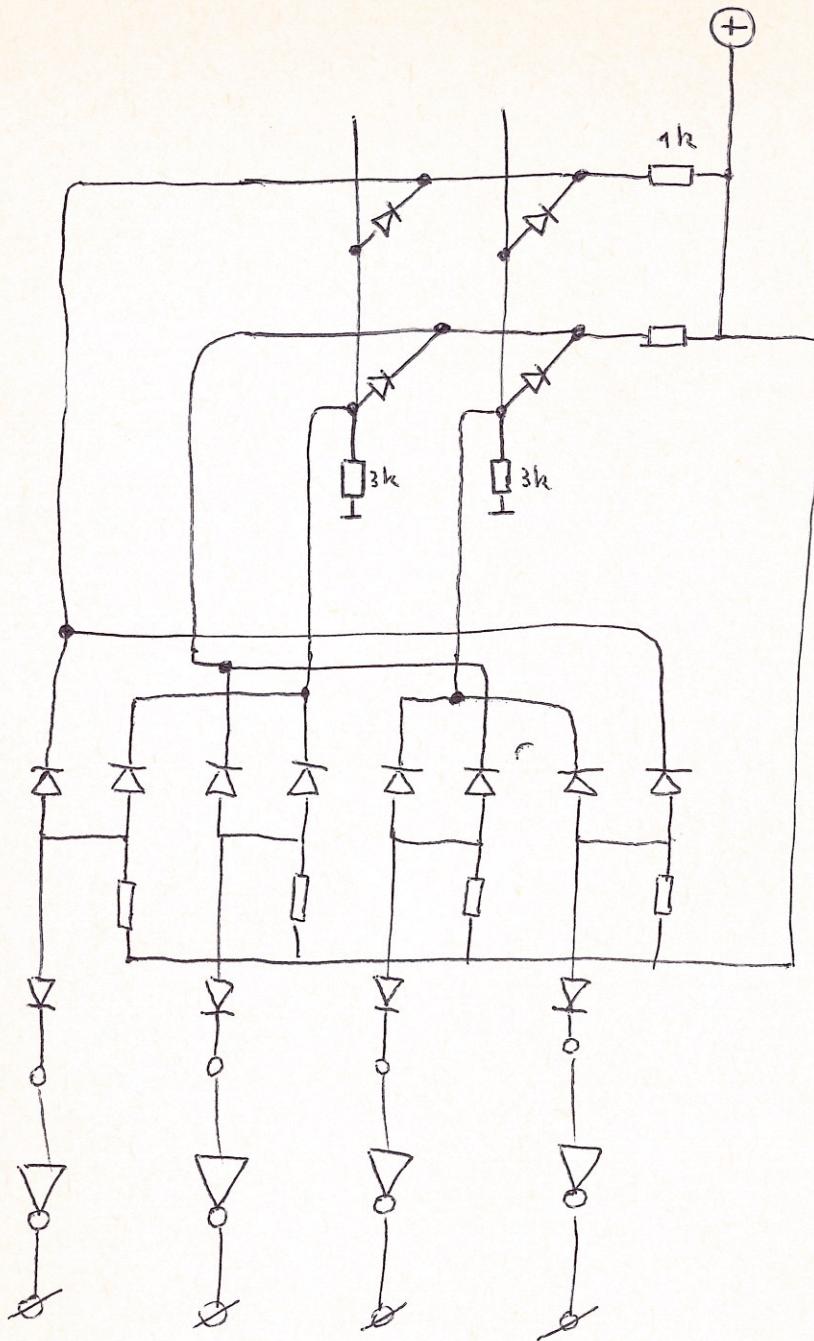




A	B	C
1	0	1
0	0	0
1	1	1
0	1	1



A	B	C
1	0	0
0	0	0
1	1	1
0	1	0



4×5 matrix.

	1	2	3	4
A				
B				
C				
D				
E				

~~A1 B1 C1 D1~~ -----

$$A_1 = 1 \quad A_2 = 6 \quad A_3 = 11 \quad A_4 = 16$$

$$B_1 = 2 \quad B_2 = 7 \quad B_3 = 12 \quad B_4 = 17$$

$$C_1 = 3 \quad C_2 = 8 \quad C_3 = 13 \quad C_4 = 18$$

$$D_1 = 4 \quad D_2 = 9 \quad D_3 = 14 \quad D_4 = 19$$

$$E_1 = 5 \quad E_2 = 10 \quad E_3 = 15 \quad E_4 = 20$$



