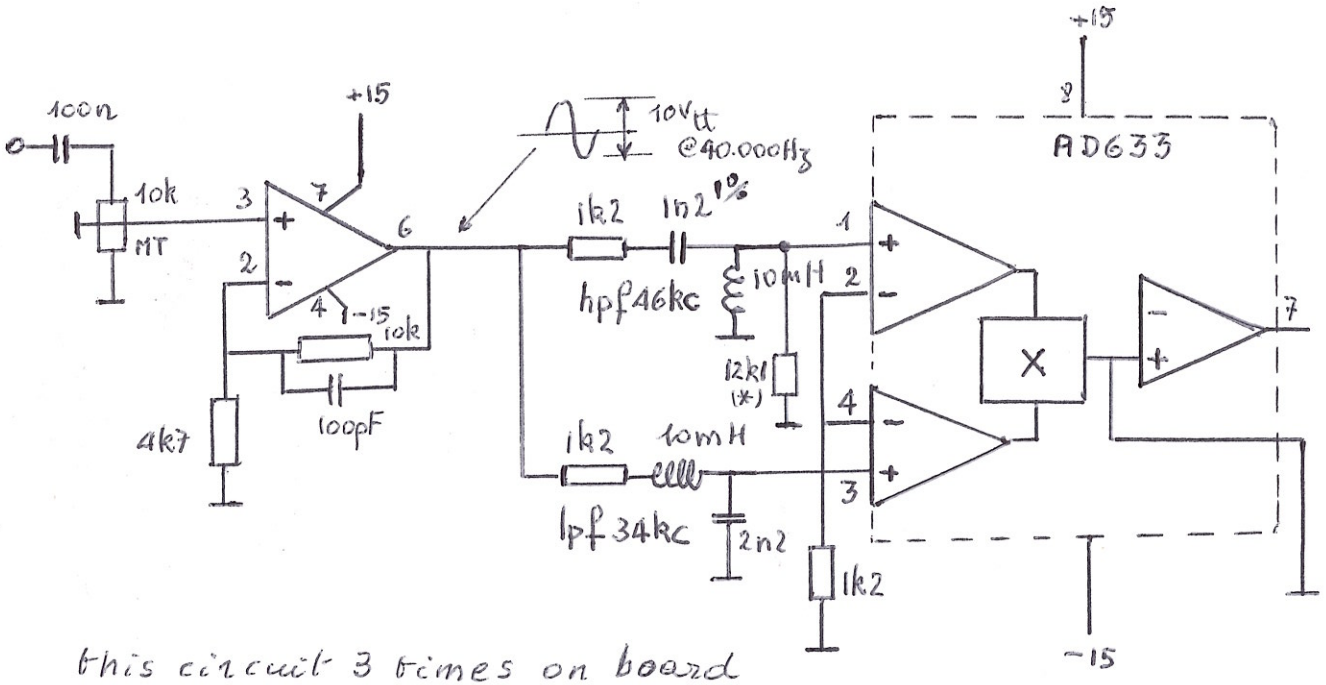
Holosound - system
audio out installatie
V97Ø8

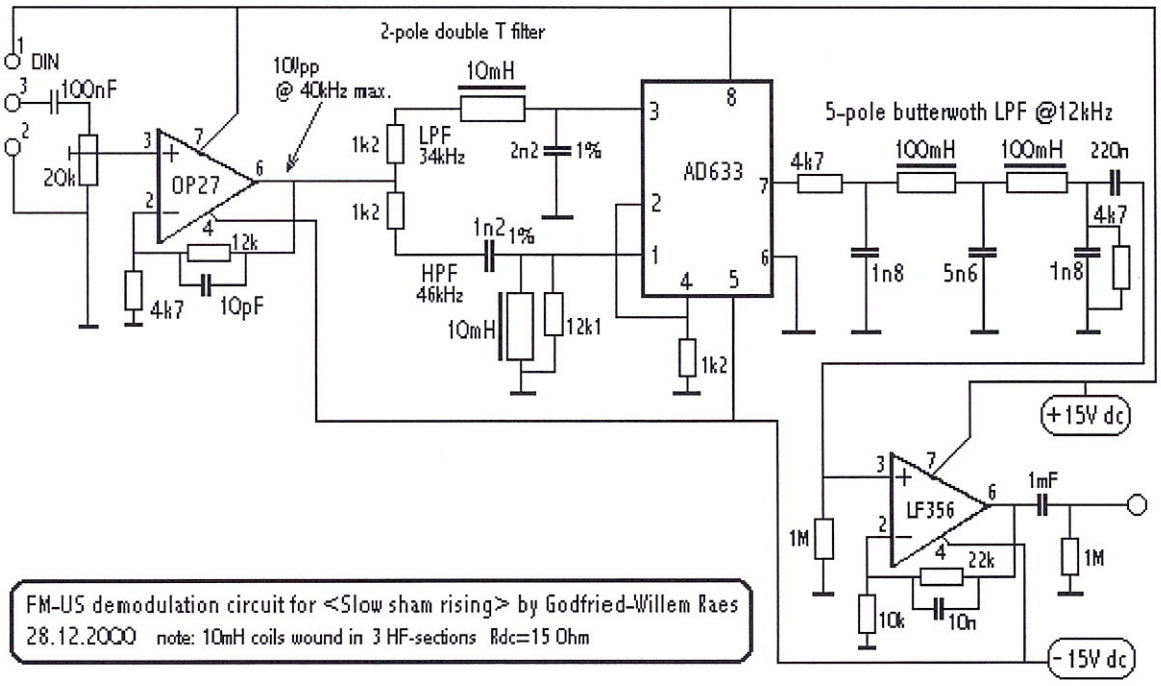
board used in <Slow sham rising>, 12.2000



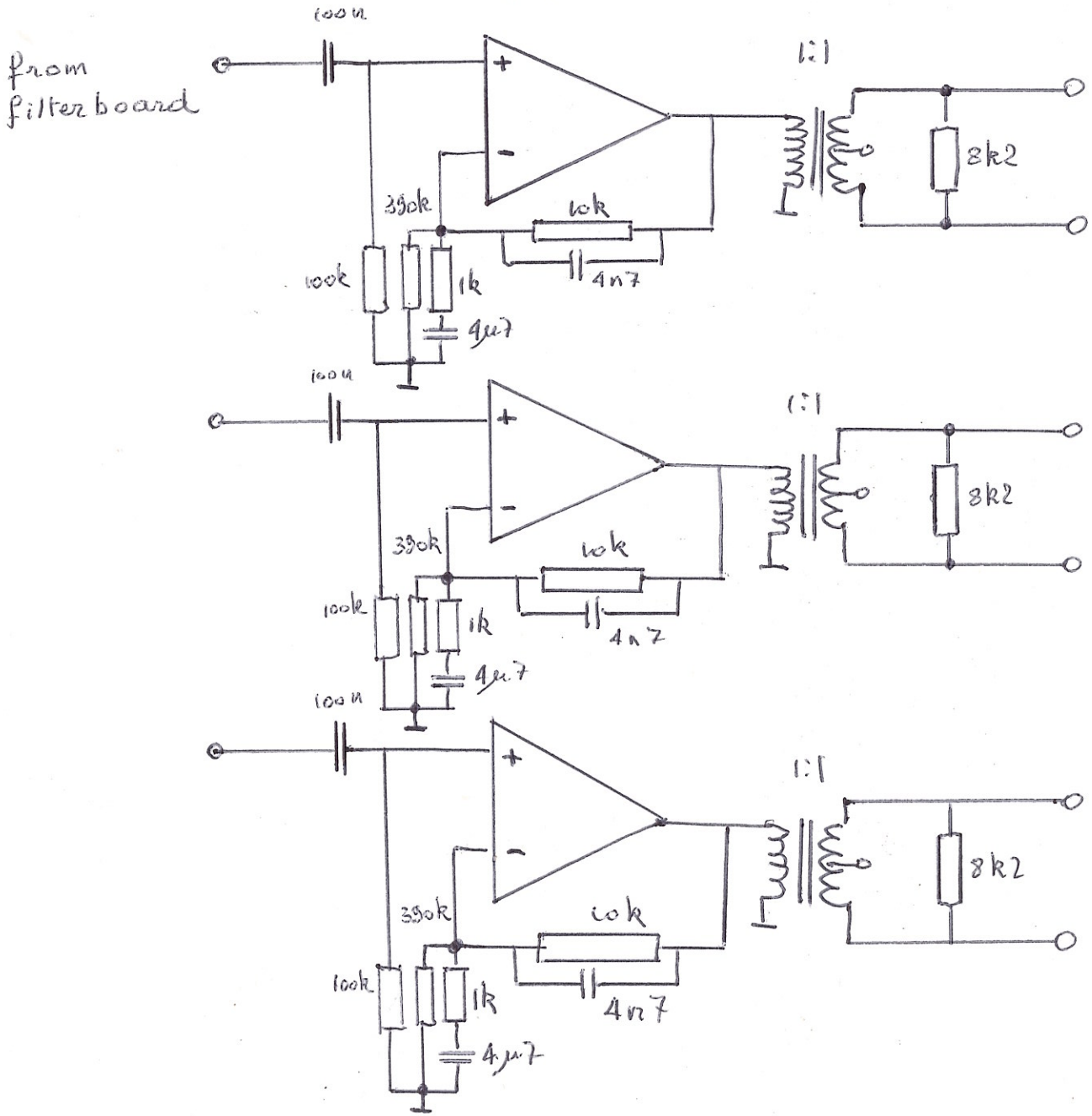
this circuit 3 times on board
X, Y & Z channels

(*) should be 12k8
cfr. Doppler.exe : holosound'97 simulator

HOLOSOUND V9708
demodulator board
02.1997 : prototype board used in 19" rack circuit
29.08.1997 : Balancing resistor 12k1 added
26.12.2000 : used in <Slow sham rising> 19" unit
dr. Godfried-Willem Raes


2-pole double T filter
DIN
100nF
20k
OP27
12k
4k7
10pF
10Vpp
@ 40kHz max.
10mH
1k2
LPF
34kHz
2n2
1%
1k2
1n2
1%
HPF
46kHz
10mH
12k1
AD633
1k2
5-pole butterwoth LPF @12kHz
4k7
100mH
100mH
220n
4k7
1n8
5n6
1n8
+15V dc
LF356
1mF
1M
22k
1M
10k
10n
-15V dc
FM-US demodulation circuit for <Slow sham rising> by Godfried-Willem Raes
28.12.2000 note: 10mH coils wound in 3 HF-sections Rdc=15 Ohm

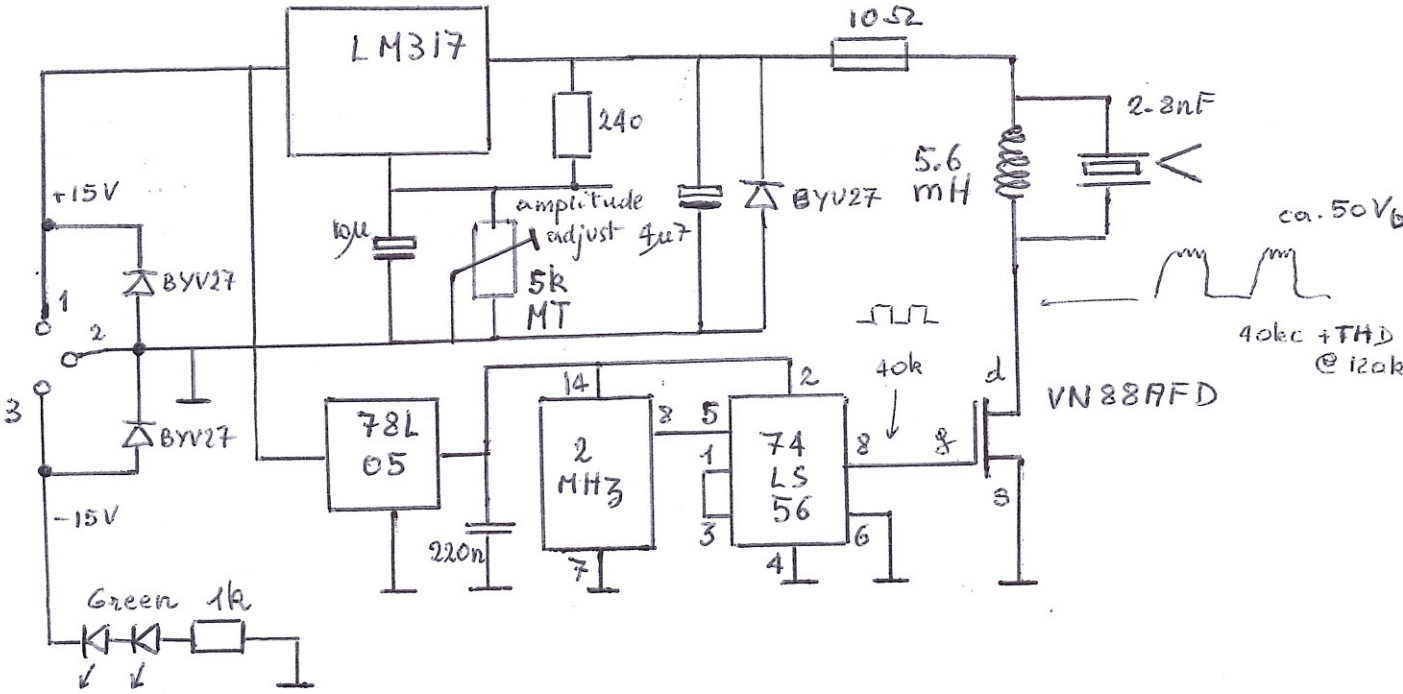
LF356

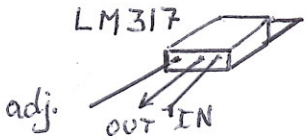


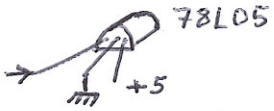
to XLR pins 2,3
(pin 1 = ground)
to 6.3mm jacks
(tip, sleeve, ring)

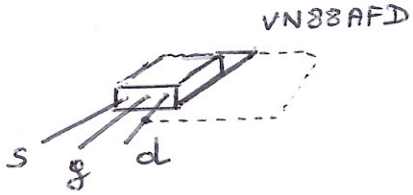
HOLOSOUND V9708
audio driver board
26.08.97 tested o.k.
dr. Godfried-Willem Raes

C978-40e3

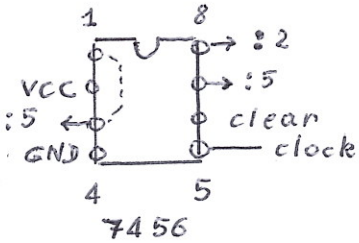








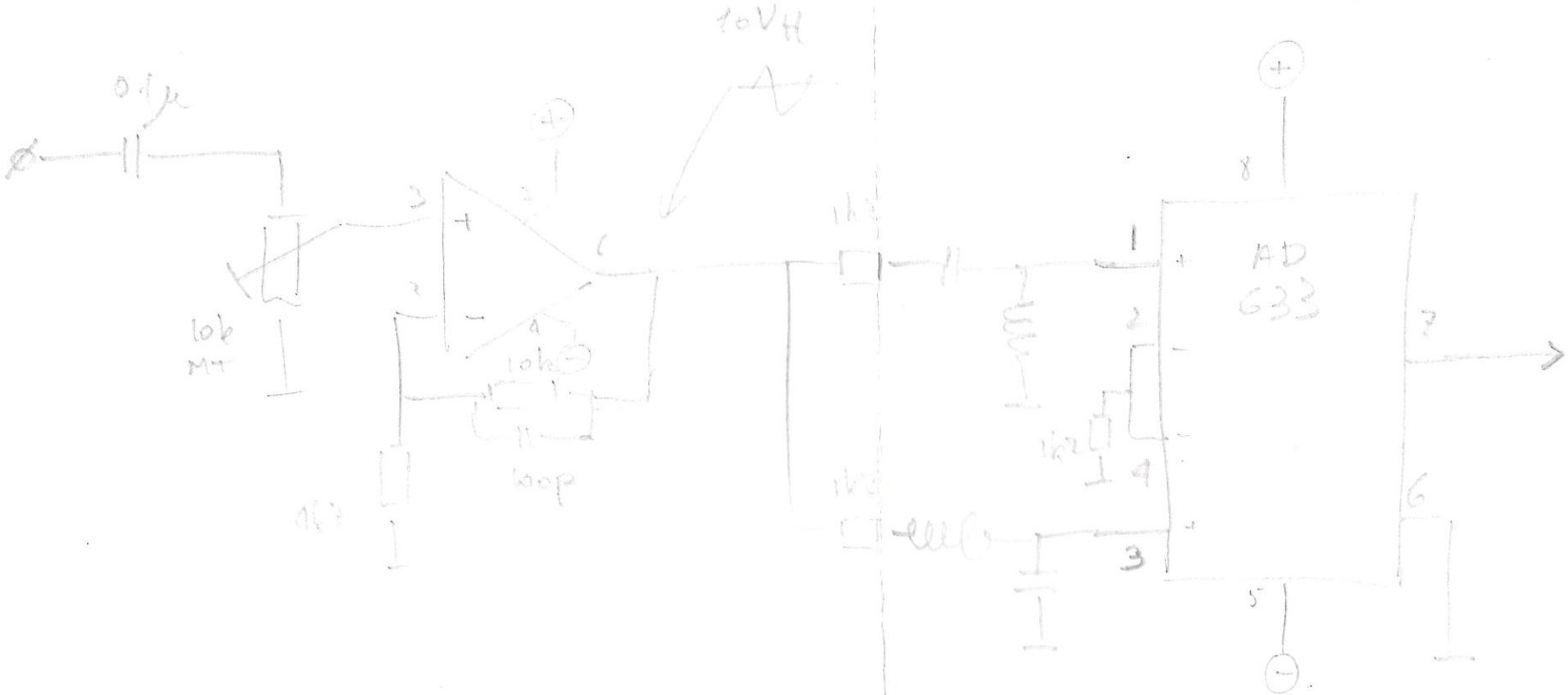
note: negative power only used for green LED's

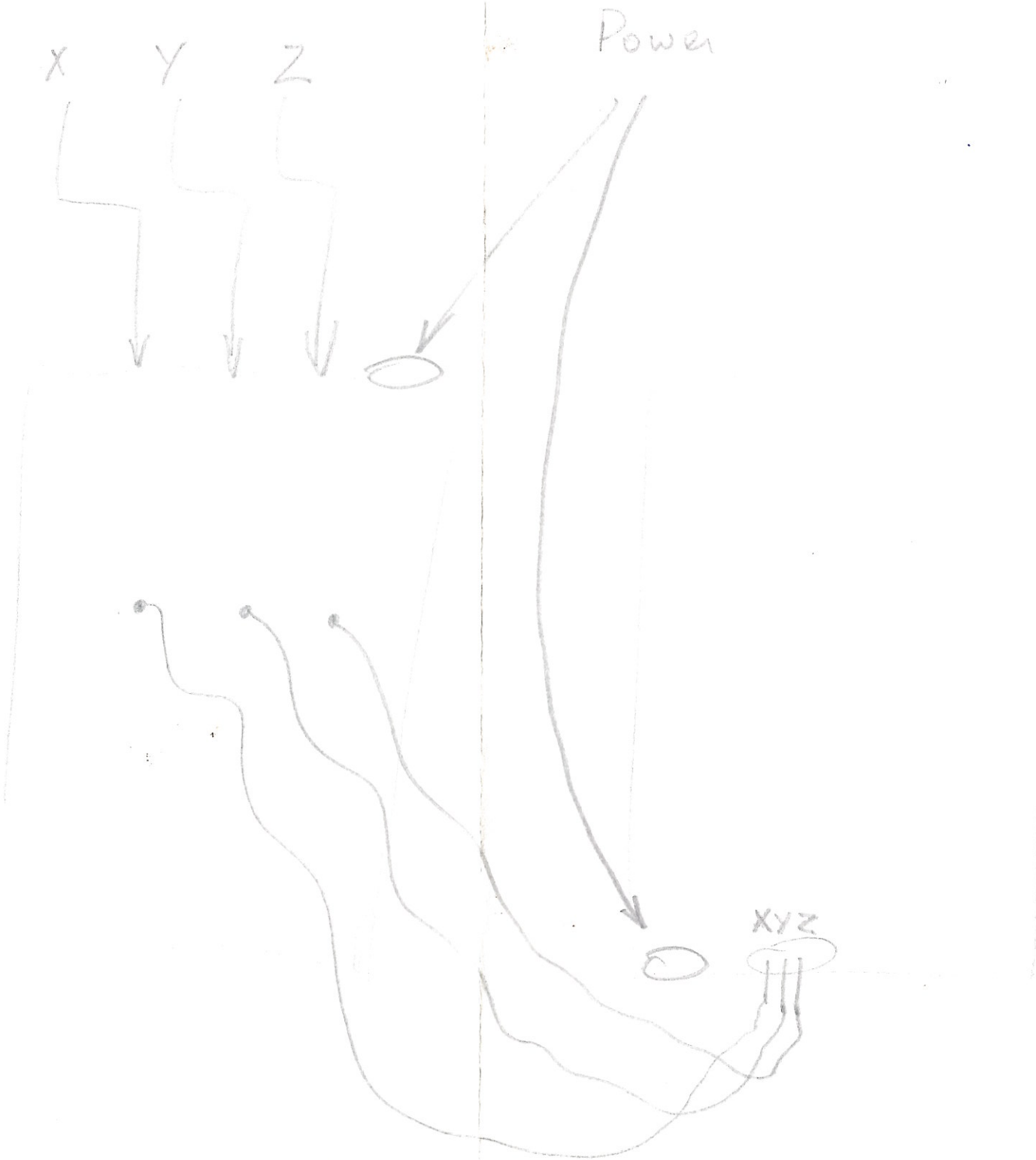


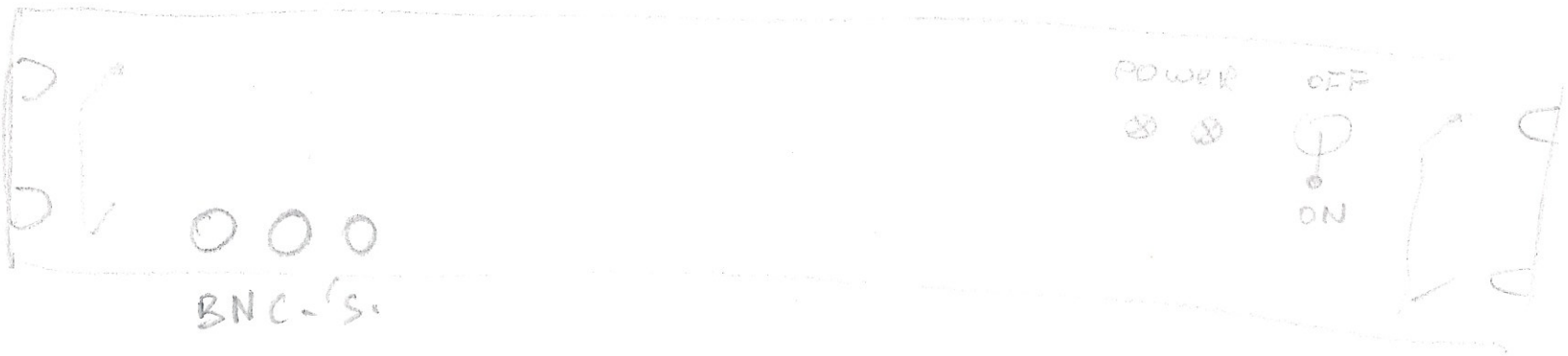
CRYSTAL CONTROLED ULTRASOUND EMITTER

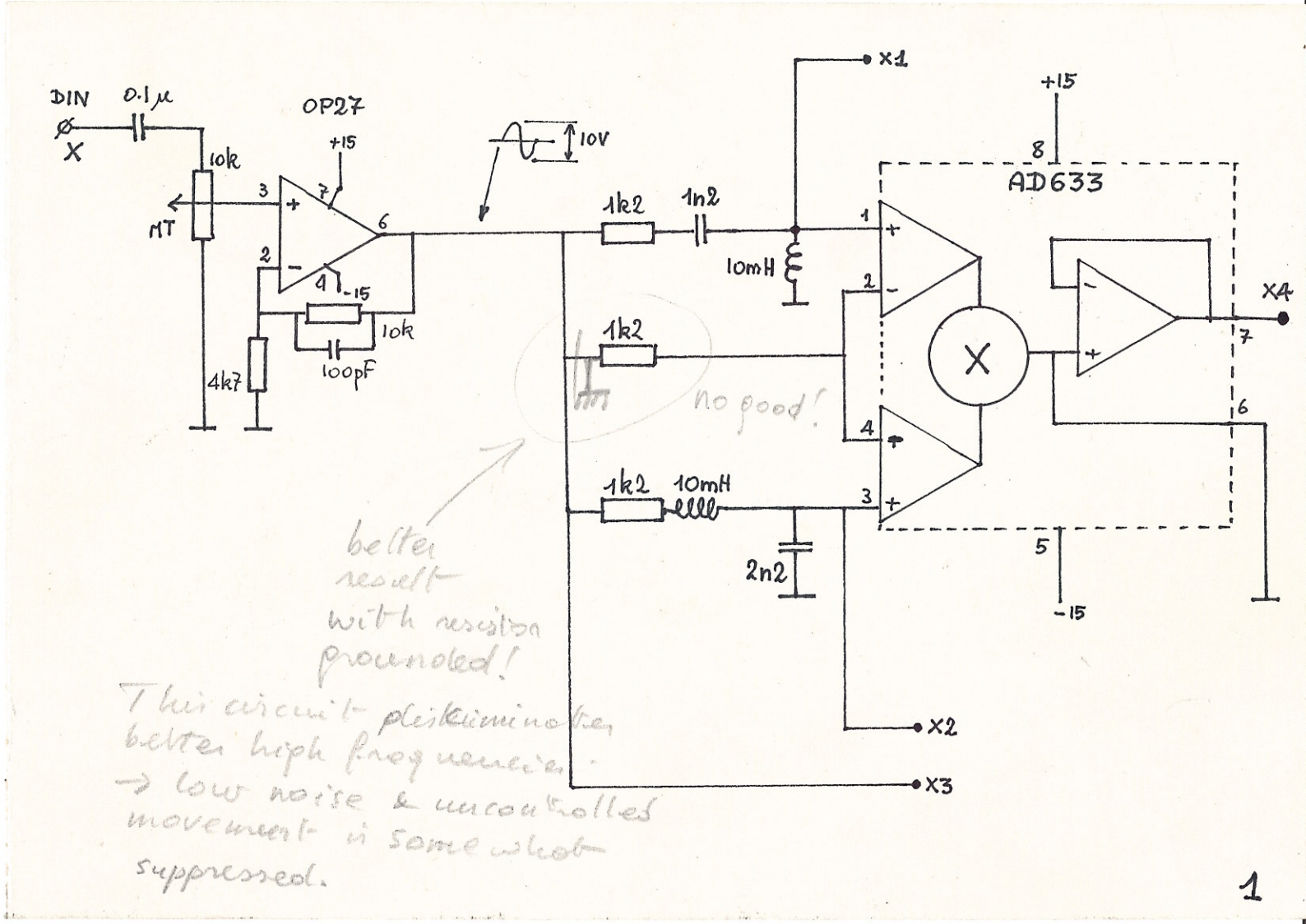
version 2.0 25.08.97 on perfoboard proto type
for analog holosound installation
moulded in transparent epoxy resin
housing: brass tube

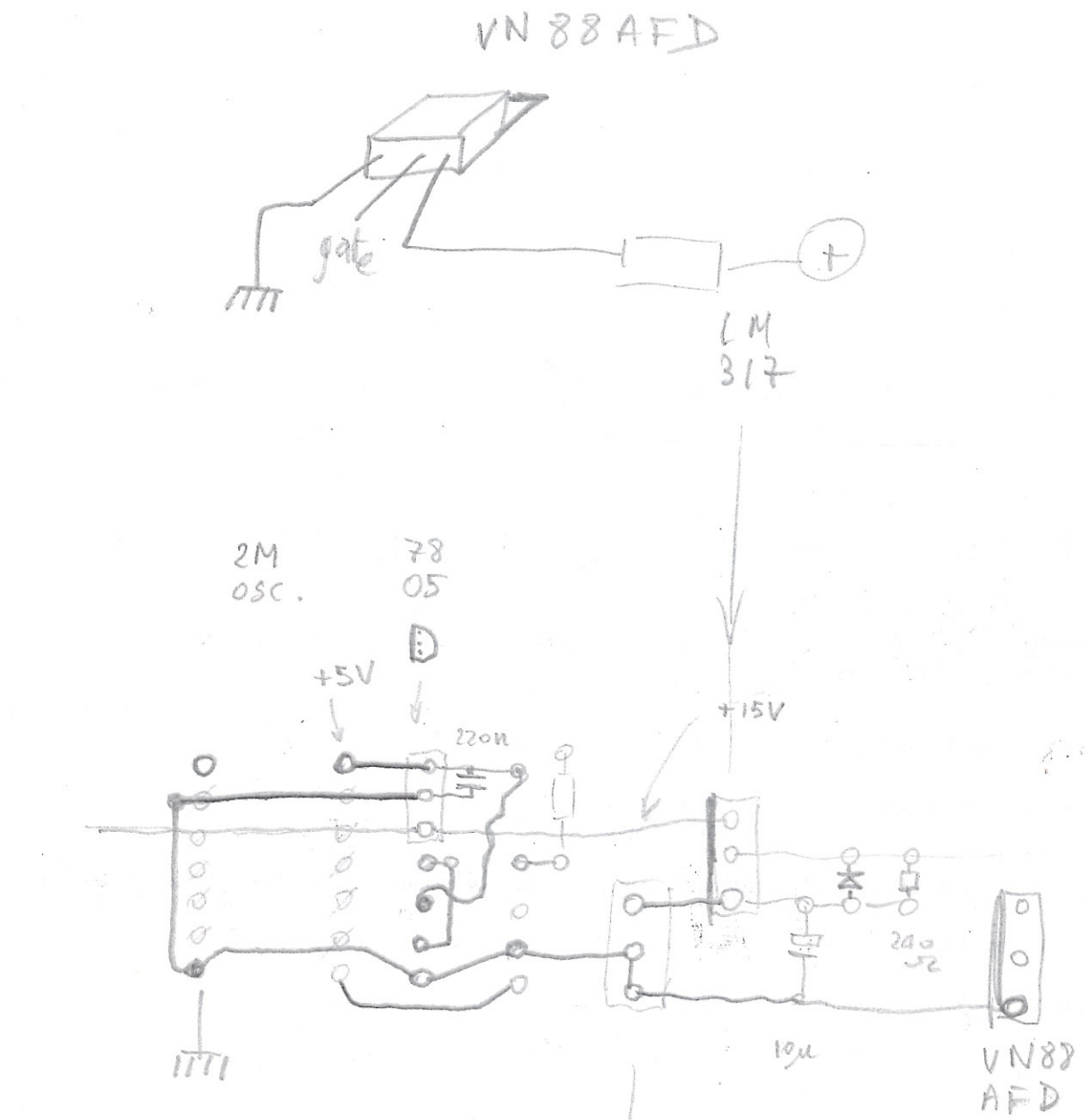
by
dr. Godfried-Willem Raes 1997

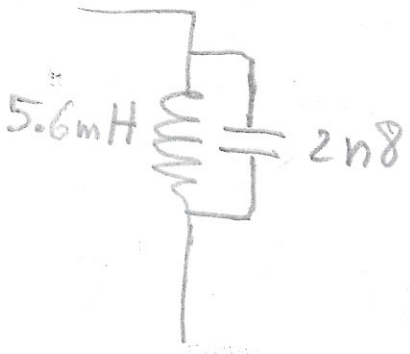

0.1µ
10k
MΩ
10k
100p
10V
AD
633


X
Y
Z
Power
XYZ


POWER
OFF
ON
BNC's.

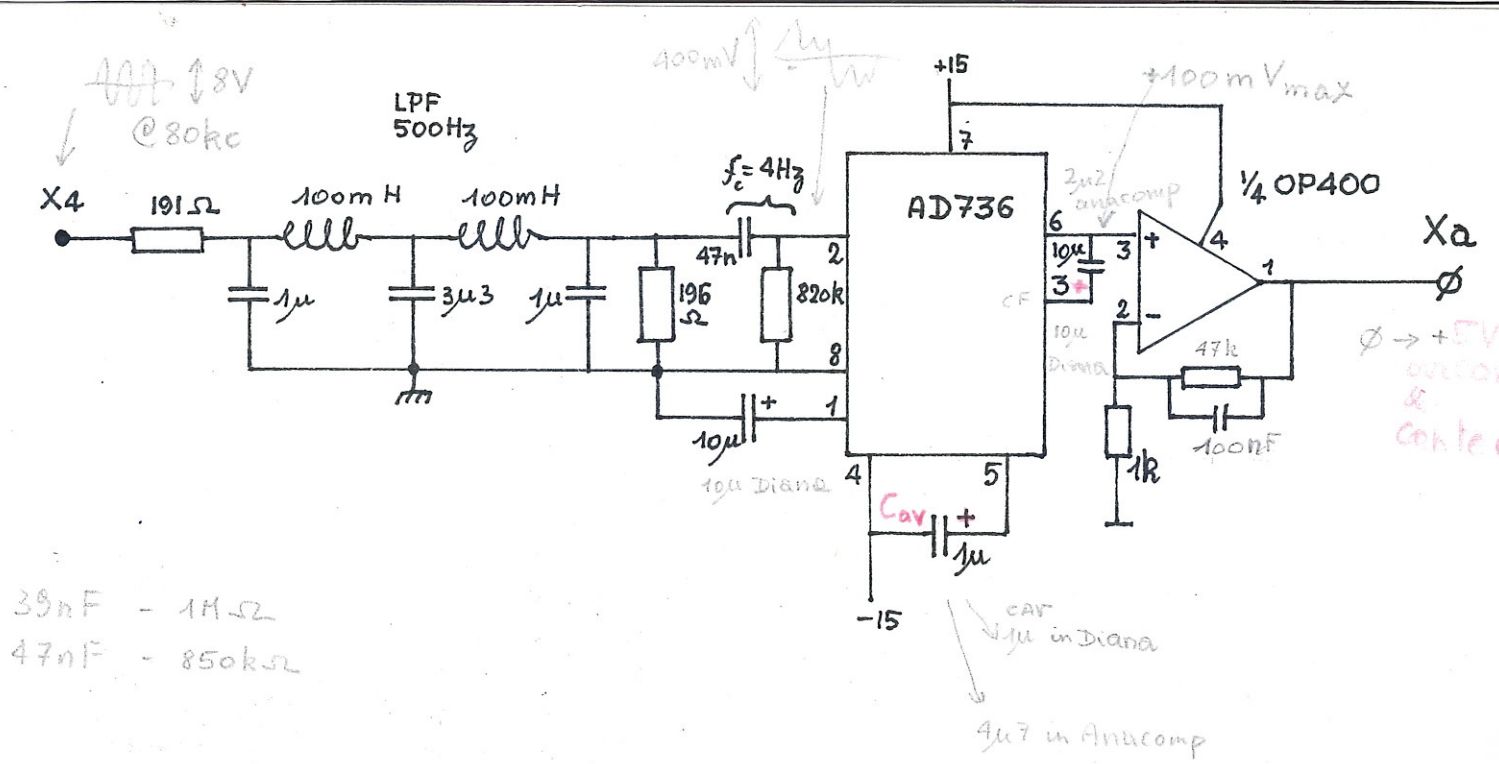

DIN
0.1µ
X
10k
MT
OP27
+15
3
7
6
2
4
-15
10k
100pF
4k7
10V
1k2
1n2
10mH
X1
+15
8
AD633
1
2
4
3
X
5
-15
7
6
X4
1k2
no good!
1k2
10mH
2n2
better result with resistor grounded!
This circuit eliminates better high frequencies.
→ low noise & uncontrolled movement is somewhat suppressed.
X2
X3



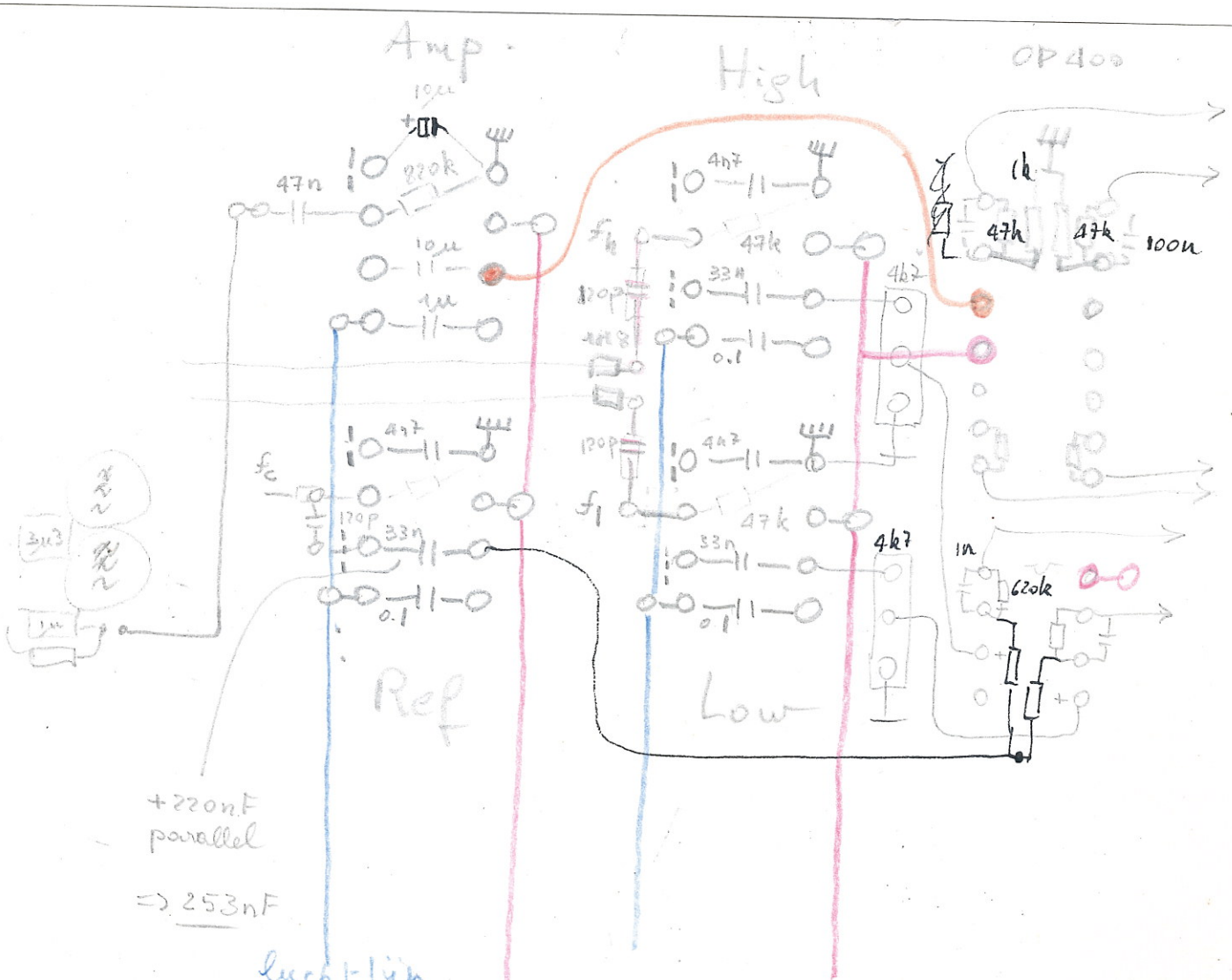


5k
Trim
MT

UST 40 T
transducer.
2n8


LPF
500Hz
X4
191Ω
100m H
100m H
1µ
3µ3
1µ
47n
196 Ω
820k
f_c= 4Hz
AD736
+15
-15
2µ2 anacomp
10µ
CF
10µ Diana
1/4 OP400
47k
100nF
1k
Xa
Cav
1µ
10µ Diana
CAV 1µ in Diana
4µ7 in Anacomp
39nF - 1MΩ
47nF - 850kΩ

2

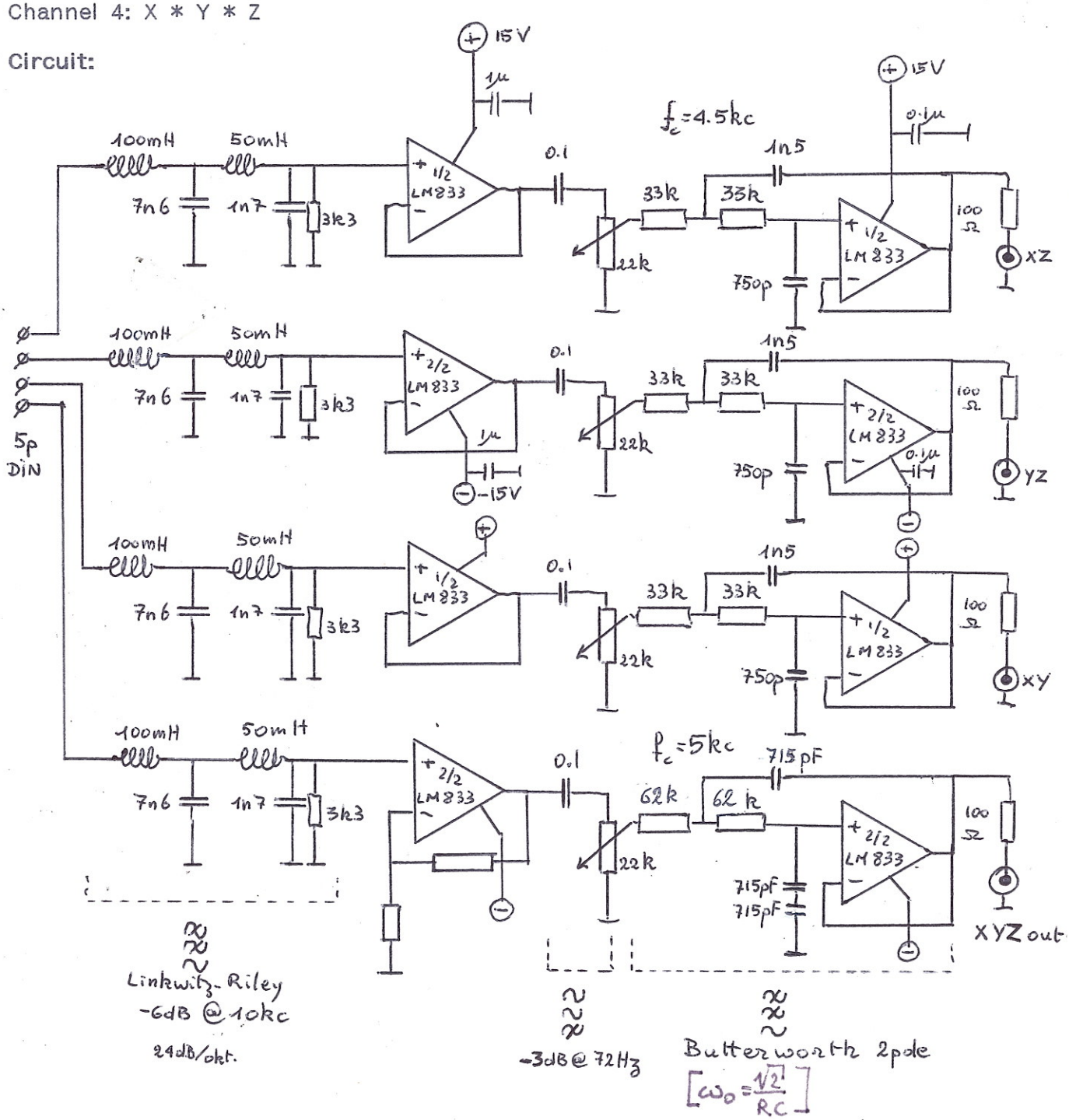

Amp
High
OP400
Ref
Low
47n
820k
10µ
1µ
4n7
47k
4k7
33n
0.1
120p
170p
3µ3
1µ
100n
620k
1k
+220nF
parallel
⇒ 253nF

Holosound

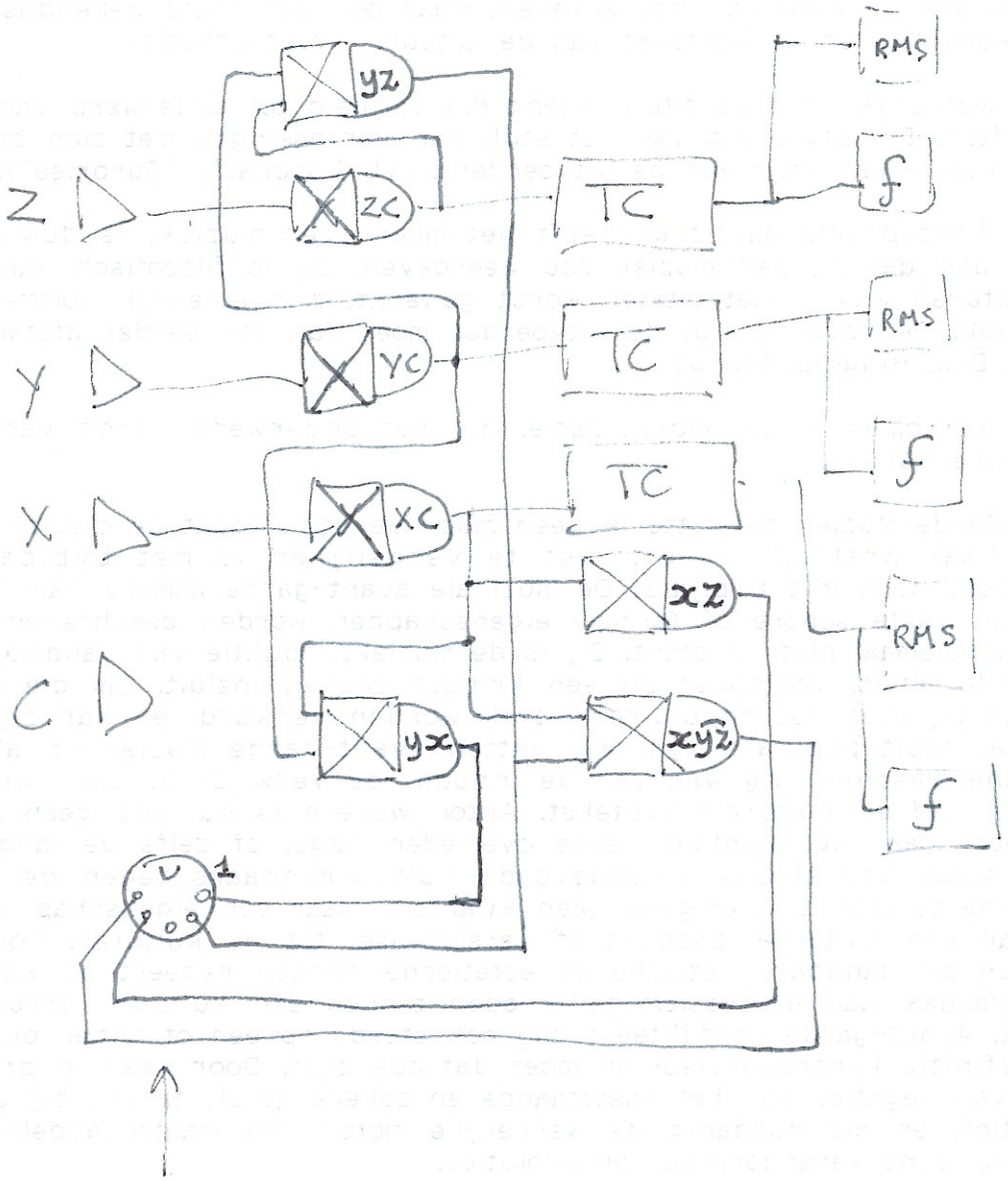
analog audio board

Channel 1: X * Z
Channel 2: Y * Z
Channel 3: X * Y
Channel 4: X * Y * Z

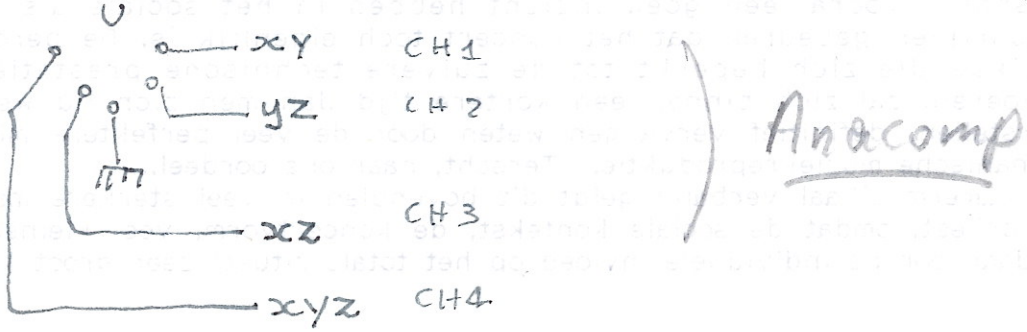
Circuit:



Board Map (Physical Layout)



WARNING:
These outputs
are DC-coupled !!!
No 40kc filtering neither !!!



Meting Linkwitz - Riley filter:

Meetrapport:

0 dB van 0 Hz →

-6 dB @ 10kc

20kc

Signaal IN: 20 V_{pt}

20kc = 1.4 V_{pt}

25.5kc = 0.6 V_{pt}

40kc = 100mV $_{pt}$

20V = 0 dB

10V = -6

5V = -12

2.5 = -18

1.25 = -24

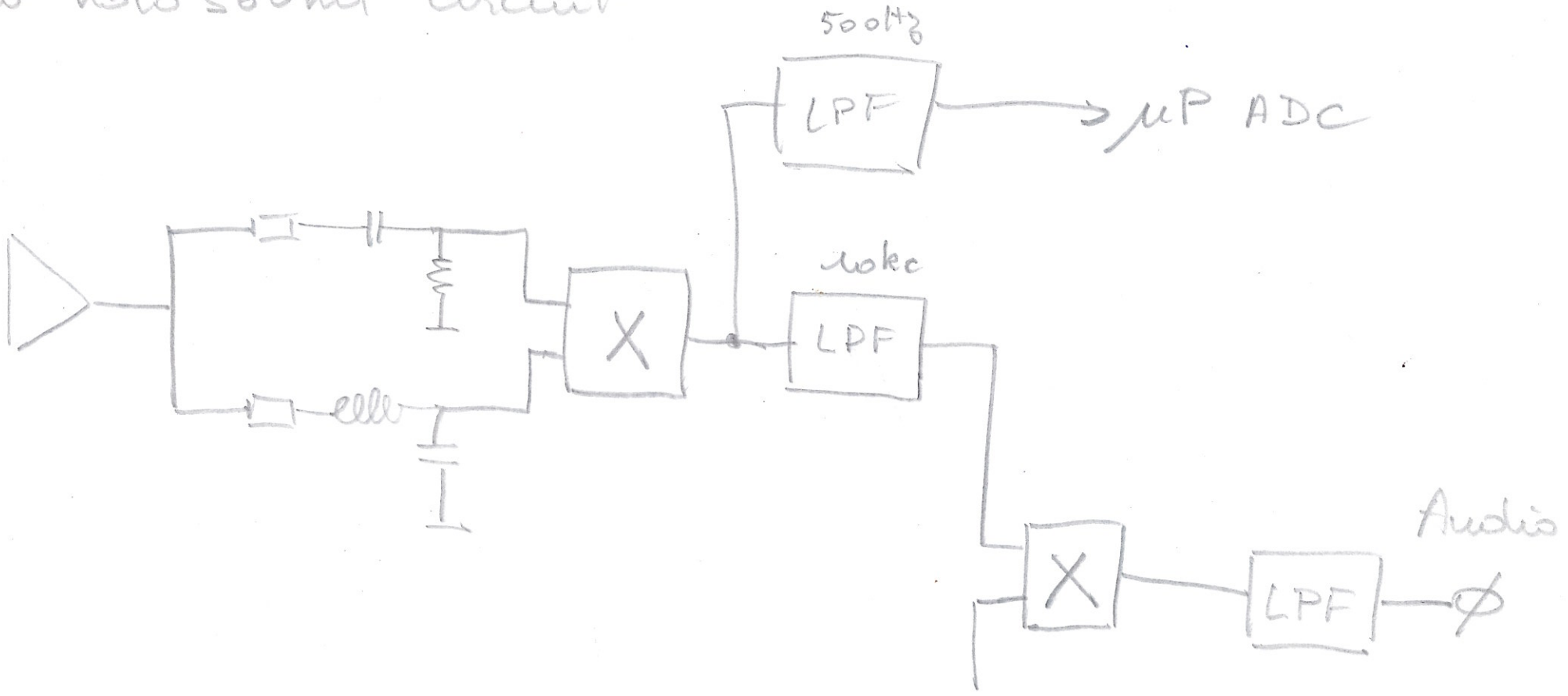
0.625 = -30 25kc

0.312 = -36

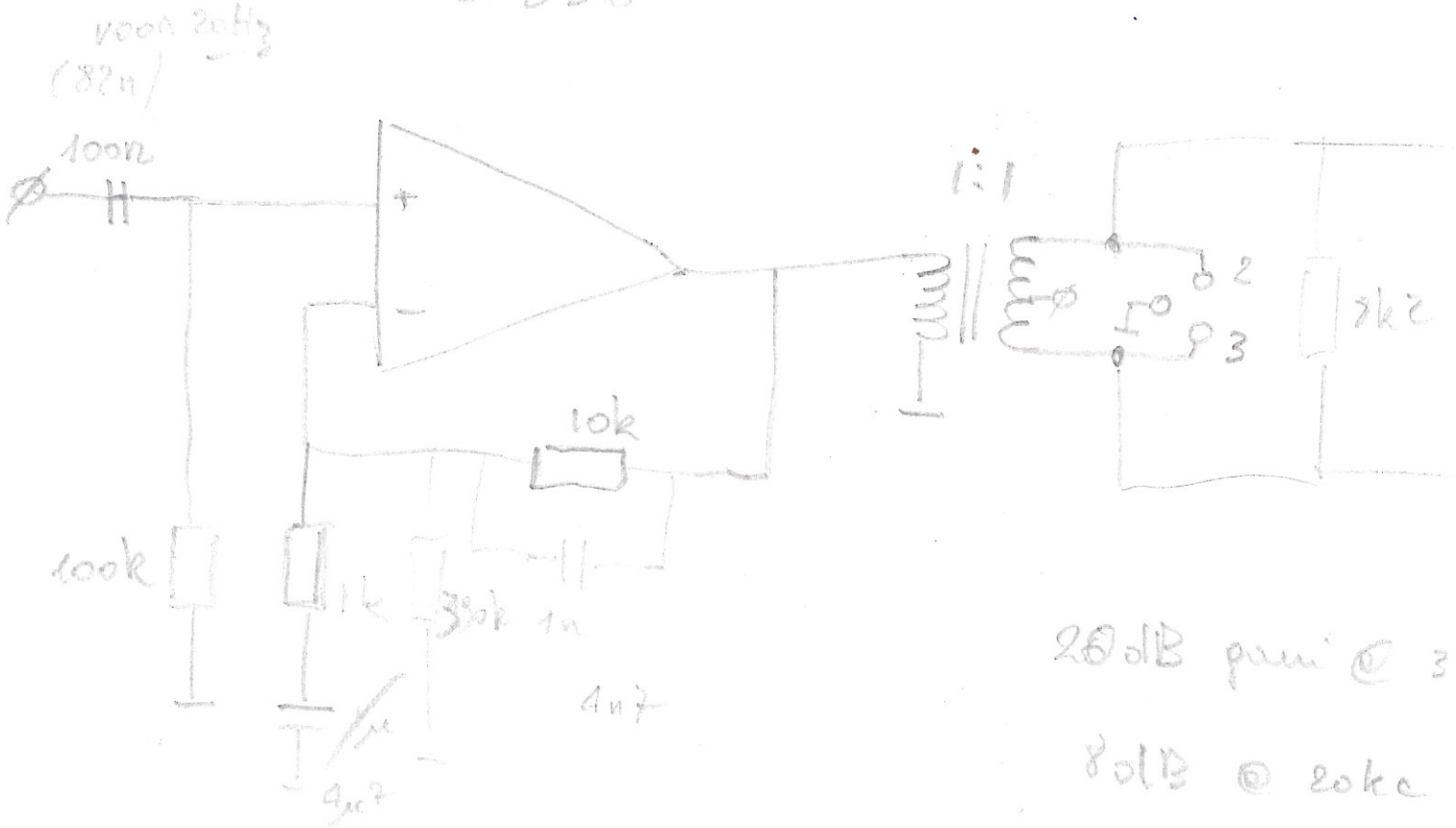
0.155 = -42

0.075 = -48 dB

New holo sound circuit

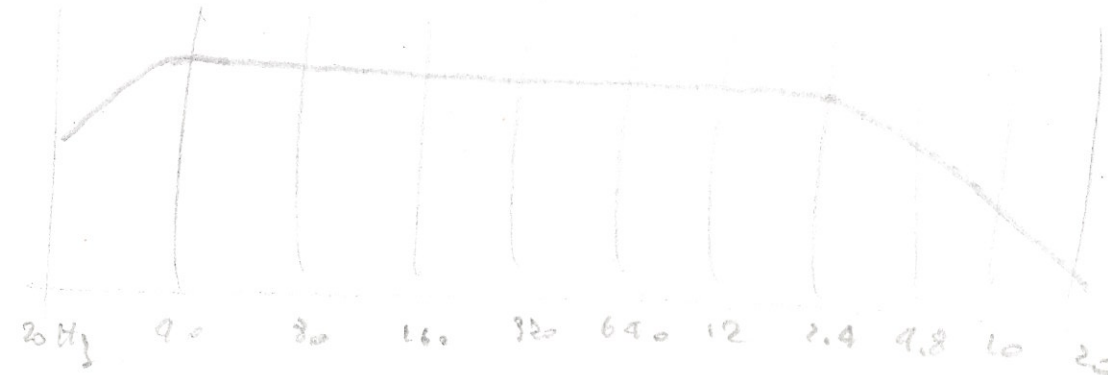


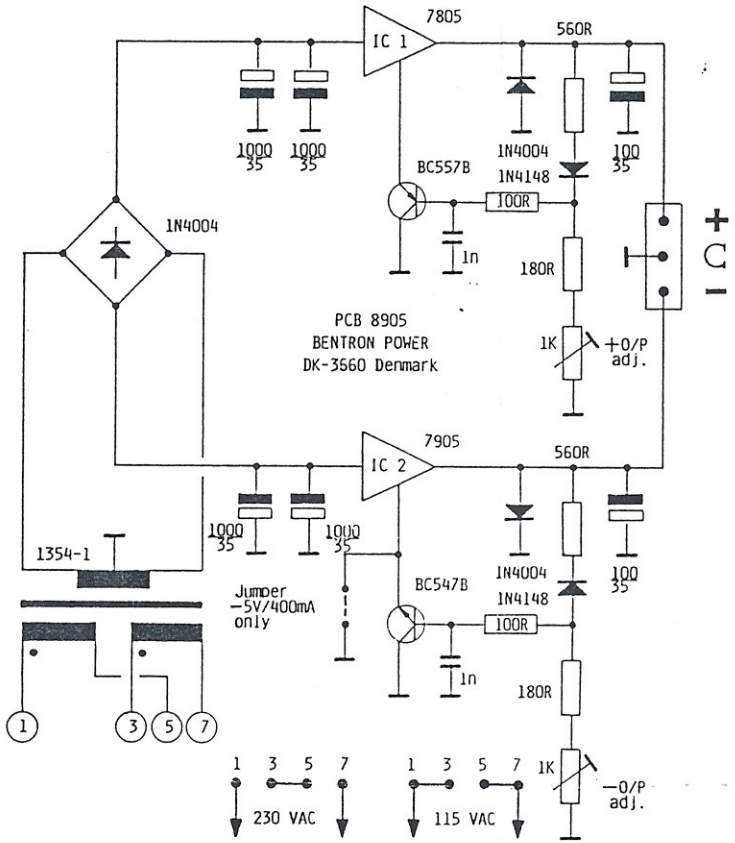
LF356



20dB gain @ 339kHz

8dB @ 20kc

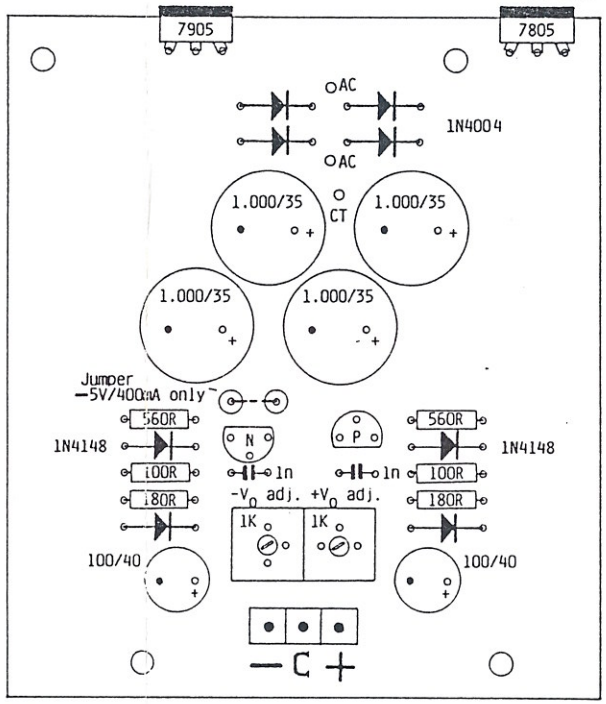




OUTPUT 1		OUTPUT 2	
+12V	1.0A	-12V	1.0A
+15V	0.8A	-15V	0.8A
+12V	1.0A	-5V	0.4A
+15V	0.8A	-5V	0.4A

Both output rails are adjustable independently from 8V....15V.
The negative rail can be programmed to give -5V output (fixed) and 400 mA. Just solder a jumper between the 2 solderlugs on the printed circuit board.

BENTRON DA 12/1
PCB 8905
11/8/89

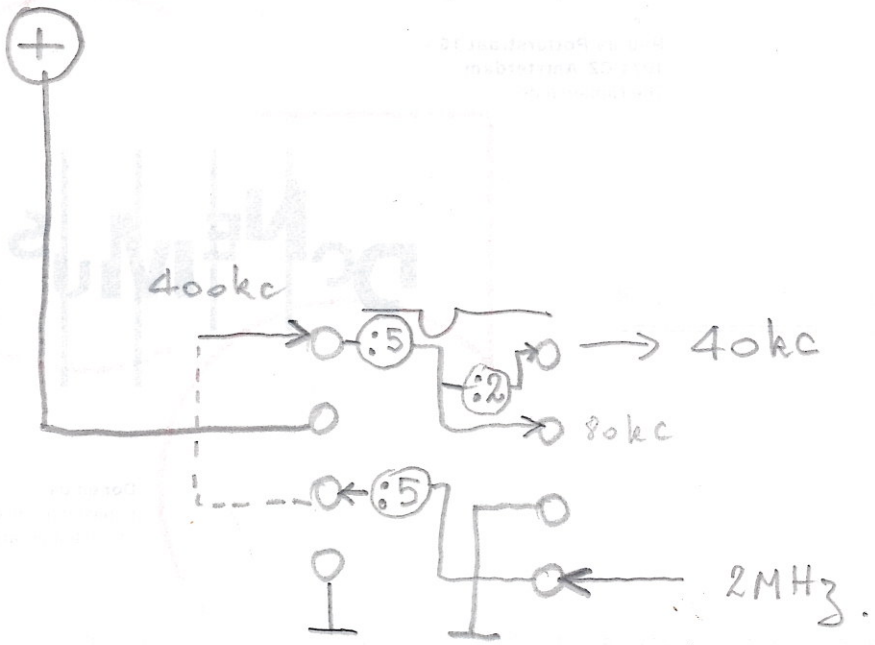


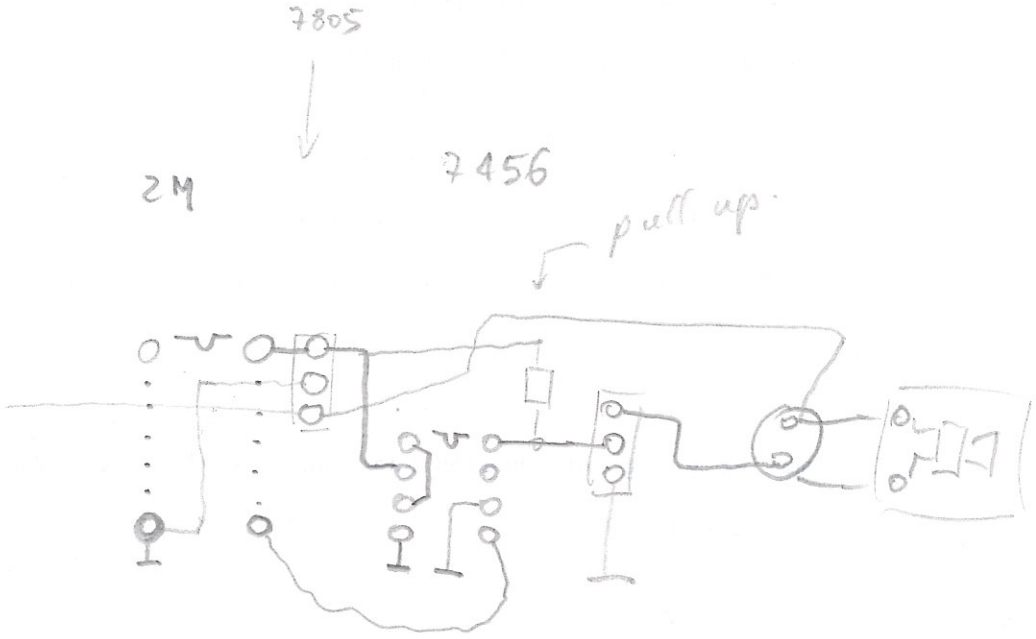
Header: PTR STL 130/3
Socket: PTR AK 130/3 DS

Bentron Power

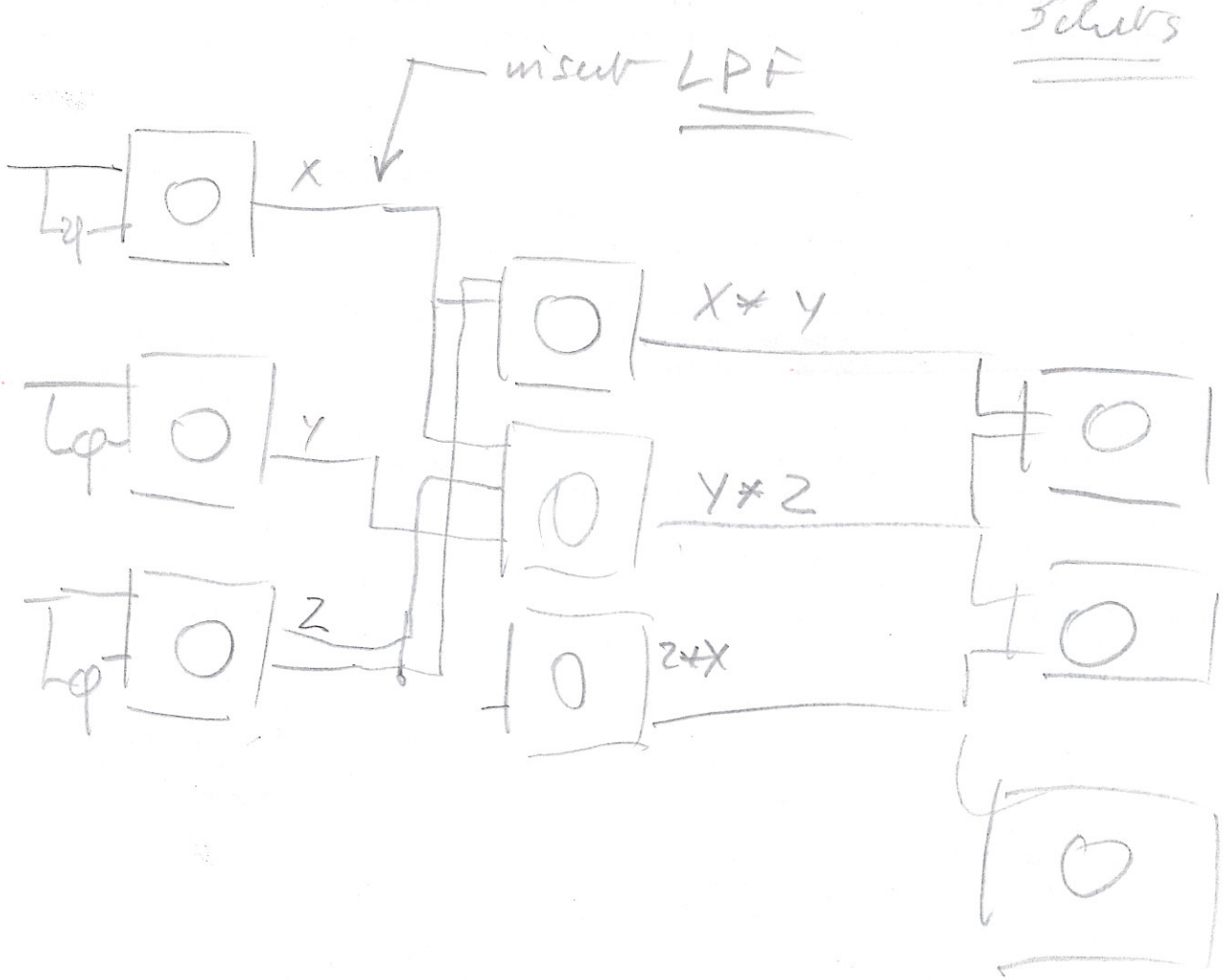
BENTRON POWER
DA-12/1

used


400kc
:5
:2
40kc
80kc
:5
2MHz.

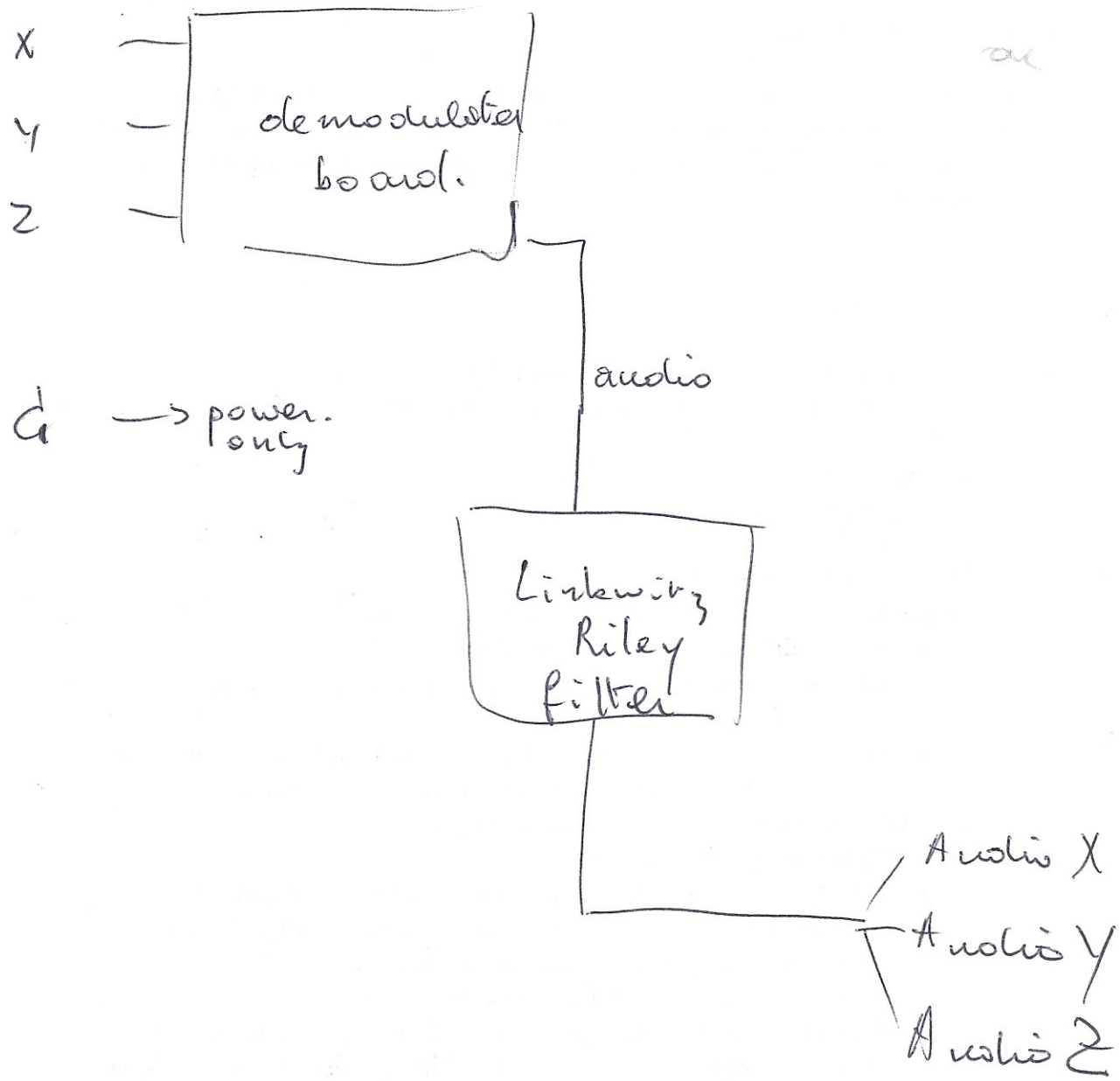

7805
2M
7456
pull up.

Schritt



x	$x*y$	$x.y^2.z$	$x^2y^3z^3$
y	$y*z$	$y.z^2.x$	$y^2.x^3.z^3$
z	$z*x$	$z.x^2.y$	$z^2.y^3.x^3$

guydb91@hotmail.com



Courier
Courier

(bol)