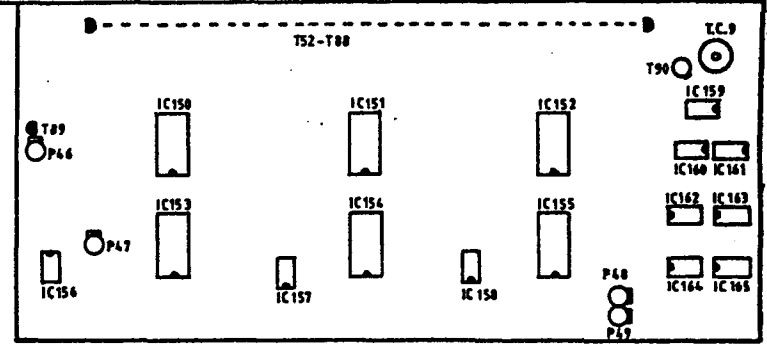
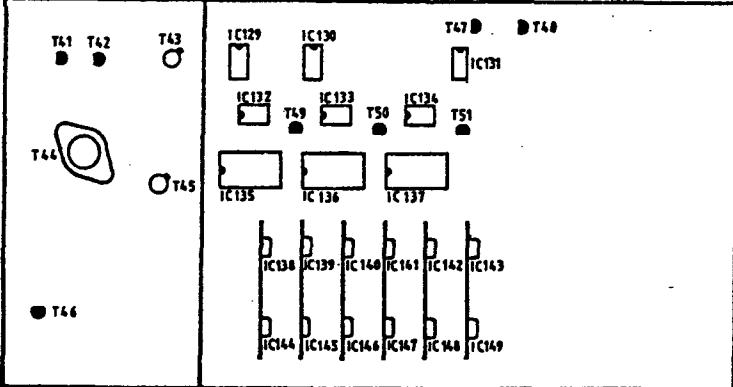
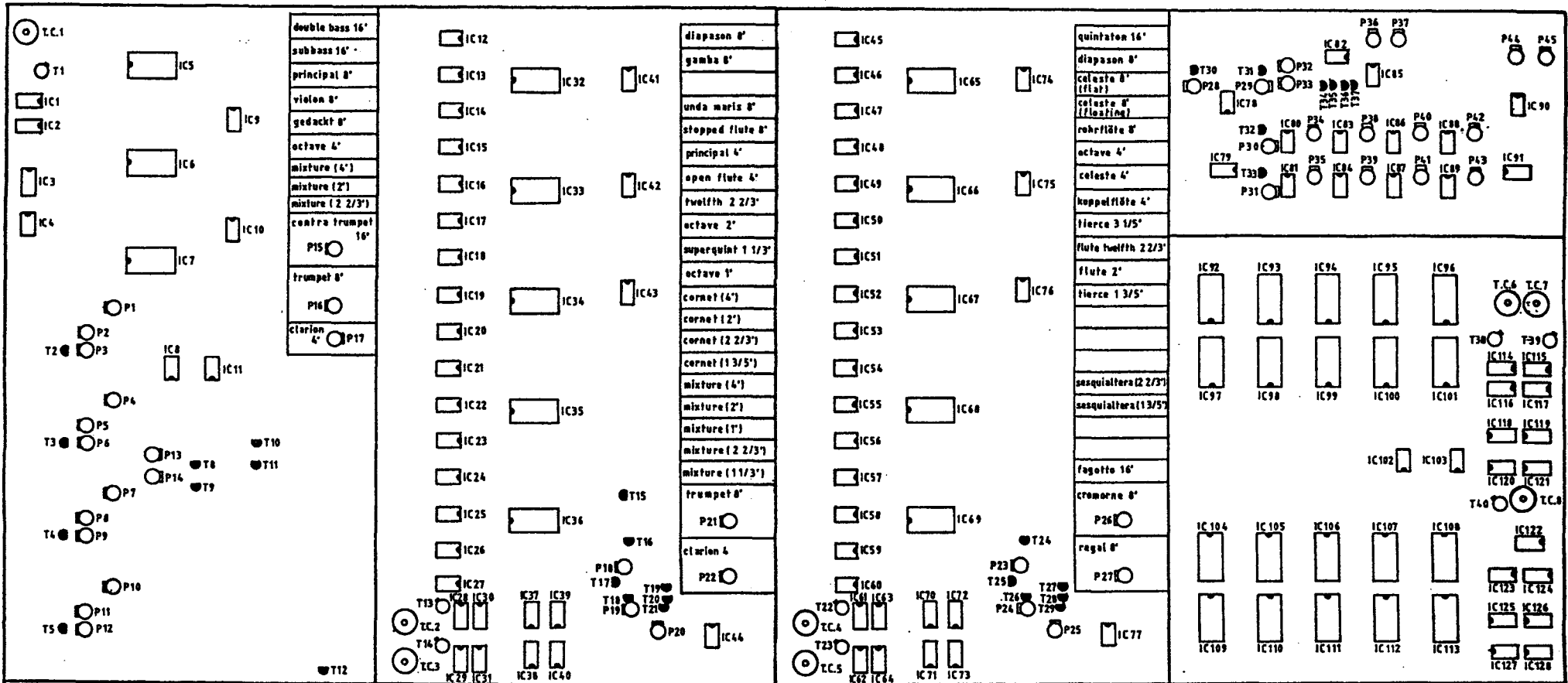


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Y=====
S C H E M A T I C   D I A G R A M S
J O H A N N U S
O P U S   2 6 0
alterations reserved
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2. LEGEND POSITION DIAGRAM
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4. SWITCH-SECTION TRANSPOSER; HICK CIRCUIT; TREMULANT CIRCUIT;
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22. KEYING & PRE-AMP'S CELESTES SWELL
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33. STOPBANK & MEMORY SECTION CAPTURE SYSTEM
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T6 & T7 ARE DISPOSED

POSITION DIAGRAM

Drawn	Date	Modified	Date
Verschoor	28-04-86		
DESIGN			
LAB.			

JOHANNUS ORGAN OPUS 260

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 ELEC TRONIUM B.V. Tel. 08380-37403

P1: volume treble II amplifier
 P2: bass adjustment treble II amplifier
 P3: treble adjustment treble II amplifier
 P4: volume treble I amplifier
 P5: bass adjustment treble I amplifier
 P6: treble adjustment treble I amplifier
 P7: volume middle amplifier
 P8: bass adjustment middle amplifier
 P9: treble adjustment middle amplifier
 P10: volume bass amplifier
 P11: bass adjustment bass amplifier
 P12: treble adjustment bass amplifier
 P13: linearity expression pedal swell
 P14: linearity expression pedal great
 P15: volume contra trumpet 16' pedal
 P16: volume trumpet 8' pedal
 P17: volume clarion 4' pedal
 P18: tremulant speed great
 P19: hick depth great
 P20: tremulant depth great
 P21: volume trumpet 8' great
 P22: volume clarion 4' great
 P23: tremulant speed swell
 P24: hick depth swell
 P25: tremulant depth swell
 P26: volume cromorne 8' swell
 P27: volume regal 8' swell
 P28: amplitude output channel A echo unit
 P29: amplitude output channel B echo unit
 P30: clockripple elimination delay line echo unit channel B
 P31: clockripple elimination delay line echo unit channel A
 P32: amplitude feed-back signal channel A to channel B
 P33: amplitude feed-back signal channel B to channel A
 P34: DC-offset IC 80
 P35: DC-offset IC 81
 P36: clockfrequence
 P37: amplitude chorus
 P38: DC-offset IC 83
 P39: DC-offset IC 84
 P40: DC-offset IC 86
 P41: DC-offset IC 87
 P42: DC-offset IC 88
 P43: DC-offset IC 89
 P44: amplitude input channel B echo unit
 P45: amplitude input channel A echo unit
 P46: squelch length carillon
 P47: volume carillon (intern)
 P48: sustain length 2'; 2 2/3' & 4' carillon
 P49: sustain length 6 2/5' carillon

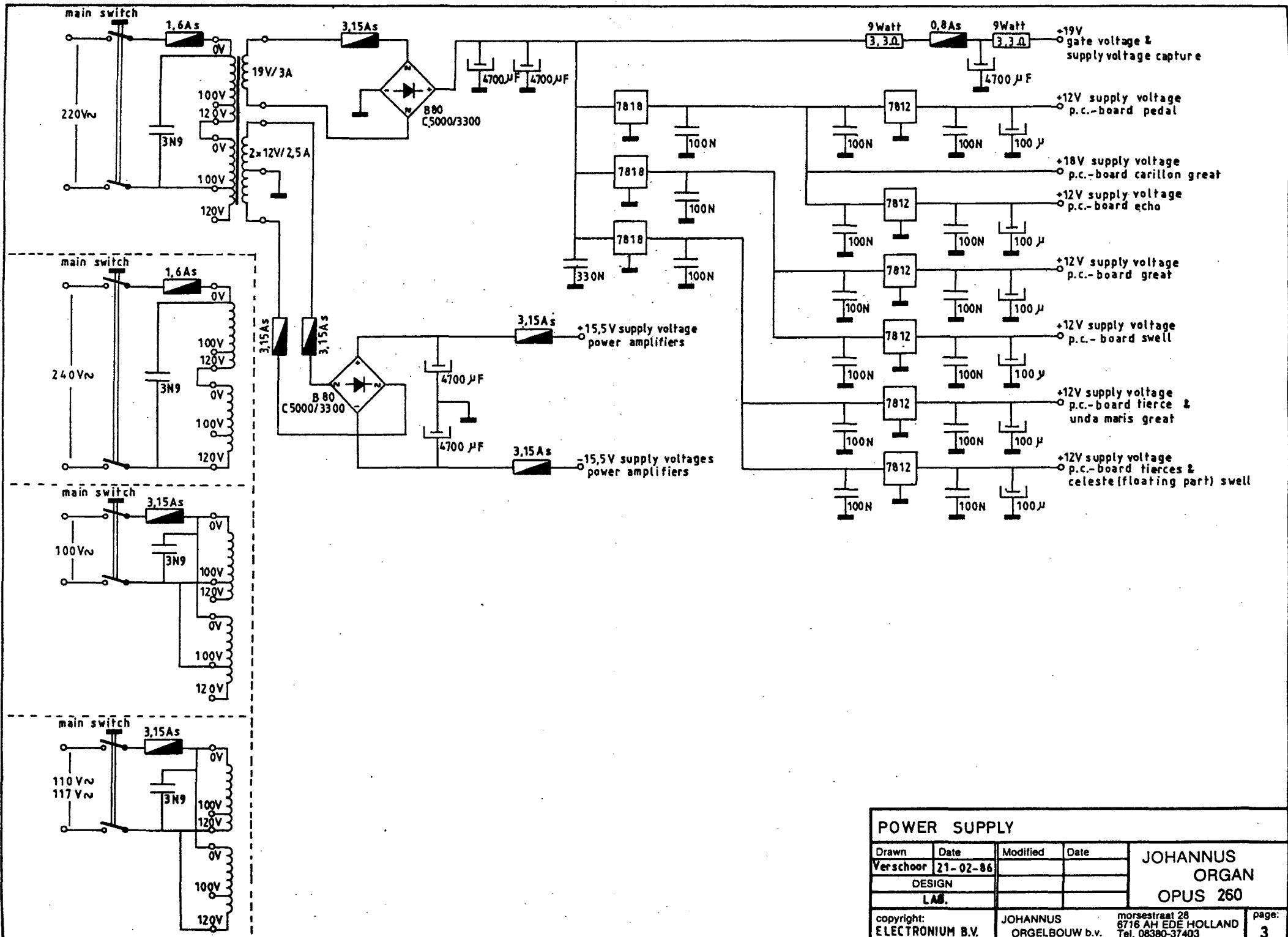
T.C. 1: tuning pedal
 T.C. 2: tuning 2nd; 4th & 5th octave great
 T.C. 3: tuning 1st & 3rd octave great
 T.C. 4: tuning 2nd & 4th octave swell
 T.C. 5: tuning 1st; 3rd & 5th octave swell
 T.C. 6: tuning unda maris great
 T.C. 7: tuning tierce great
 T.C. 8: tuning celestes & tierces swell
 T.C. 9: tuning carillon

IC 1; 28; 29; 61; 62; 114; 115; 122; 159.....MO 83
 IC 2; 30; 31; 63; 64; 115; 116; 123; 124; 160; 161.....4512
 IC 3; 37; 38; 70; 71; 118; 119; 125; 126; 162; 163.....4046
 IC 4; 39; 40; 72; 73; 120; 121; 127; 128; 164; 165.....4520
 IC 5-7; 32-36; 65-69; 150-155.....TMS 3617
 IC 8-11; 41-44; 74-78; 90; 102; 103; 156.....TL 074
 IC 12-27; 45-60.....LM 339
 IC 79; 91.....NE 570
 IC 80; 81; 83; 84; 86-89.....TDA 2108
 IC 82.....4093
 IC 85; 138-149; 157; 158.....LM 324
 IC 92-101; 104-113.....TMS 3615
 IC 129; 130.....4528
 IC 131.....4013
 IC 132-134.....4081
 IC 135-137.....ER 2051

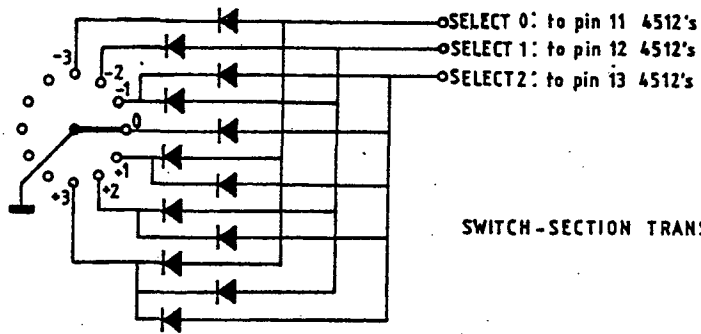
 T 1; 13; 14; 22; 23; 38-40; 45; 90.....BC 141
 T 2-9; 12; 15-21; 24-33; 35; 36; 41; 42; 46-88.....BC 549
 T 10; 11.....BC 337
 T 34; 37.....BC 558
 T 43.....BC 161
 T 44.....2N3055
 T 89.....J 174

LEGEND POSITION DIAGRAM			
Drawn	Date	Modified	Date
Verschoor	28-04-86		
DESIGN			
copyright: ELECTRONIUM B.V.		JOHANNUS ORGELBOUW b.v.	morsestraat 28 8716 AH EDE HOLLAND Tel. 08380-37403
			page: 2

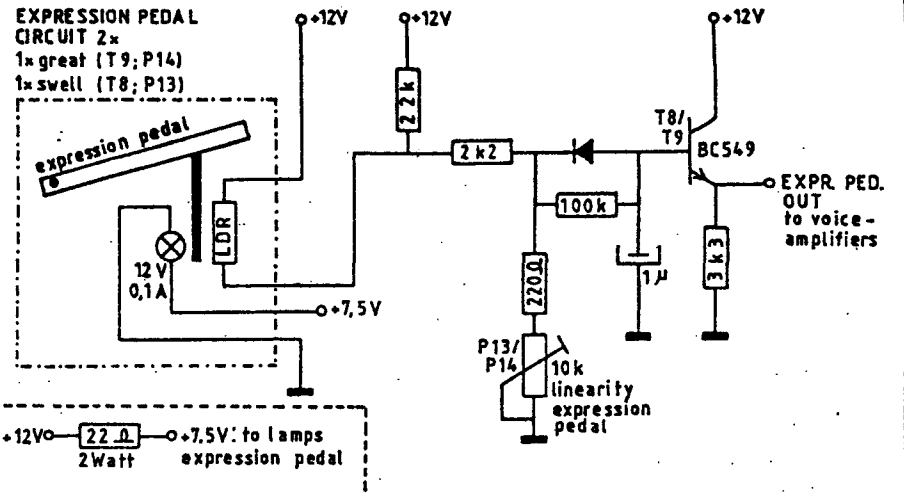
JOHANNUS
 ORGAN
 OPUS 260



POWER SUPPLY				JOHANNUS ORGAN OPUS 260
Drawn	Date	Modified	Date	
Verschoor	21-02-86			
DESIGN				
L.A.S.				
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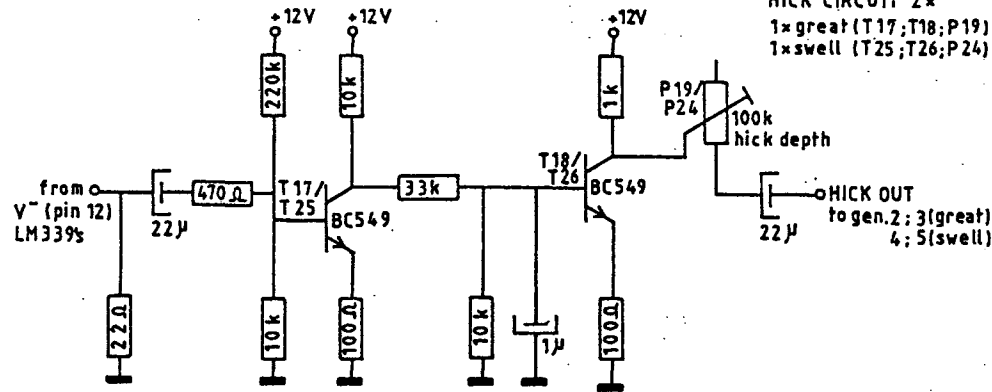


SWITCH-SECTION TRANSPOSER

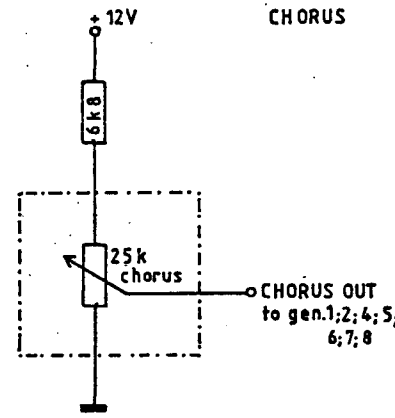


EXPRESSION PEDAL
CIRCUIT 2x
1x great (T9; P14)
1x swell (T8; P13)

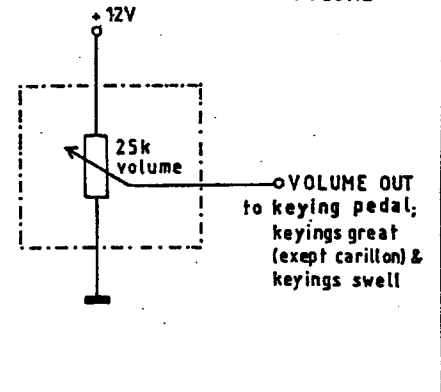
HICK CIRCUIT 2x
1x great (T17; T18; P19)
1x swell (T25; T26; P24)



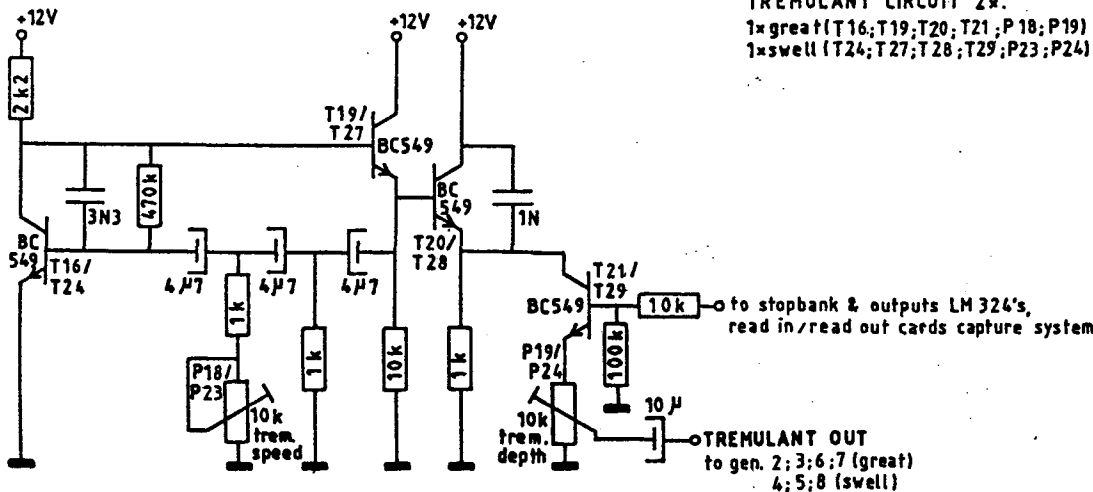
CHORUS



VOLUME

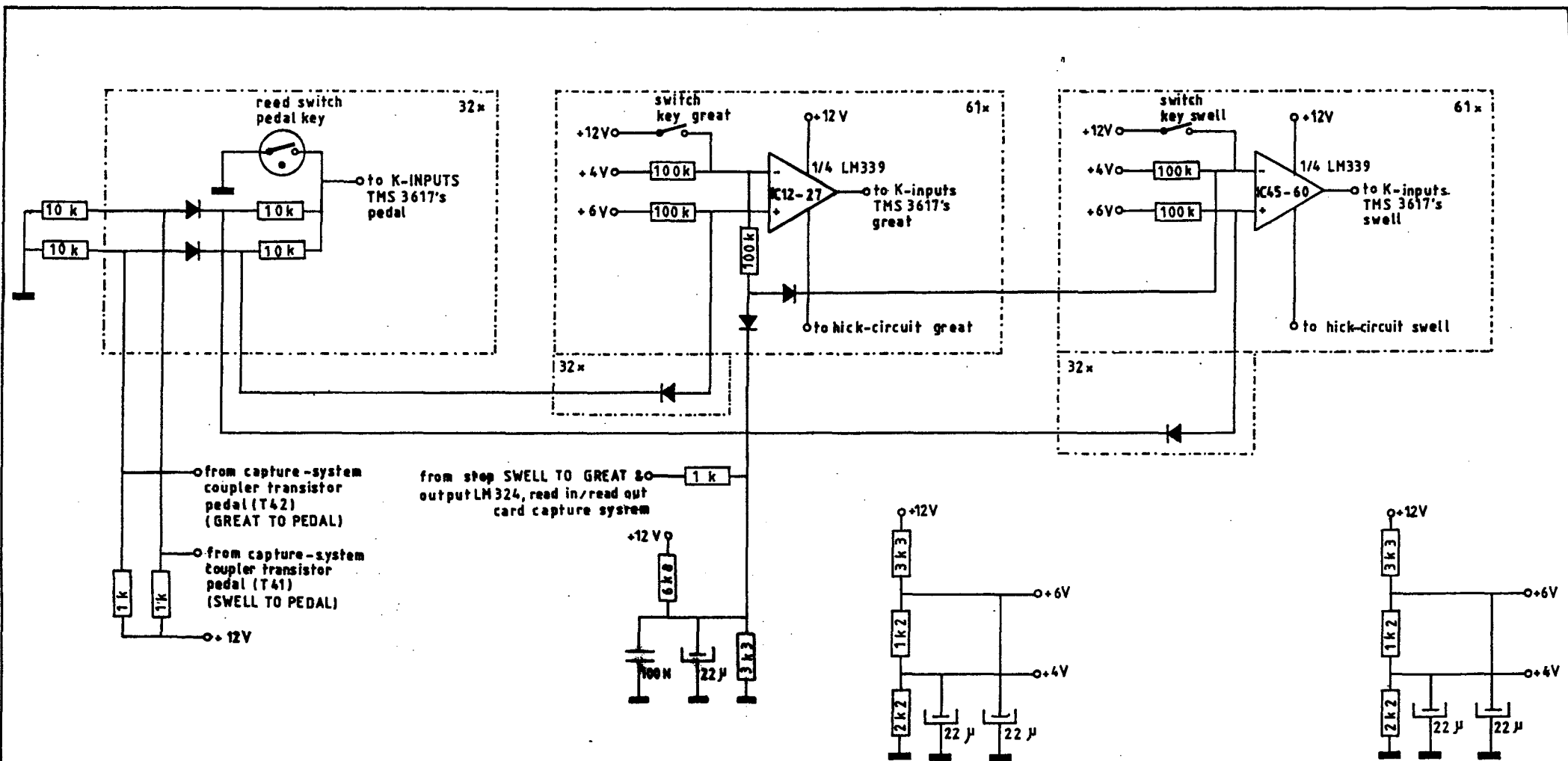


TREMULANT CIRCUIT 2x:
1x great (T16; T19; T20; T21; P18; P19)
1x swell (T24; T27; T28; T29; P23; P24)



ALL DIODES: 1N4148

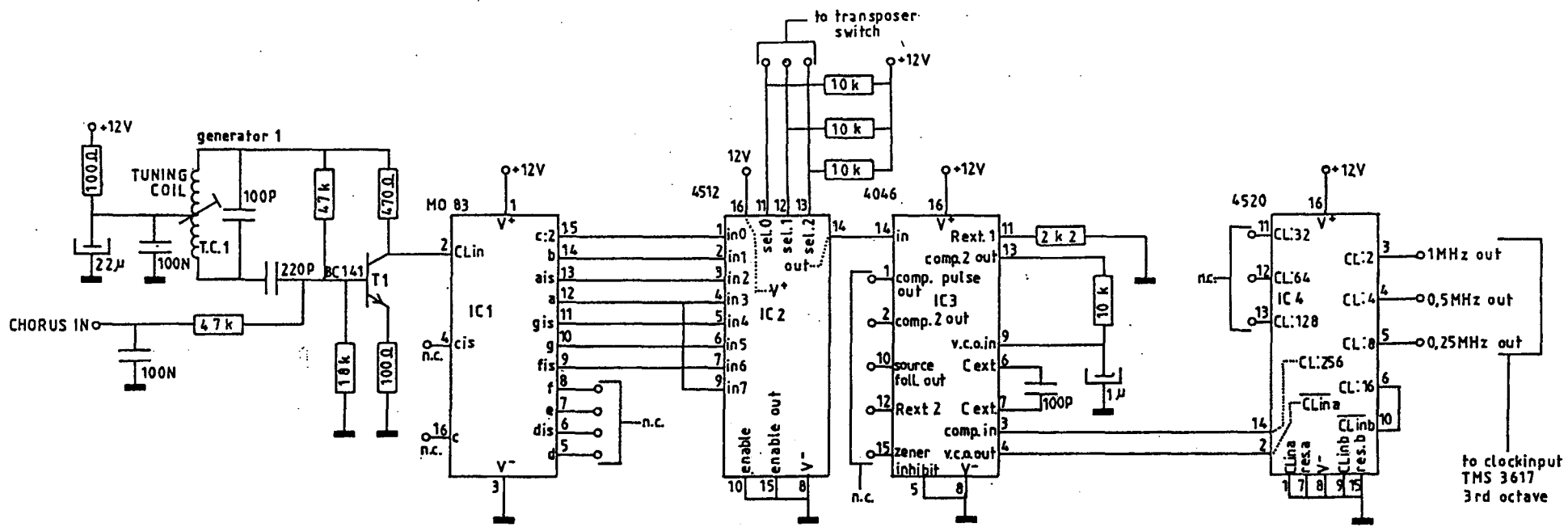
SWITCH-SECTION TRANSPOSER;			
; HICK CIRCUIT ; TREMULANT CIRCUIT ;			
EXPRESSION PEDAL CIRCUIT ; CHORUS & VOLUME			
Drawn	Date	Modified	Date
Verschoor	03-04-86		
DESIGN			
LAB.			
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COUPLER CIRCUIT

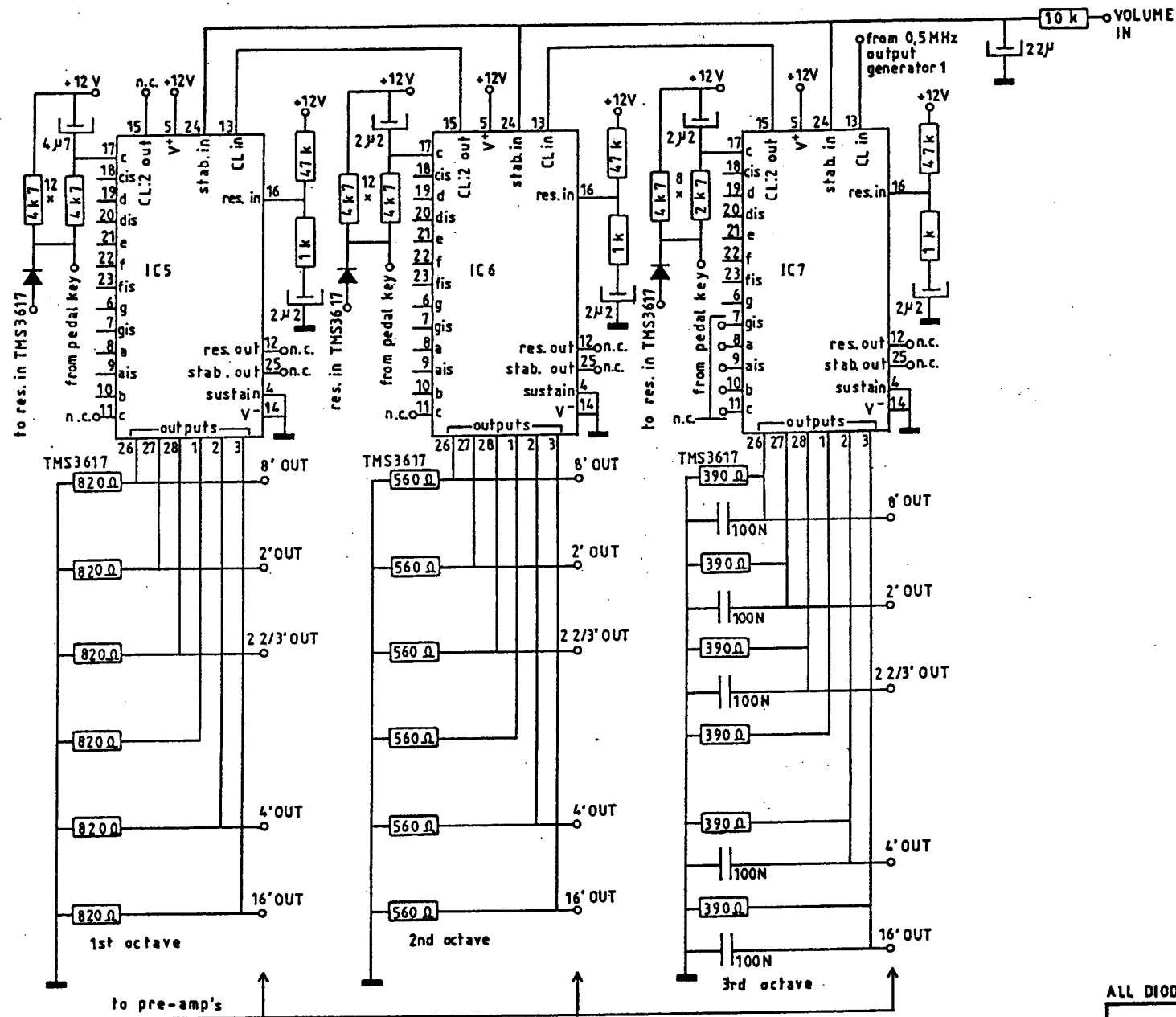
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DESIGN				
LAB.				
copyright:	JOHANNUS	morsestraat 28		page:
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GENERATOR/TRANSPOSER PEDAL			
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Verschoor	25-02-86		
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LAB			
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ORGAN
OPUS 260

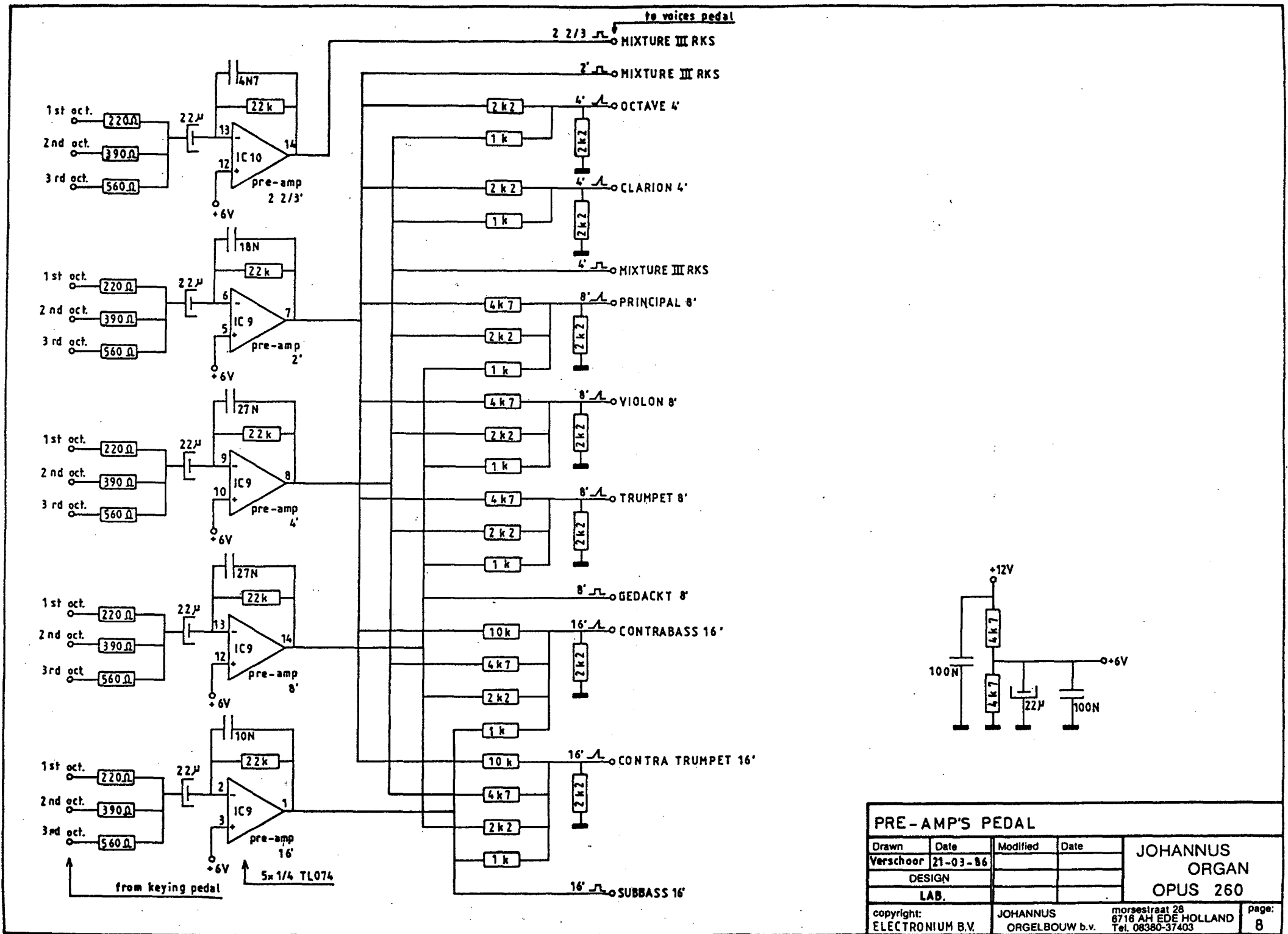
to clockinput
TMS 3617
3rd octave



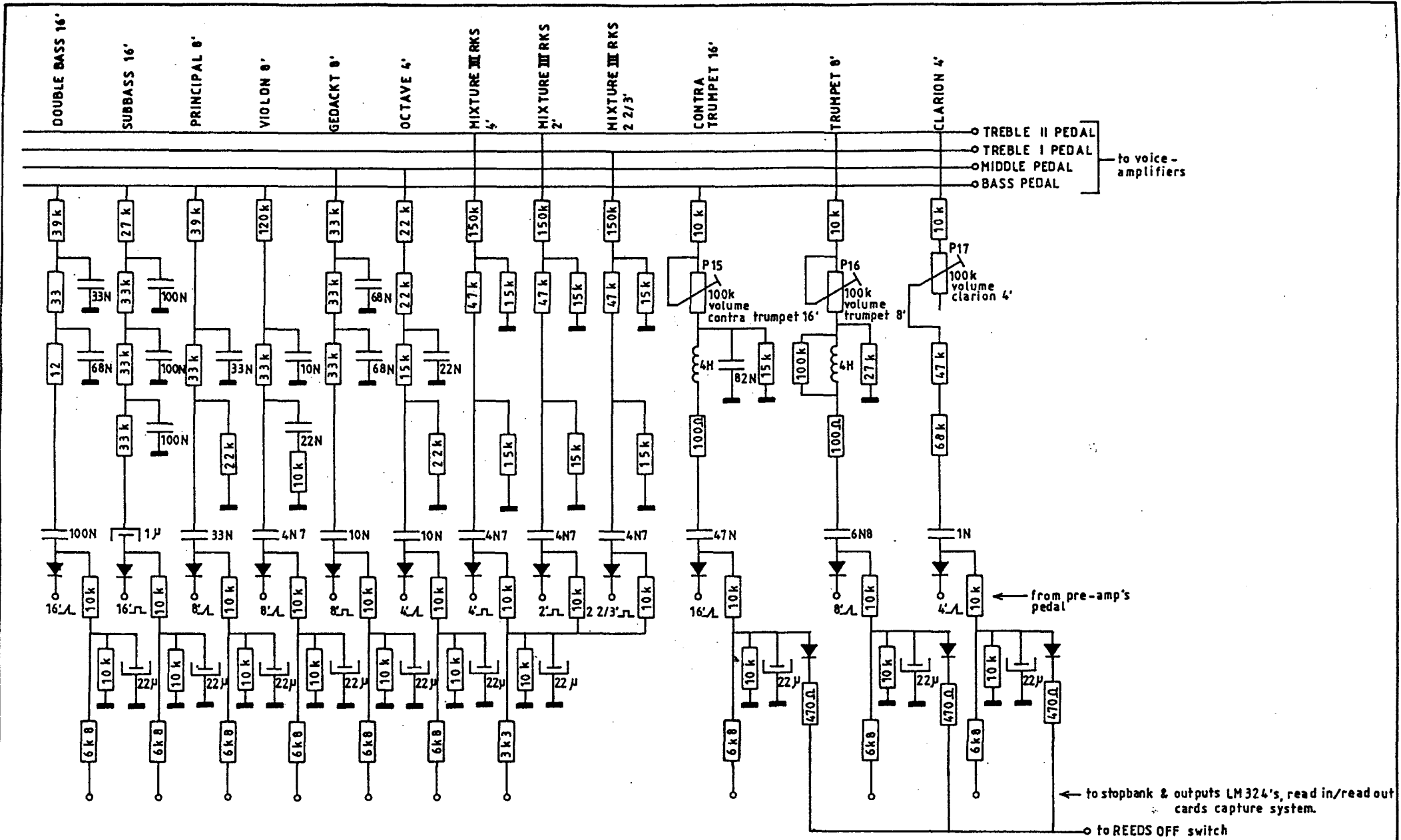
ALL DIODES: 1N4148

KEYING PEDAL

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LAB.				
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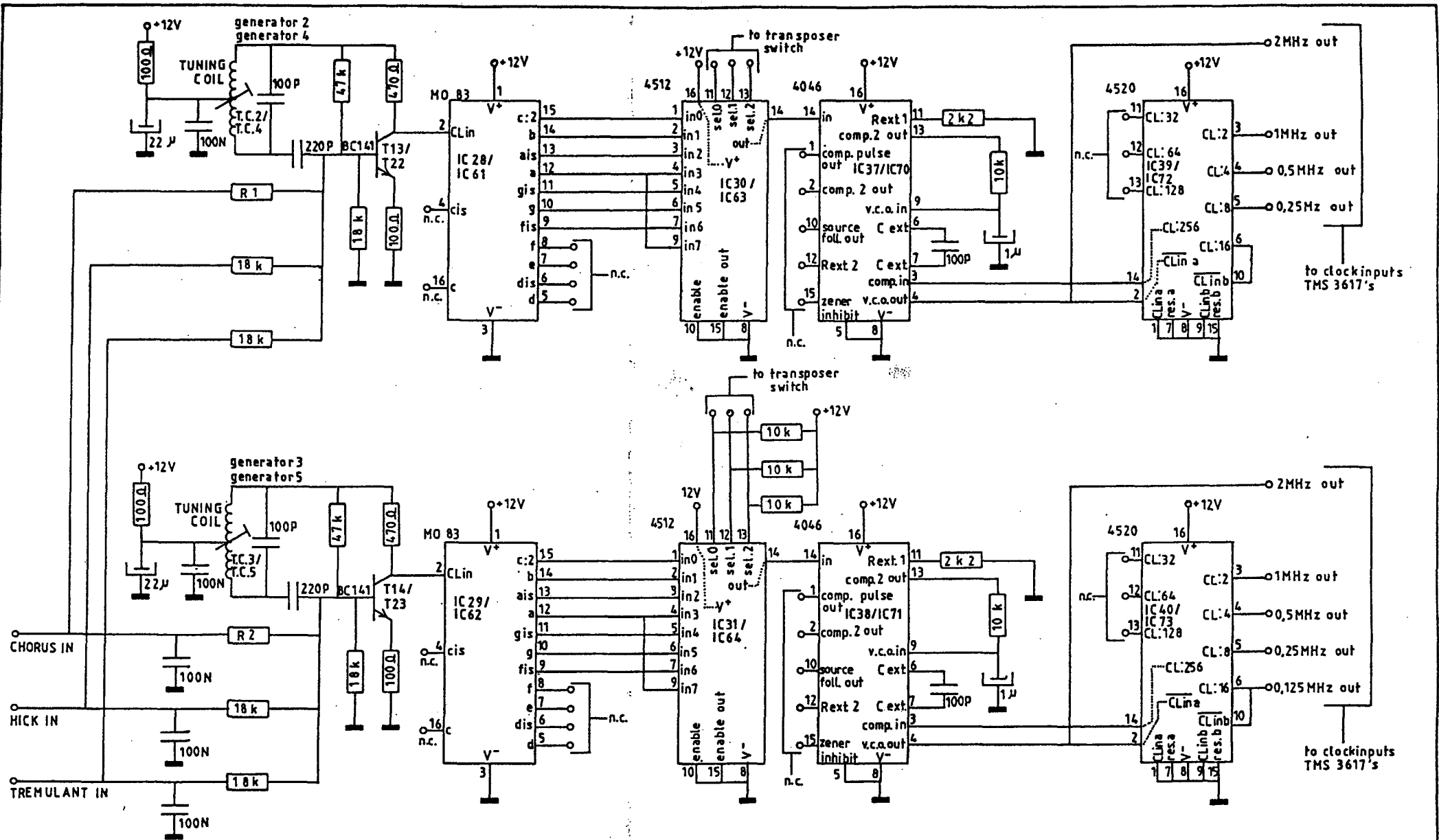


PRE-AMP'S PEDAL				JOHANNUS ORGAN OPUS 260
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DESIGN				
LAB.				
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ALL DIODES: 1N4148

VOICES PEDAL				JOHANNUS ORGAN OPUS 260
Drawn	Date	Modified	Date	
Verschuur	25-03-86			
DESIGN				
LAB.				
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ELECTRONIUM B.V.	ORGELBOUW b.v.			

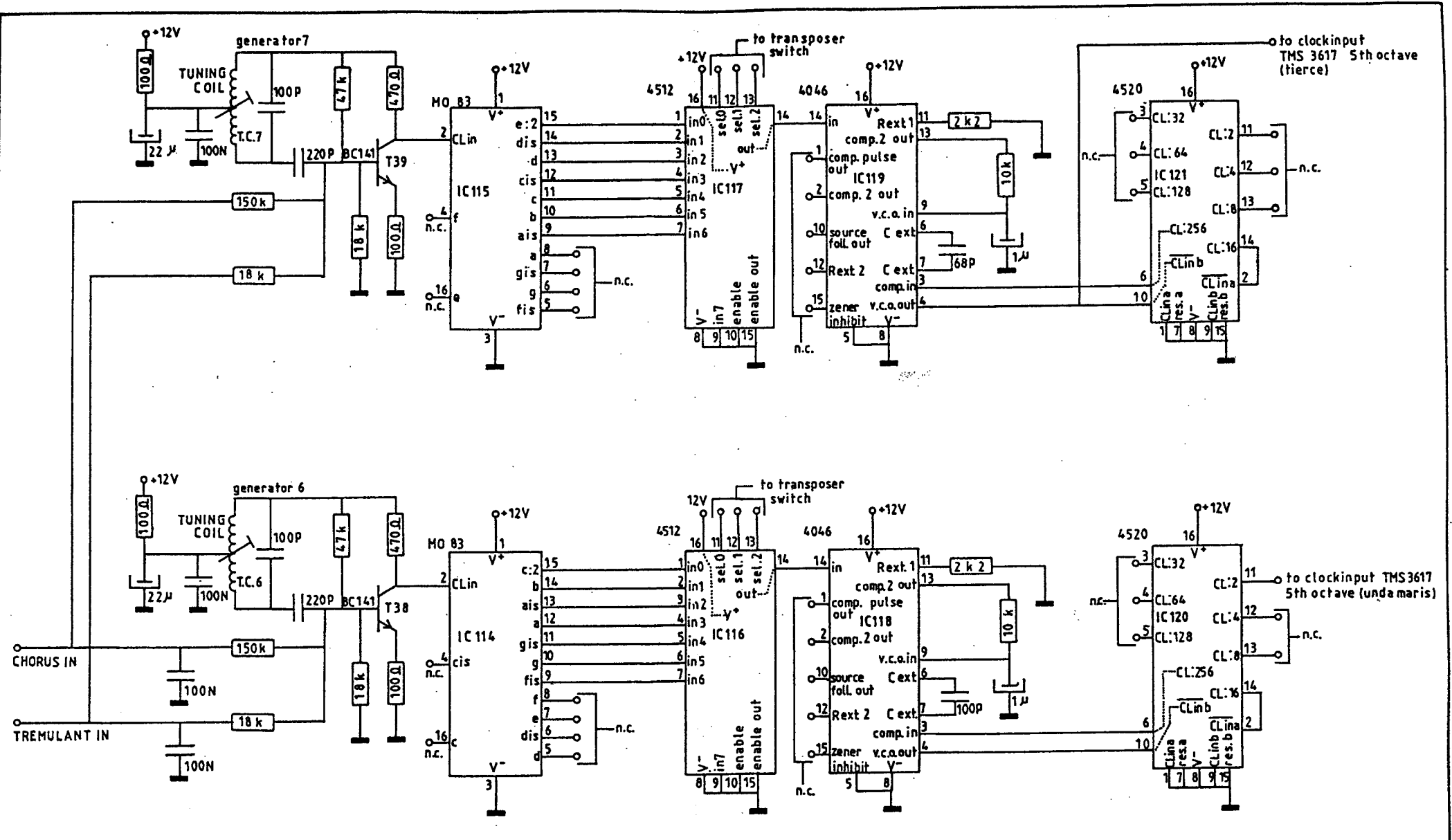


generator 2 : R1=56k
 generator 4 : R1=39k
 generator 3 : R2= —
 generator 5 : R2=100k

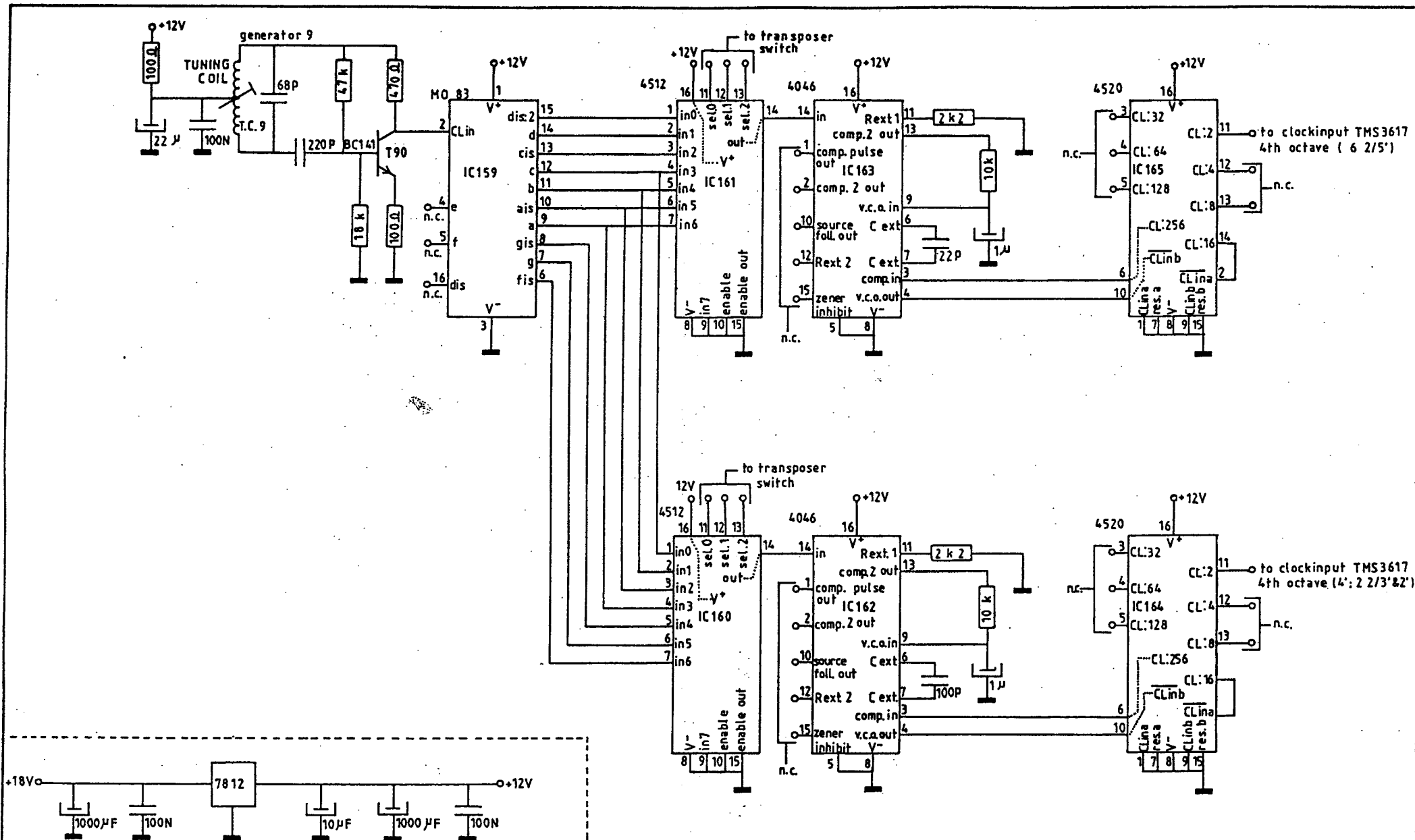
GENERATORS / TRANSPOSERS MANUALS

(1 x GREAT & 1 x SWELL)

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DESIGN				
LAB				
copyright: ELECTRONIUM B.V.	JOHANNUS ORGELBOUW b.v.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403	page: 10	



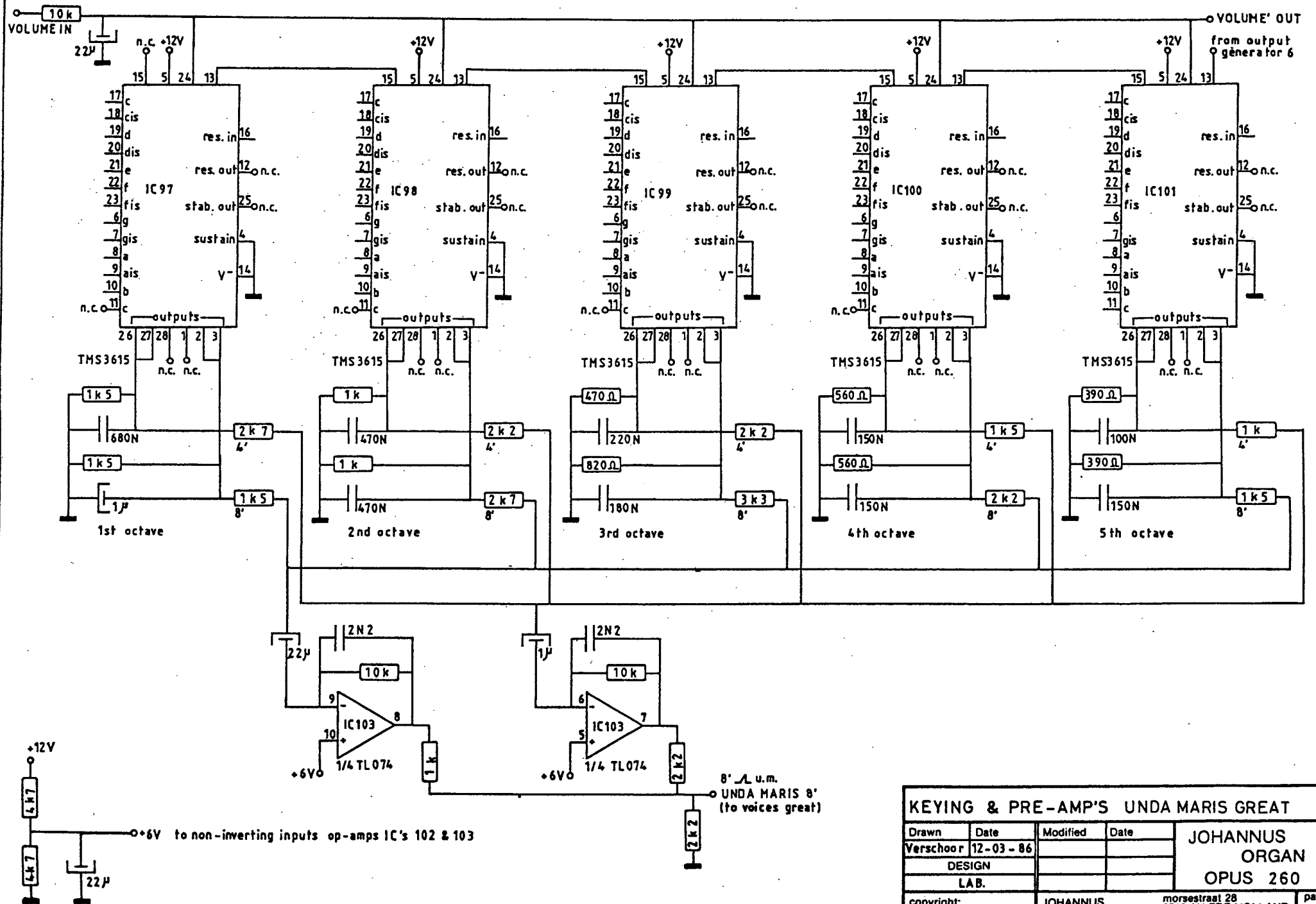
GENERATORS / TRANSPOSERS UNDA MARIS & TIERCE GREAT			
Drawn	Date	Modified	Date
Verschoor	25-02-86		
DESIGN			
LAB			
copyright:	JOHANNUS	morsestraat 28	
ELECTRONIUM B.V.	ORGELBOUW b.v.	6716 AH EDE HOLLAND	
		Tel. 08380-37403	
			page: 11



POWER SUPPLY

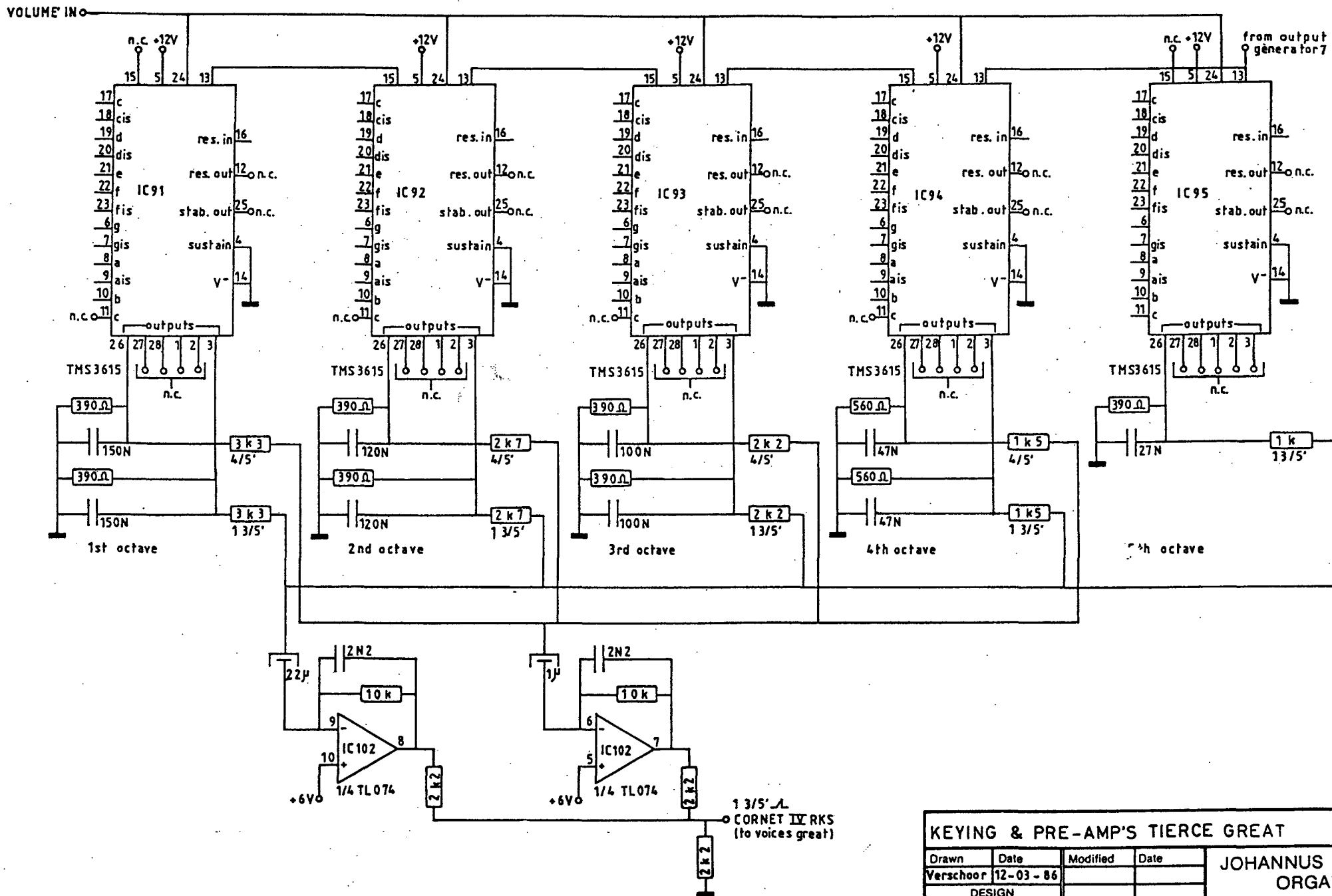
GENERATOR/TRANSPOSER &			
POWER SUPPLY CARILLON			
Drawn	Date	Modified	Date
Verschoor	25-02-86		
DESIGN			
LAB			
copyright: ELECTRONIUM B.V.		JOHANNUS ORGELOUW b.v.	morsestraat 28 8716 AH EDE HOLLAND Tel. 08380-37403
			page: 12

NOTE: the K-inputs (pin 6-11 and pin 17-23) and the reset-input (pin 16) of the LC's TMS 3615 are connected with the corresponding pins of the TMS3617's on the P.C.-board of great

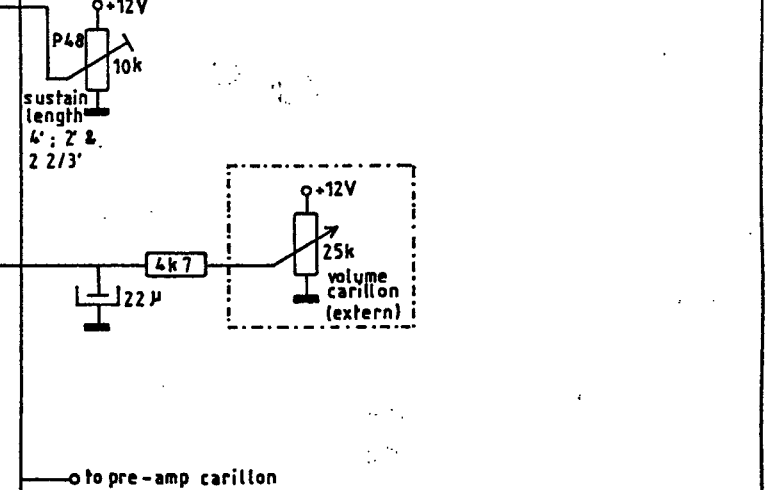
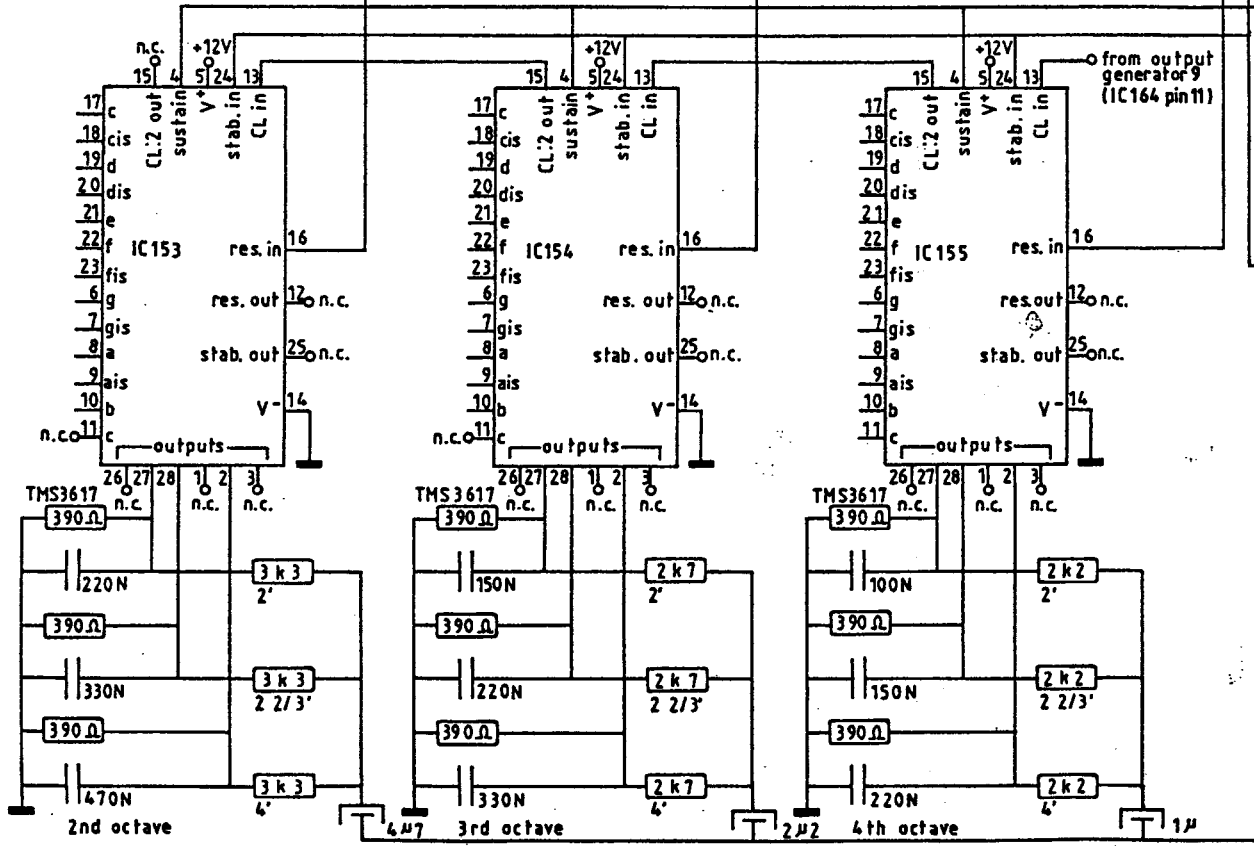
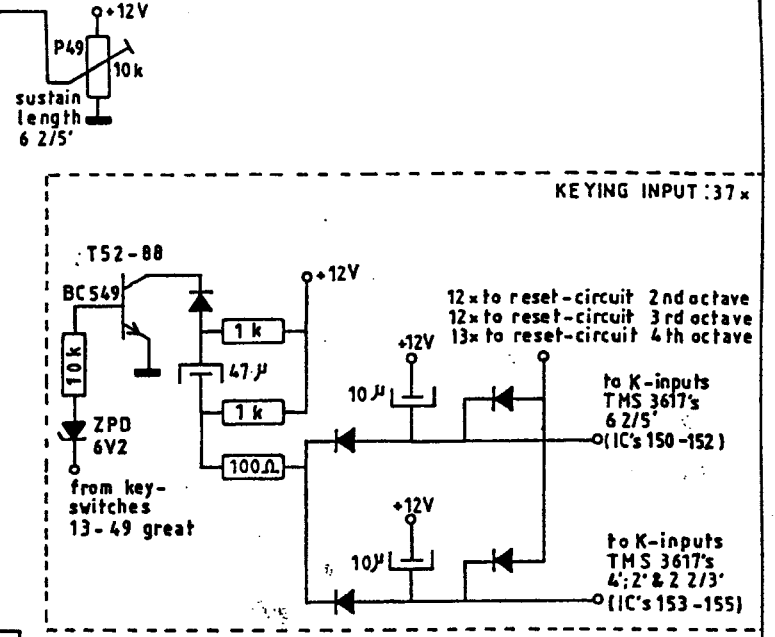
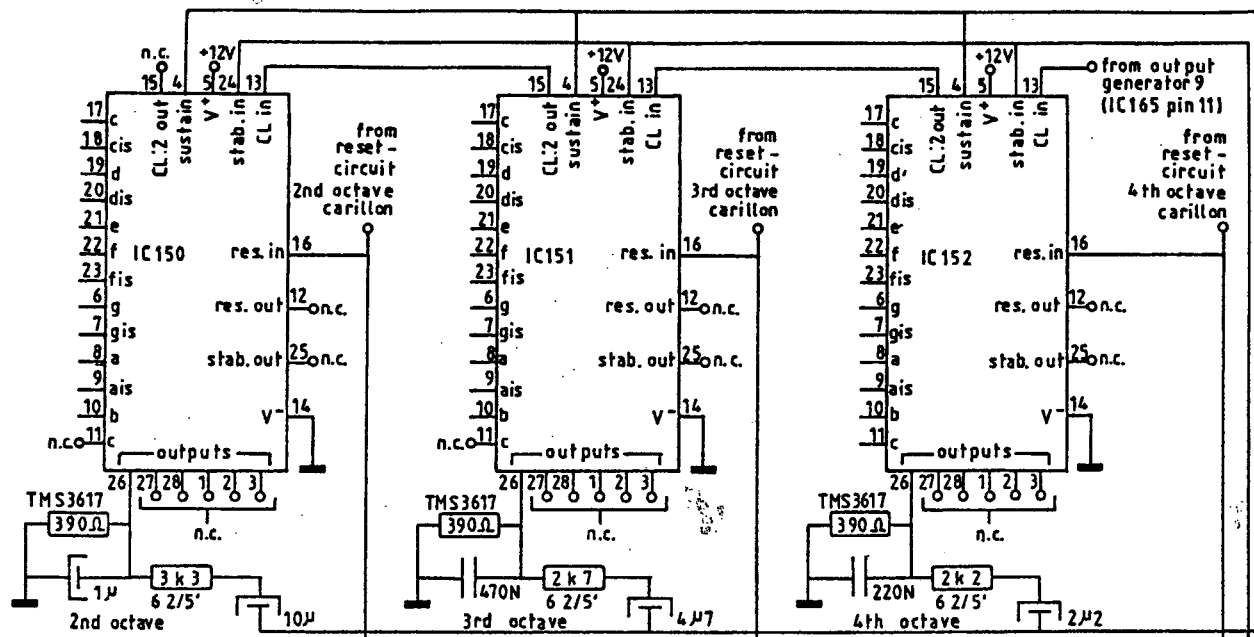


KEYING & PRE-AMP'S UNDA MARIS GREAT			
Drawn	Date	Modified	Date
Verschoor	12-03-86		
DESIGN			
L.A.B.			
copyright:		JOHANNUS	
ELECTRONIUM B.V.		ORGELBOUW b.v.	
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		Tel. 08380-37403	
			page: 13

NOTE: the K-inputs (pin 6-11 and pin 17-23) and the reset-input (pin 16) of the I.C.'s TMS 3615 are connected with the corresponding pins of the TMS3617's on the P.C.-board of great

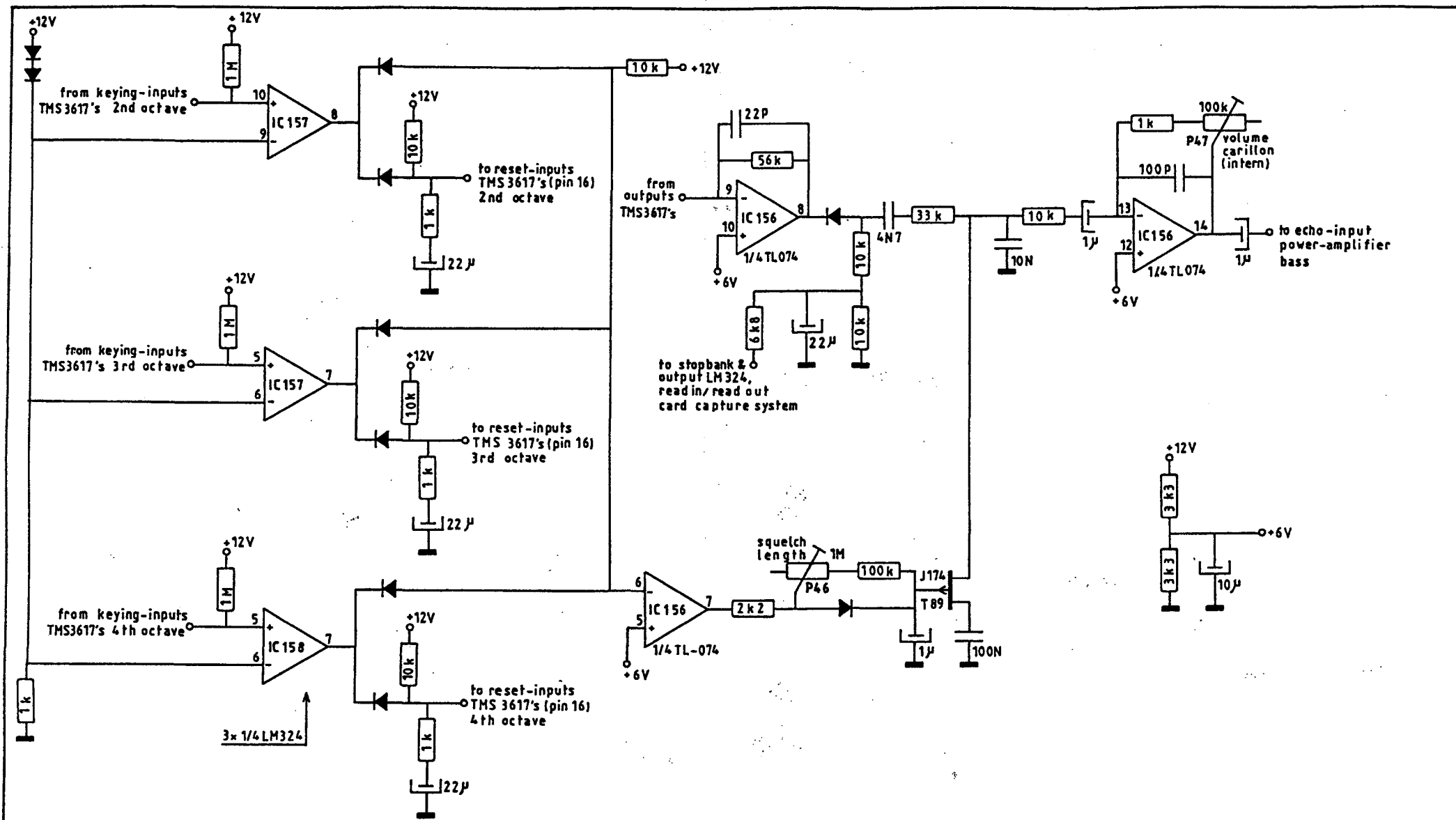


KEYING & PRE-AMP'S TIERCE GREAT			
Drawn	Date	Modified	Date
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DESIGN			
LAB.			
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ELECTRONIUM B.V.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403		14



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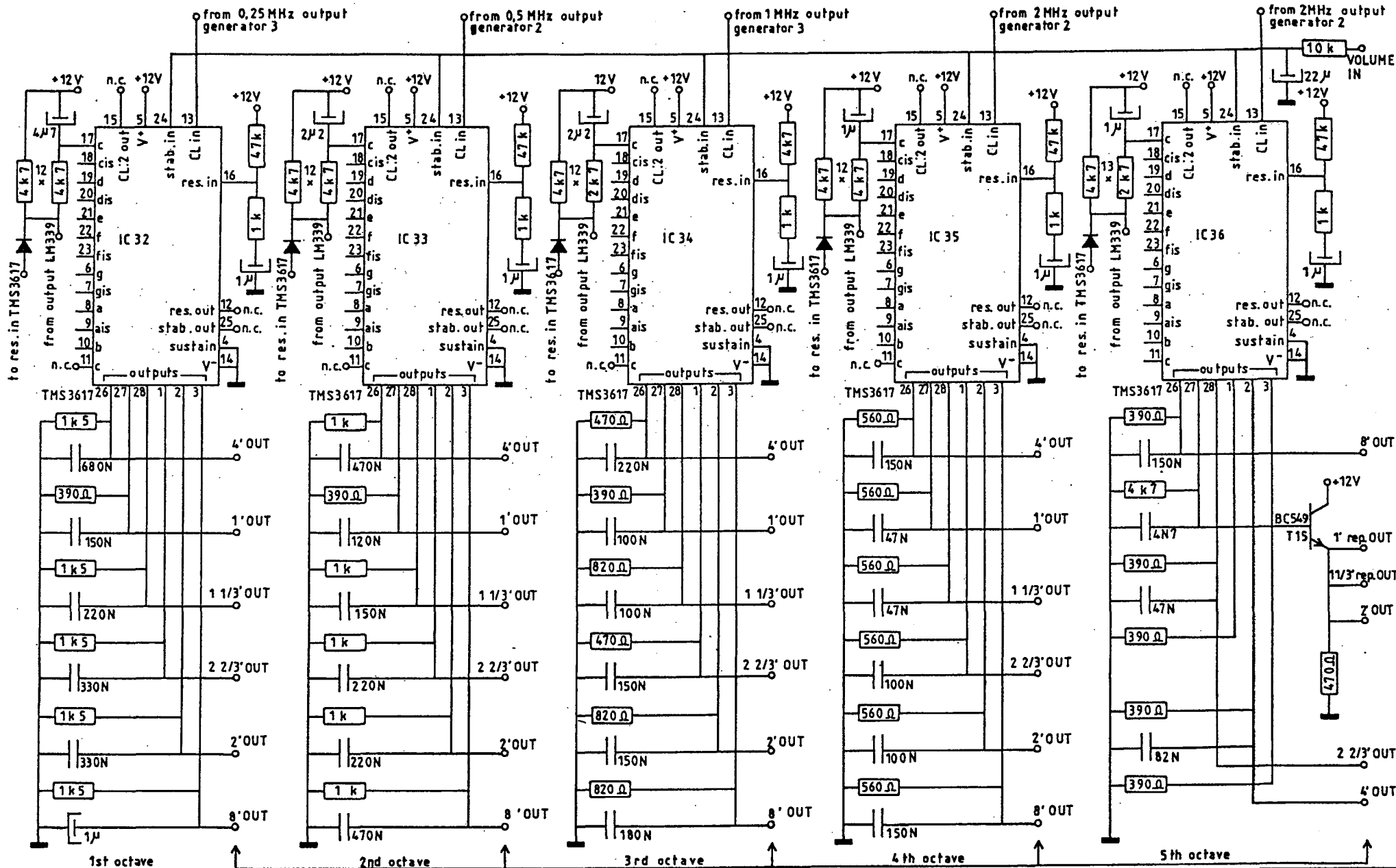
KEYING CARILLON				JOHANNUS ORGAN OPUS 260
Drawn	Date	Modified	Date	
Verschoor	14-03-86			
DESIGN				
LAB.				
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3x 1/4 LM324

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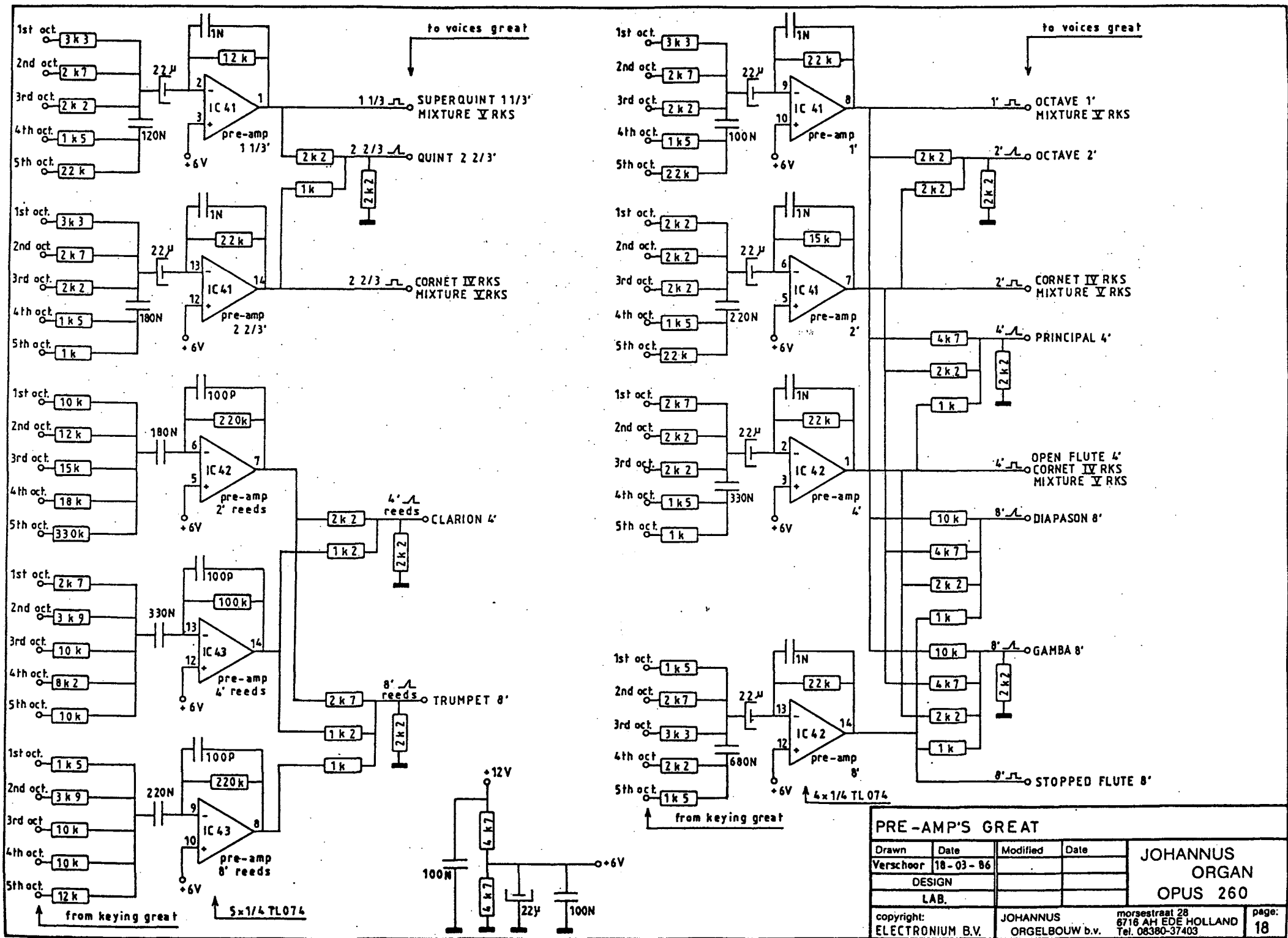
PRE-AMP'S; RESET/SQUELCH-CIRCUIT &			
VOICE CARILLON			
Drawn	Date	Modified	Date
Verschoor	17-03-86		
DESIGN			
LAB.			
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ELECTRONIUM B.V.	ORGELBOUW b.v.	6716 AH EDE HOLLAND	16
		Tel. 08380-37403	



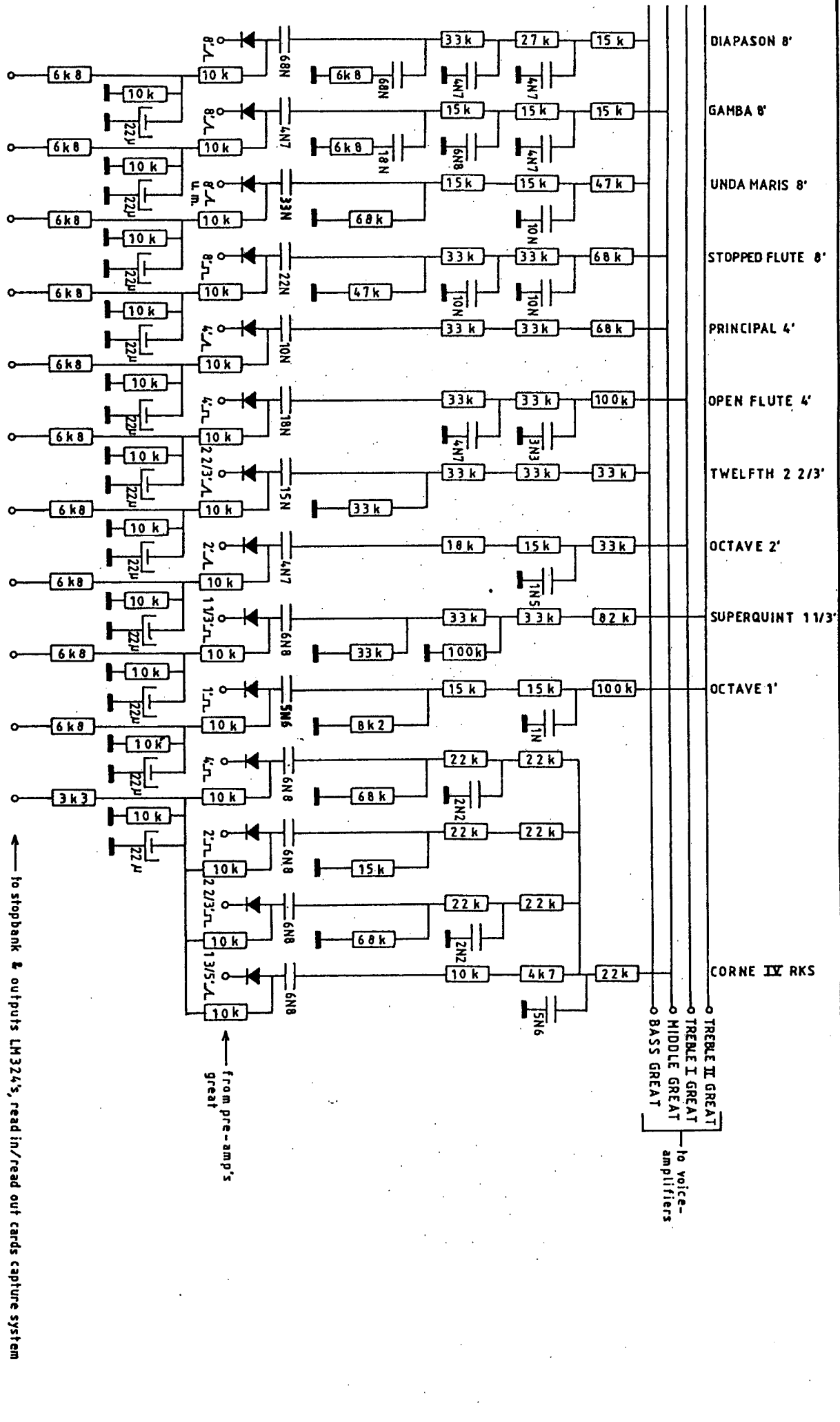
ALL DIODES: 1N4148

KEYING GREAT

Drawn	Date	Modified	Date	JOHANNUS ORGAN OPUS 260
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DESIGN				
LAB.				
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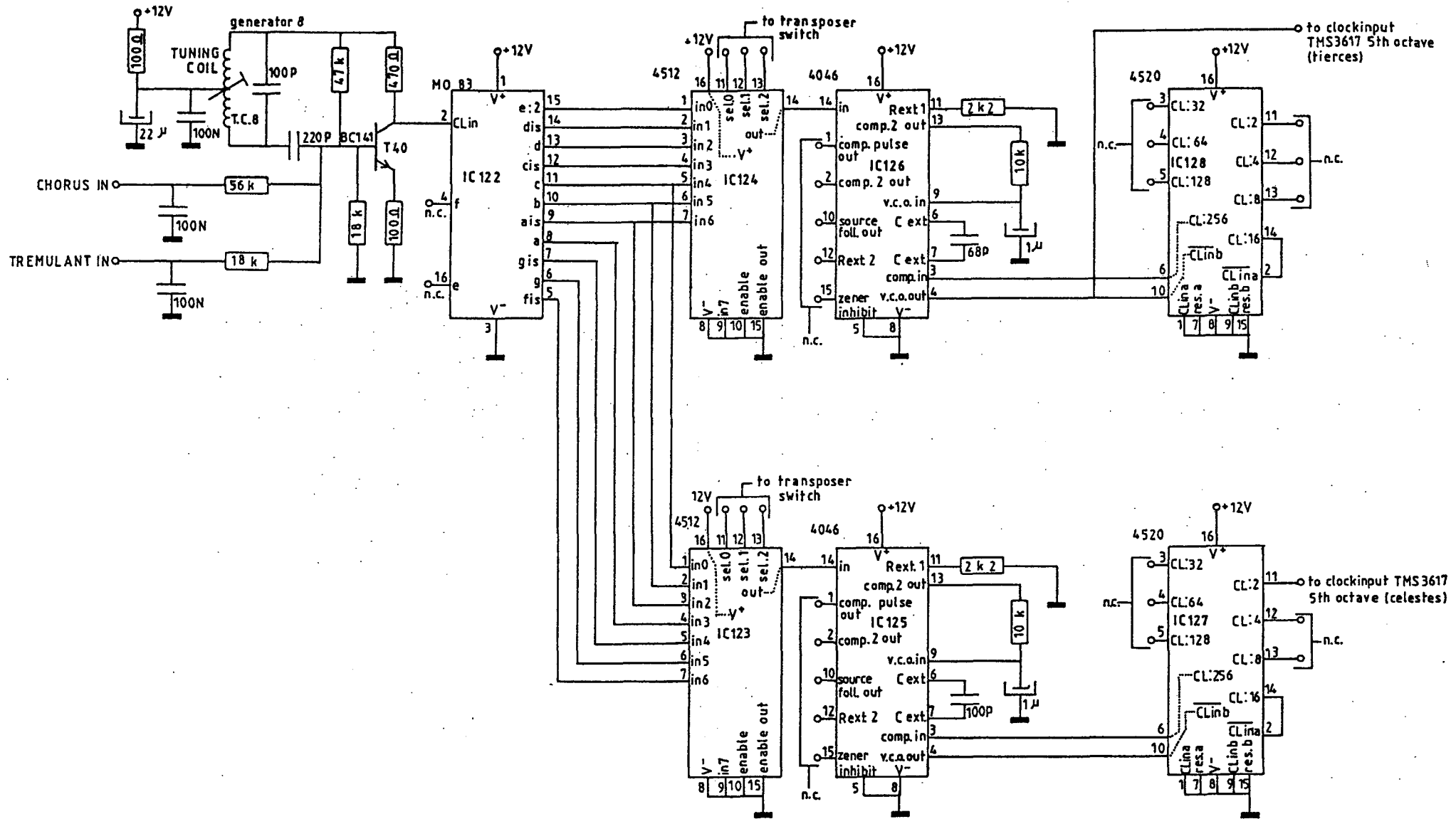
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Drawn	Date	Modified	Date	
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DESIGN				
LAB.				
copyright:	JOHANNUS ORGELBOUW b.v.			page: 18
ELECTRONIUM B.V.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403			



ALL DIODES: 1N4148

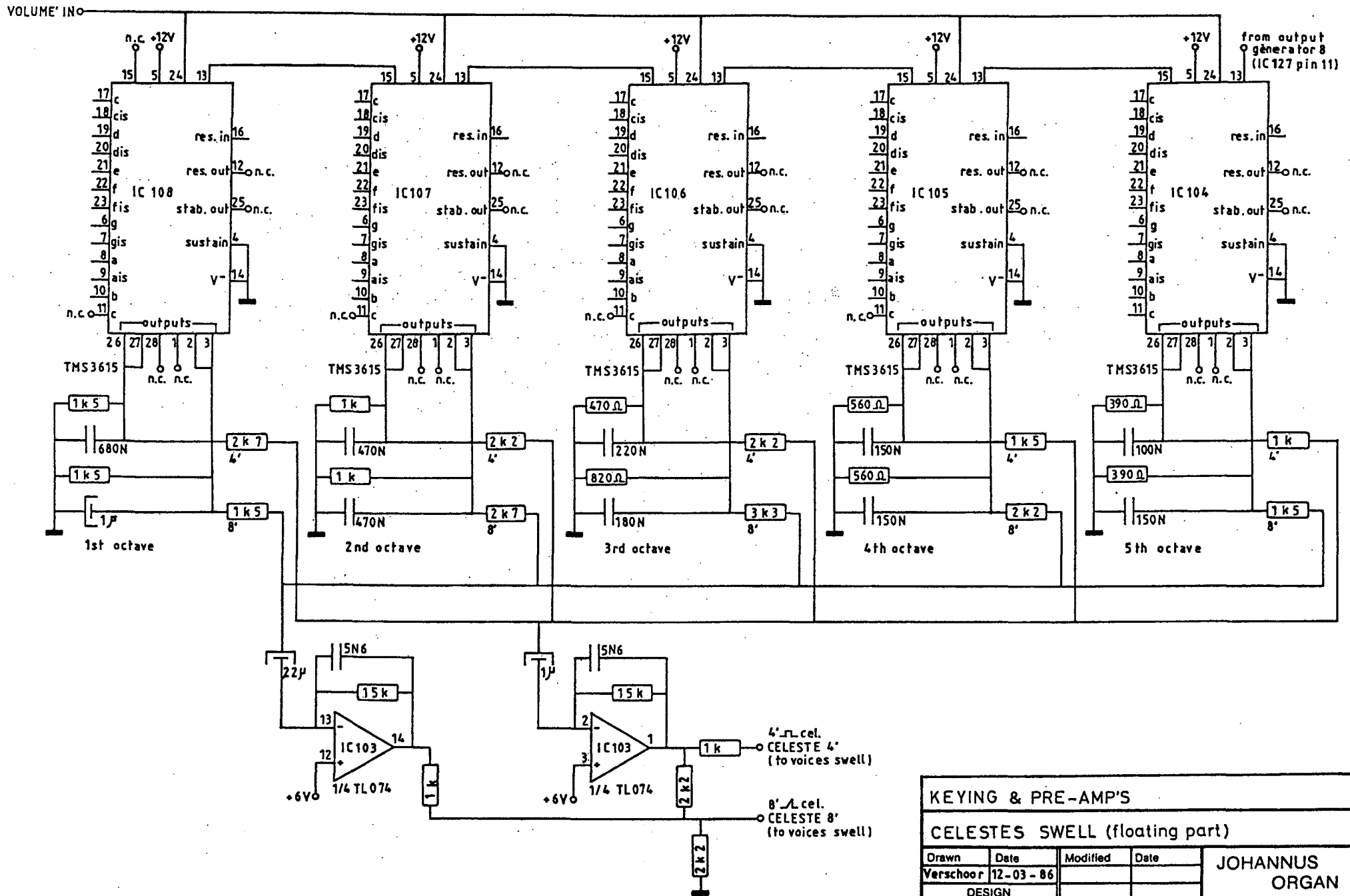
VOICES GREAT (part 11)

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LAB.			
JOHANNUS ORGAN		OPUS 260	
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		Tel. 08380-37403	



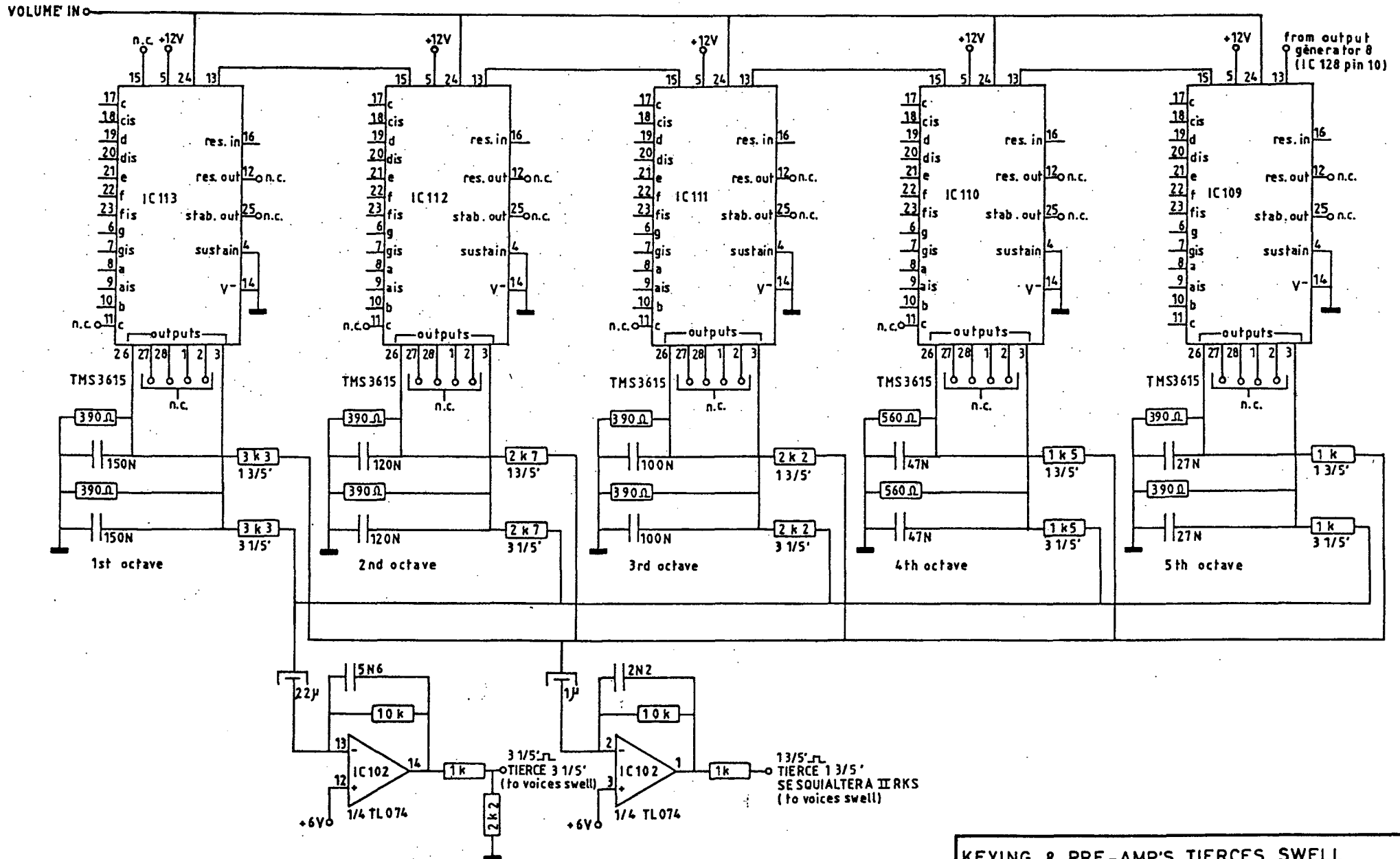
GENERATOR/TRANSPOSER CELESTES (floating parts) & TIERCES SWELL			
Drawn	Date	Modified	Date
Verschoor	25-02-86		
DESIGN			
LAB			
copyright:	JOHANNUS ELECTRONIUM B.V.	JOHANNUS ORGELBOUW b.v.	morsestraat 28 6716 AH EDE HOLLAND Tel. 08380-37403
			page: 21

NOTE: the K-inputs (pin 6-11 and pin 17-23) and the reset-input (pin 16) of the L.C.'s TMS 3615 are connected with the corresponding pins of the TMS3617's on the P.C.-board of swell



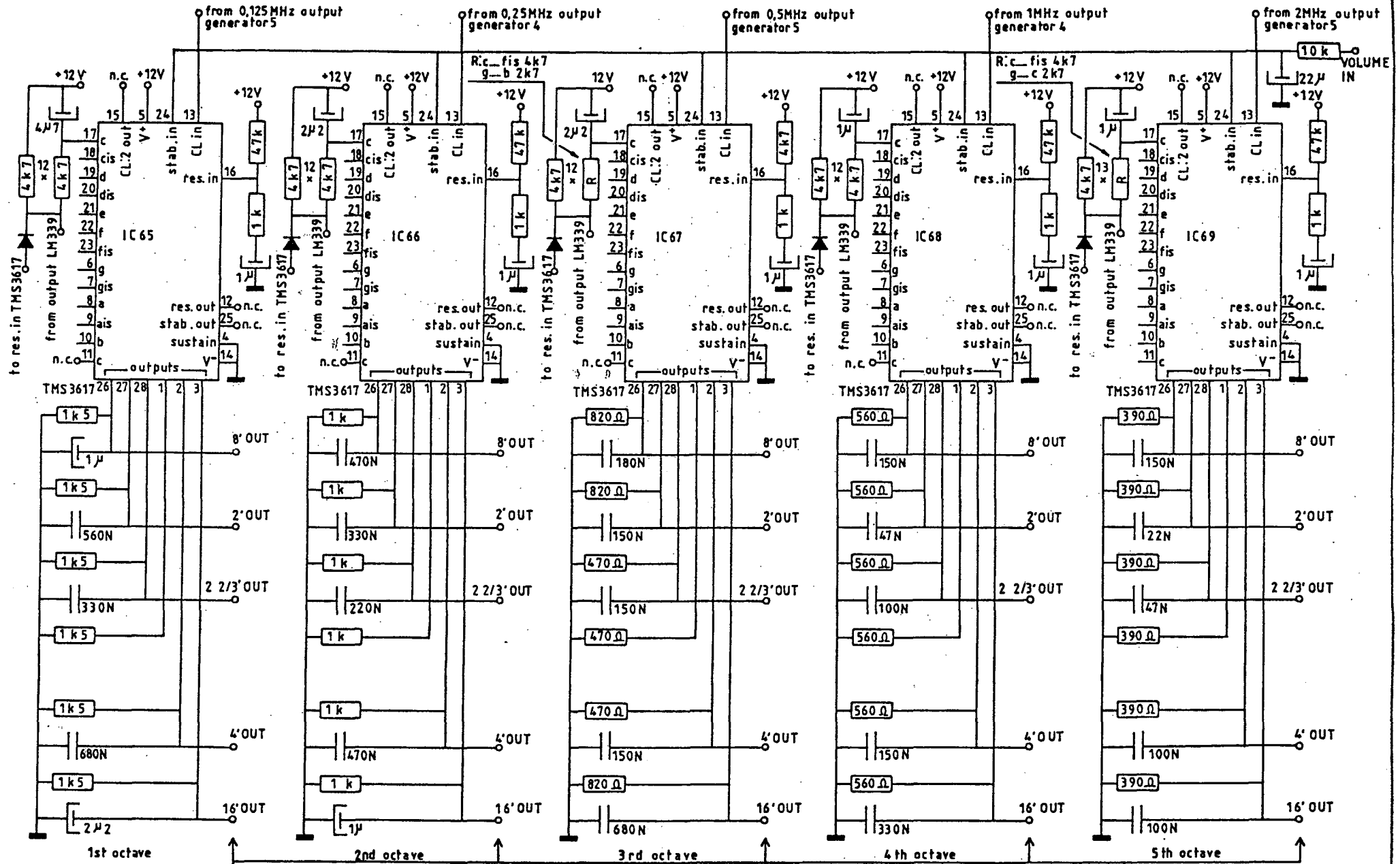
KEYING & PRE-AMP'S			
CELESTES SWELL (floating part)			
Drawn	Date	Modified	Date
Verschoor	12-03-86		
DESIGN			
LAB.			
copyright:	JOHANNUS	morsestraat 28	page:
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		Tel. 08380-37403	

NOTE: the K-inputs (pin 6-11 and pin 17-23) and the reset-input (pin 16) of the I.C.'s TMS 3615 are connected with the corresponding pins of the TMS3617's on the P.C.-board of swell



KEYING & PRE-AMP'S TIERCES SWELL

Drawn	Date	Modified	Date	JOHANNUS ORGAN OPUS 260
Verschoor	12-03-86			
DESIGN				
LAB.				
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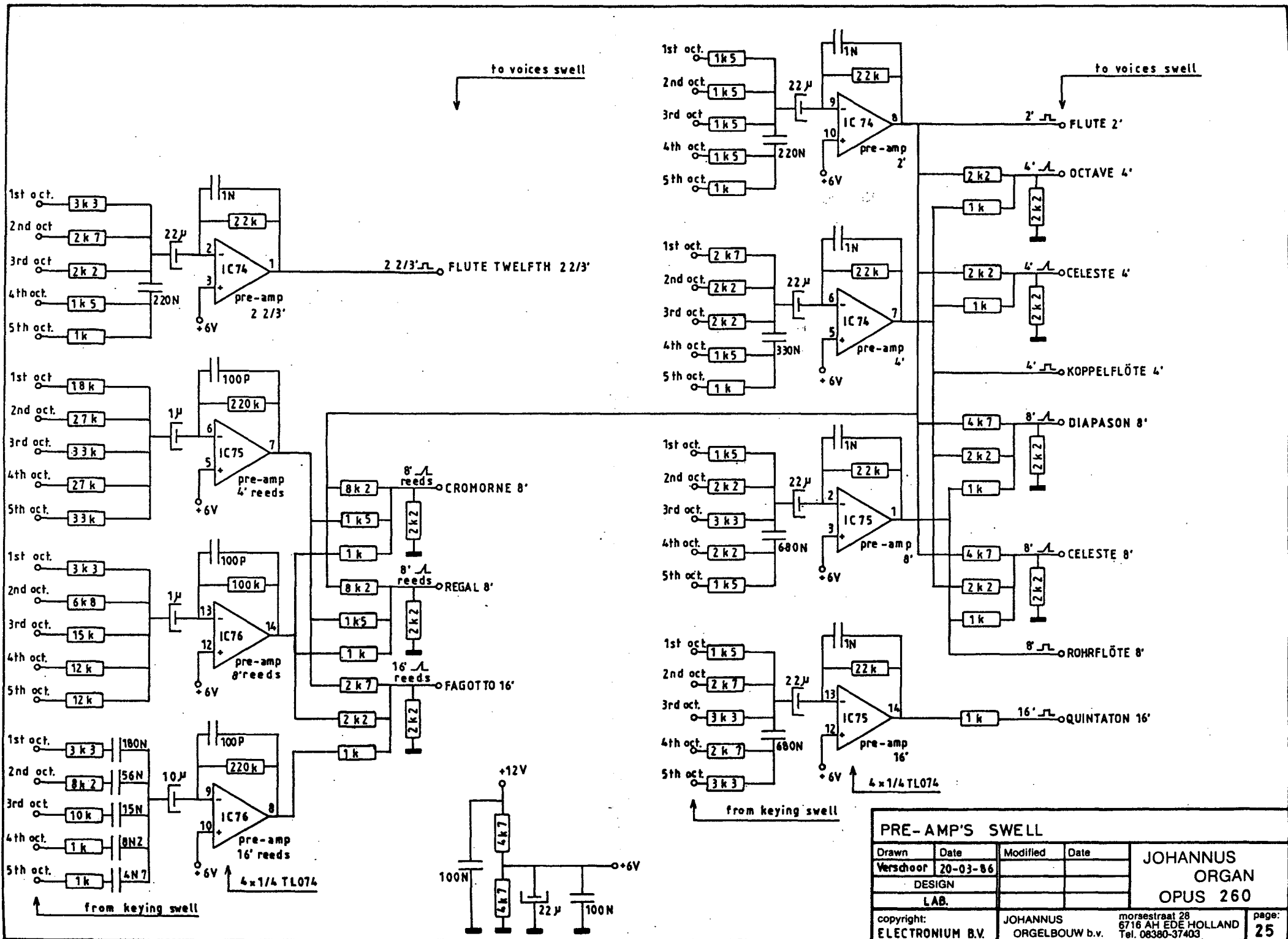


ALL DIODES: 1N4148

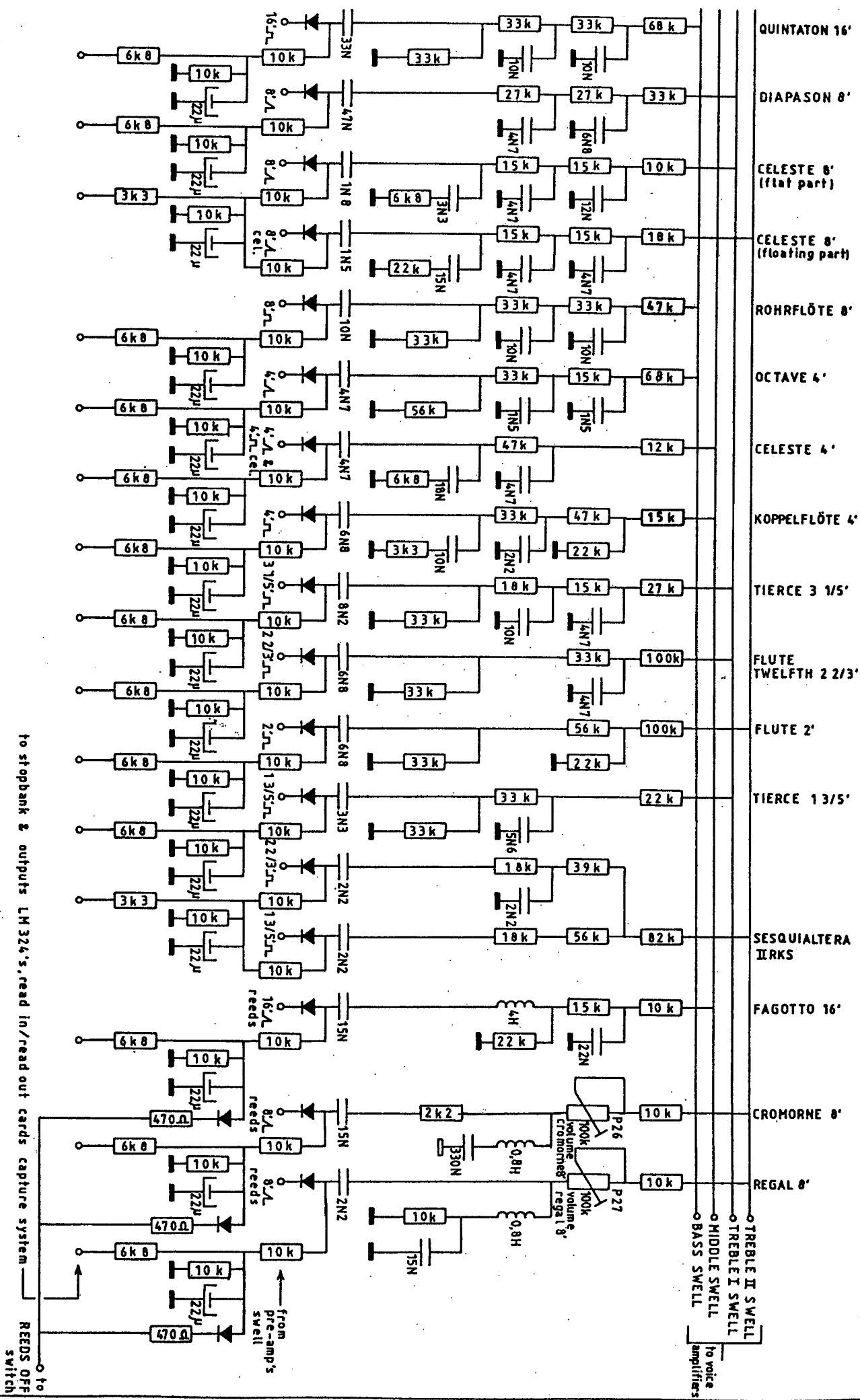
KEYING SWELL

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			page: 24

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ORGAN
OPUS 260



PRE-AMP'S SWELL				JOHANNUS ORGAN OPUS 260
Drawn	Date	Modified	Date	
Verschoor	20-03-86			
DESIGN				
LAB.				
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ELECTRONIUM B.V.	ORGELBOUW b.v.	6716 AH EDE HOLLAND		25
		Tel. 08380-37403		



ALL DIODES: 1N4148

VOICES SWELL

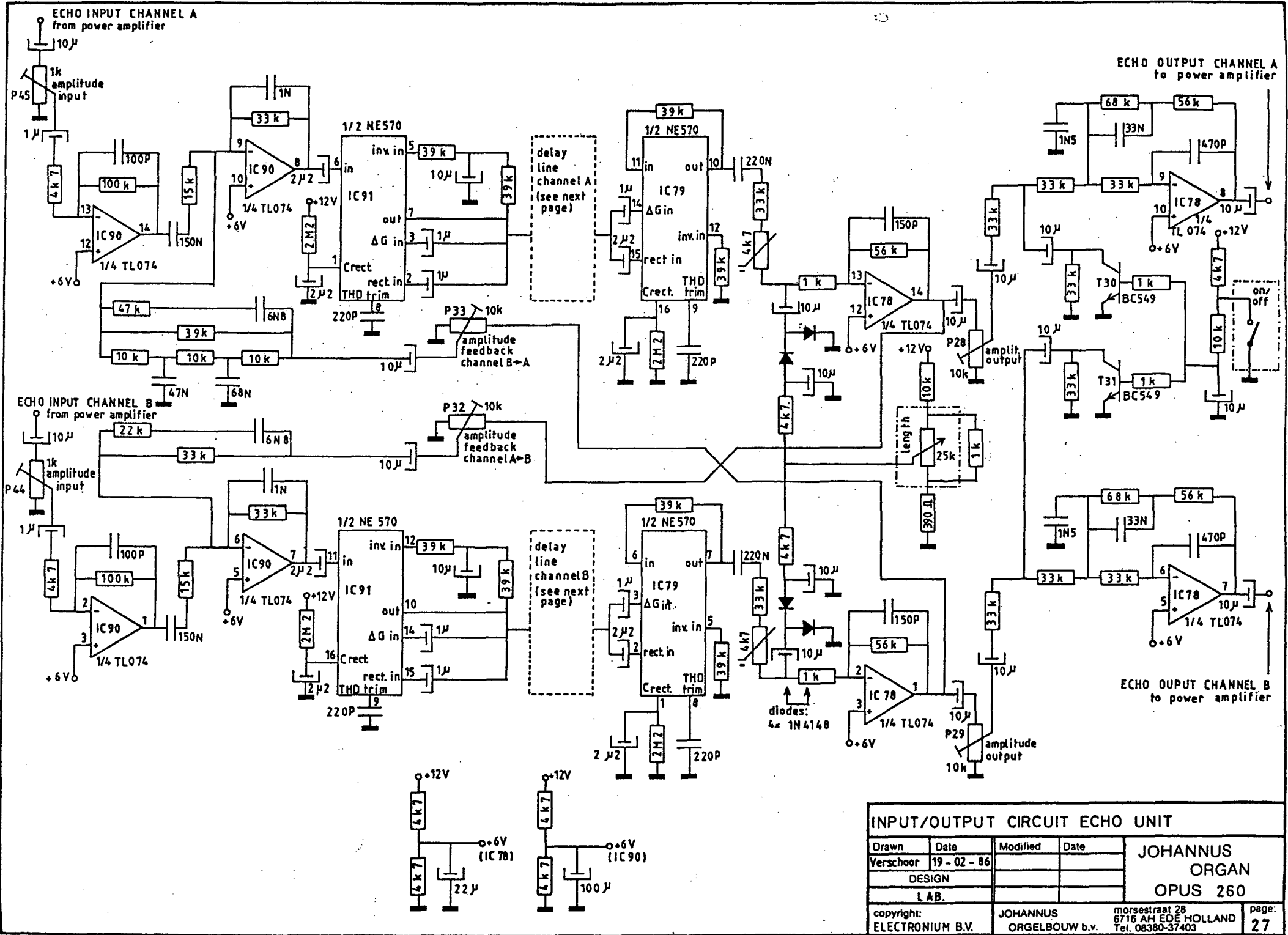
JOHANNUS
ORGAN
OPUS 260

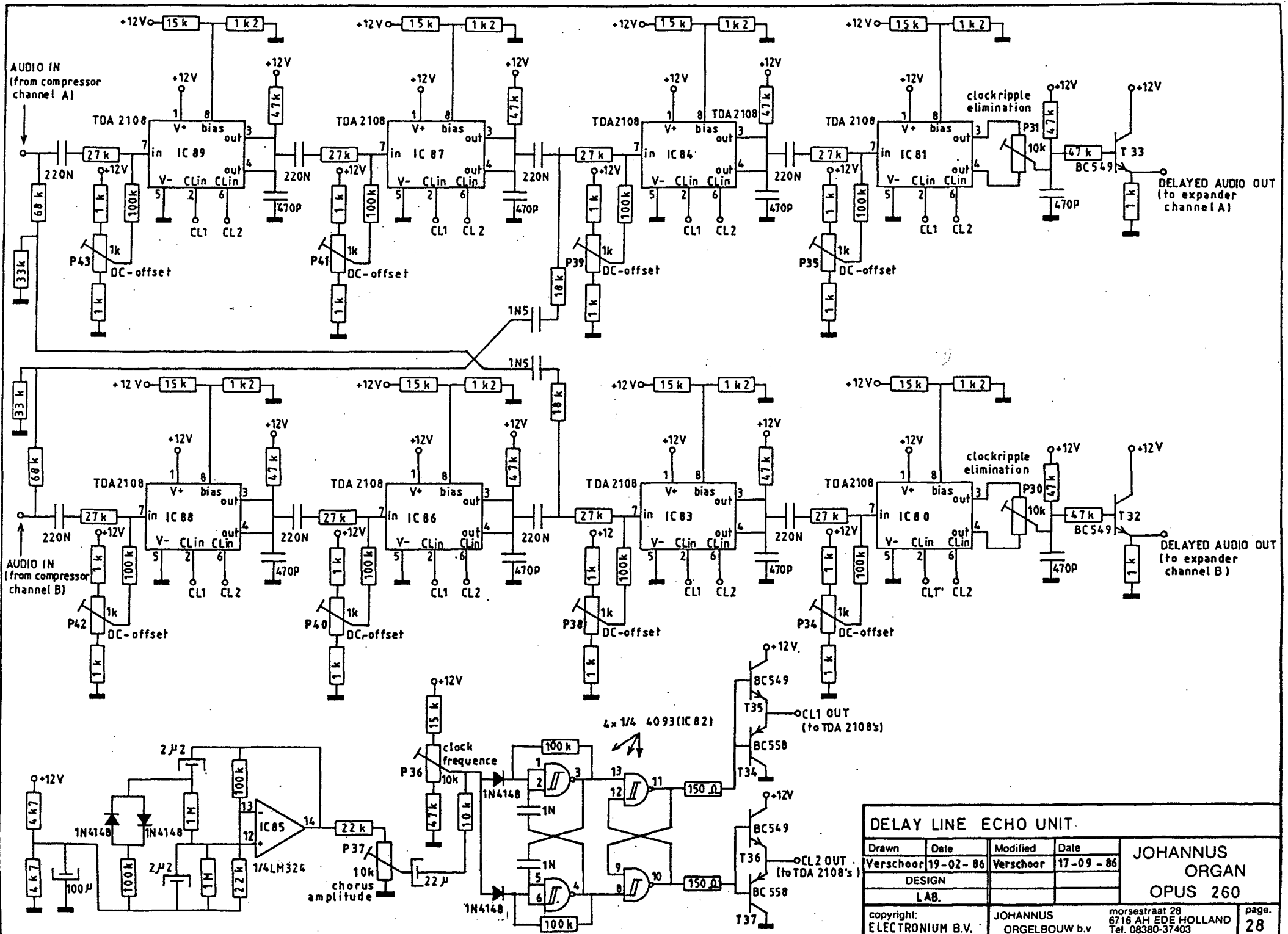
to stopbank & outputs LM324's, read in/read out cards capture system

REEDS OFF switch

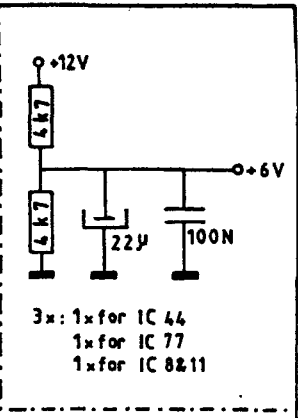
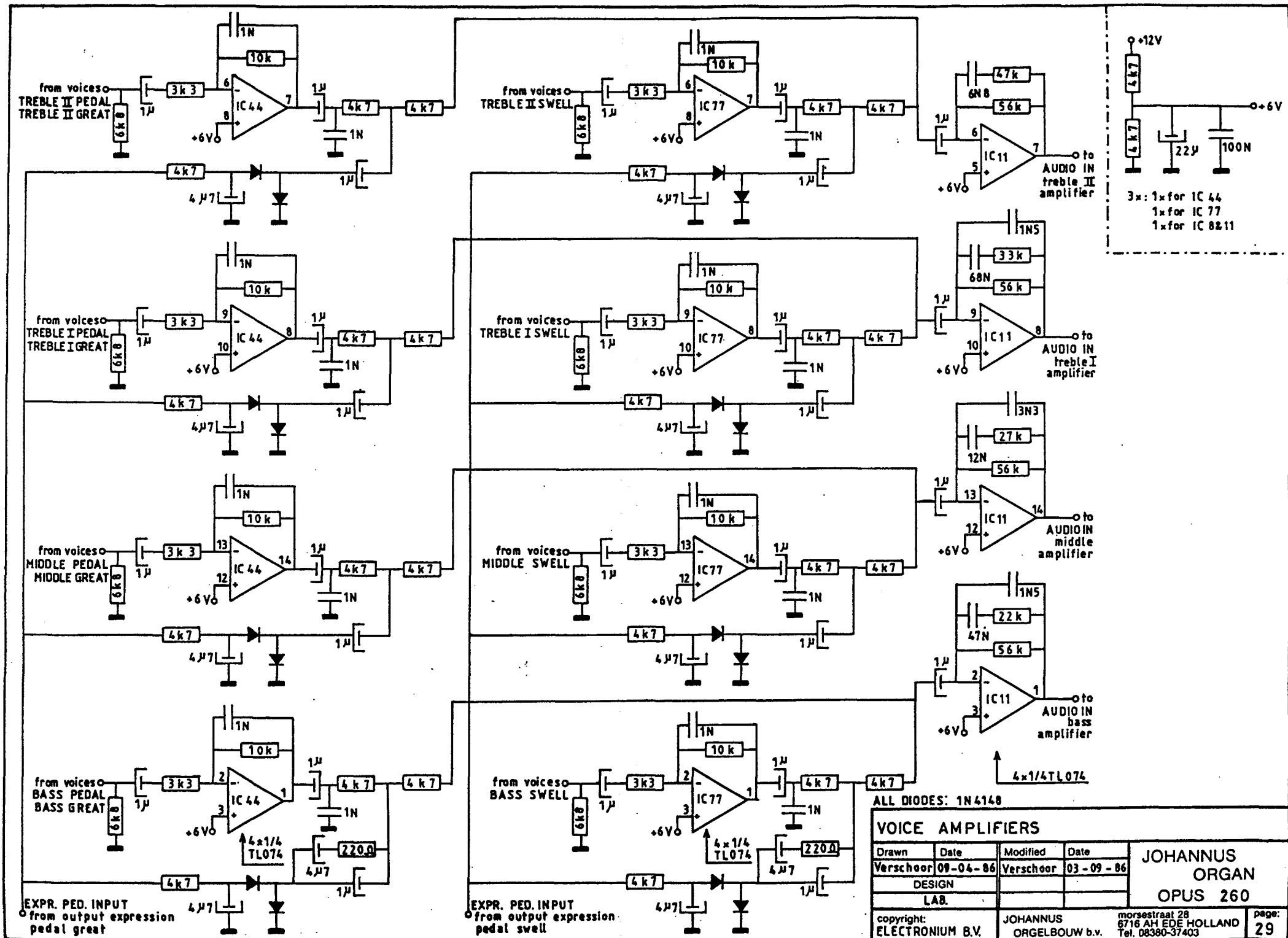
TREBLE II SWELL
TREBLE I SWELL
MIDDLE SWELL
BASS SWELL

Drawn	Date	Modified	Date
Verschoor	26-03-86		
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page:			26





DELAY LINE ECHO UNIT			
Drawn	Date	Modified	Date
Verschoor	19-02-86	Verschoor	17-09-86
DESIGN			
LAB.			
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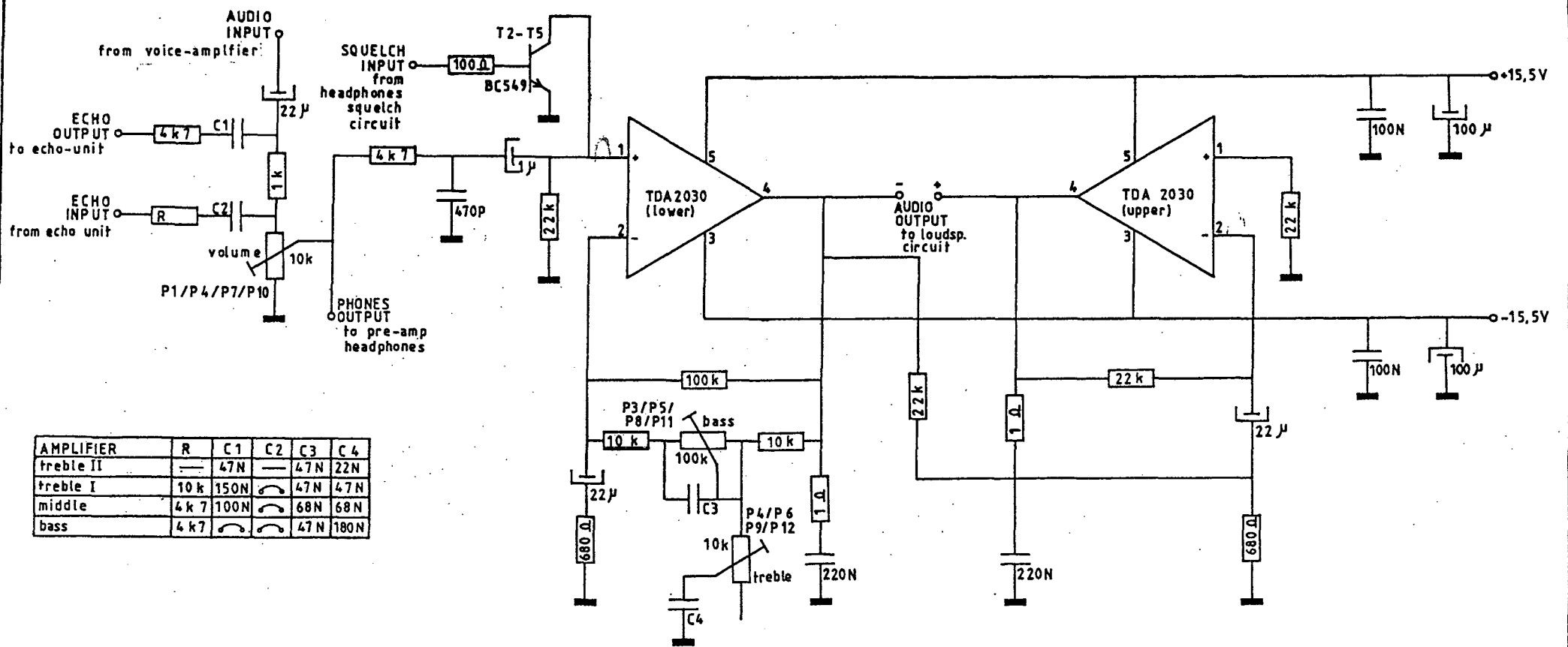
3x: 1x for IC 44
 1x for IC 77
 1x for IC 8211

ALL DIODES: 1N4148

VOICE AMPLIFIERS

Drawn	Date	Modified	Date
Verschoor	09-04-86	Verschoor	03-09-86
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LAB.			
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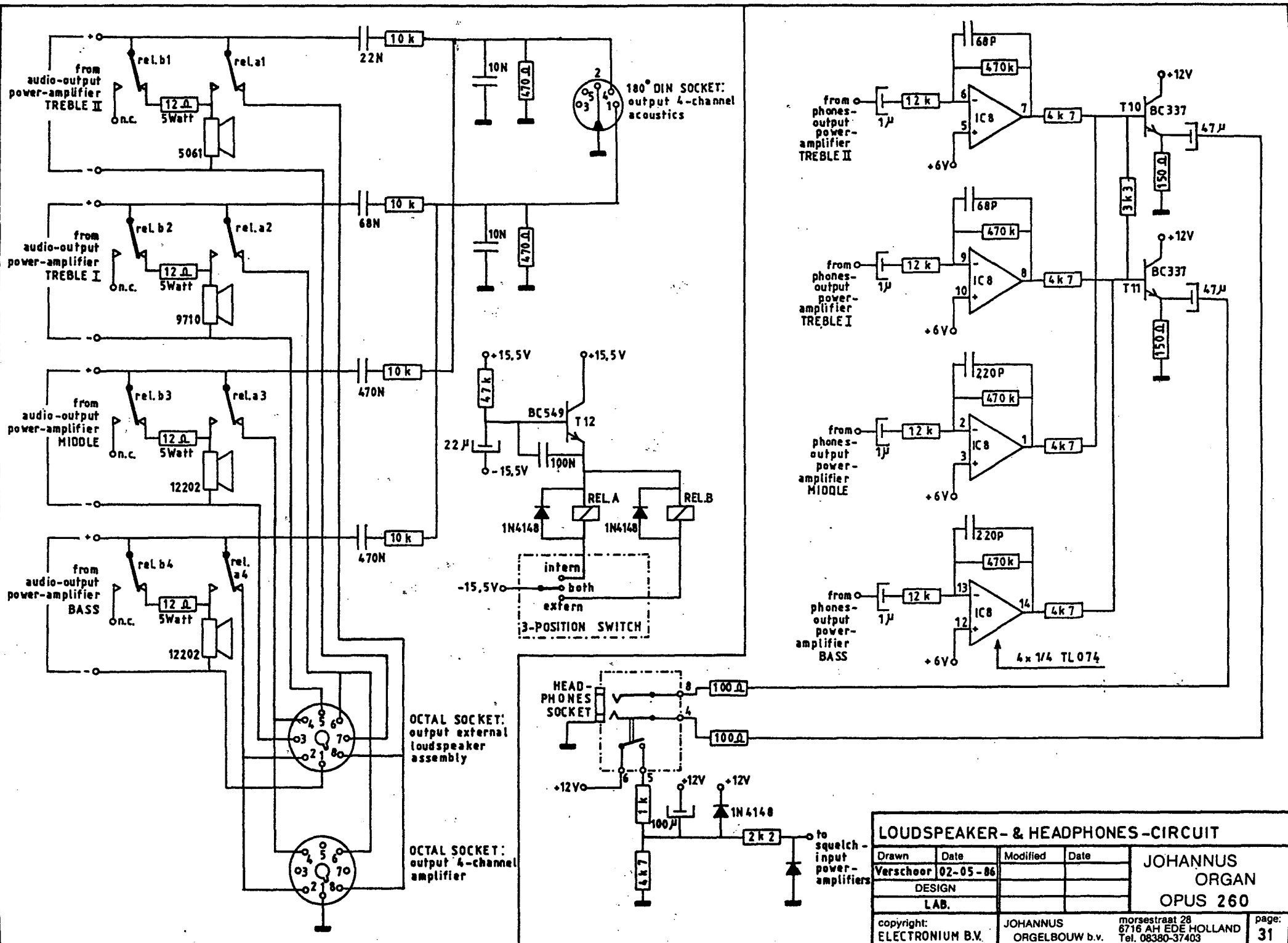
**JOHANNUS
ORGAN
OPUS 260**



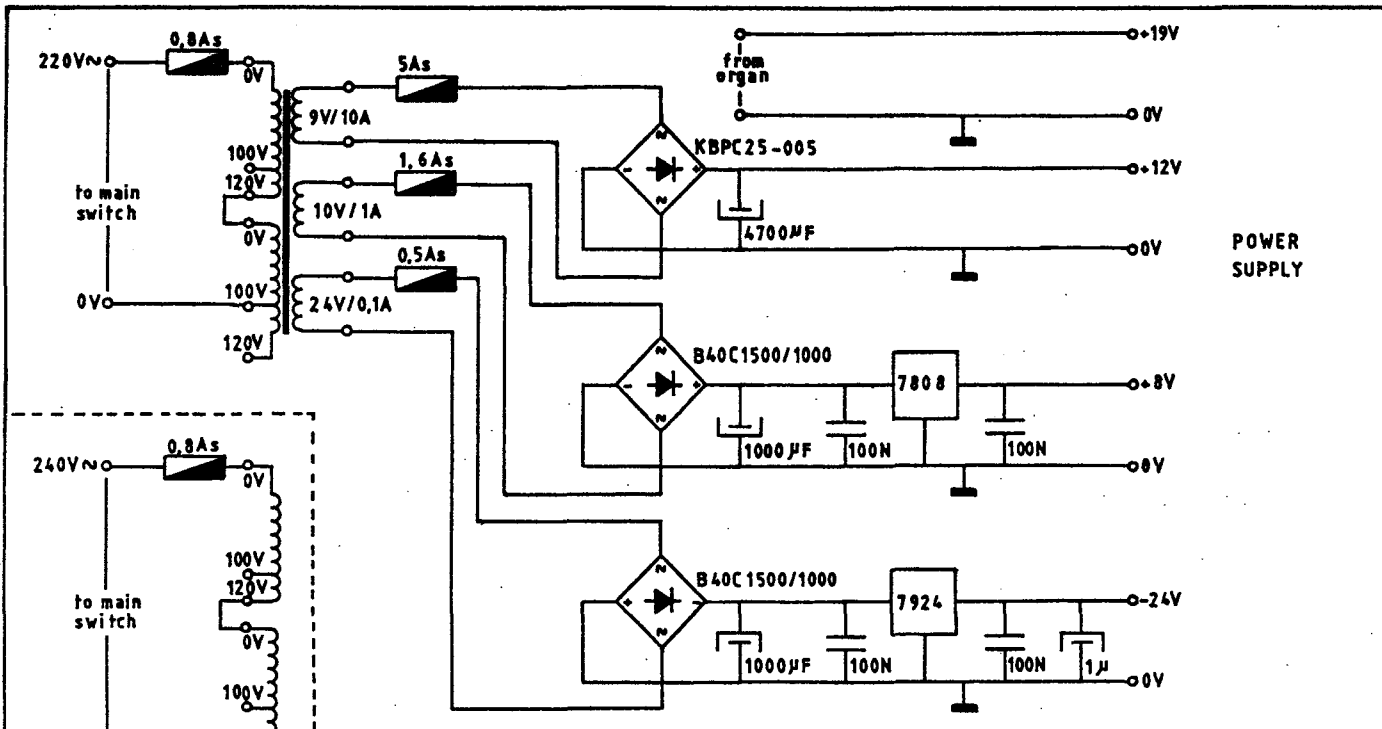
AMPLIFIER	R	C1	C2	C3	C4
treble II	—	47N	—	47N	22N
treble I	10 k	150N	↷	47N	47N
middle	4 k 7	100N	↷	68N	68N
bass	4 k 7	↷	↷	47N	180N

POWER - AMPLIFIER (4 x)

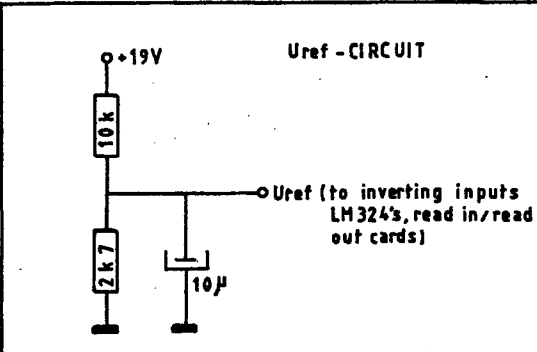
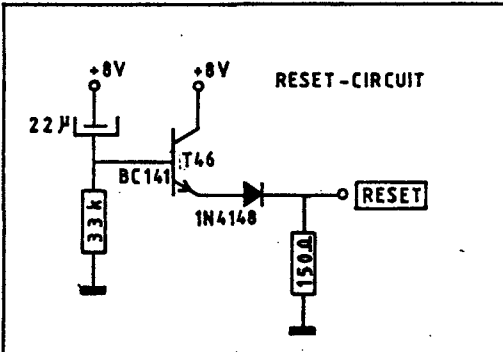
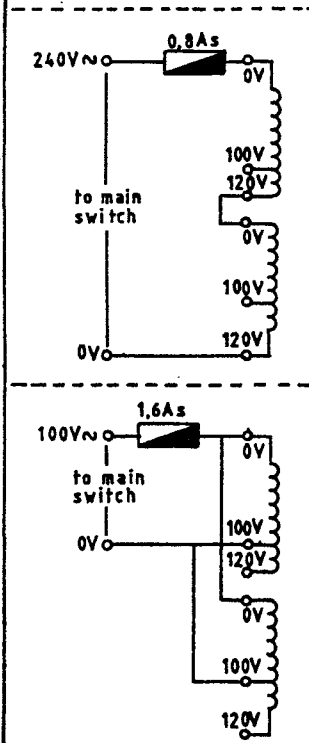
Drawn	Date	Modified	Date	JOHANNUS ORGAN OPUS 260
Verschoor	19-02-86			
DESIGN				
LAB				
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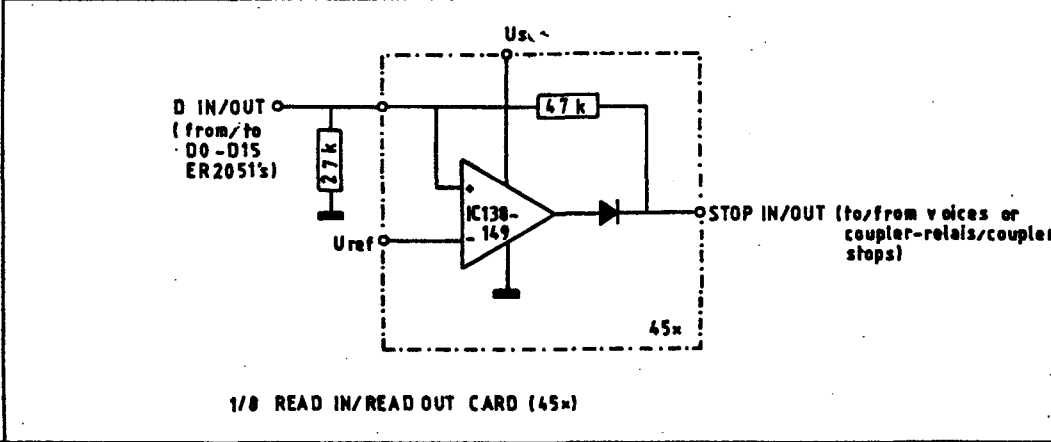
LOUDSPEAKER- & HEADPHONES-CIRCUIT			
Drawn	Date	Modified	Date
Verschoor	02-05-86		
DESIGN			
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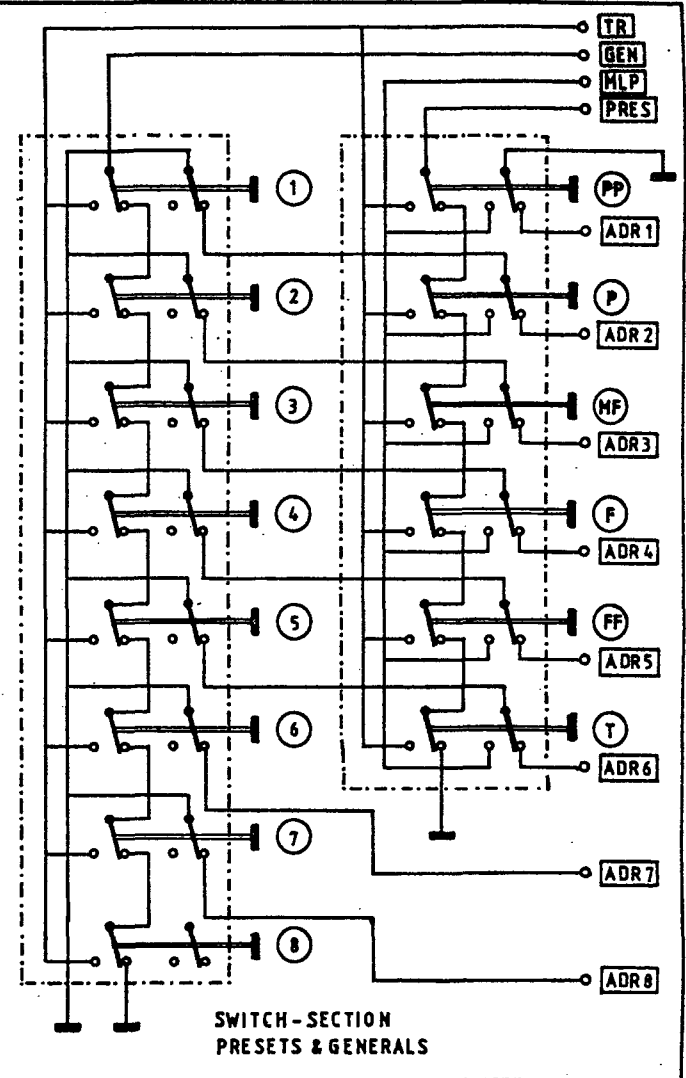
POWER SUPPLY



Uref - CIRCUIT



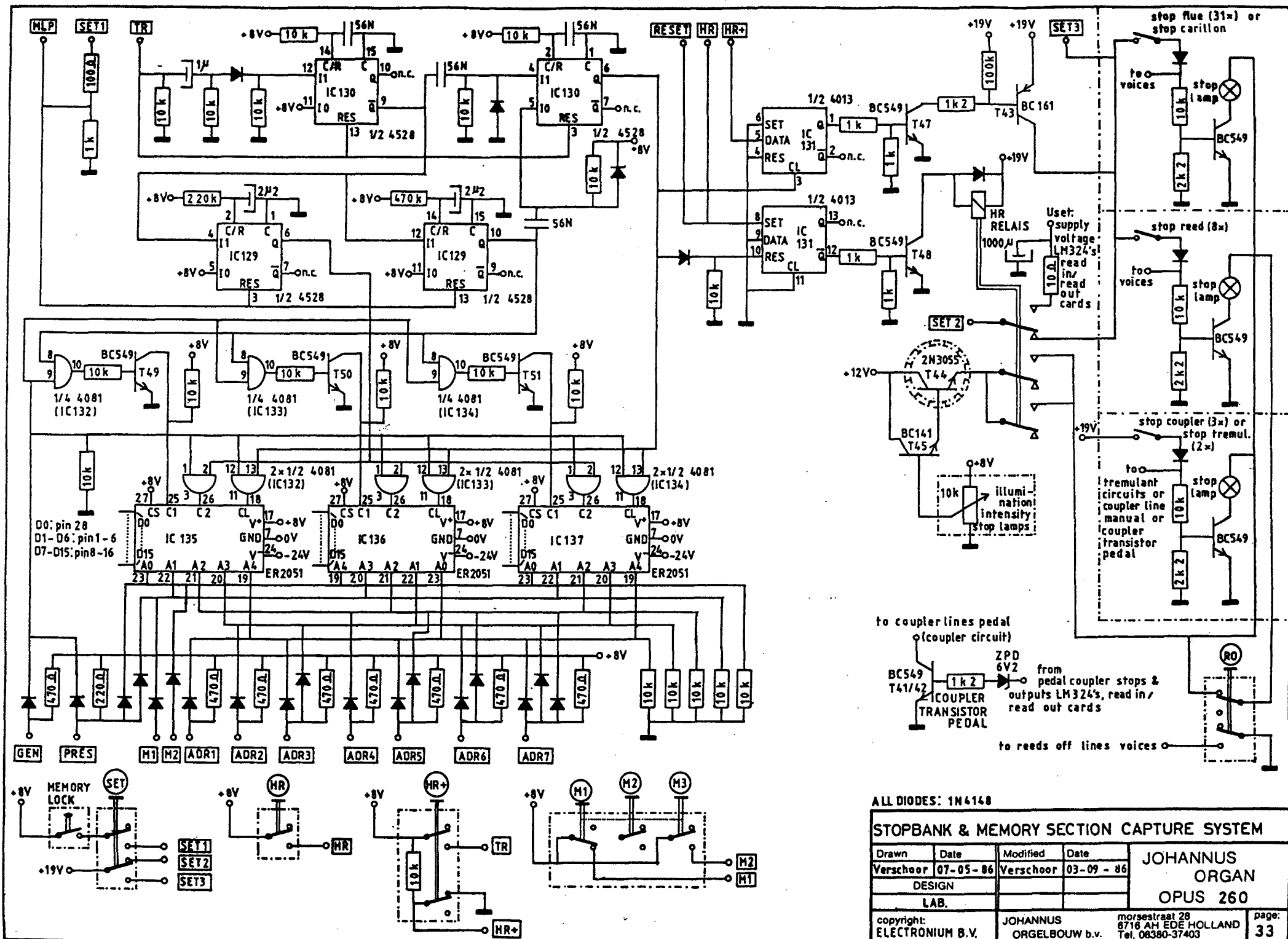
1/8 READ IN/READ OUT CARD (45x)

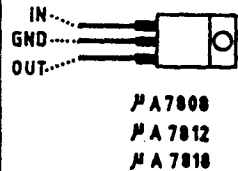
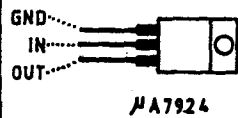
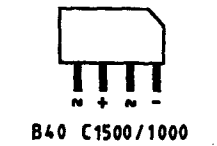
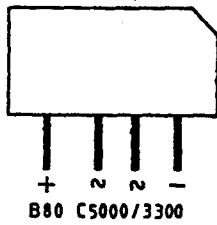
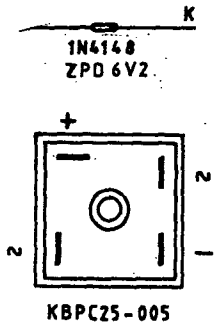


SWITCH-SECTION PRESETS & GENERALS

POWER SUPPLY; SWITCH-SECTION (presets & generals); RESET-CIRCUIT; Uref-CIRCUIT & 1/8 READ IN/READ OUT CARD CAPTURE SYSTEM

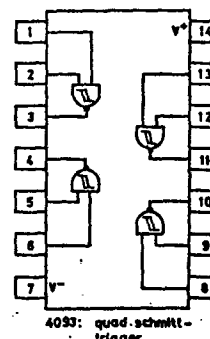
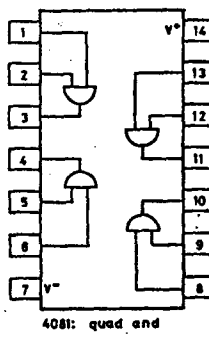
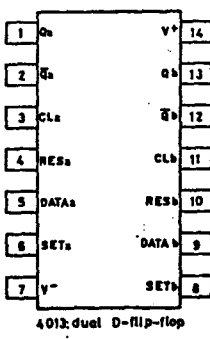
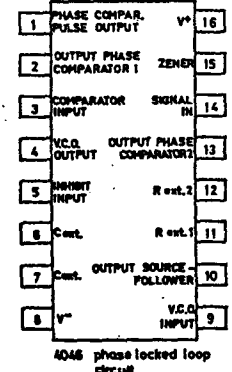
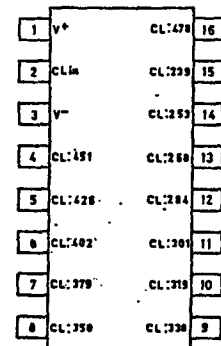
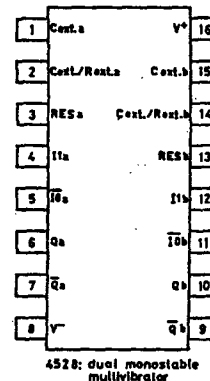
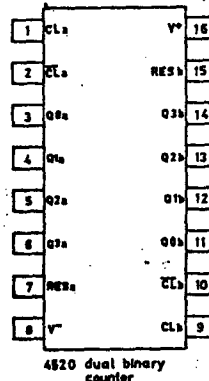
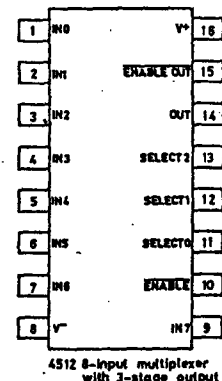
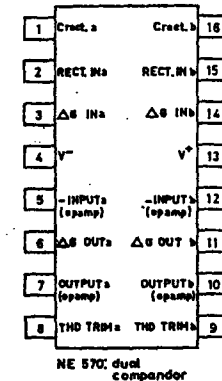
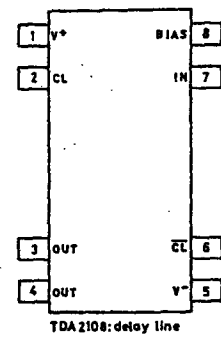
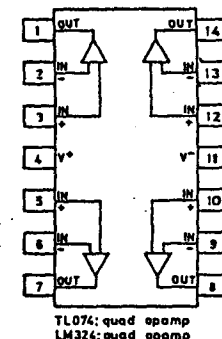
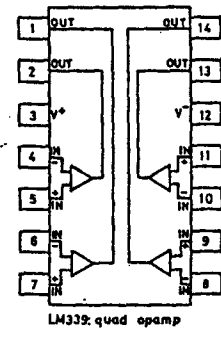
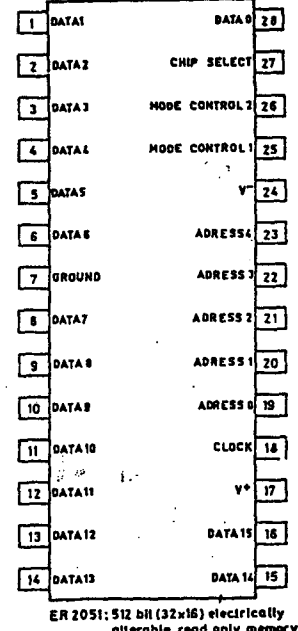
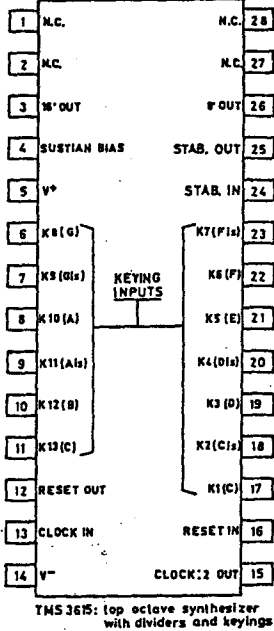
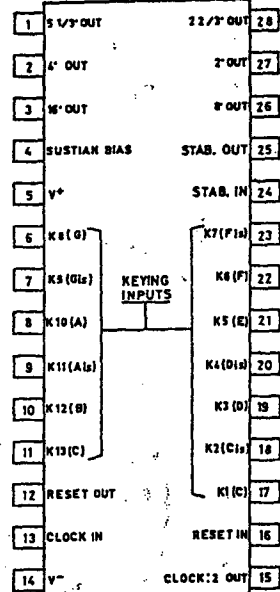
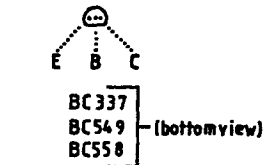
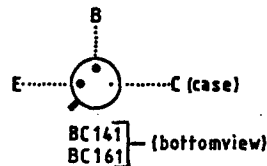
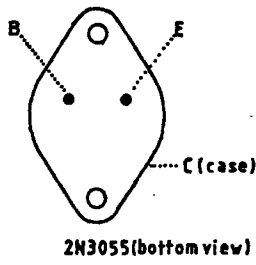
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Verschuur	05-05-86			
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1=non-inverting input
2=inverting input
3=V-
4=output
5=V+

TDA 2030



GENERAL INFORMATION SEMI-CONDUCTORS			
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