

JOHANNUS

SCHHEMATIC DIAGRAMS

OPUS 800

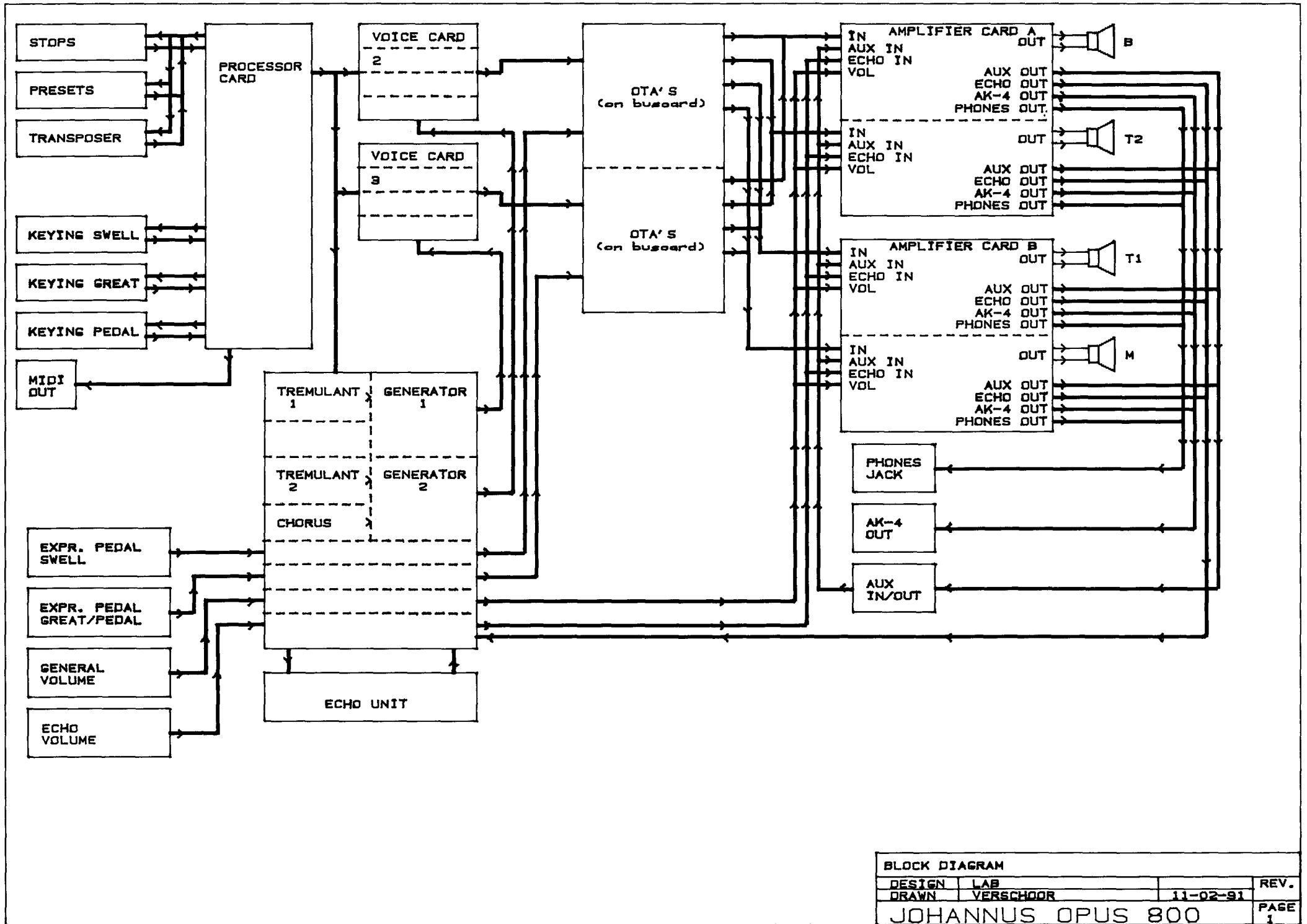
ALTERATIONS RESERVED

JOHANNUS Orgelbouw b.v.

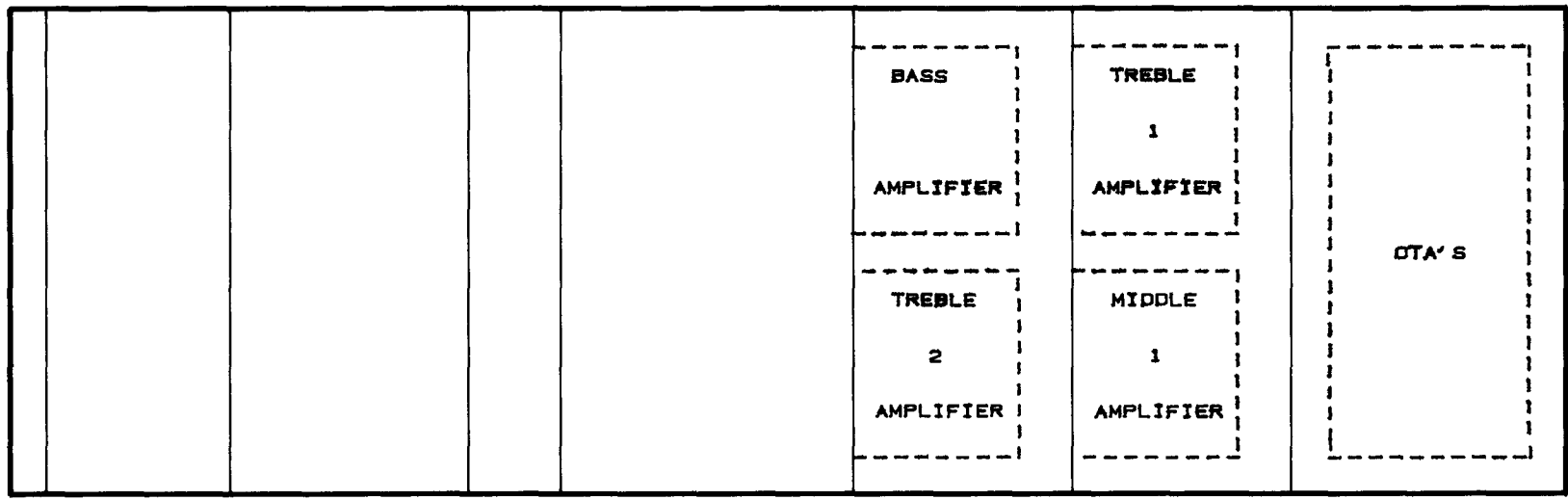
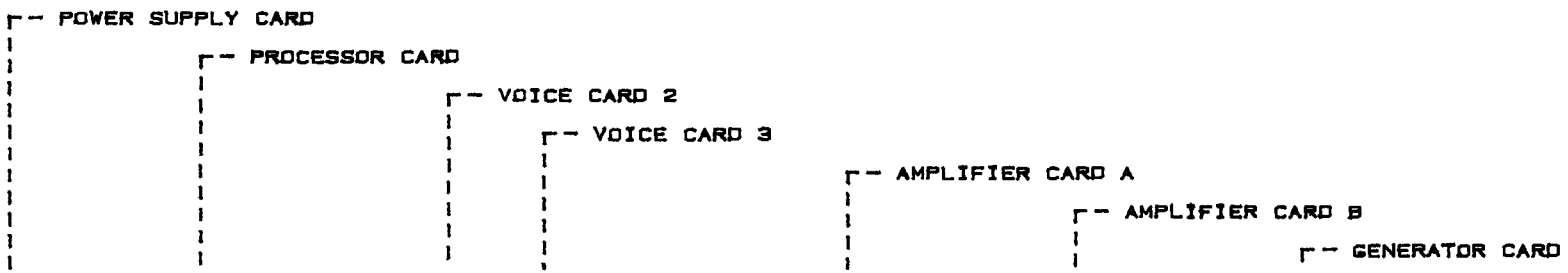
Morsstraat 28 - 6716 AH Ede - Tel. (08380) 37403 - Fax (08380) 22238

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BLOCK DIAGRAM			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	11-02-91	PAGE
JOHANNUS OPUS 800			1



COMPONENT SIDE
←

POSITION DIAGRAM CARDS (TOPVIEW)			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	12-02-91	PAGE
JOHANNUS OPUS 800			2

CON1

	010	
	020	
	030	
	040	
+12V	050	+12V
-12V	060	-12V
AGND	070	AGND
AGND	080	AGND
+35V	090	+35V
-35V	0100	-35V
	0110	
	0120	
	0130	
	0140	
	0150	
	0160	
	0170	
	0180	
	0190	
	0200	
	0210	
	0220	
	0230	
	0240	
+5V	0250	+5V
LGND	0260	LGND
LGND	0270	LGND
	0280	
	0290	
	0300	
	0310	
	0320	

POWER SUPPLY CARD

CON2

	010	
	020	
	030	
	040	
+12V	050	+12V
-12V	060	-12V
AGND	070	AGND
AGND	080	AGND
+35V	090	+35V
-35V	0100	-35V
	0110	
	0120	
	0130	
	0140	
	0150	
GEN1	0160	GEN1
LGND	0170	LGND
LGND	0180	LGND
	0190	GEN2
RES M114	0200	EPROM CHOISE
B0	0210	DATA STROBE
B4	0220	B5
B2	0230	B3
B0	0240	B1
+5V	0250	+5V
LGND	0260	LGND
LGND	0270	LGND
	0280	
SEL7	0290	SEL0
SEL5	0300	SEL4
SEL3	0310	SEL2
SEL1	0320	SEL0

PROCESSOR CARD

CON4-5

PRE-AMP1	010	PRE-AMP2
PRE-AMP3	020	PRE-AMP4
	030	
	040	
+12V	050	+12V
-12V	060	-12V
AGND	070	AGND
AGND	080	AGND
+35V	090	+35V
-35V	0100	-35V
	0110	
	0120	
	0130	
	0140	
	0150	
GEN1	0160	GEN1
LGND	0170	LGND
LGND	0180	LGND
	0190	GEN2
RES M114	0200	EPROM CHOISE
B0	0210	DATA STROBE
B4	0220	B5
B2	0230	B3
B0	0240	B1
+5V	0250	+5V
LGND	0260	LGND
LGND	0270	LGND
	0280	
SEL7	0290	SEL0
SEL5	0300	SEL4
SEL3	0310	SEL2
SEL1	0320	SEL0

VOICE CARD 2-3

CON6-9

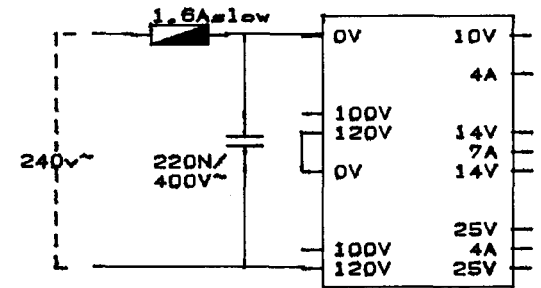
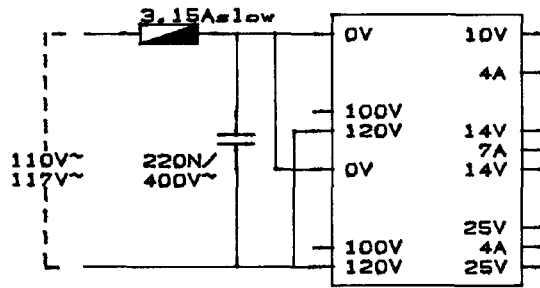
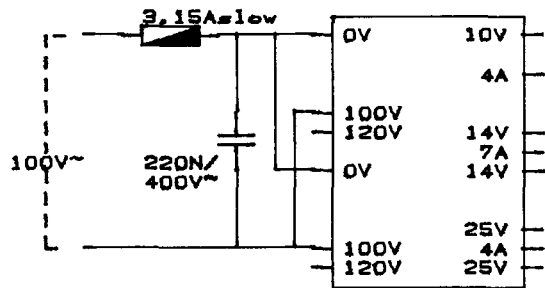
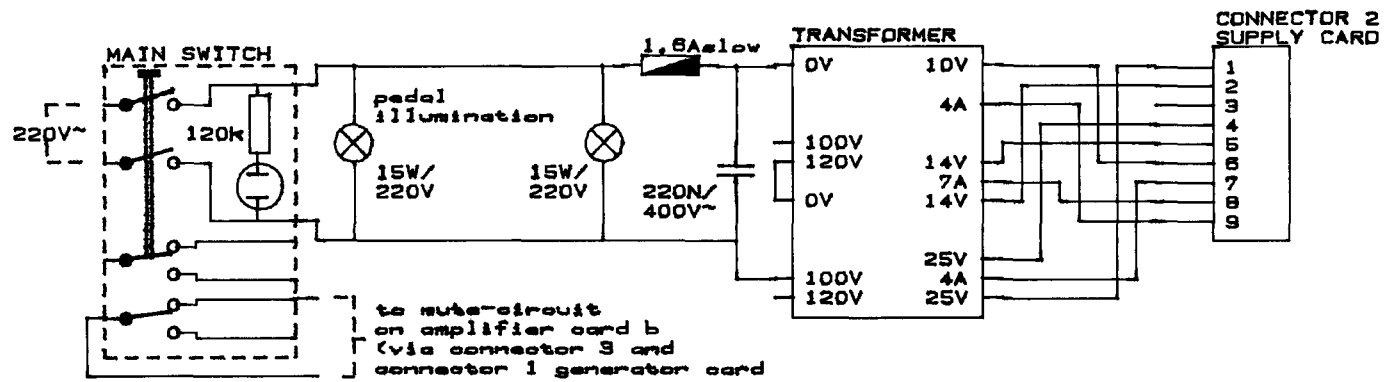
POWER-AMP1	010	POWER-AMP2
POWER-AMP3	020	POWER-AMP4
TO ECHO	030	FROM ECHO B
	040	FROM ECHO A
+12V	050	+12V
-12V	060	-12V
AGND	070	AGND
AGND	080	AGND
+35V	090	+35V
-35V	0100	-35V
	0110	MUTE
VOLUME	0120	
PHONES	0130	
	0140	
	0150	
GEN1	0160	GEN1
LGND	0170	LGND
LGND	0180	LGND
	0190	GEN2
	0200	EPROM CHOISE
	0210	
	0220	
	0230	
	0240	
+5V	0250	+5V
LGND	0260	LGND
LGND	0270	LGND
	0280	
	0290	
	0300	
	0310	
	0320	

AMPLIFIER CARD A & B

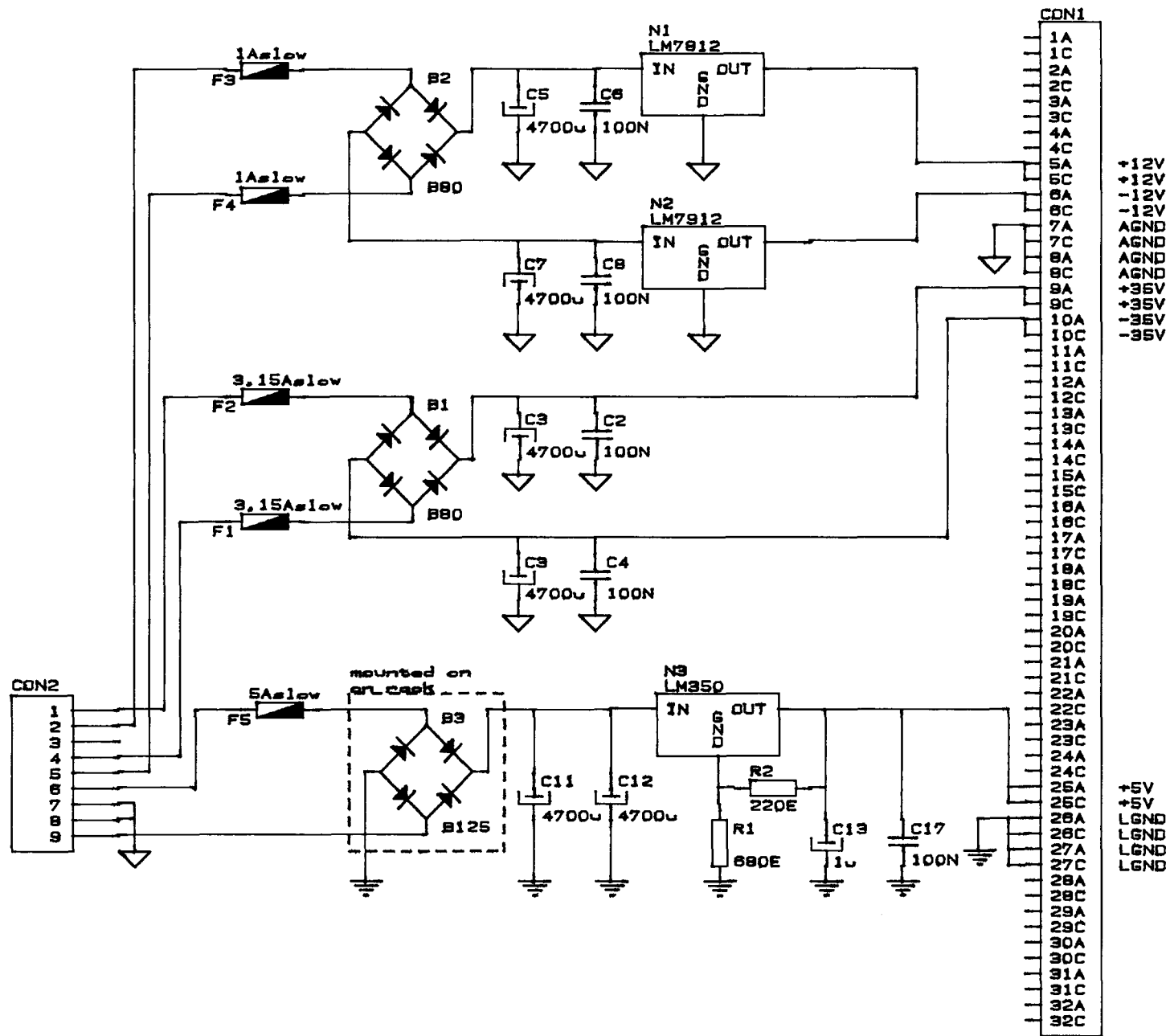
CON10

POWER-AMP1	010	POWER-AMP2
POWER-AMP3	020	POWER-AMP4
TO ECHO	030	FROM ECHO B
	040	FROM ECHO A
+12V	050	+12V
-12V	060	-12V
AGND	070	AGND
AGND	080	AGND
+35V	090	+35V
-35V	0100	-35V
	0110	MUTE
VOLUME	0120	EXPR. PED SWELL
PHONES	0130	EXPR. PED GREAT
	0140	
	0150	
GEN1	0160	GEN1
LGND	0170	LGND
LGND	0180	LGND
	0190	GEN2
RES M114	0200	EPROM CHOISE
	0210	
	0220	
	0230	
	0240	
+5V	0250	+5V
LGND	0260	LGND
LGND	0270	LGND
	0280	
SEL7	0290	SEL0
SEL5	0300	SEL4
SEL3	0310	SEL2
SEL1	0320	SEL0

GENERATOR CARD



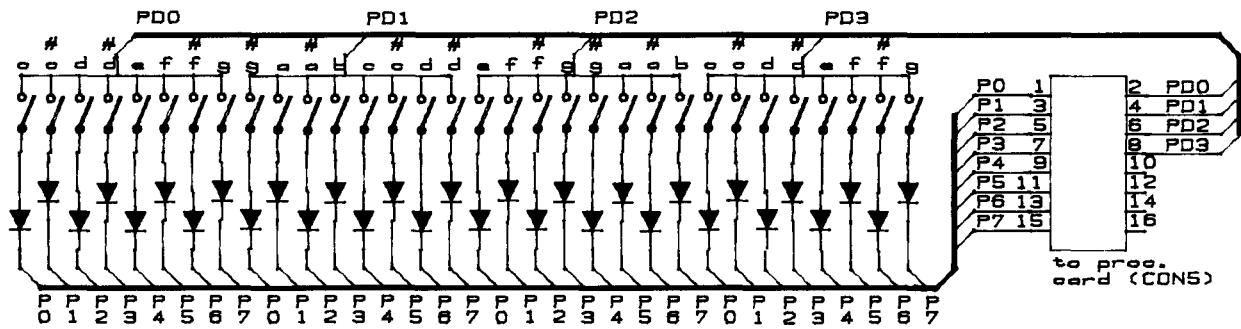
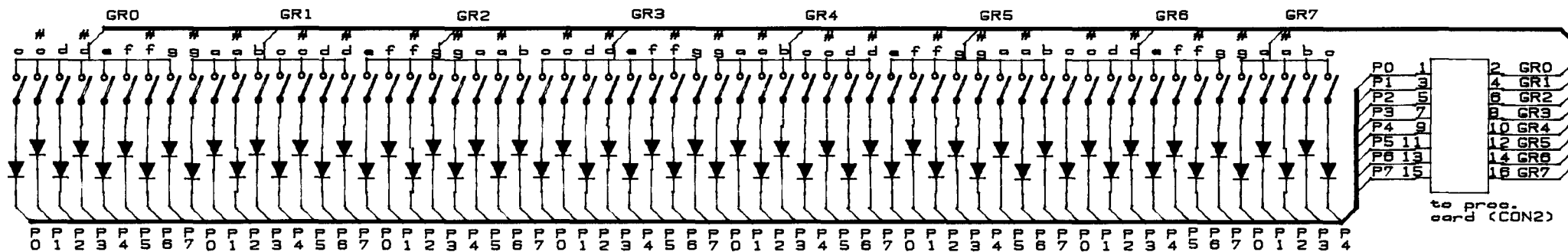
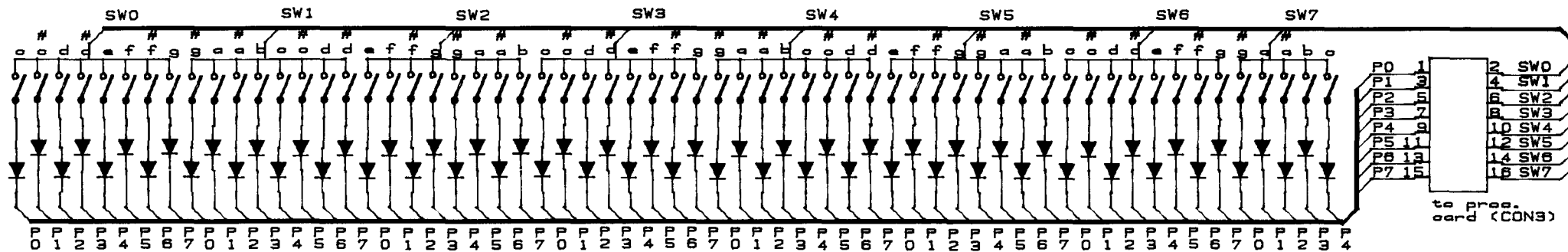
TRANSFORMER CONNECTIONS			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	14-02-81	PAGE
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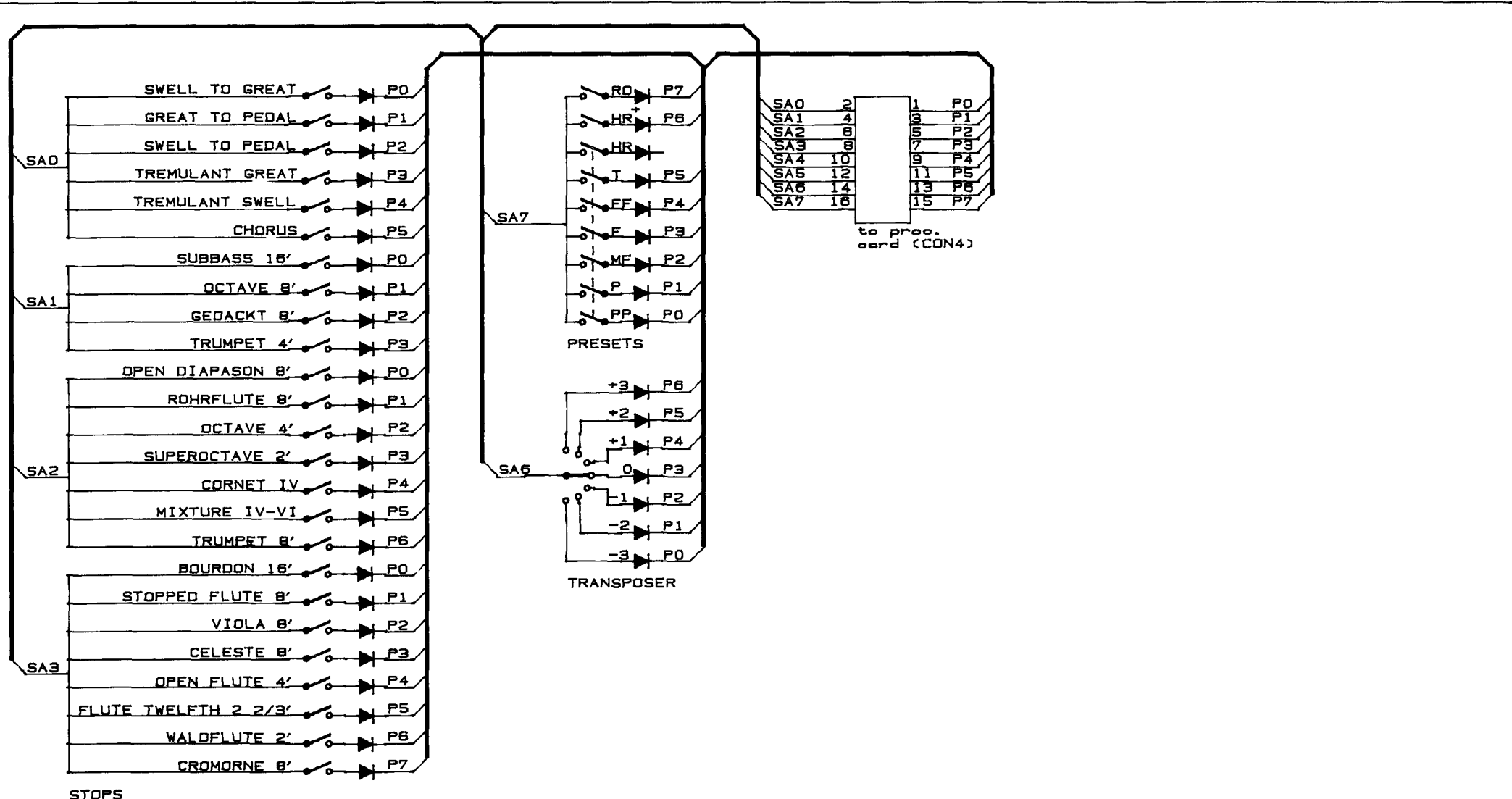
+12V
 +12V
 -12V
 -12V
 AGND
 AGND
 AGND
 AGND
 +35V
 +35V
 -35V
 -35V

+5V
 +5V
 LGND
 LGND
 LGND
 LGND

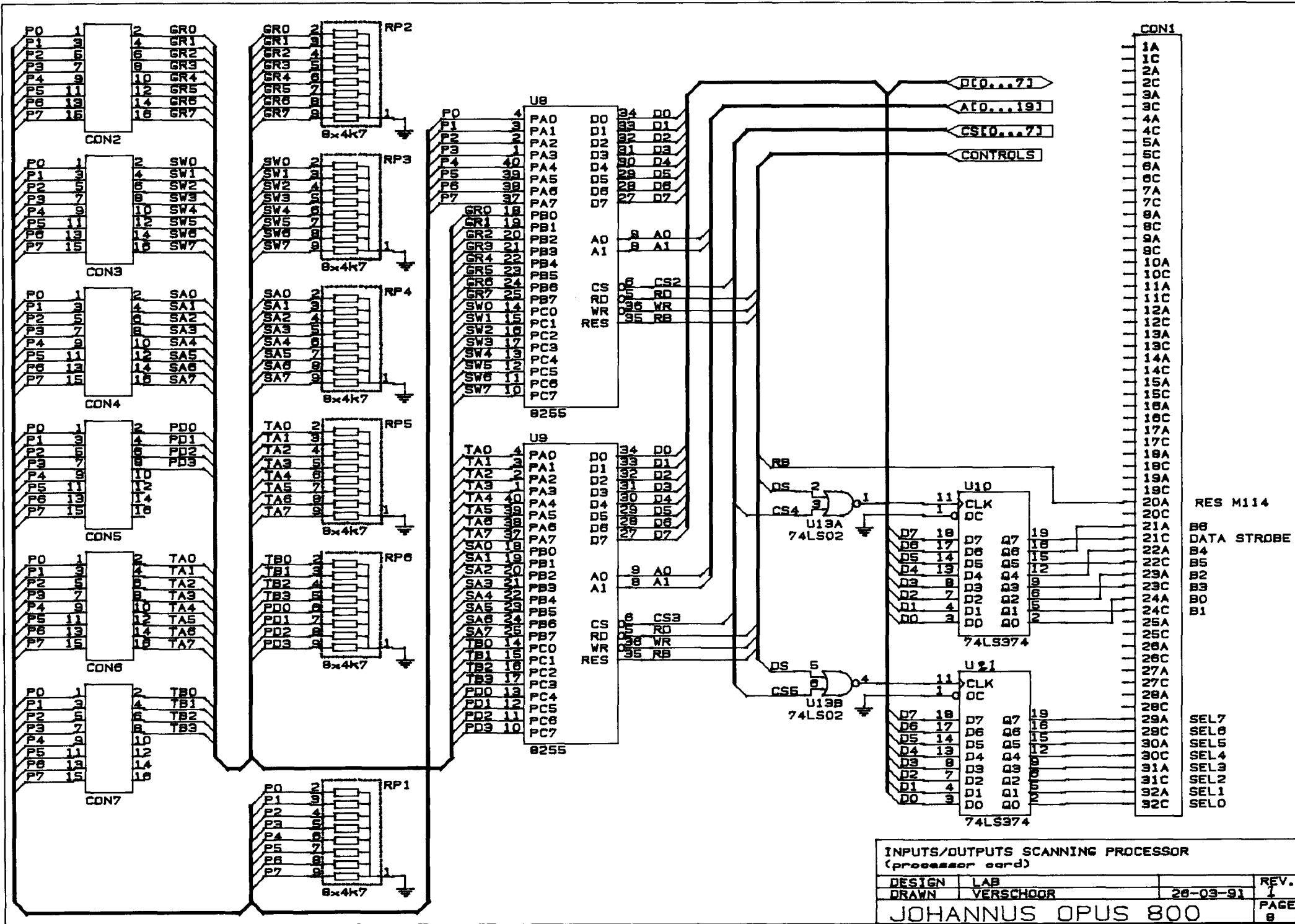
POWER SUPPLY (power supply card)			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	14-02-91	PAGE
JOHANNUS OPUS 800			5

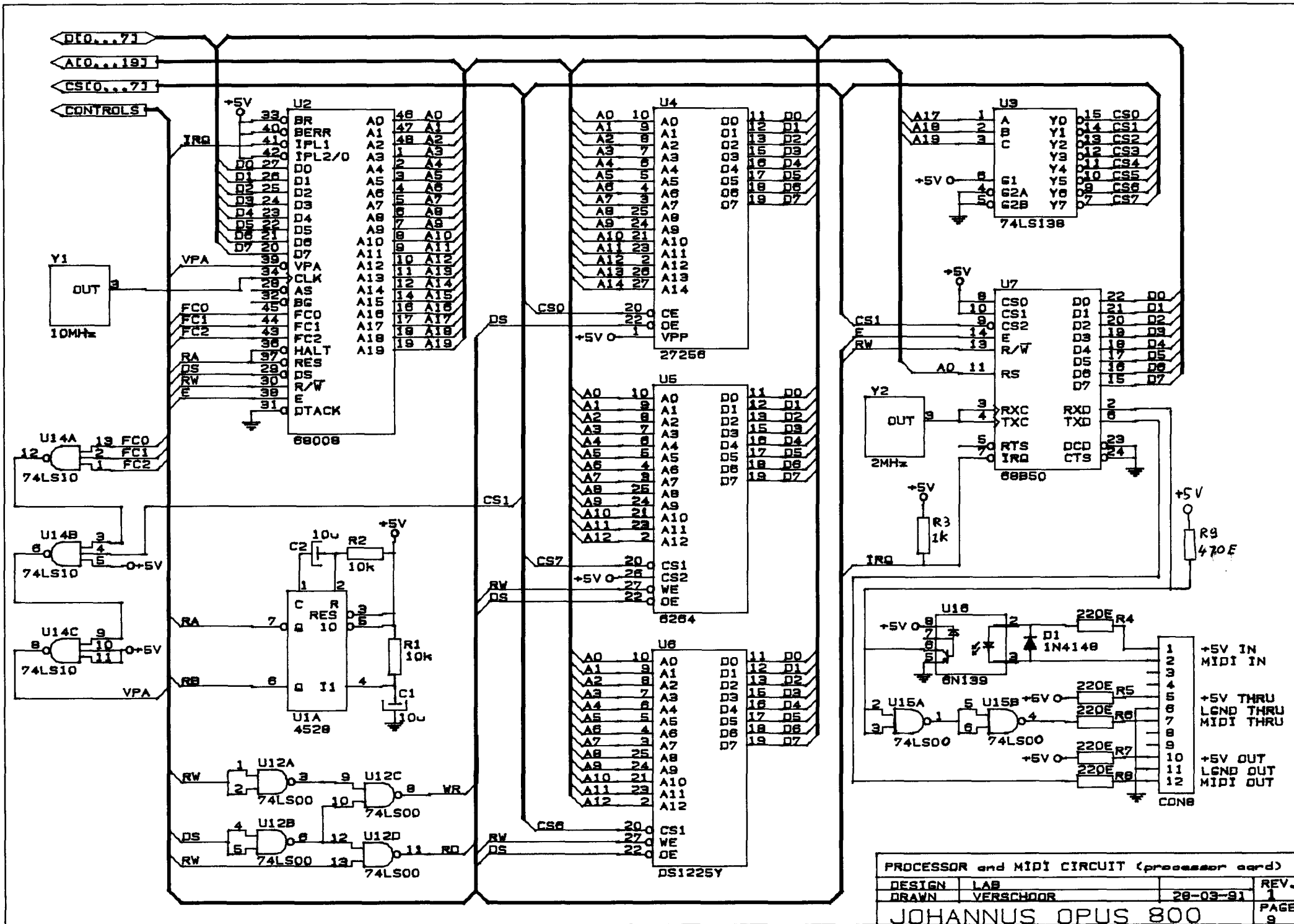


SCANNING KEYING			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	05-03-91	PAGE
JOHANNUS OPUS 800			6



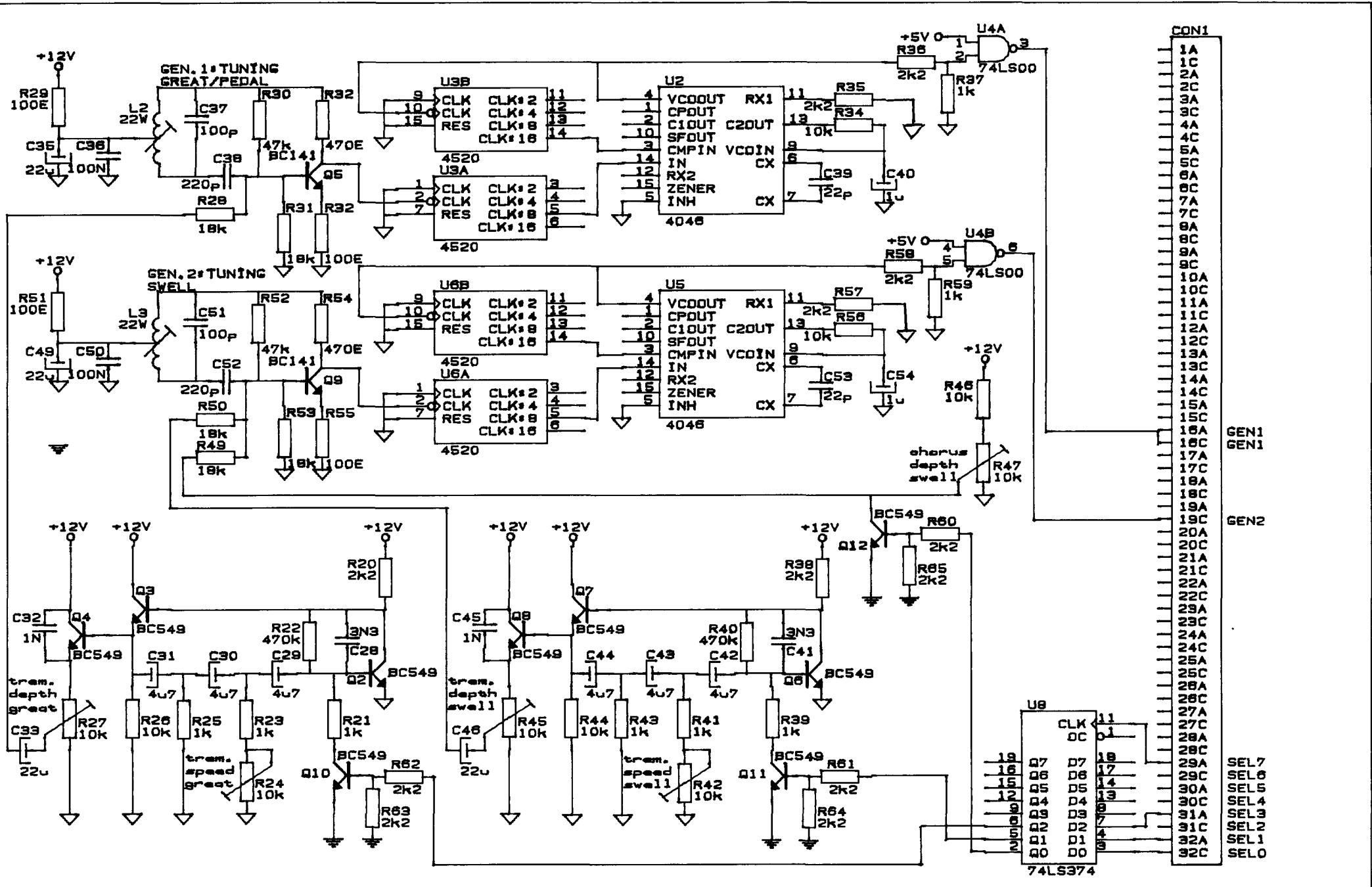
SCANNING STOPS, PRESETS and TRANSPOSER			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	05-03-91	PAGE
JOHANNUS OPUS 800			7





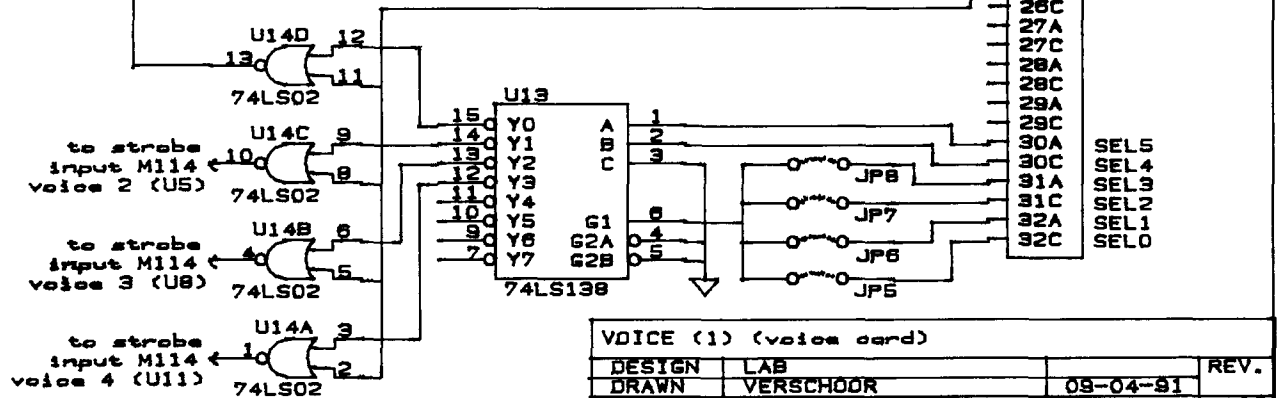
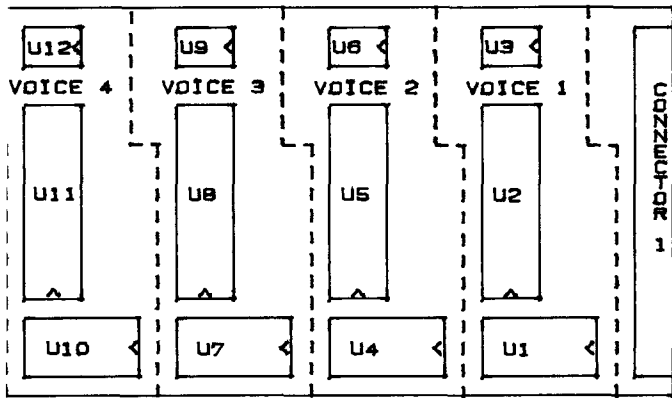
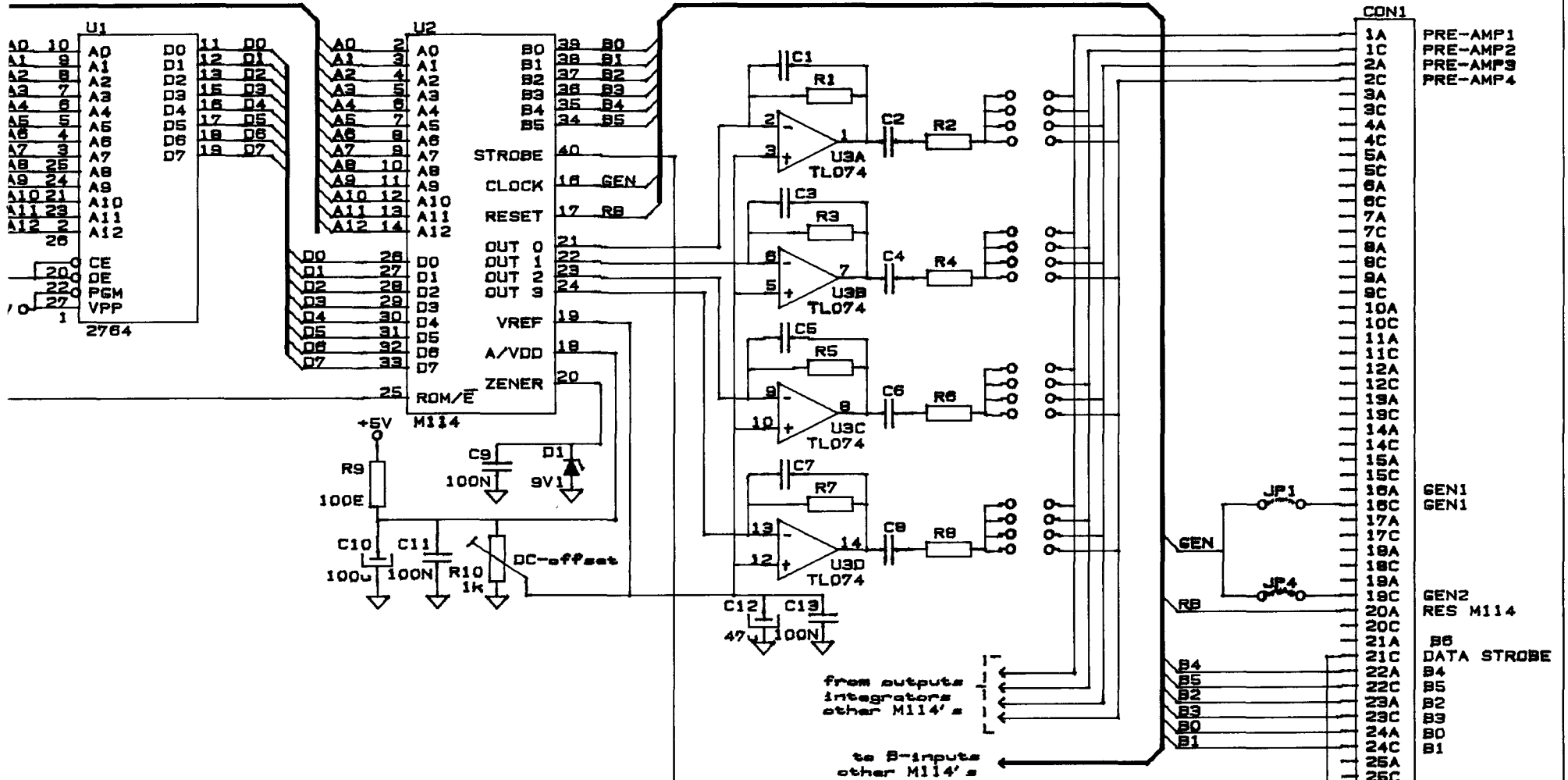
PROCESSOR and MIDI CIRCUIT (processor card)

DESIGN	LAB		REV.
DRAWN	VERSCHOOR	28-03-91	1
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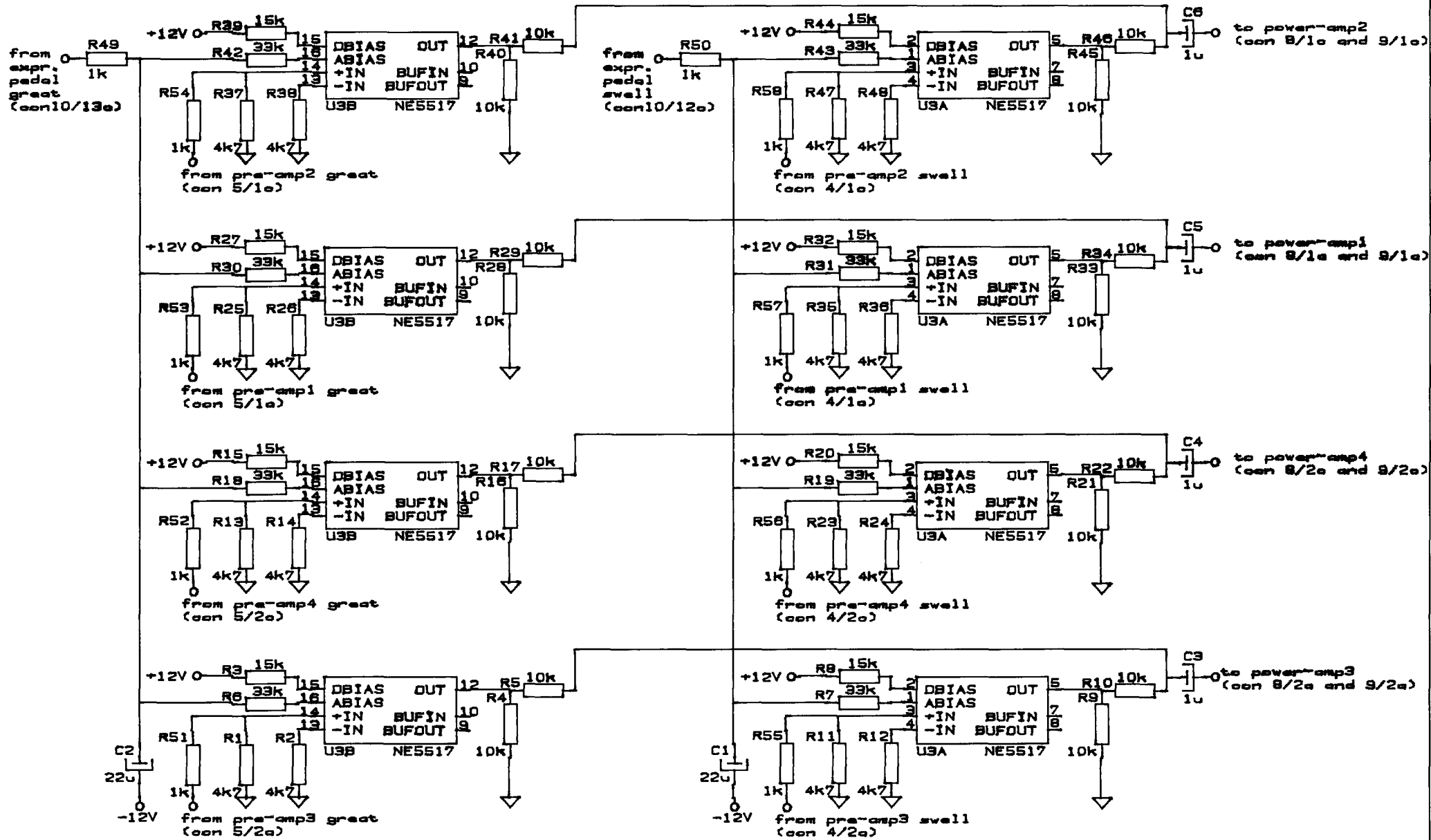


TUNING GENERATORS: CHORUS and TREMULANTS
(generator card)

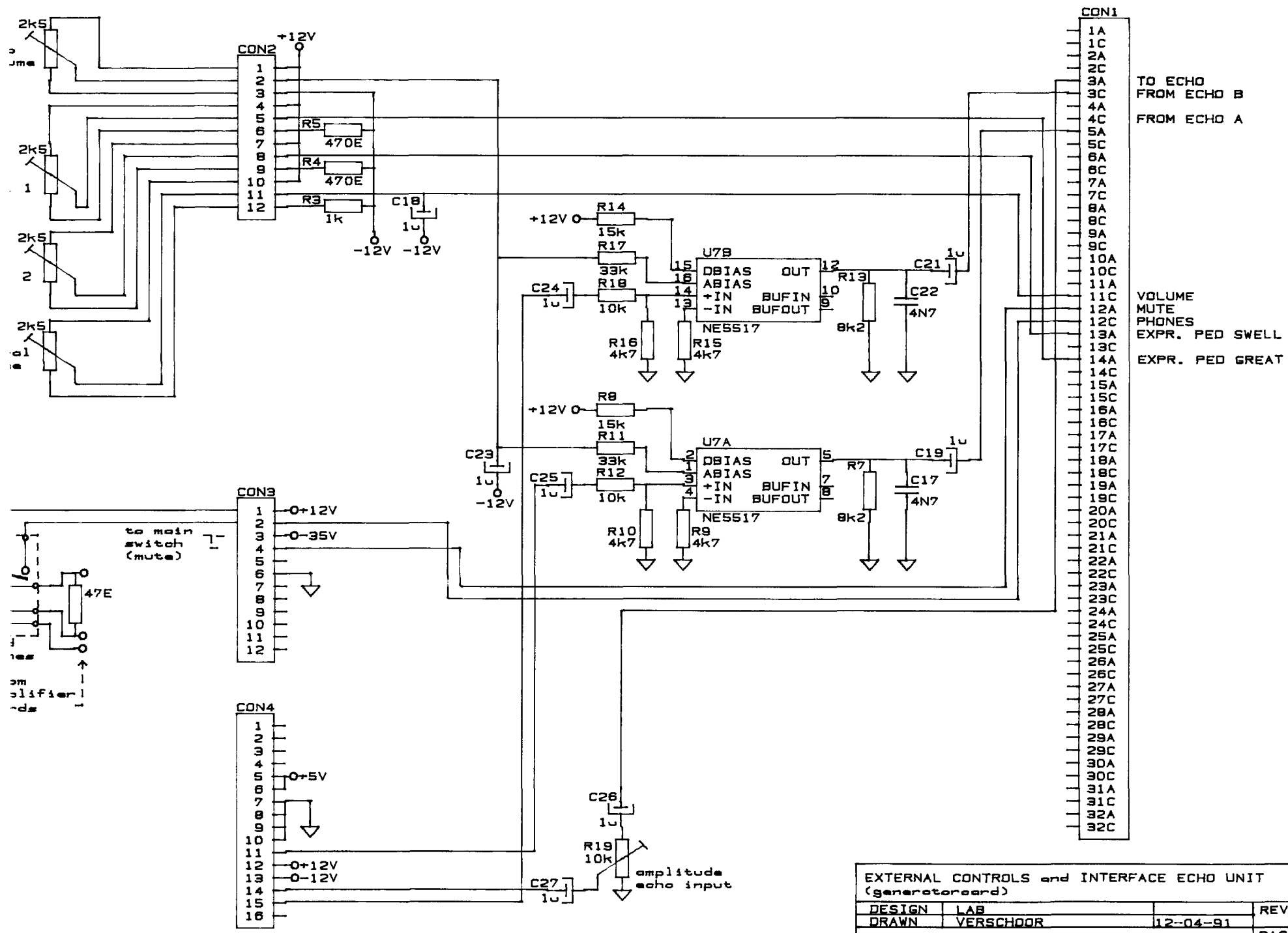
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	28-03-91	1
JOHANNUS OPUS 800			PAGE 10



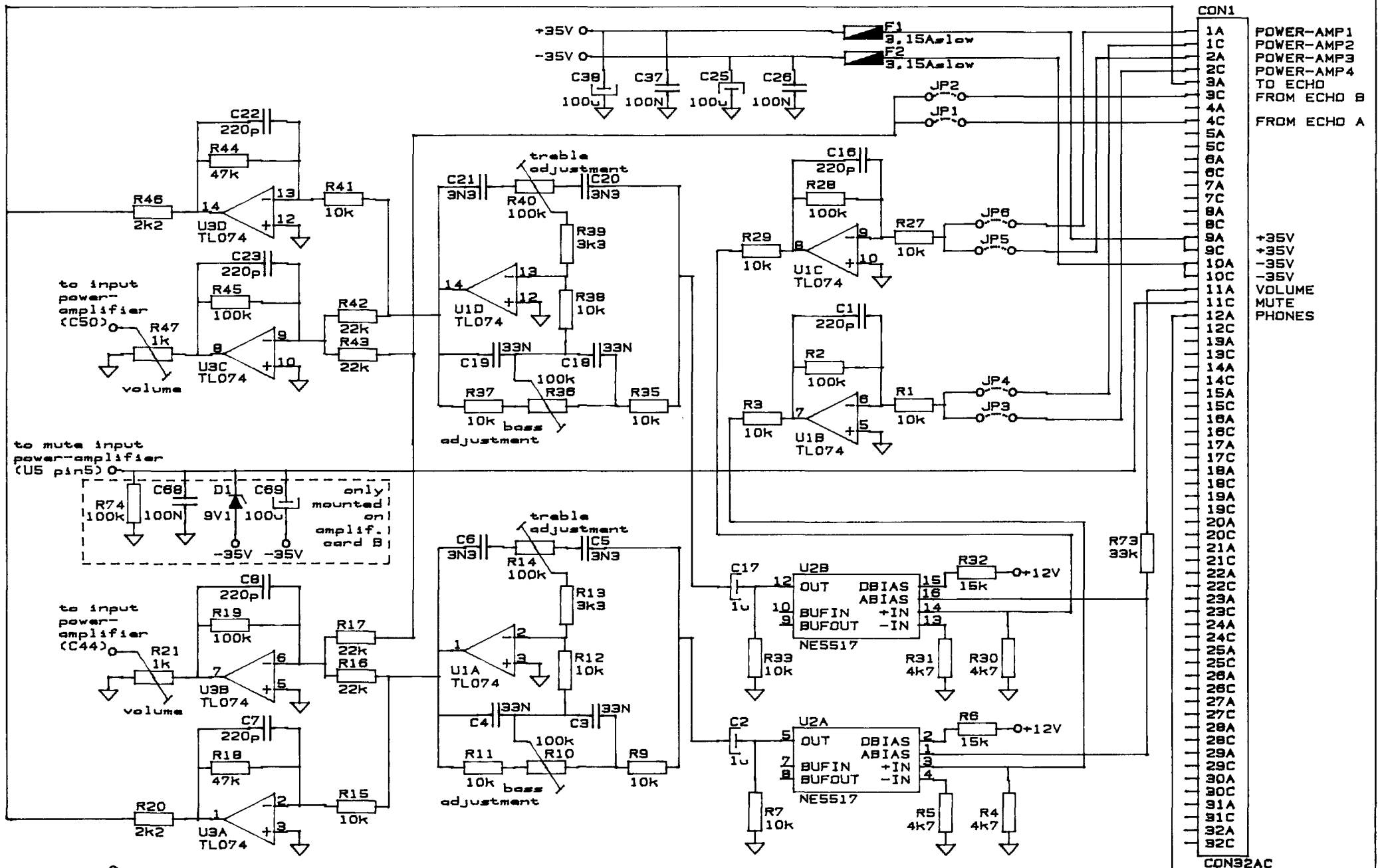
VOICE (1) (voice card)			REV.
DESIGN	LAB		
DRAWN	VERSCHOOR	09-04-91	PAGE
JOHANNUS OPUS 800			11



EXPRESSION PEDAL CIRCUIT (buseard)			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	09-04-91	PAGE
JOHANNUS OPUS 800			12



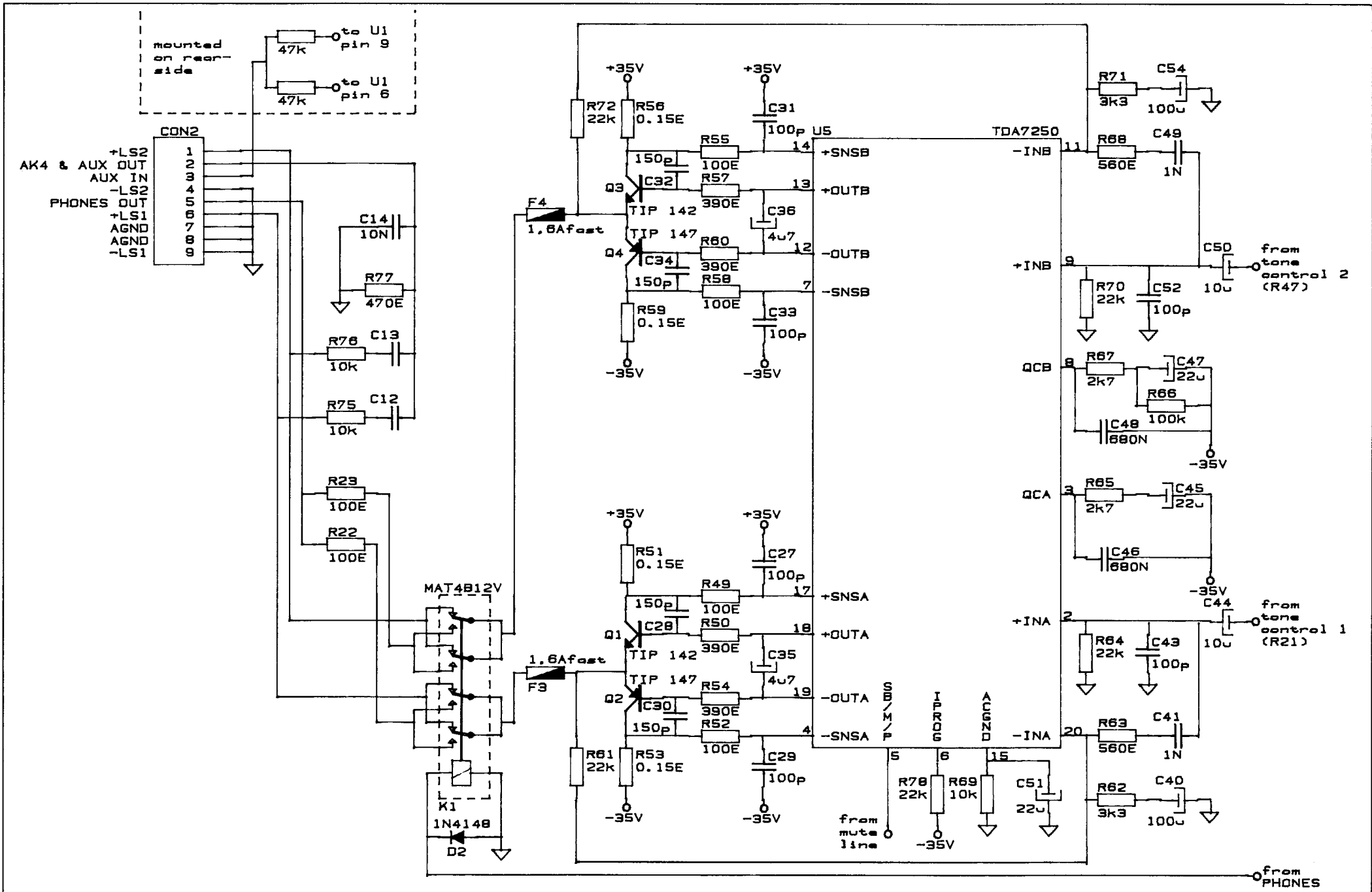
EXTERNAL CONTROLS and INTERFACE ECHO UNIT (generatorcard)			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	12-04-91	PAGE
JOHANNUS OPUS 800			13



- CON1
- 1A POWER-AMP1
 - 1C POWER-AMP2
 - 2A POWER-AMP3
 - 2C POWER-AMP4
 - 3A TO ECHO B
 - 3C FROM ECHO B
 - 4A FROM ECHO A
 - 4C FROM ECHO A
 - 5A
 - 5C
 - 6A
 - 6C
 - 7A
 - 7C
 - 8A
 - 8C
 - 9A +35V
 - 9C +35V
 - 10A -35V
 - 10C -35V
 - 11A VOLUME
 - 11C MUTE
 - 12A PHONES
 - 12C
 - 13A
 - 13C
 - 14A
 - 14C
 - 15A
 - 15C
 - 16A
 - 16C
 - 17A
 - 17C
 - 18A
 - 18C
 - 19A
 - 19C
 - 20A
 - 20C
 - 21A
 - 21C
 - 22A
 - 22C
 - 23A
 - 23C
 - 24A
 - 24C
 - 25A
 - 25C
 - 26A
 - 26C
 - 27A
 - 27C
 - 28A
 - 28C
 - 29A
 - 29C
 - 30A
 - 30C
 - 31A
 - 31C
 - 32A
 - 32C
- CON32AC

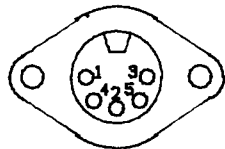
PRE-AMPLIFIERS and TONE CONTROLS
(amplifier card)

DESIGN	LAB		REV.
DRAWN	VERSCHOOR	15-04-91	PAGE
JOHANNUS OPUS 800			14



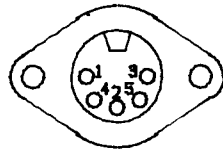
POWER AMPLIFIER (amplifier card)			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	17-04-91	PAGE
JOHANNUS OPUS 800			15

1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI IN
5. MIDI IN



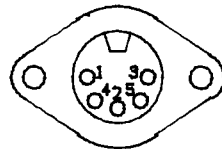
MIDI
IN

1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI THRU
5. MIDI THRU



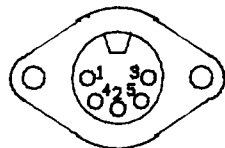
MIDI
THRU

1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI OUT
5. MIDI OUT



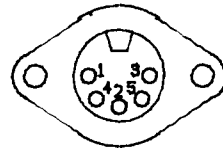
MIDI
OUT

1. AK-4 OUT CHANNEL A
2. GROUND
3. NOT CONNECTED
4. AK-4 OUT CHANNEL B
5. NOT CONNECTED



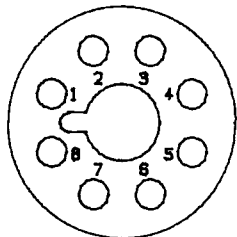
AK-4
OUT

1. AUX OUT CHANNEL A
2. GROUND
3. AUX IN CHANNEL A
4. AUX OUT CHANNEL B
5. AUX IN CHANNEL B



AUX
IN/OUT

1. - BASS AMPLIFIER
2. + BASS AMPLIFIER
3. - MIDDLE AMPLIFIER
4. + MIDDLE AMPLIFIER
5. - TREBLE I AMPLIFIER
6. + TREBLE I AMPLIFIER
7. - TREBLE II AMPLIFIER
8. + TREBLE II AMPLIFIER



LS OUT A

(OPTIONAL)

EXTERNAL CONNECTIONS (mounted on the
rearside of the organ) SOLDERINGSIDEVIEW

DESIGN	LAB		REV.
DRAWN	VERSCHOOR	18-04-91	PAGE
JOHANNUS OPUS 800			16