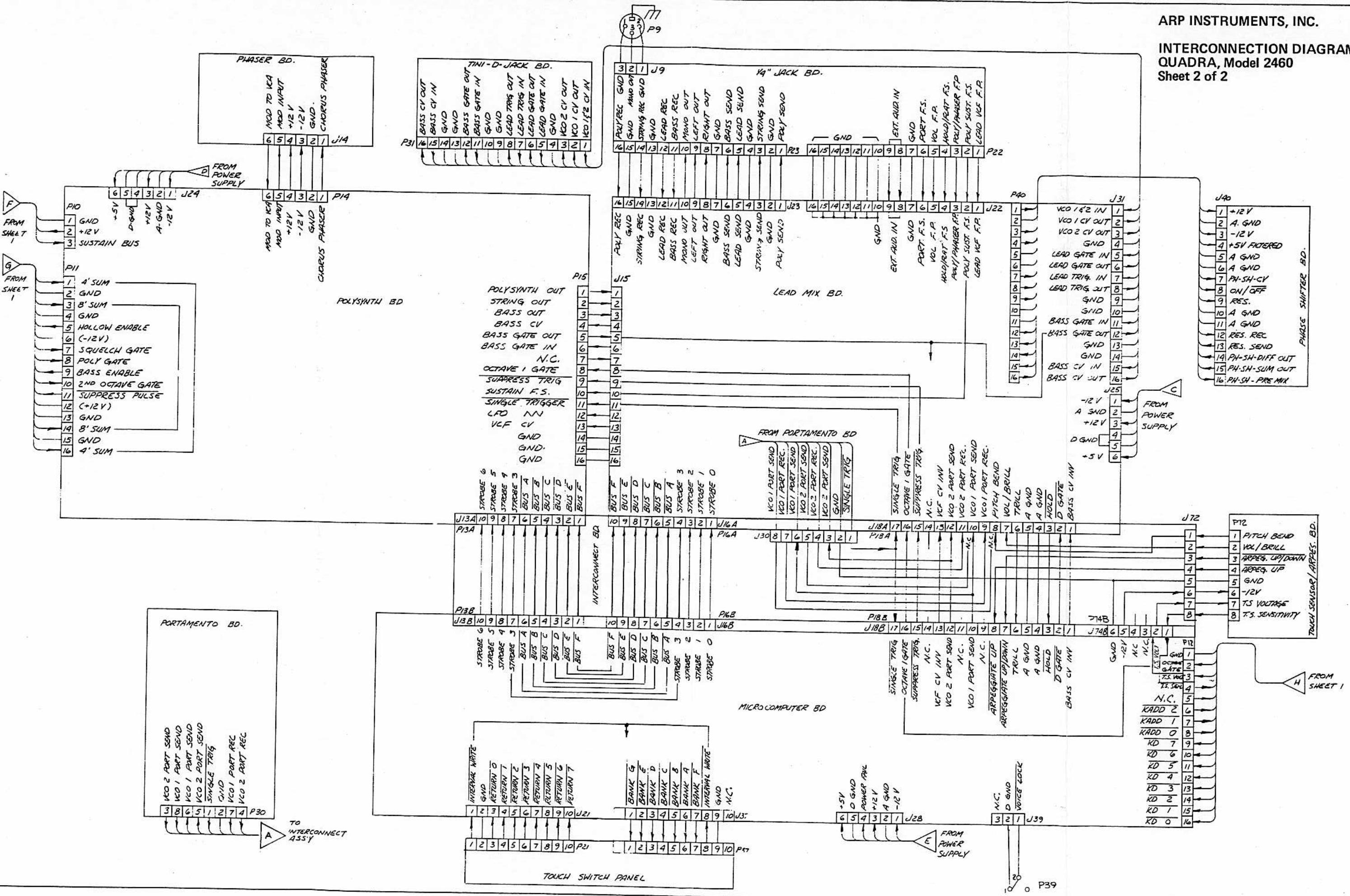
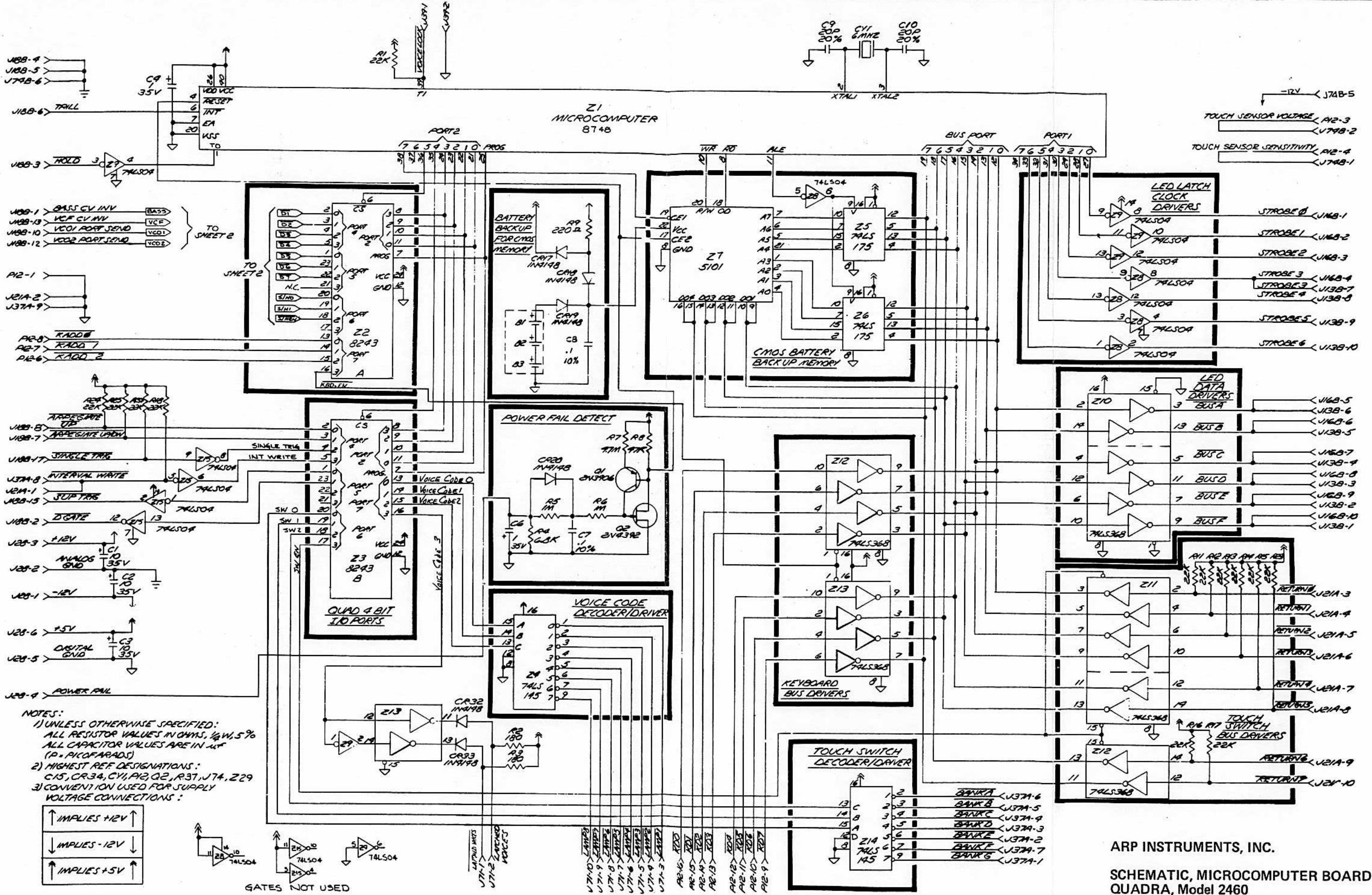


ARP INSTRUMENTS, INC.

**INTERCONNECTION DIAGRAM
QUADRA, Model 2460**
Sheet 1 of 2

INTERCONNECTION DIAGRAM
QUADRA, Model 2460
Sheet 2 of 2



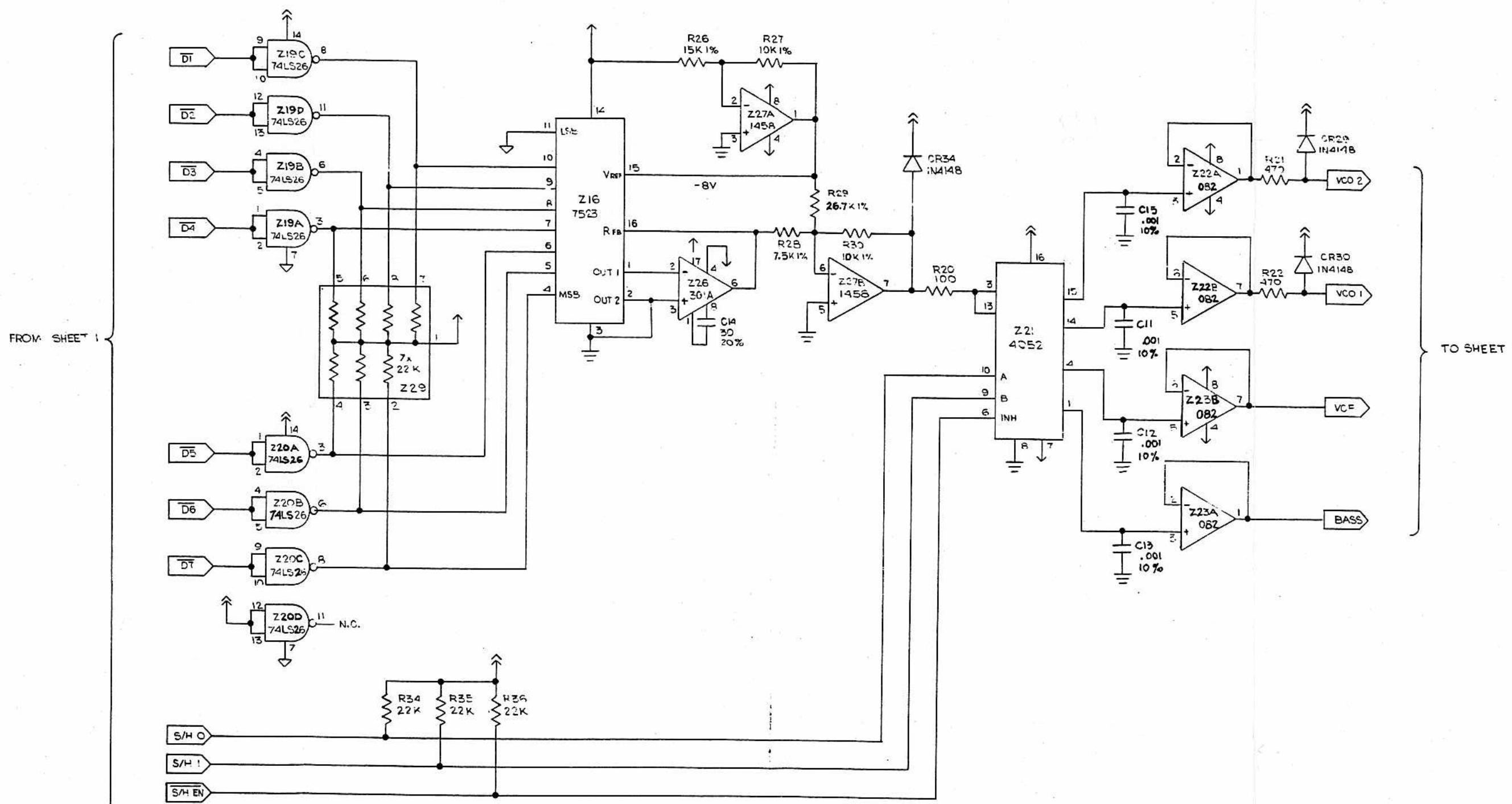


ARP INSTRUMENTS, INC.

SCHEMATIC, MICROCOMPUTER BOARD

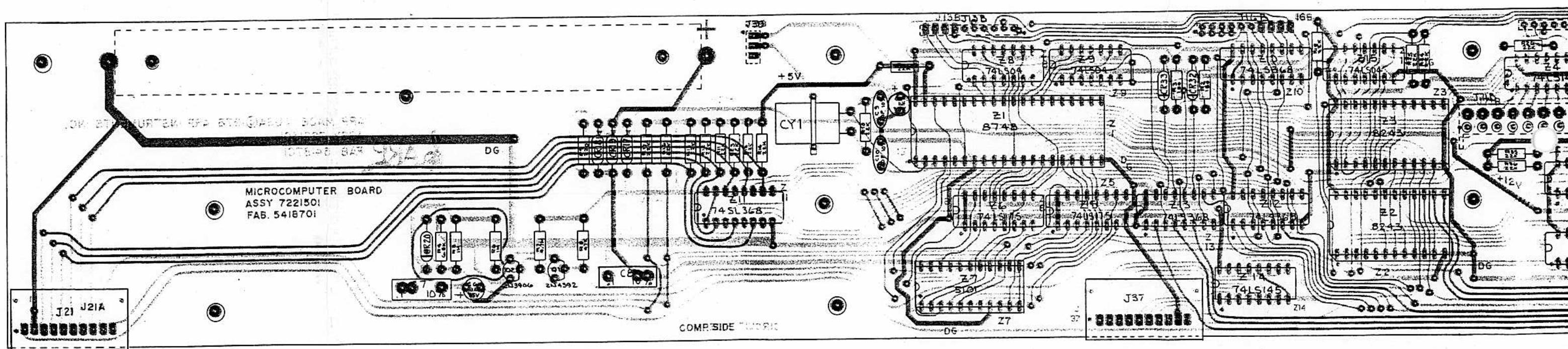
QUADRA, Model 2460

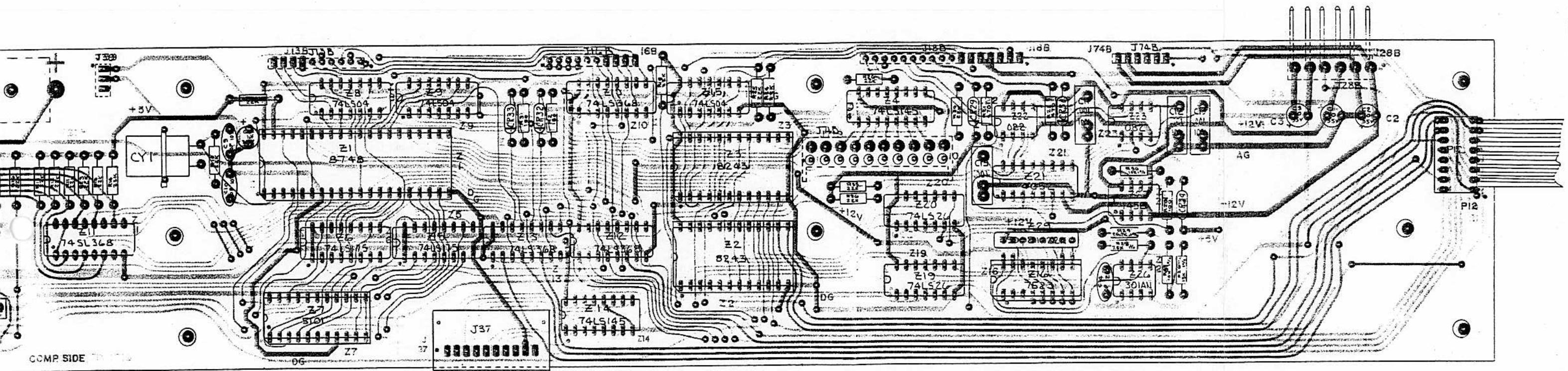
Sheet 1 of 2



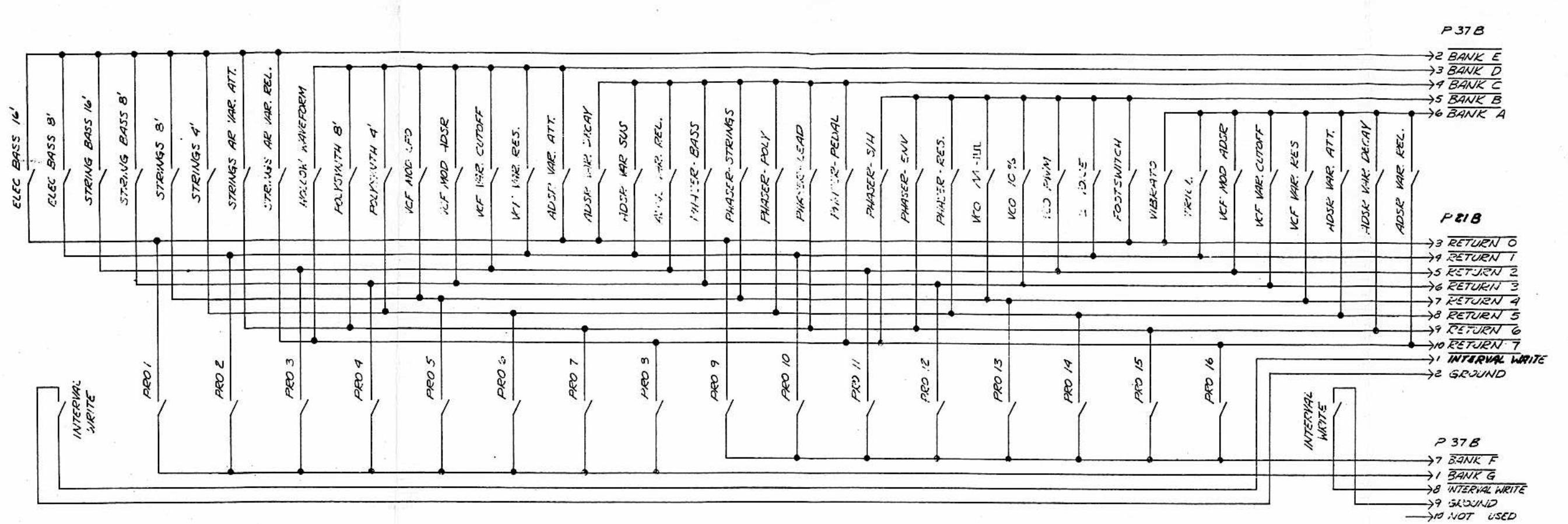
ARP INSTRUMENTS, INC.

**SCHEMATIC, MICROCOMPUTER BOARD
QUADRA, Model 2460**

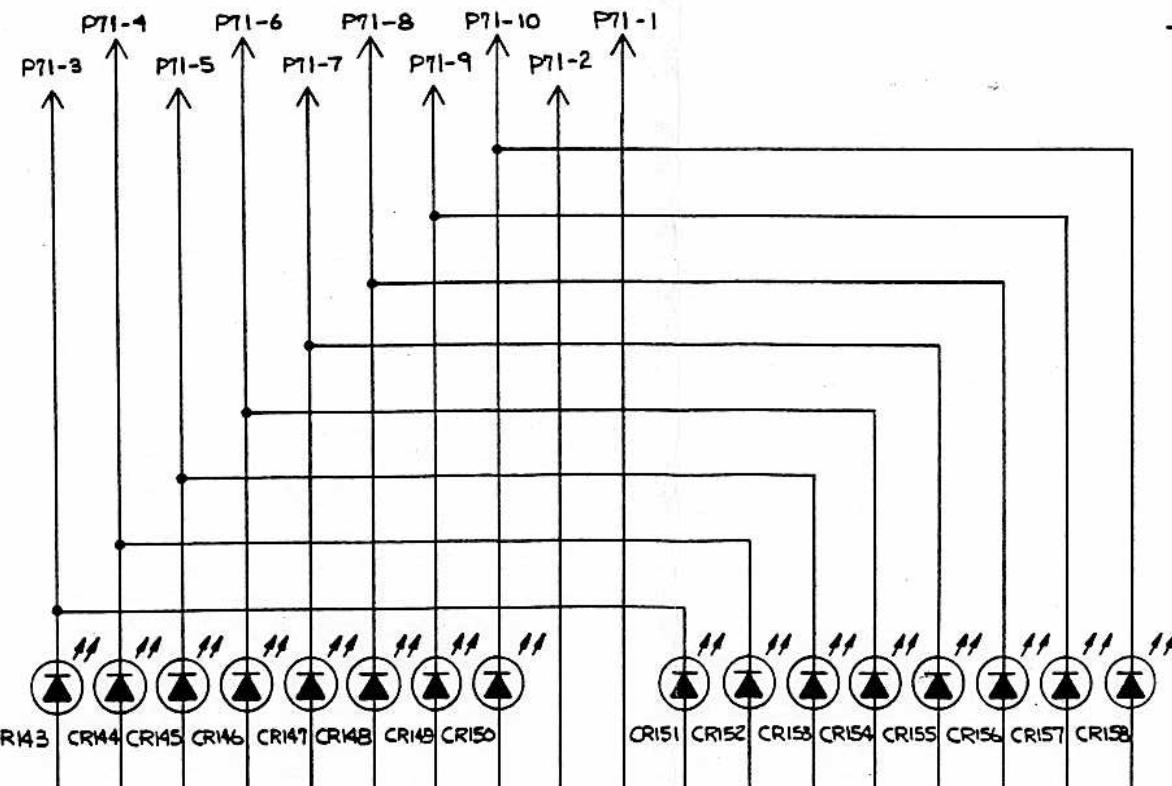




ARP INSTRUMENTS, INC.
ASSEMBLY, MICROCOMPUTER BOARD
QUADRA, Model 2460



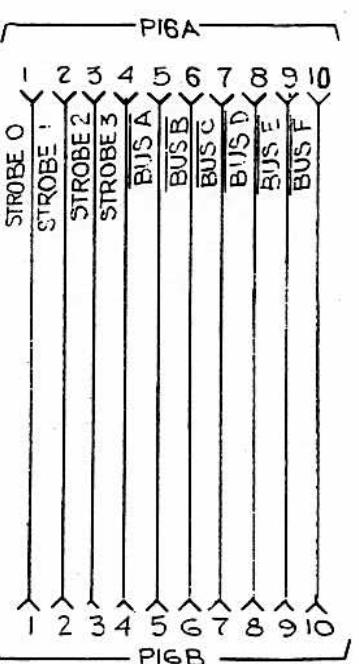
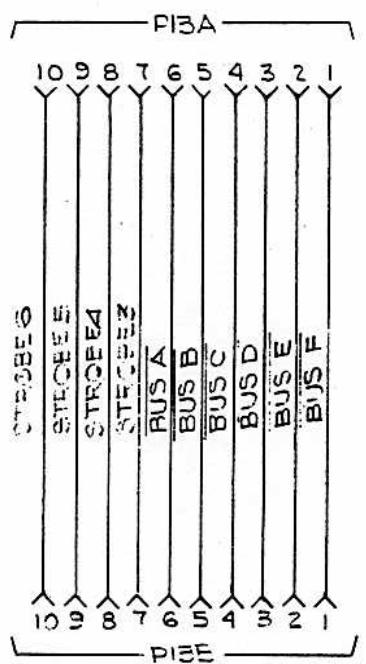
LATCH CODE - POLYSYNTH FUNCTION	DATA BUS	
ELEC BASS 16'	C	6
ELEC BASS 8'	D	6
STRING BASS 16'	E	6
STRING BASS 8'	F	5
STRINGS 8'	A	5
STRINGS 4'	B	5
STRING AR VAR ATT	C	5
SIRING AR VAR REL	D	5
HOLLOW WAVEFORM	F	4
POLYSYNTH 8'	E	4
POLYSYNTH 4'	D	4
VCF MOD LFO	C	4
VCF MOD ADSR	B	4
VCF VAR CUTOFF	A	4
VCF VAR RES	F	5
ADSR VAR ATT	E	5
ADSR VAR DELAY	A	3
ADSR VAR SUS	B	3
ADSR VAR REL	C	3



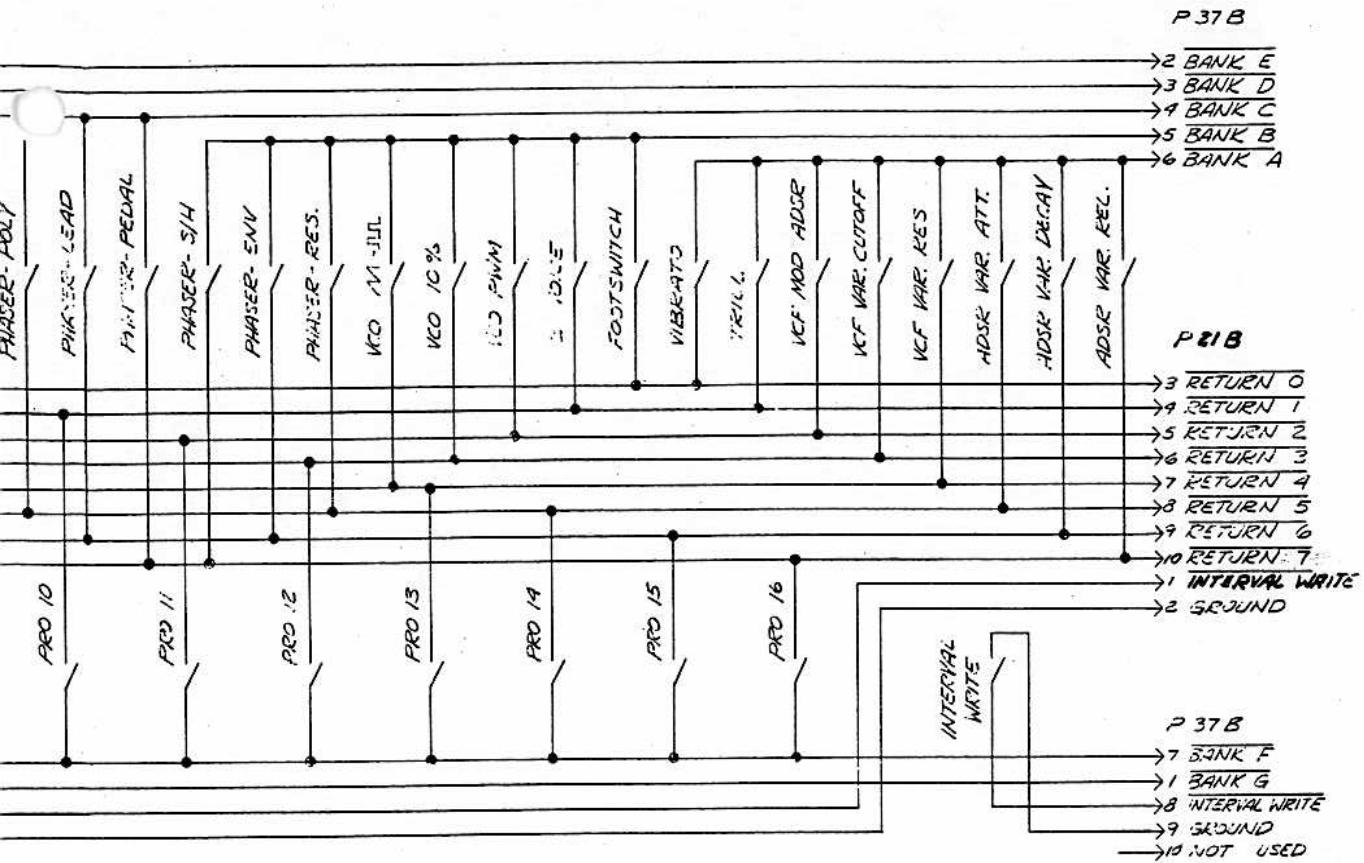
NOTE:

1. UNLESS OTHERWISE SPECIFIED:
ALL DIODES ARE FLY 510.

ARP INSTRUMENTS, INC.
SCHEMATIC, LED BOARD
QUADRA, Model 2460



TCH ARRAY



LATCH CODE - POLYSYNTH FUNCTION	DATA BUS	STROBE
ELEC BASS 16'	C	6
ELEC BASS 8'	D	6
STRING BASS 16'	E	6
STRING BASS 8'	F	5
STRINGS 8'	A	5
STRINGS 4'	B	5
STRING AR VAR ATT	C	5
STRING AR VAR REL	D	5
HOLLOW WAVEFORM	F	4
POLYSYNTH 8'	E	4
POLYSYNTH 4'	D	4
VCF MOD LFO	C	4
VCF MOD ADSR	B	4
VCF VAR CUTOFF	A	4
VCF VAR RES	F	5
ADSR VAR ATT	E	5
ADSR VAR DECAY	A	3
ADSR VAR SUS	B	3
ADSR VAR REL	C	3

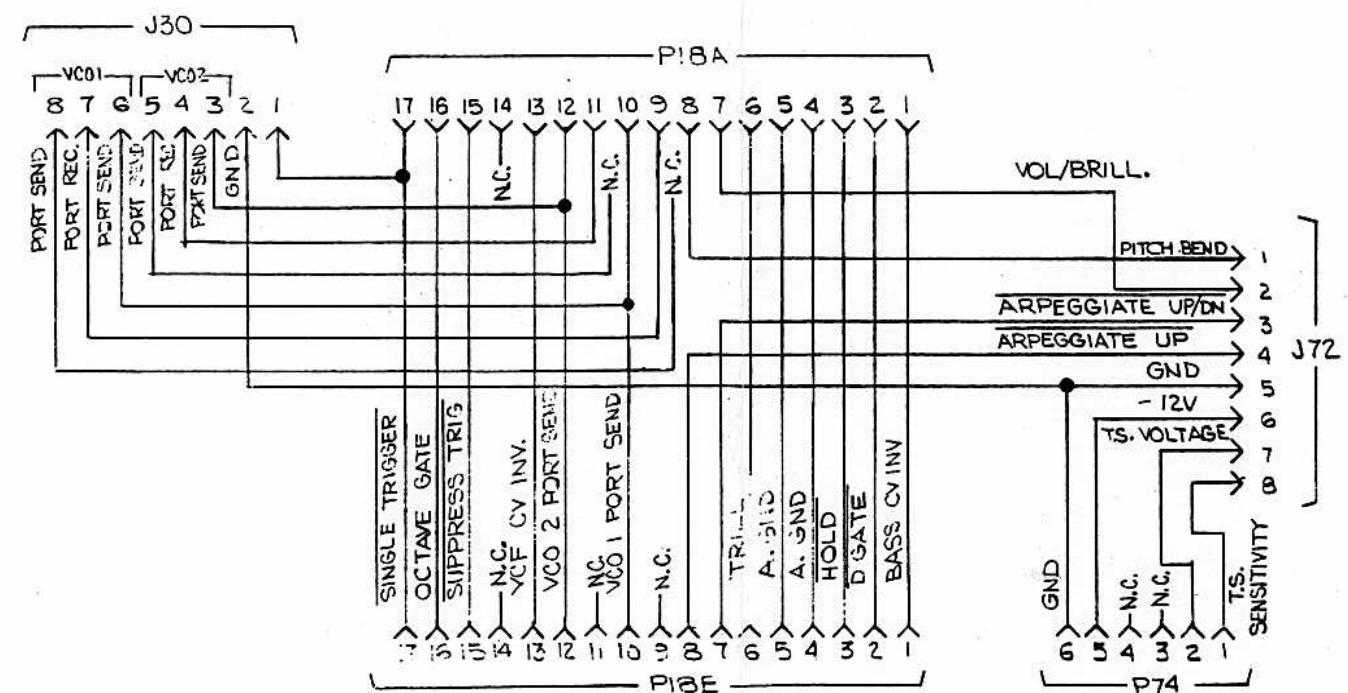
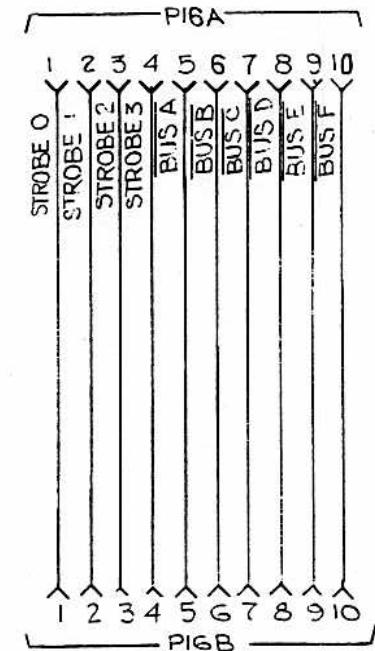
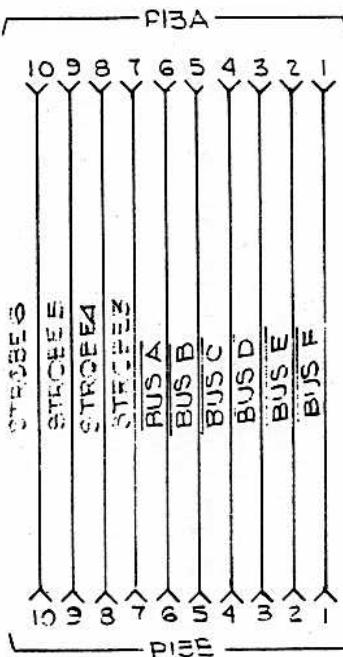
LATCH CODE - PHASER FUNCTION	DATA BUS	STROBE
PHASER - BASS	D	3
PHASER - STRINGS	E	3
PHASER - POLY	F	3
PHASER - LEAD	A	2
PHASER - PEDAL	B	2
PHASER - S/H	D	1
PHASER - ENV	C	1
PHASER - RES	B	1

LATCH CODE - LEAD FUNCTION	DATA BUS	STROBE
VCO M	A	1
VCO 10%	F	2
VCO PWM	E	2
2 VOICE	D	2
FOOTSWITCH	C	2
VIBRATO	E	1
TRILL	F	1
VCF MOD ADSR	A	0
VCF VAR CUTOFF	B	0
VCF VAR RES	C	0
ADSR VAR ATT	D	0
ADSR VAR DECAY	E	0
ADSR VAR REL	F	0

ARP INSTRUMENTS, INC.

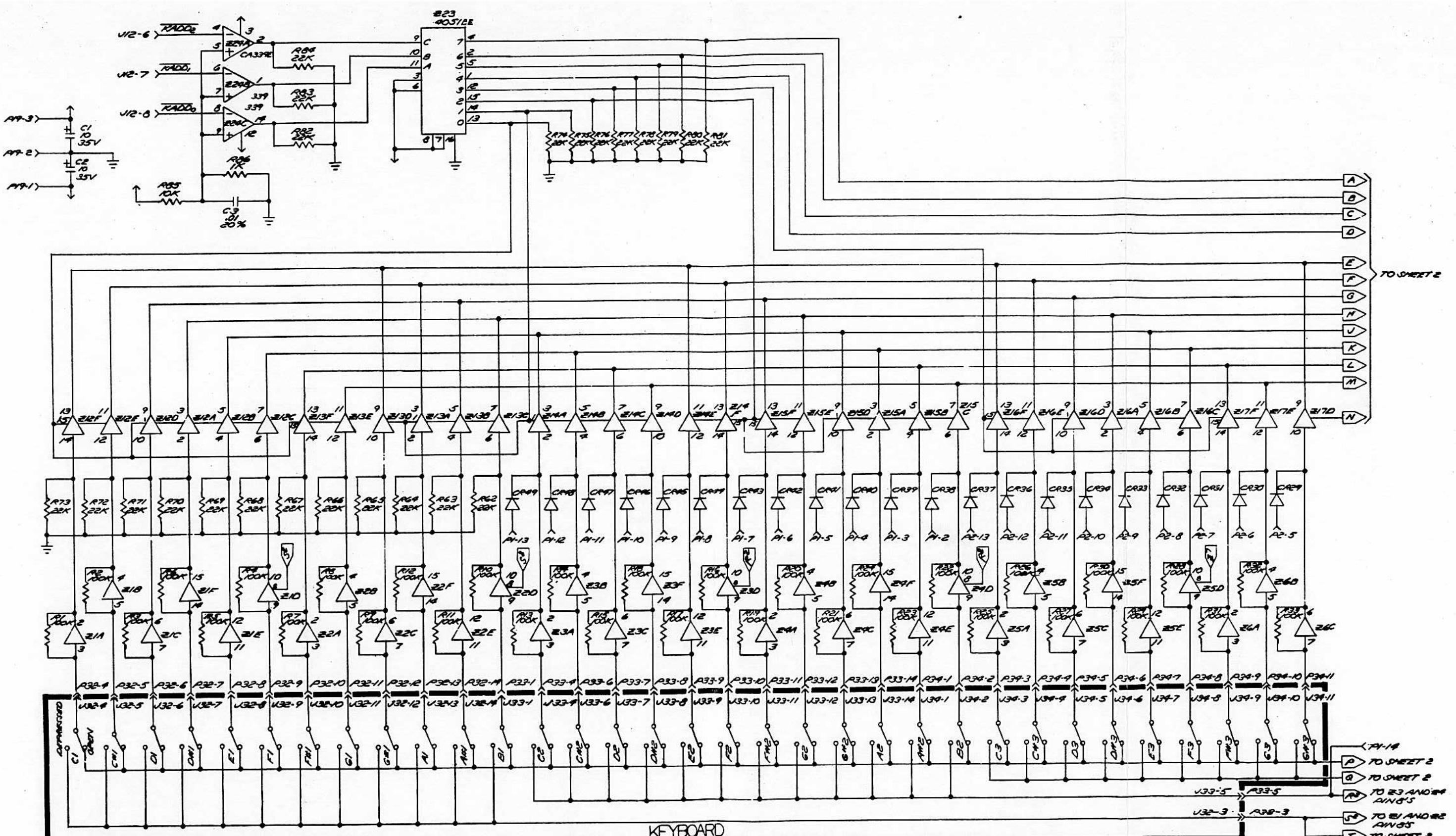
SCHEMATIC, TOUCH SWITCH PANEL
QUADRA, Model 2460

SS OTHERWISE SPECIFIED:
DIODES ARE FLY 510.



ARP INSTRUMENTS, INC.
SCHEMATIC, LED BOARD
QUADRA, Model 2460

ARP INSTRUMENTS, INC.
SCHEMATIC, INTERCONNECT BOARD
QUADRA, Model 2460



SAME AS
R35 R33
U35 U33

CONNECTIONS FOR
U21 THRU U24 TO 502E
N.C.

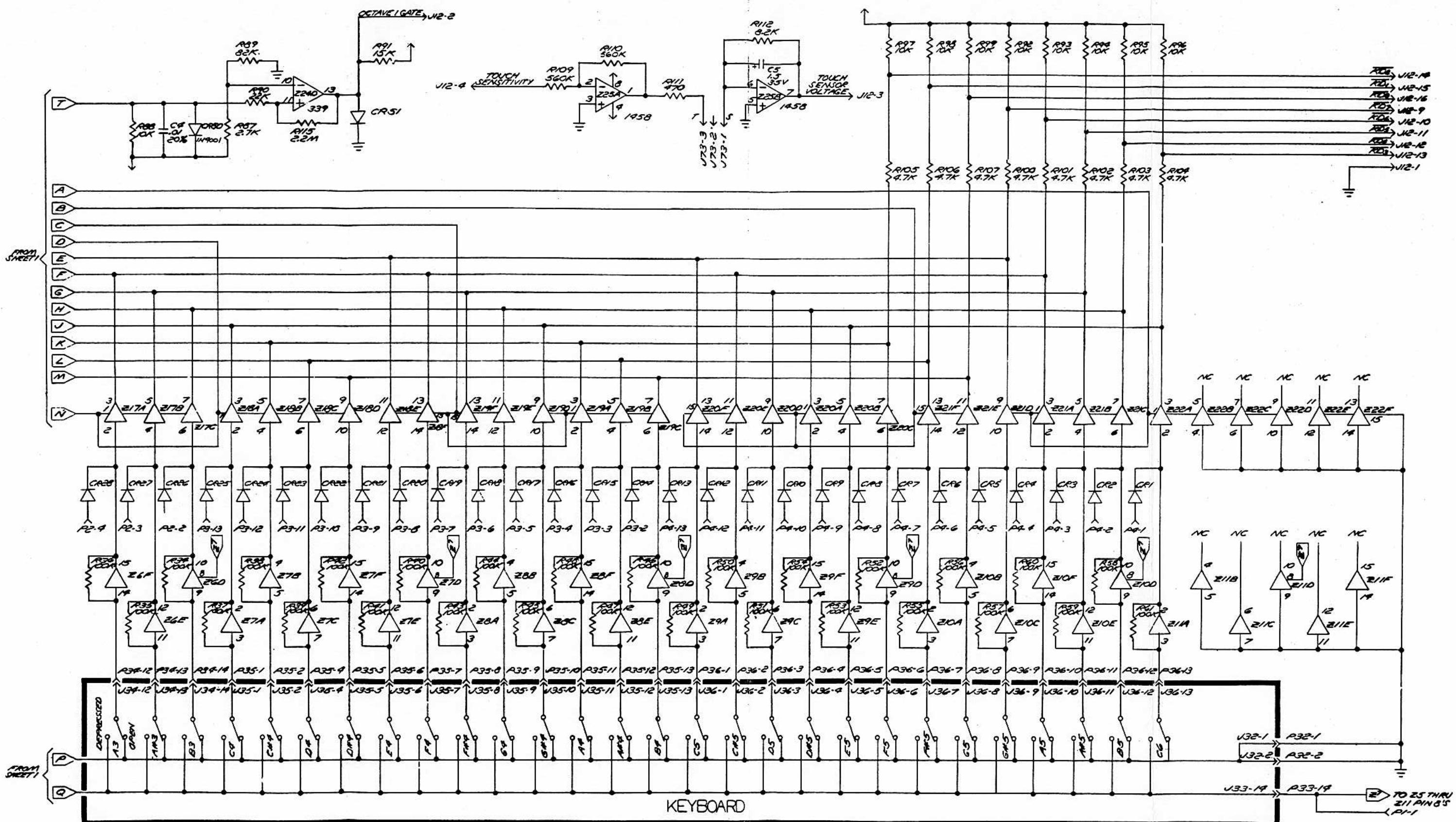


2) U21 THRU U24 TO 502E
N.C.



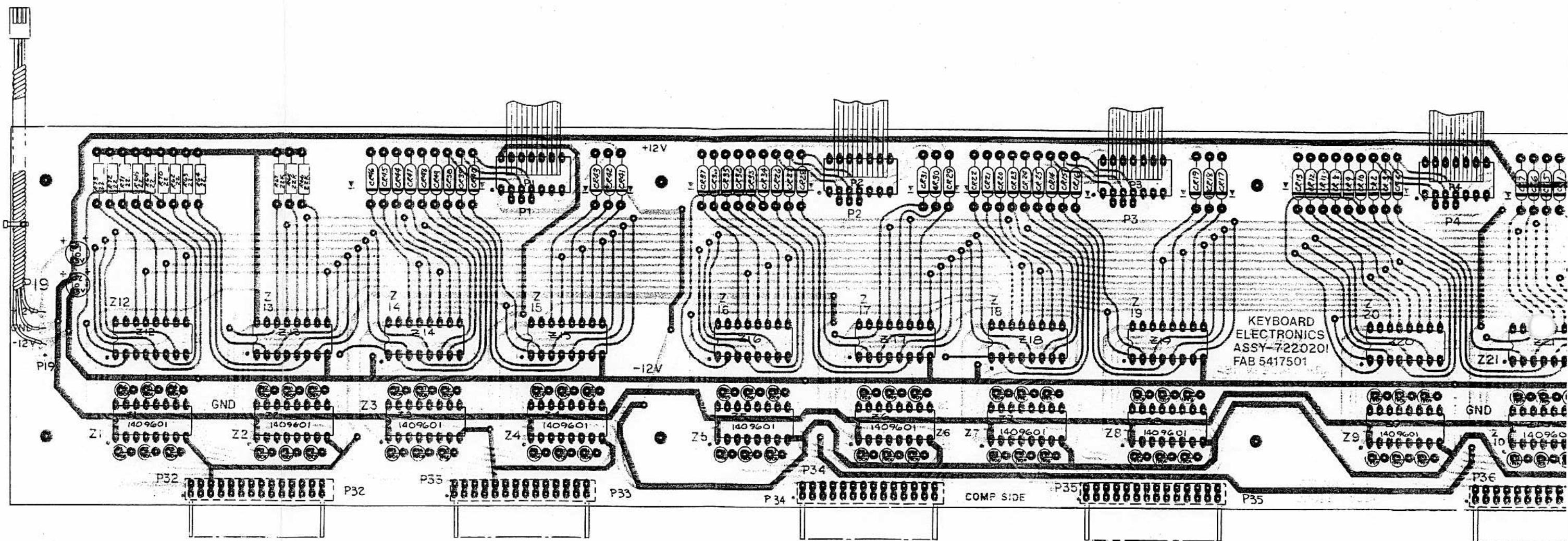
ARP INSTRUMENTS, INC.

SCHEMATIC, KEYBOARD ELECTRONICS BOARD
QUADRA, Model 2460
Sheet 1 of 2



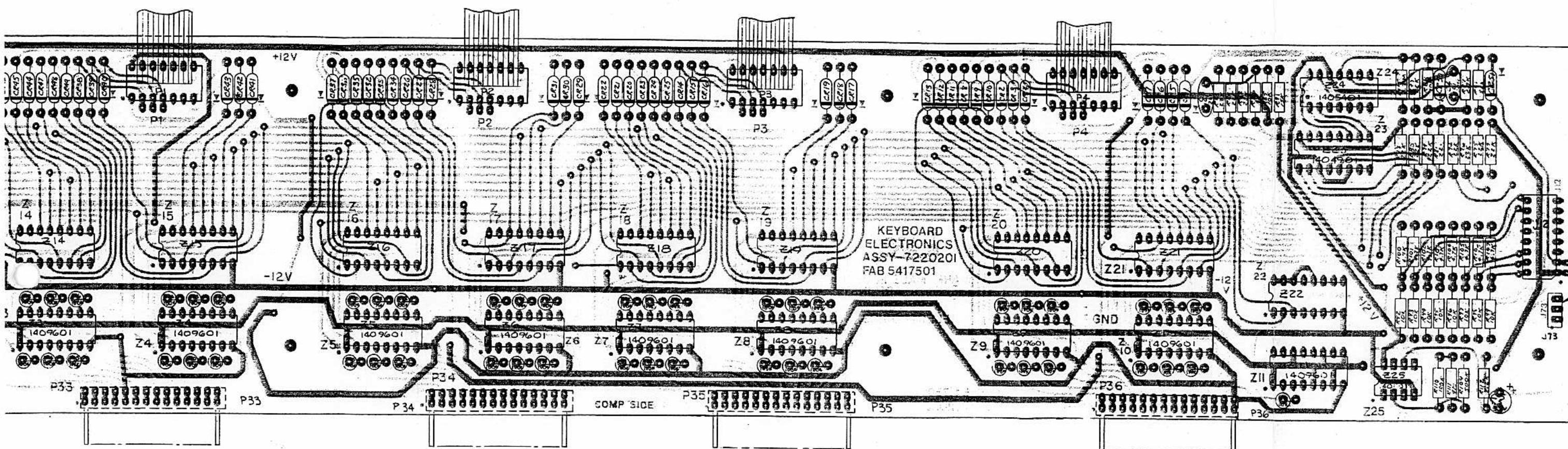
ARP INSTRUMENTS, INC.

**SCHEMATIC, KEYBOARD ELECTRONICS BOARD
QUADRA, Model 2460**



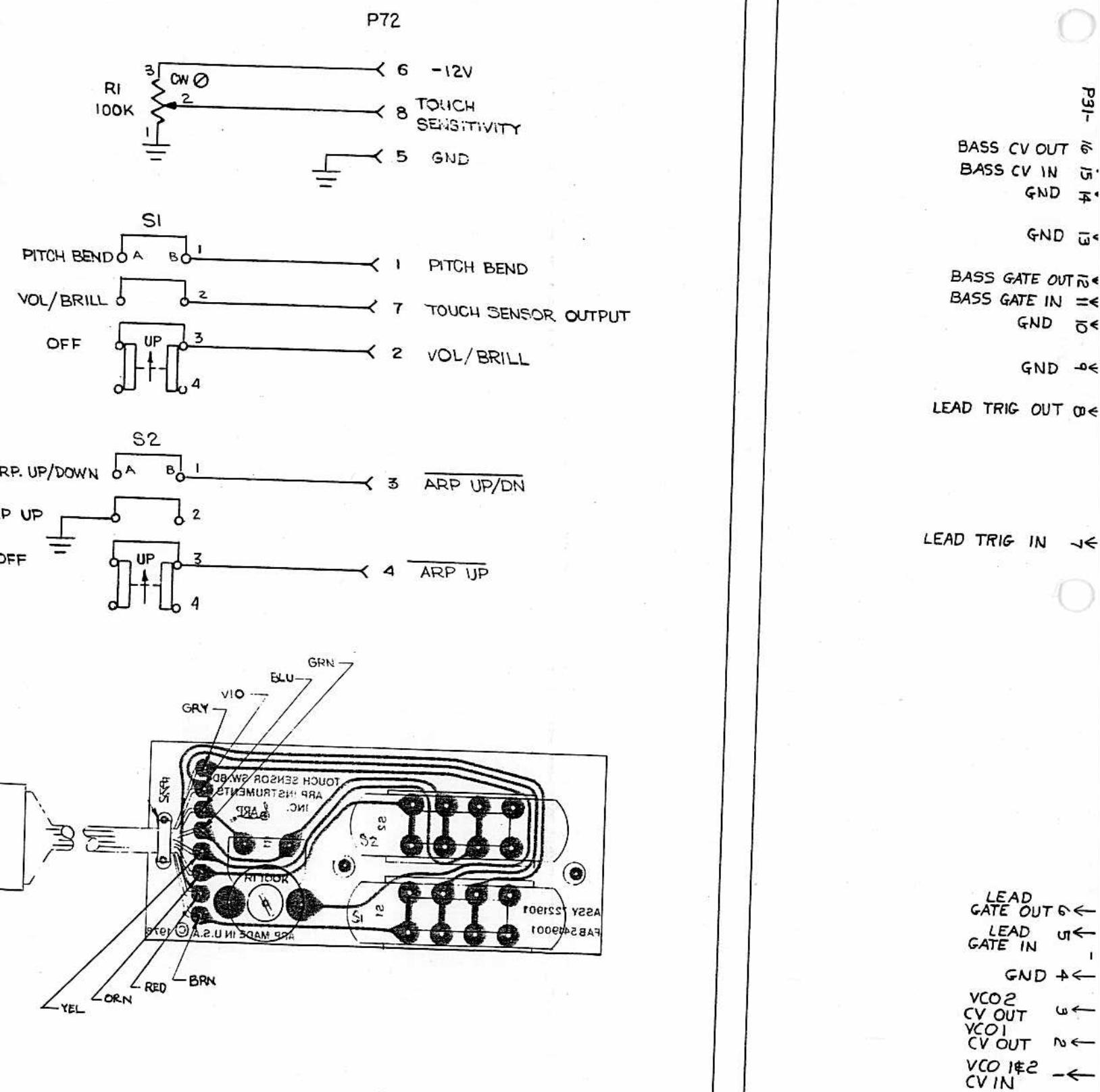
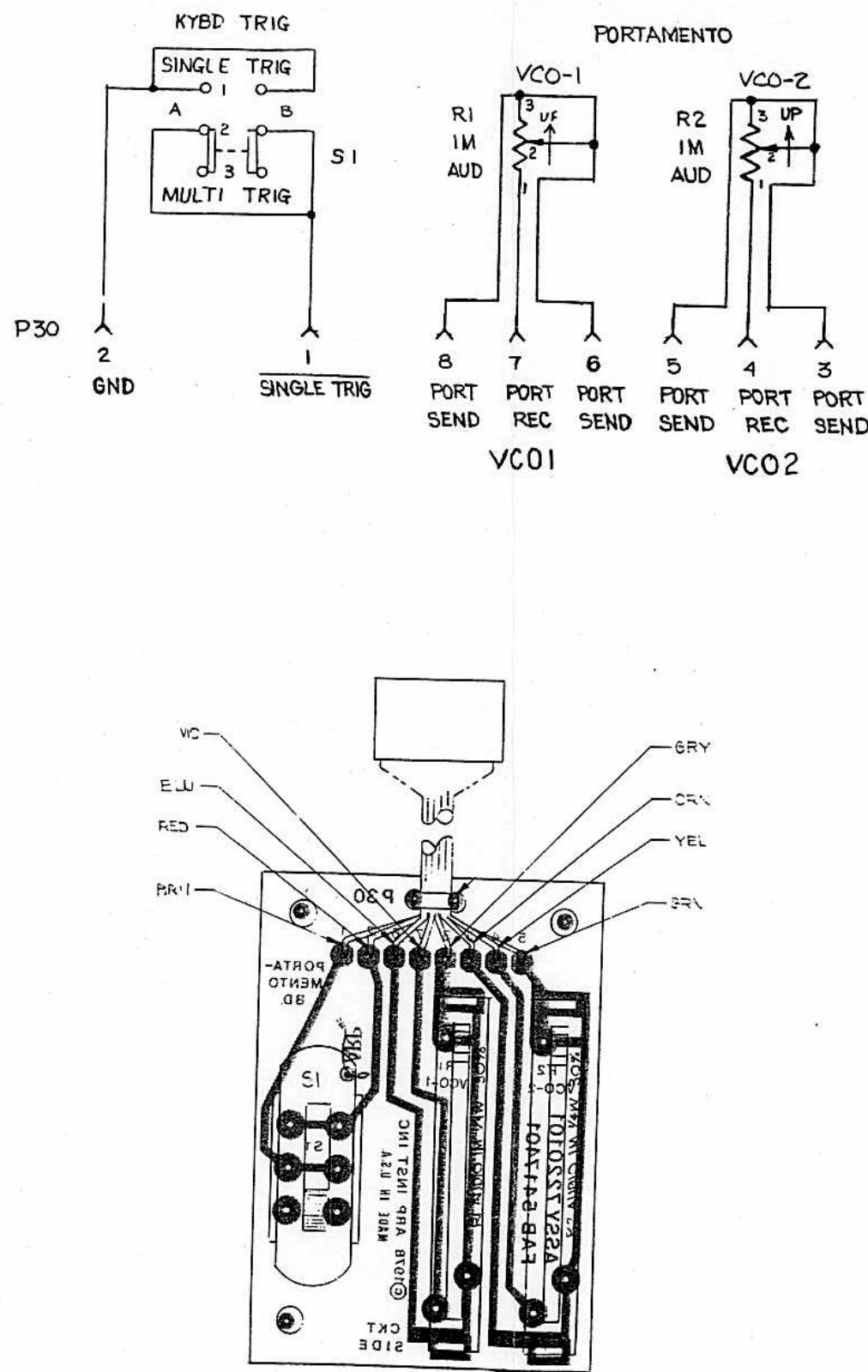
NOTES:

- I. UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS, 1%W, 5%.
CAPACITOR VALUES μ F (P=PICOFARADS).
DIODES ARE IN4148.

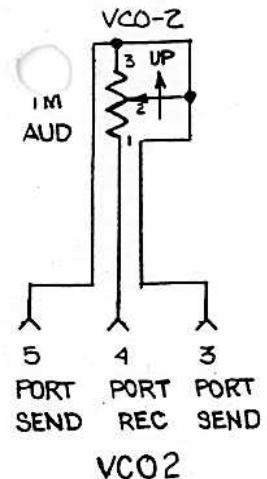


ARP INSTRUMENTS, INC.

ASSEMBLY, KEYBOARD ELECTRONICS BOARD
QUADRA, Model 2460



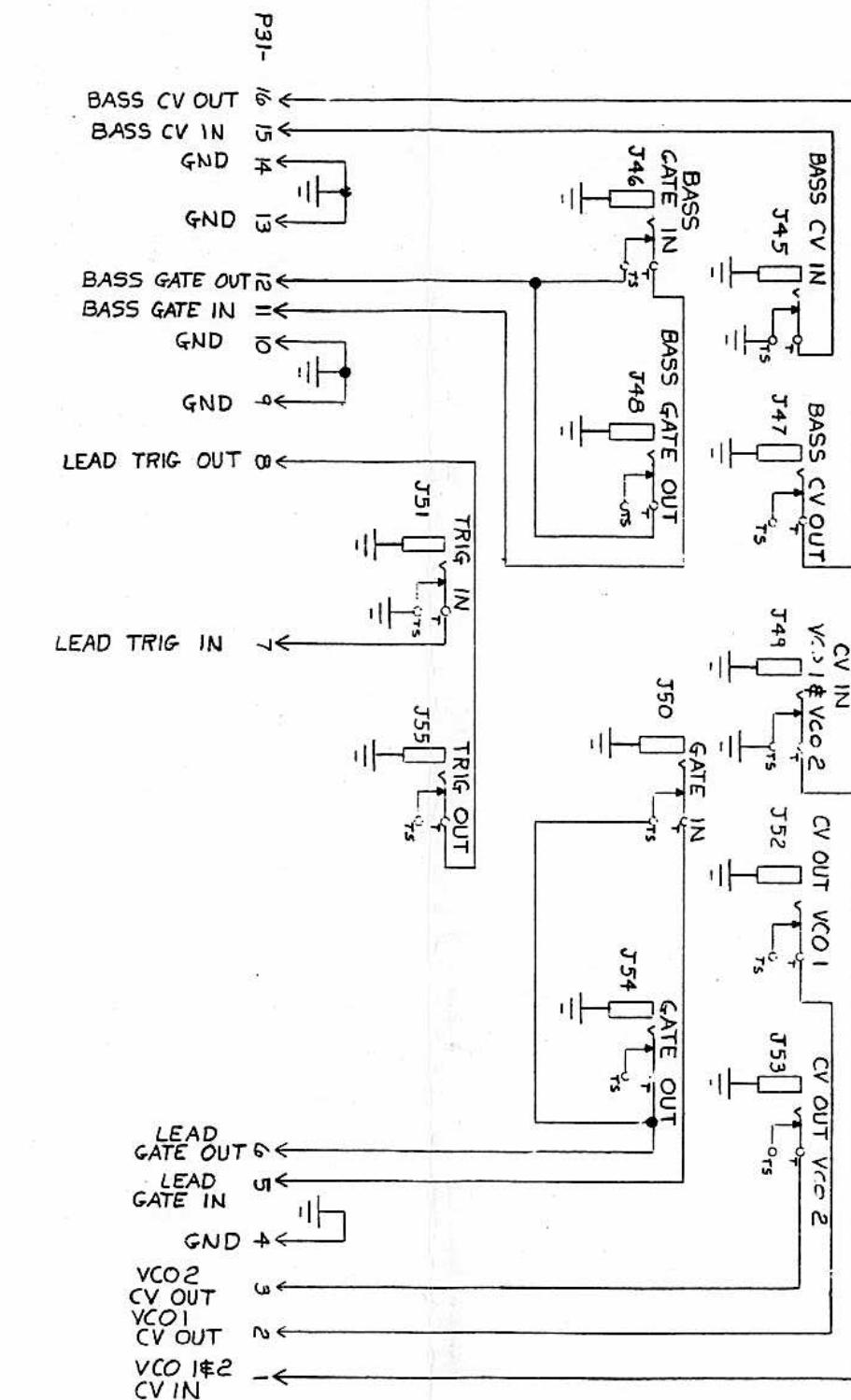
MENTO



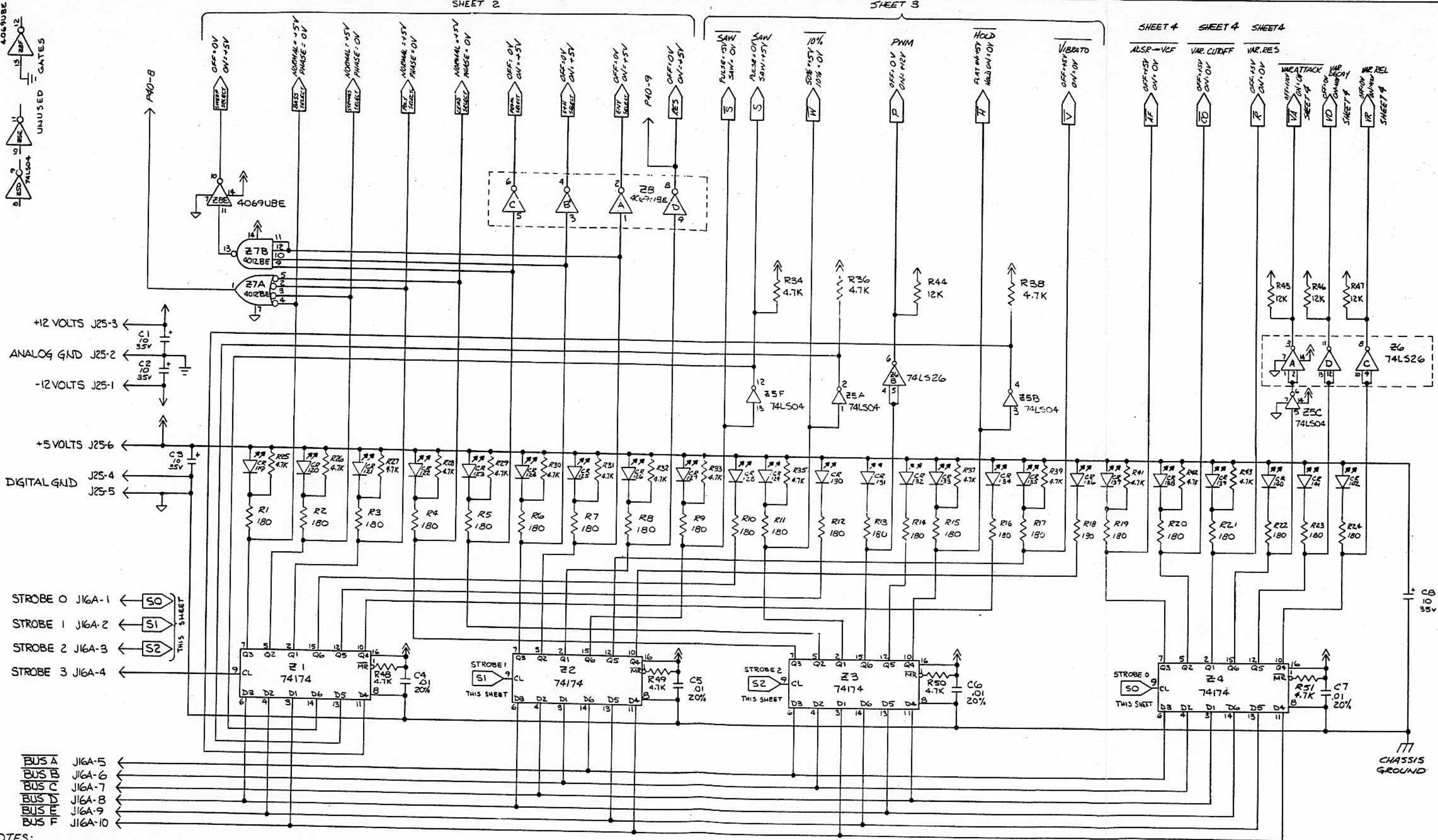
GRY
GRN
BLU
VIO
GRY

ARP INSTRUMENTS, INC.
SCHEMATIC & ASSEMBLY, TOUCH SENSOR SWITCH BOARD
QUADRA, Model 2460

PORTAMENTO BOARD



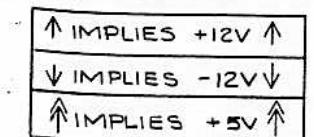
ARP INSTRUMENTS, INC.
SCHEMATIC, TINY "D" JACK BOARD
QUADRA, Model 2460



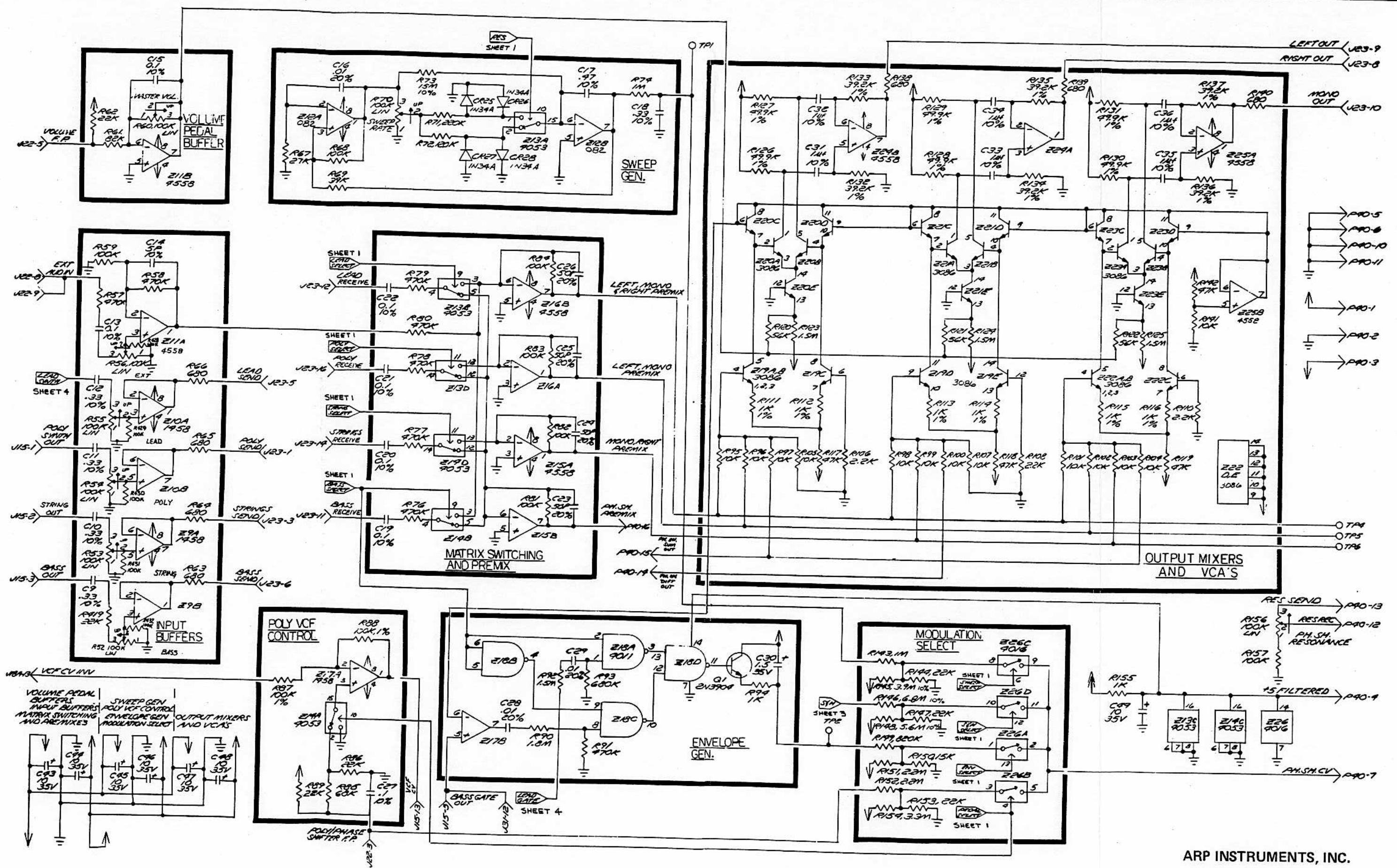
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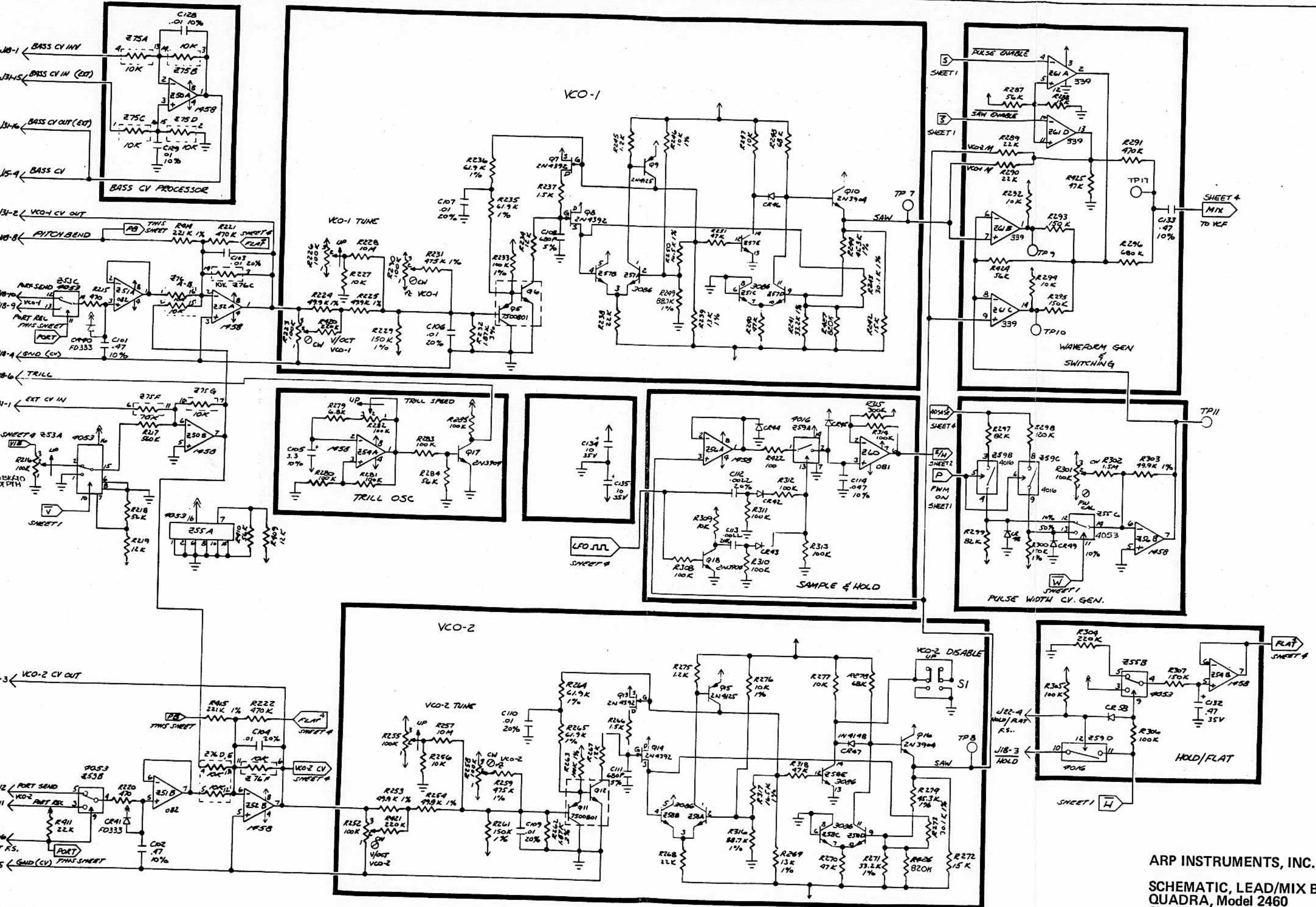
1. UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS, $\frac{1}{4}$ W, 5%.
CAPACITOR VALUES ARE IN μ F (P = PICOFARADS).
DIODES ARE IN 4148, CR119-121, 129, 131-133, 135-142 ARE FLV510 LED'S. CR129, 130, 134 ARE FLV310 LED'S
2. HIGHEST REF. DESIGNATIONS ARE: C136, CR142, R432, Z76, Q22, P40, J31, S1, M1.

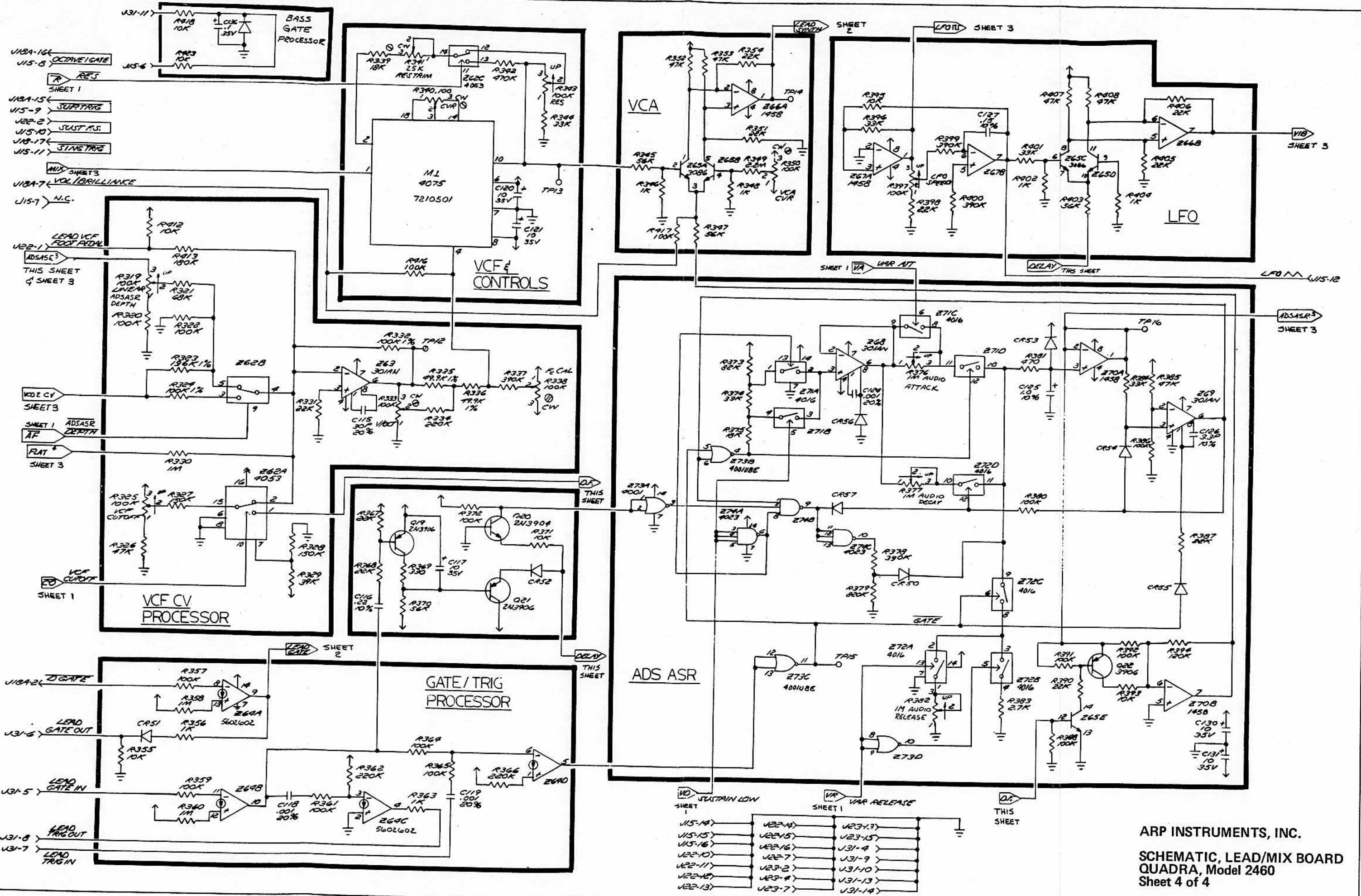
3. CONVENTIONS USED FOR SUPPLY VOLTAGE CONNECTIONS

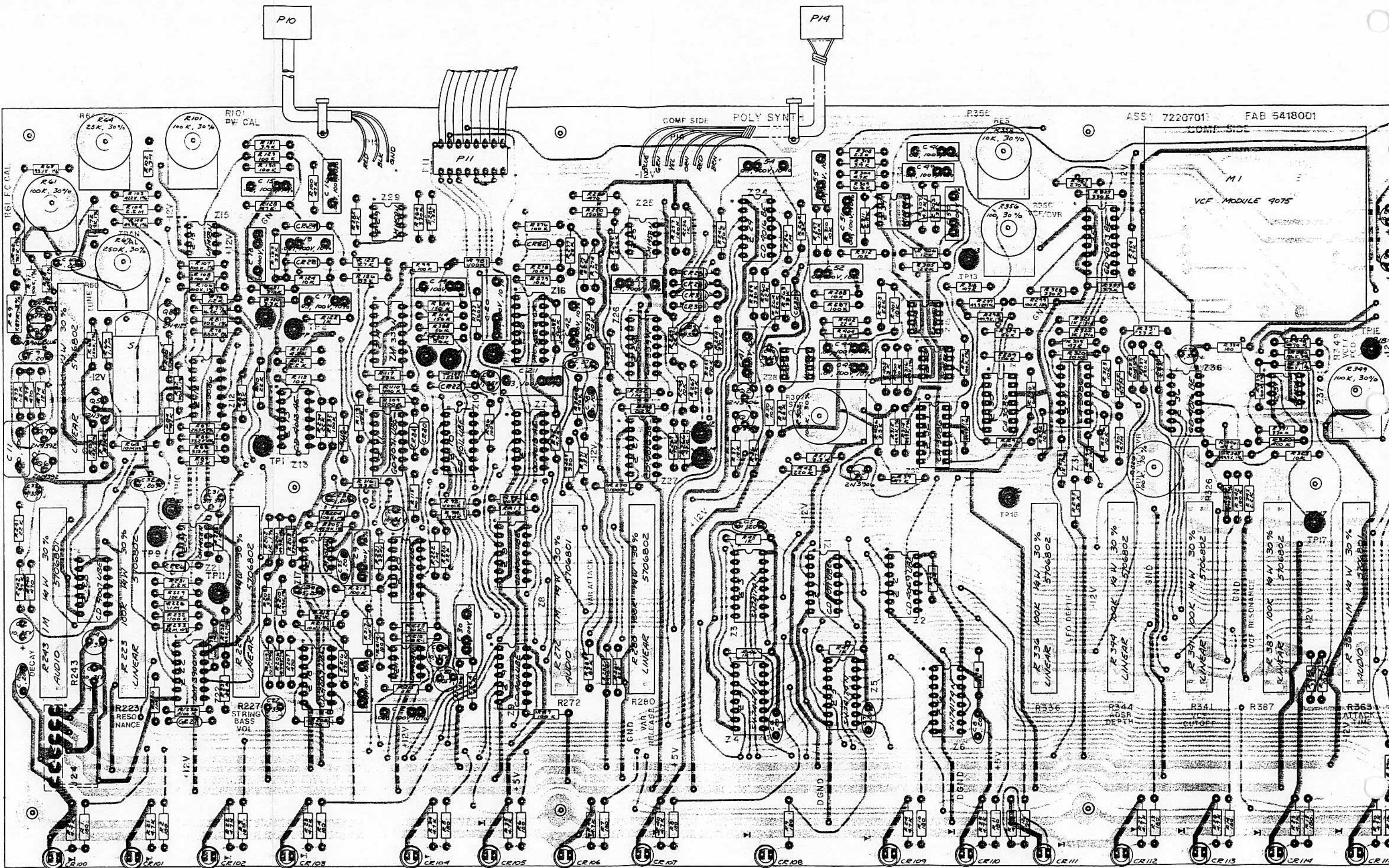


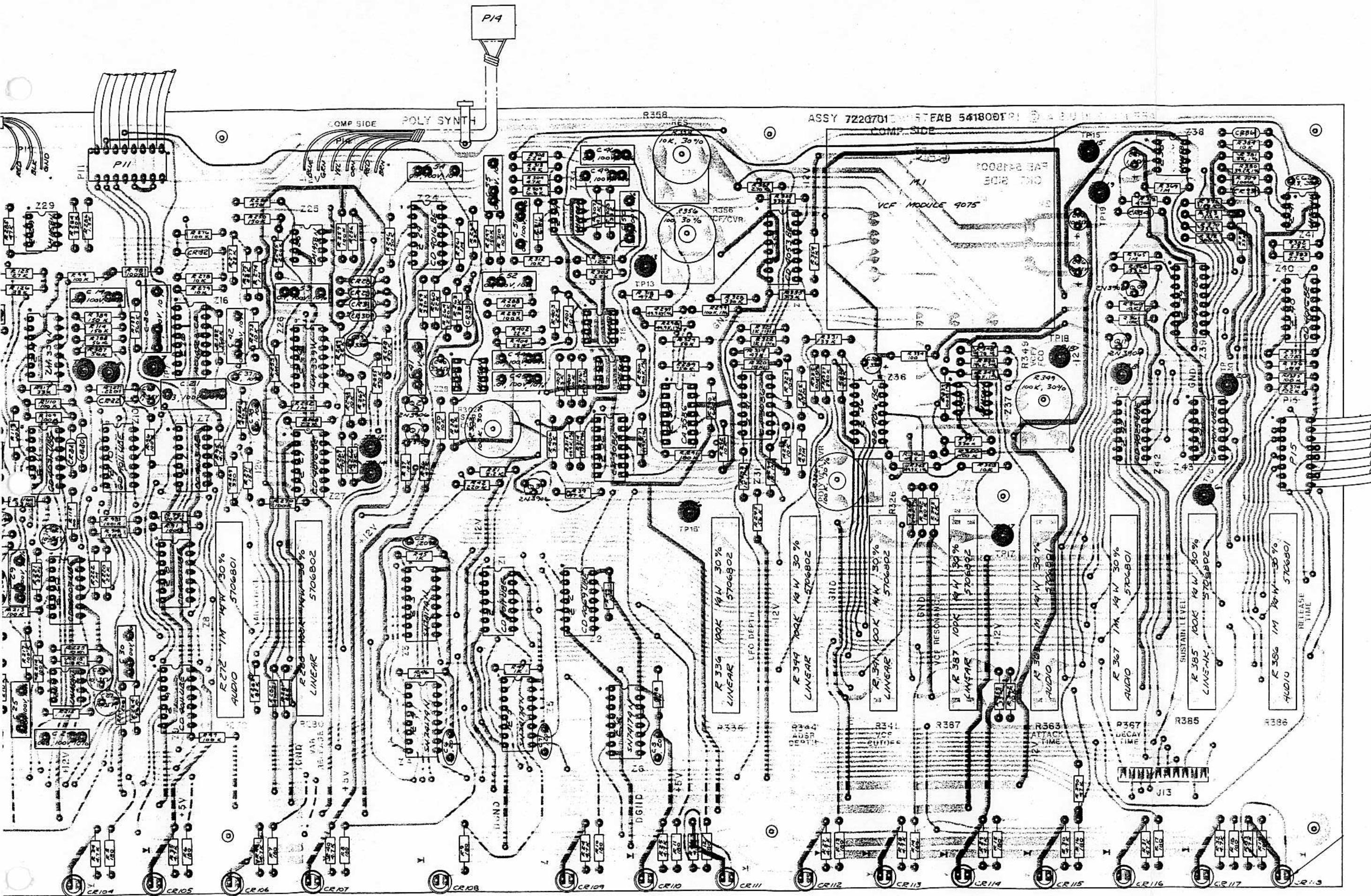
ARP INSTRUMENTS, INC.
SCHEMATIC, LEAD/MIX BOARD
QUADRA, Model 2460
Sheet 1 of 4

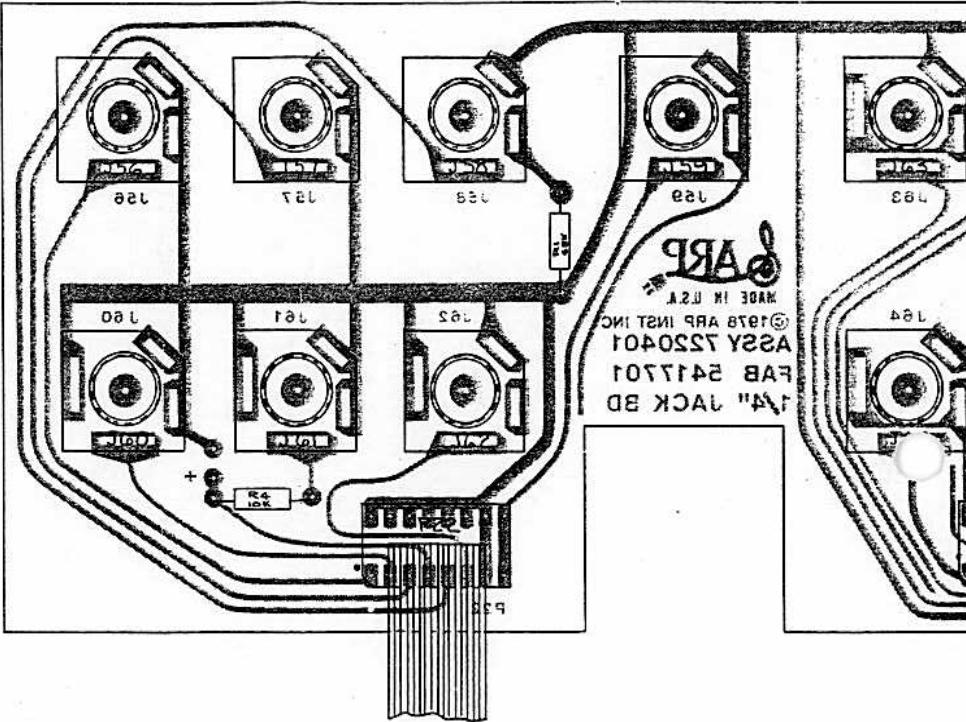
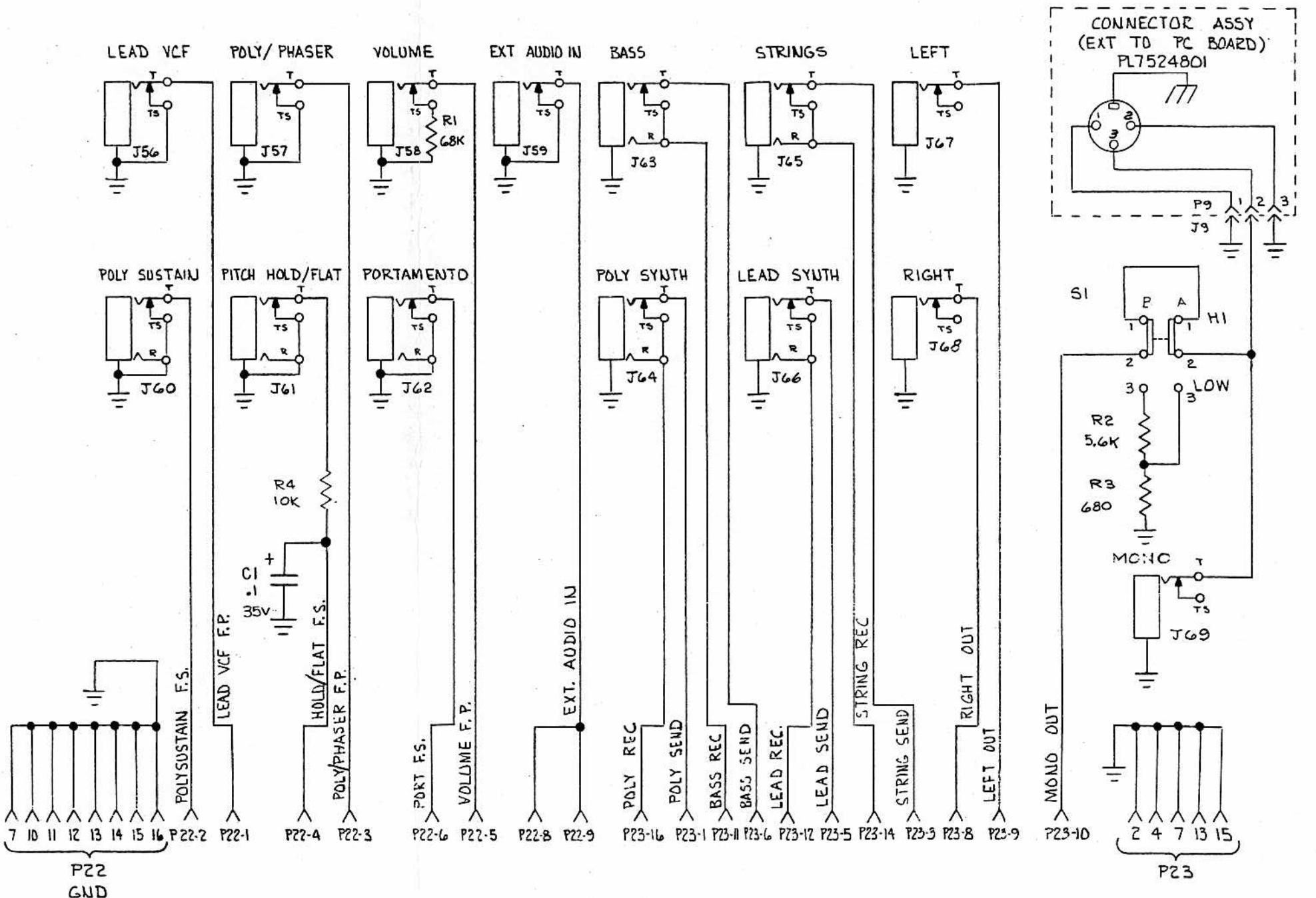


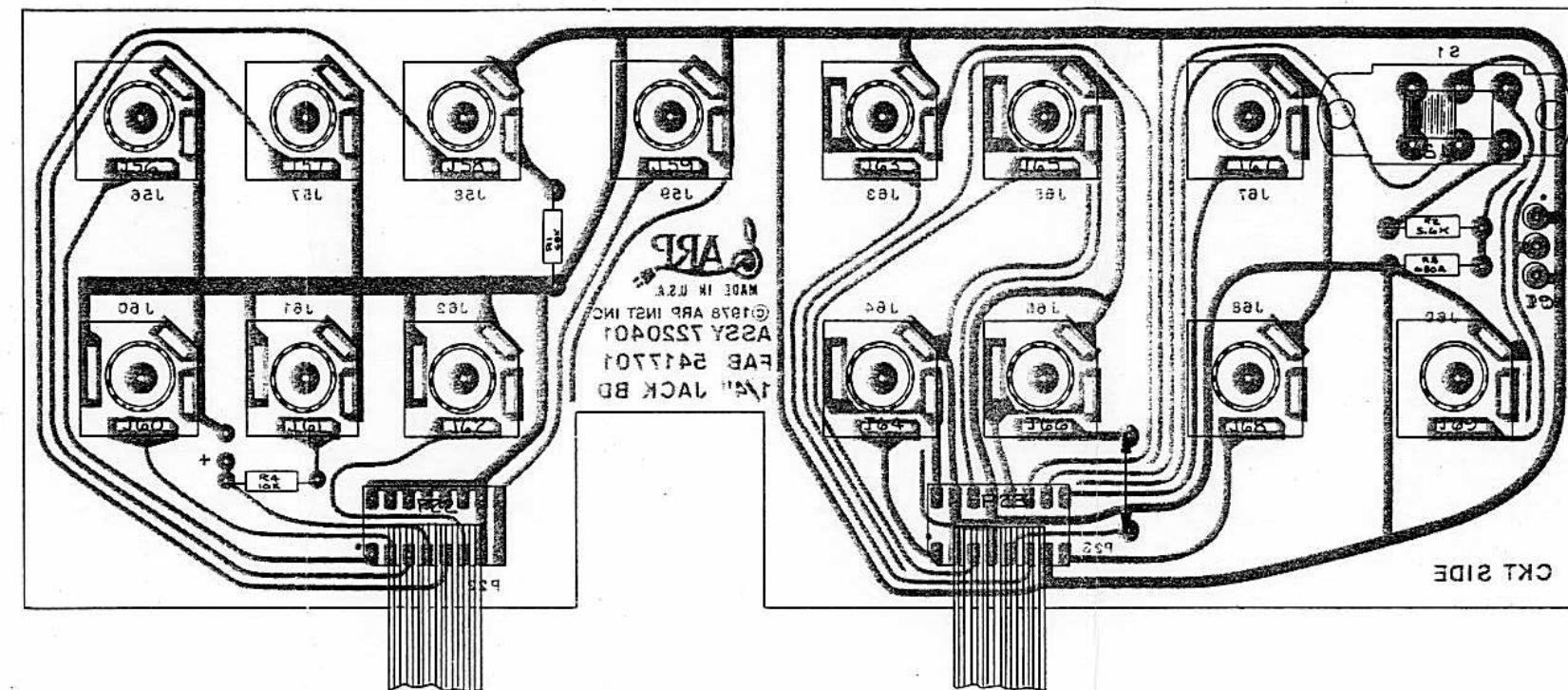
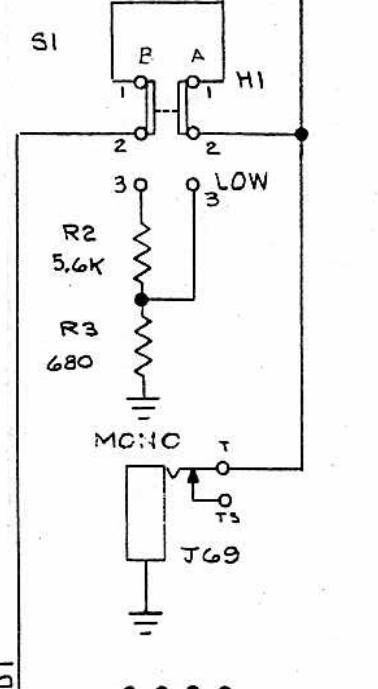
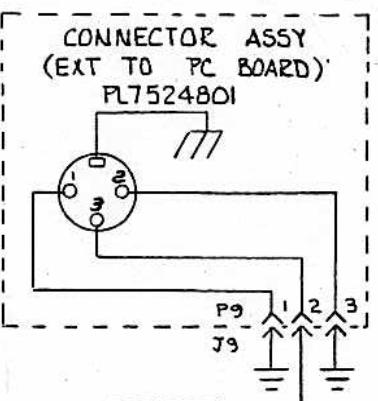
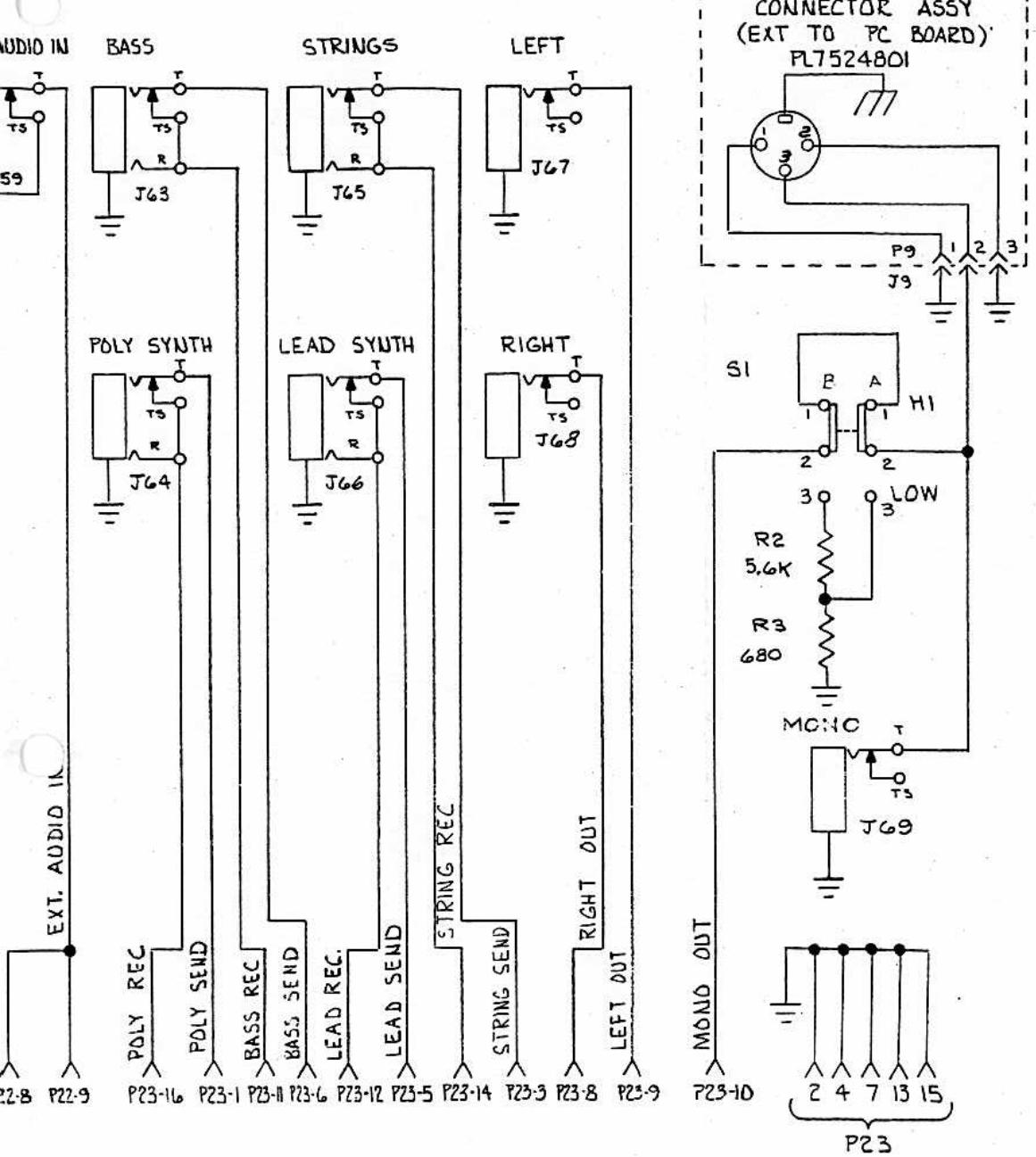






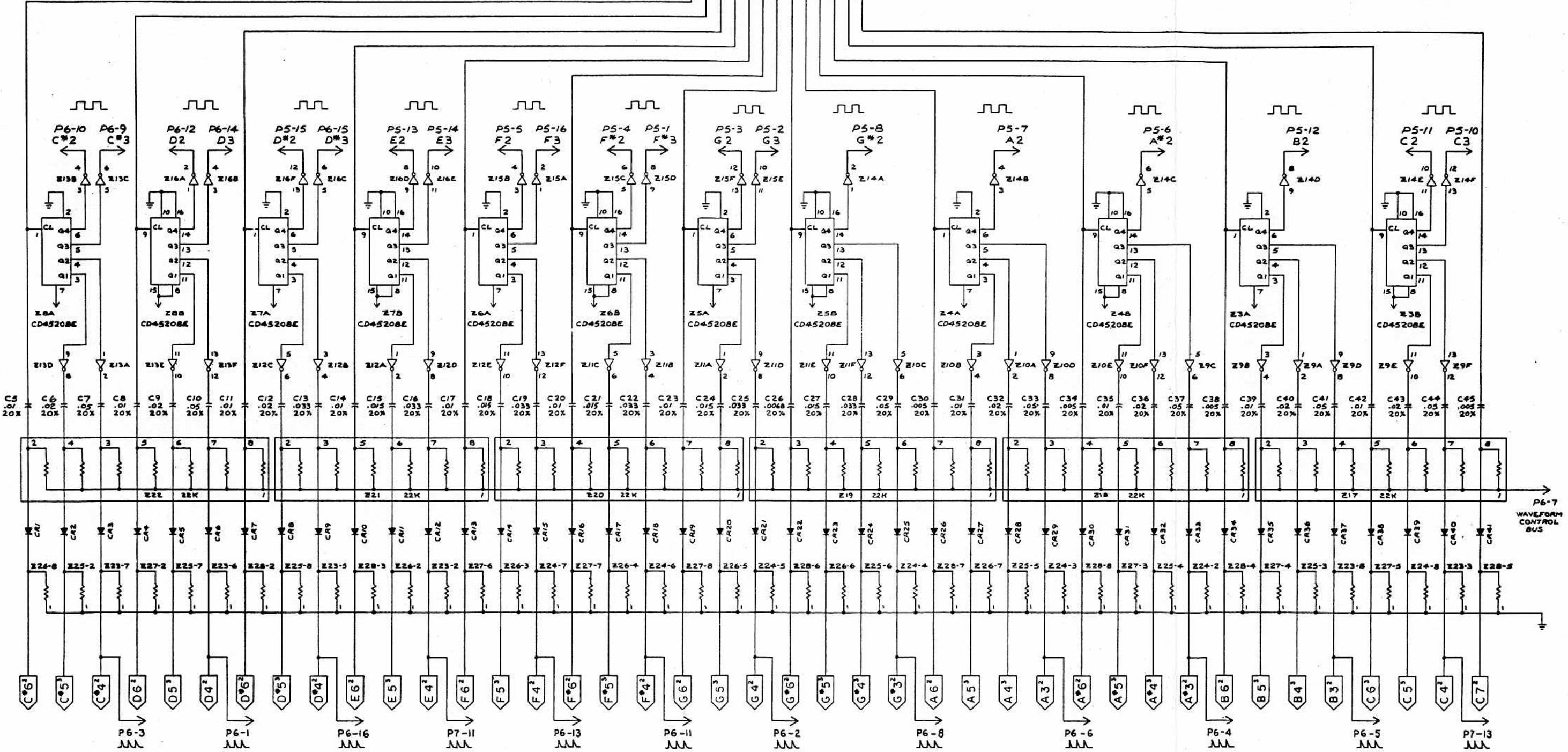
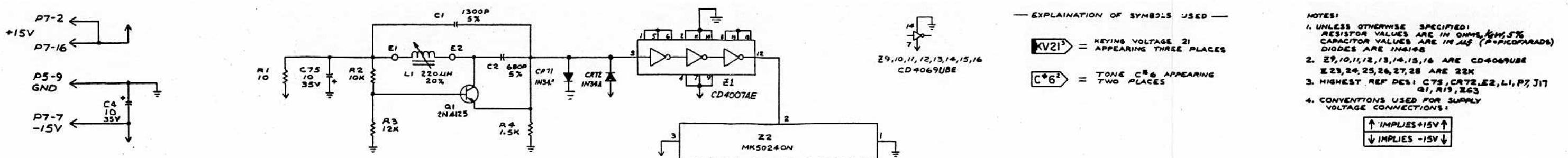






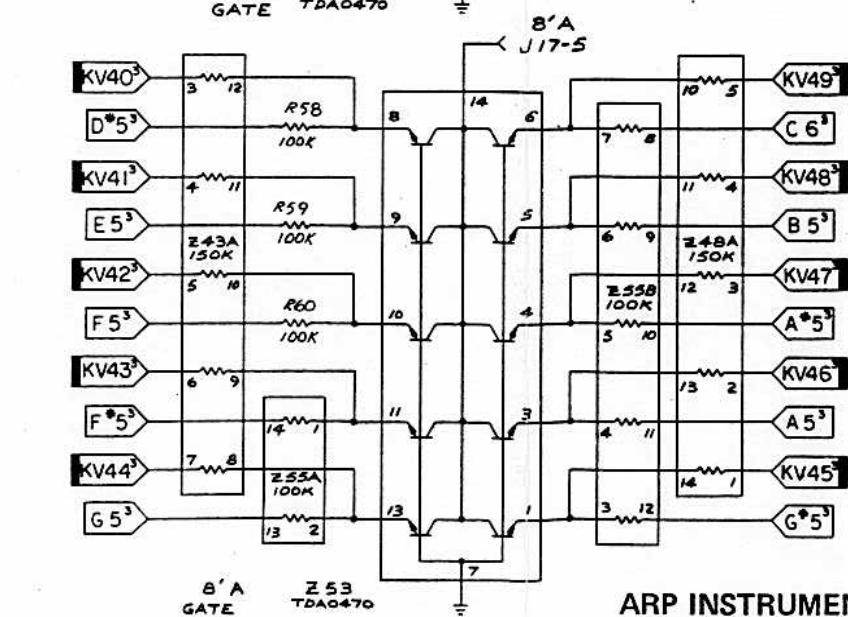
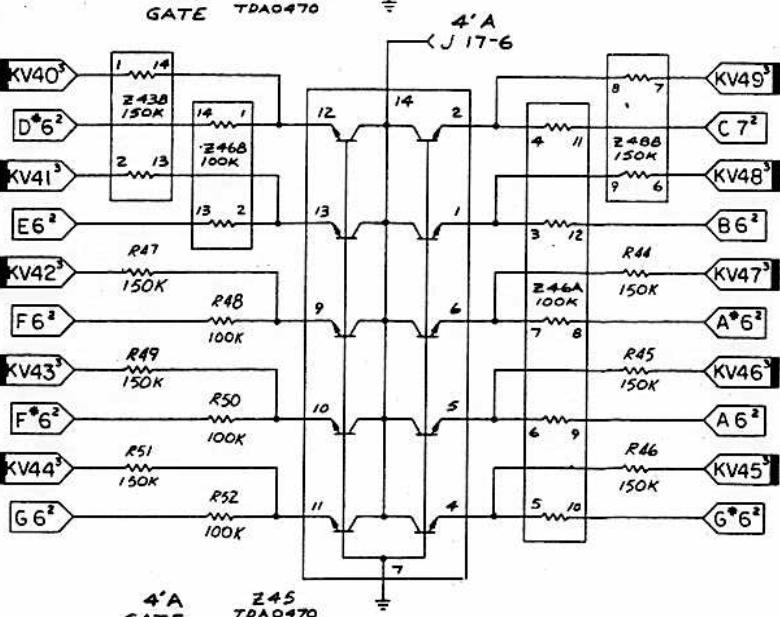
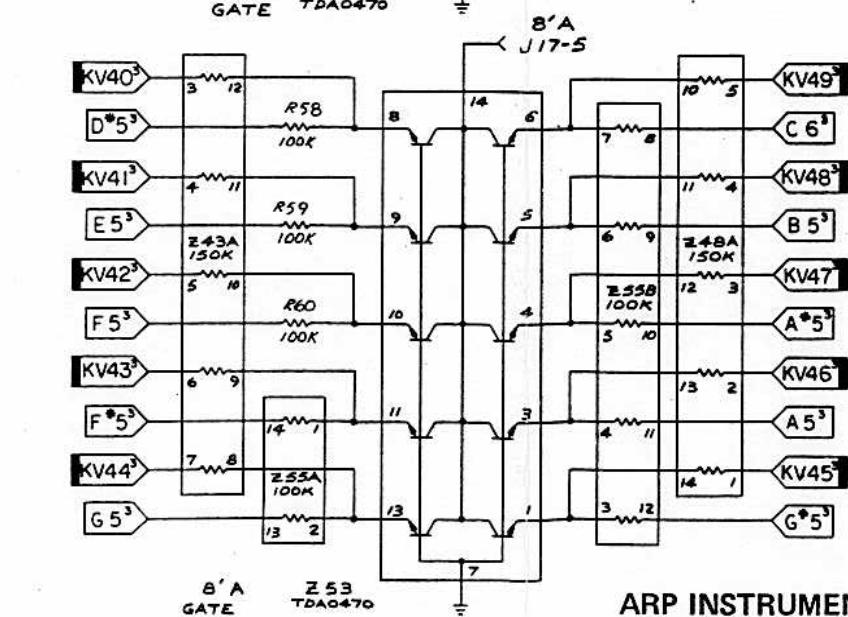
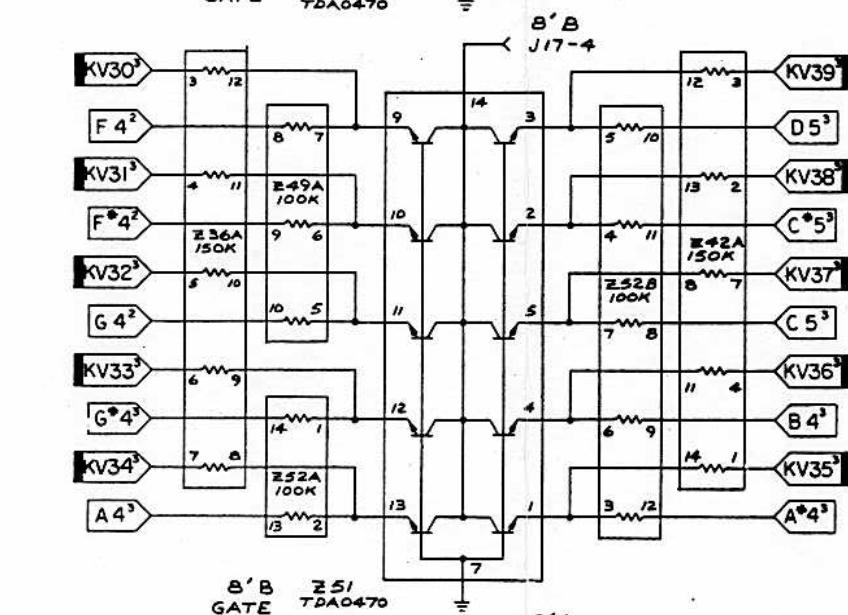
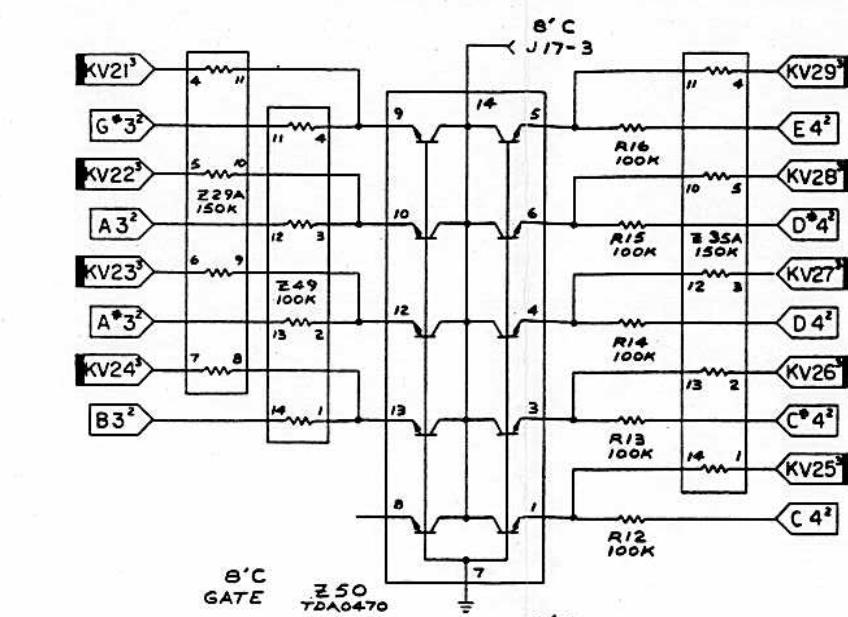
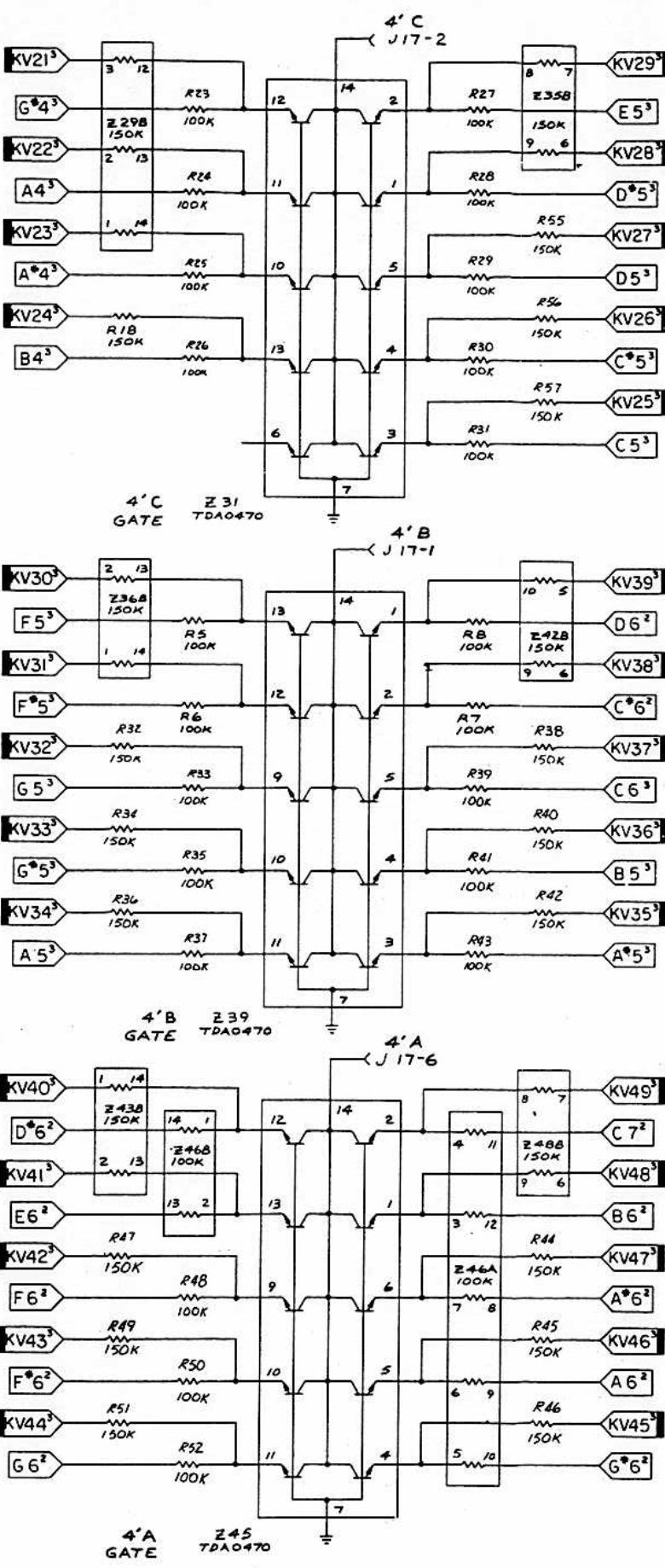
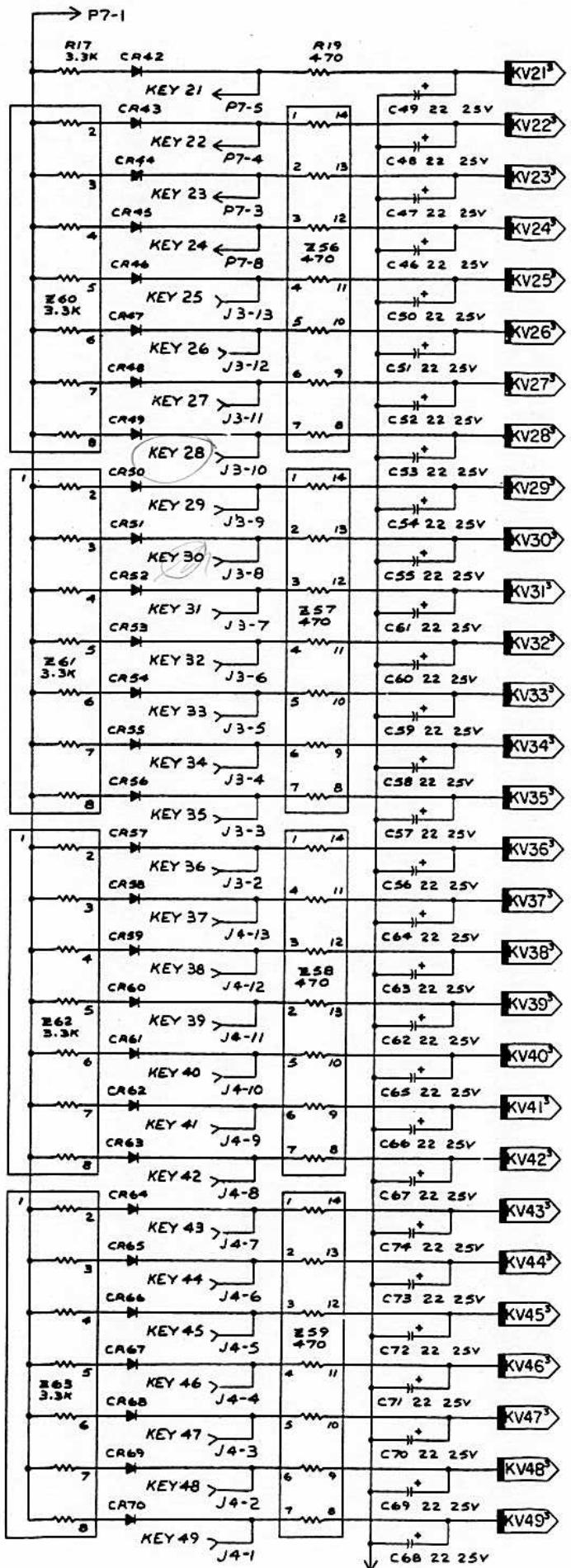
ARP INSTRUMENTS, INC.

SCHEMATIC & ASSEMBLY, 1/4" JACK BOARD
QUADRA, Model 2460



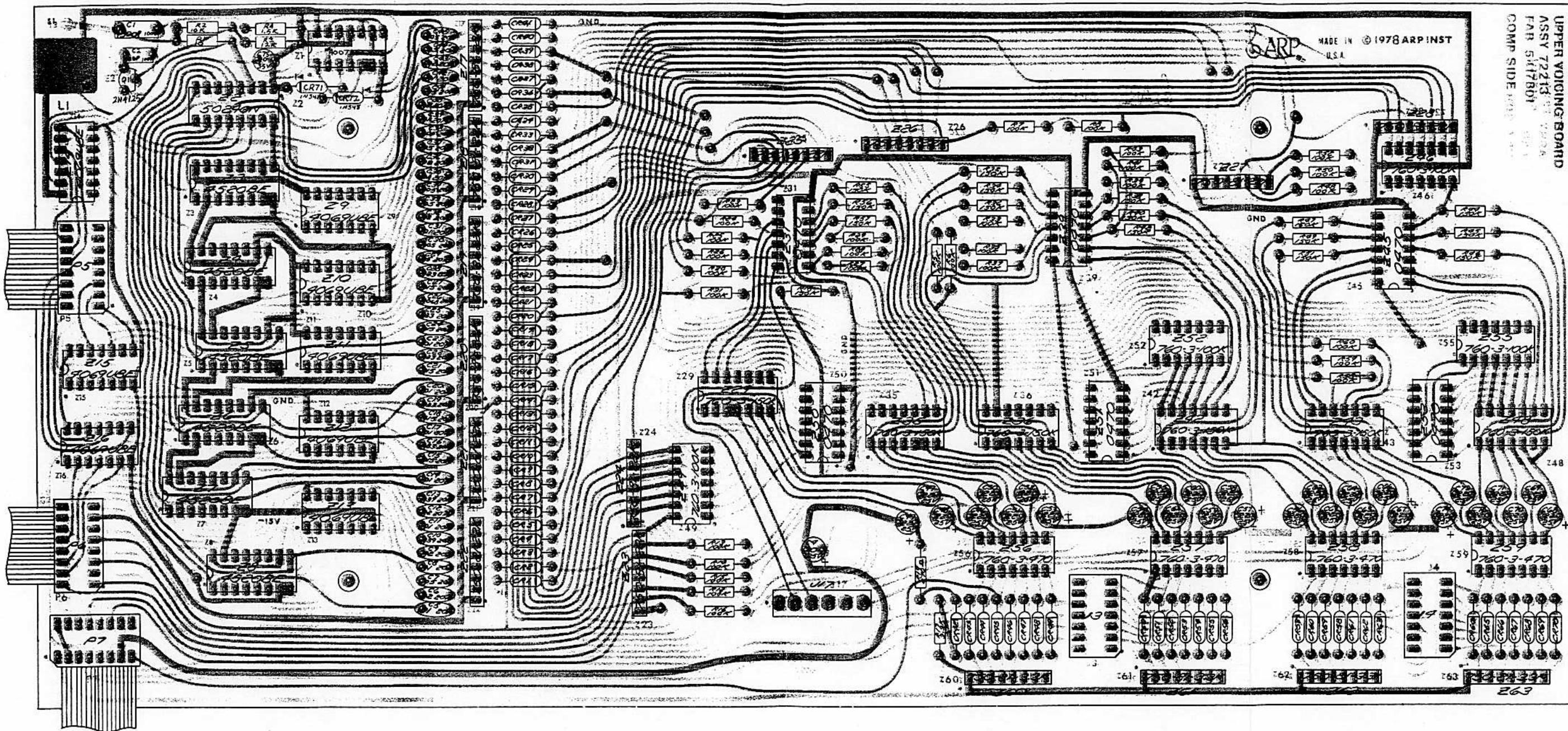
ARP INSTRUMENTS, INC.

**SCHEMATIC, UPPER VOICING BOARD
QUADRA, Model 2460**
Sheet 1 of 2



ARP INSTRUMENTS, INC.

SCHEMATIC, UPPER VOICING BOARD
QUADRA, Model 2460
Sheet 2 of 2

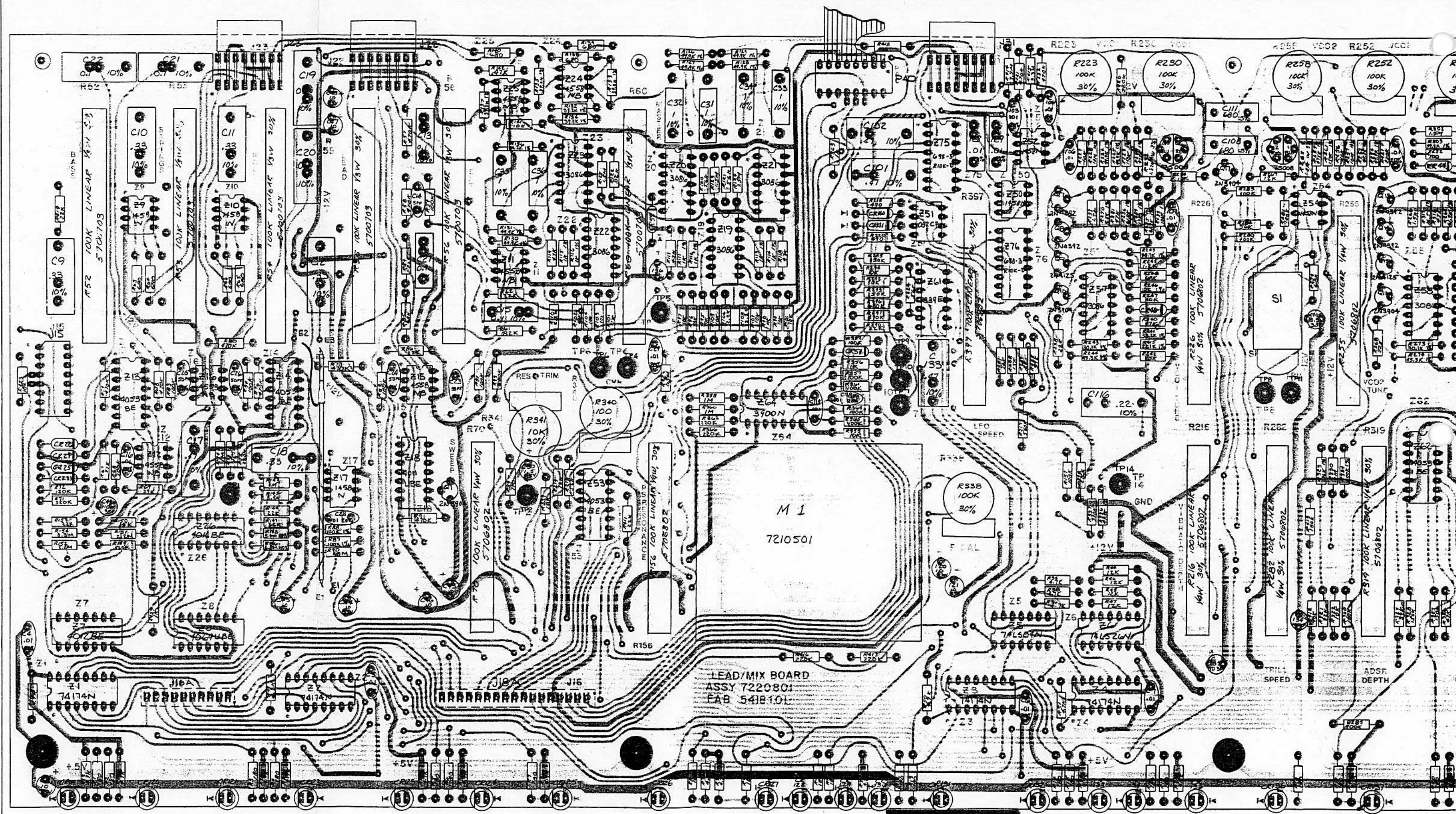


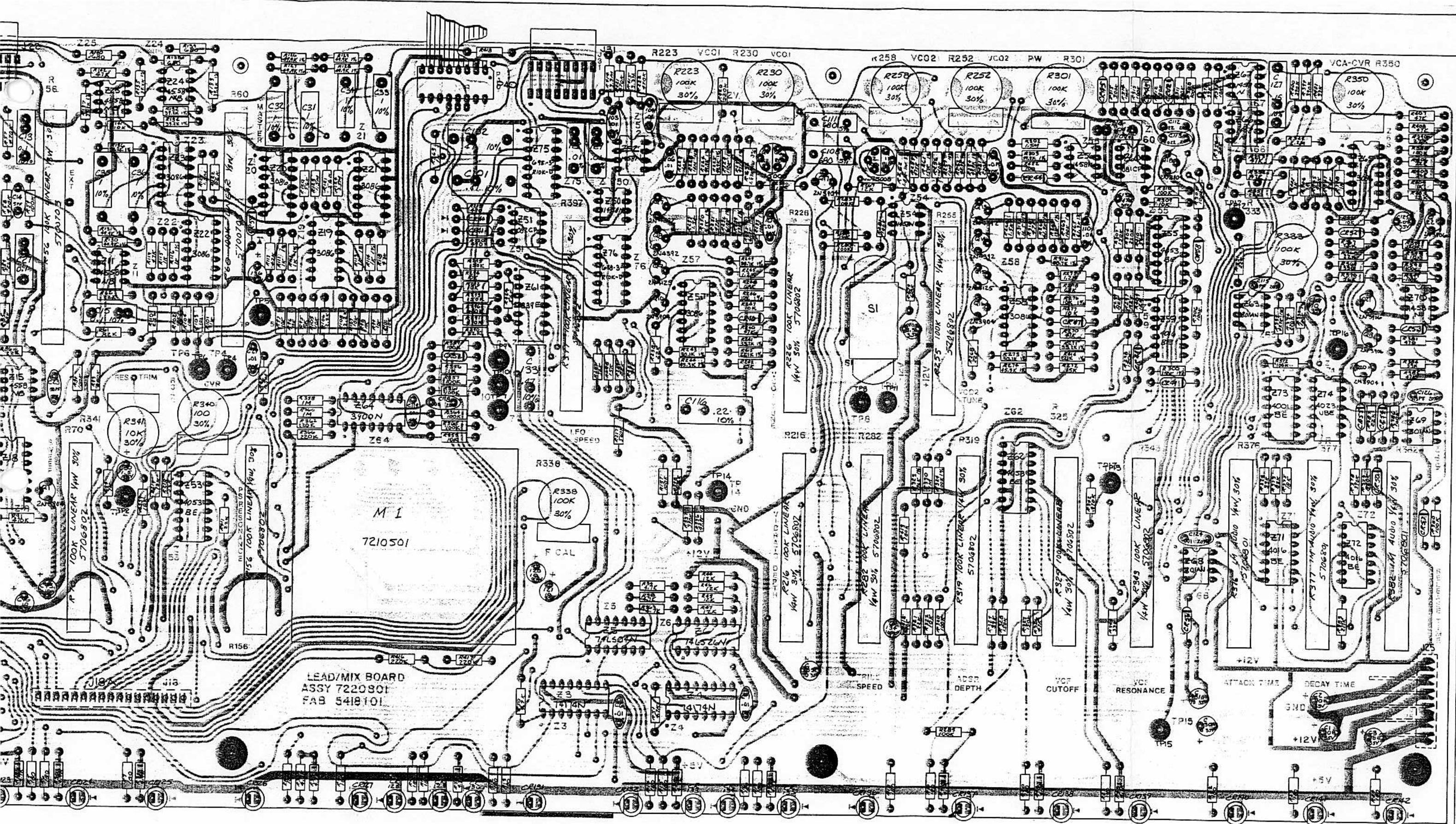
NOTES.

1. UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS, 1%W, $\pm 5\%$
CAPACITOR VALUES ARE IN NF (P = PICOFARADS).

ARP INSTRUMENTS, INC.

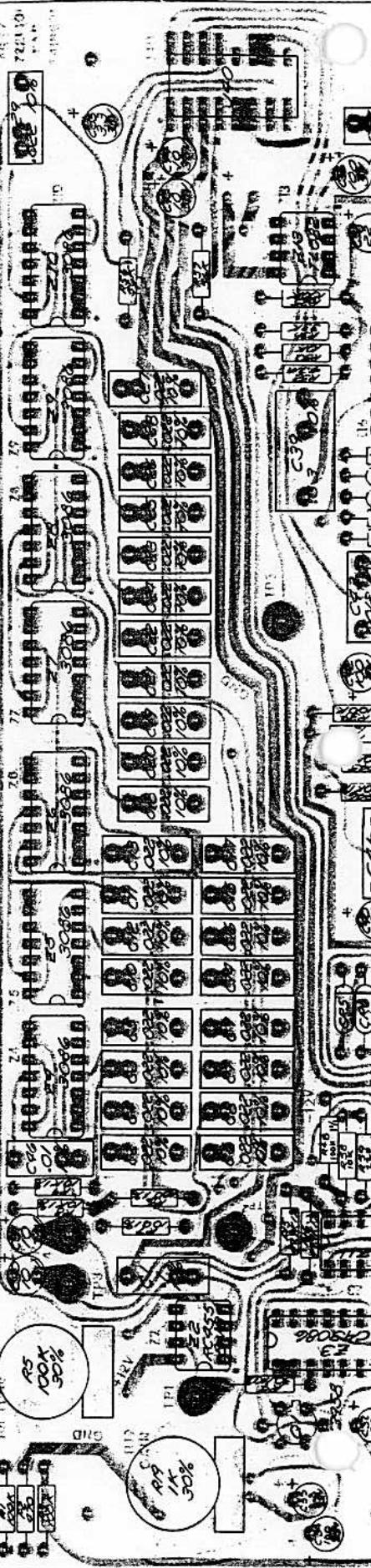
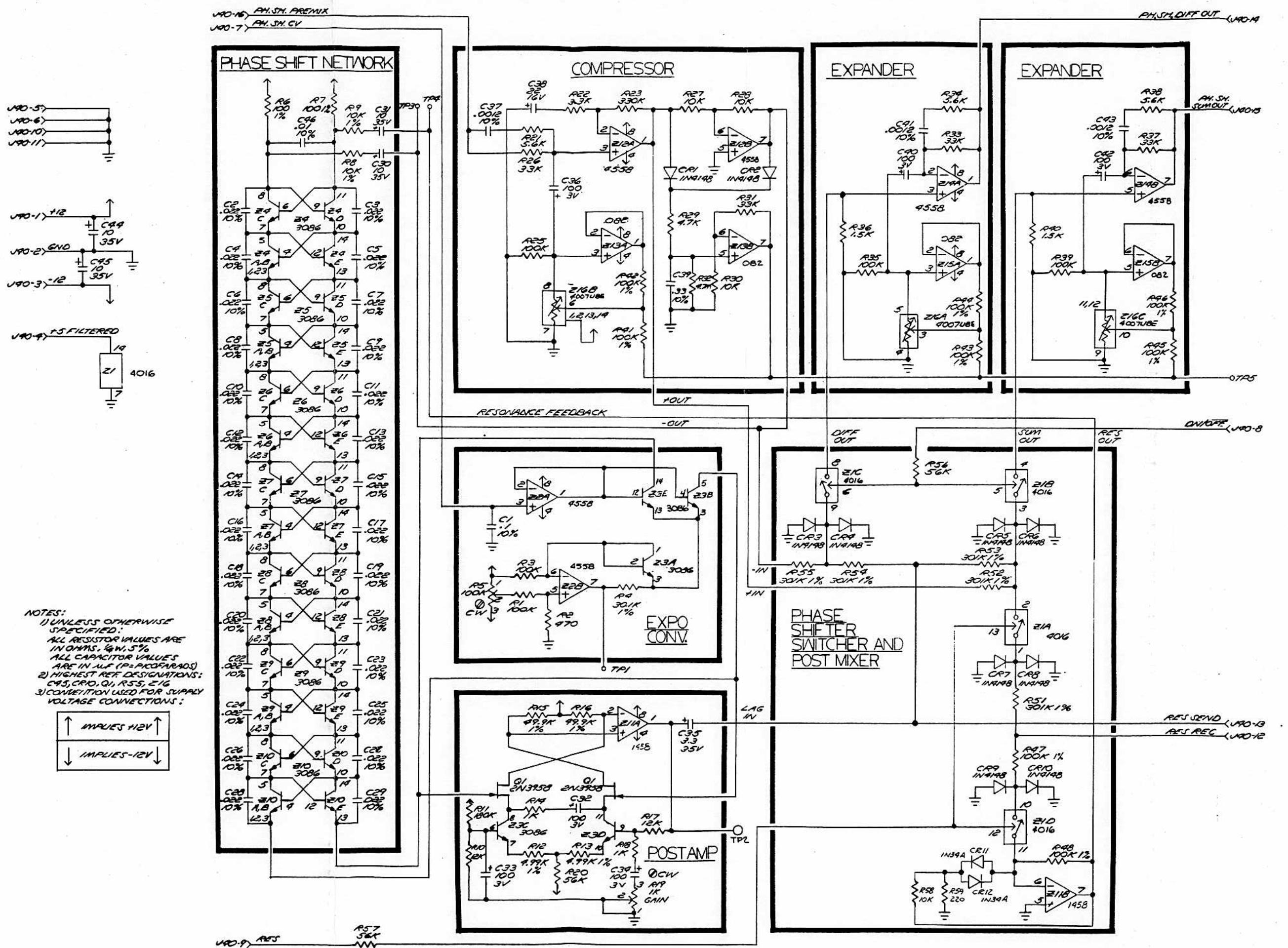
ASSEMBLY, UPPER VOICING BOARD
QUADRA, Model 2460

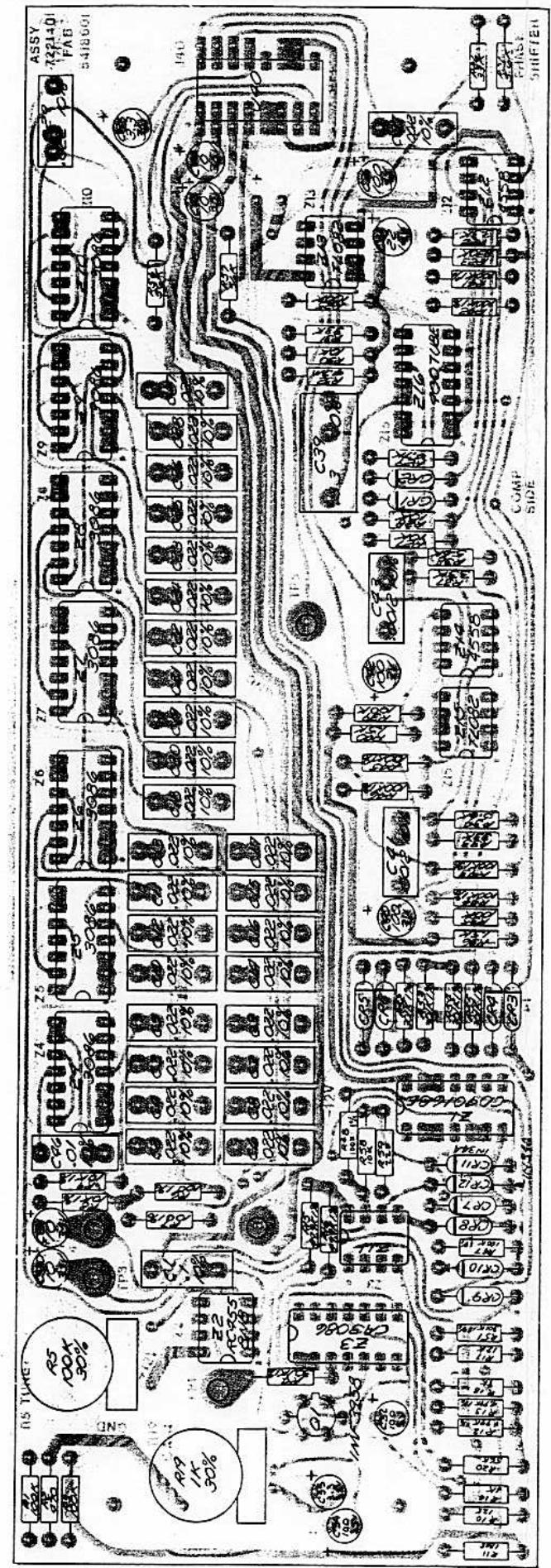
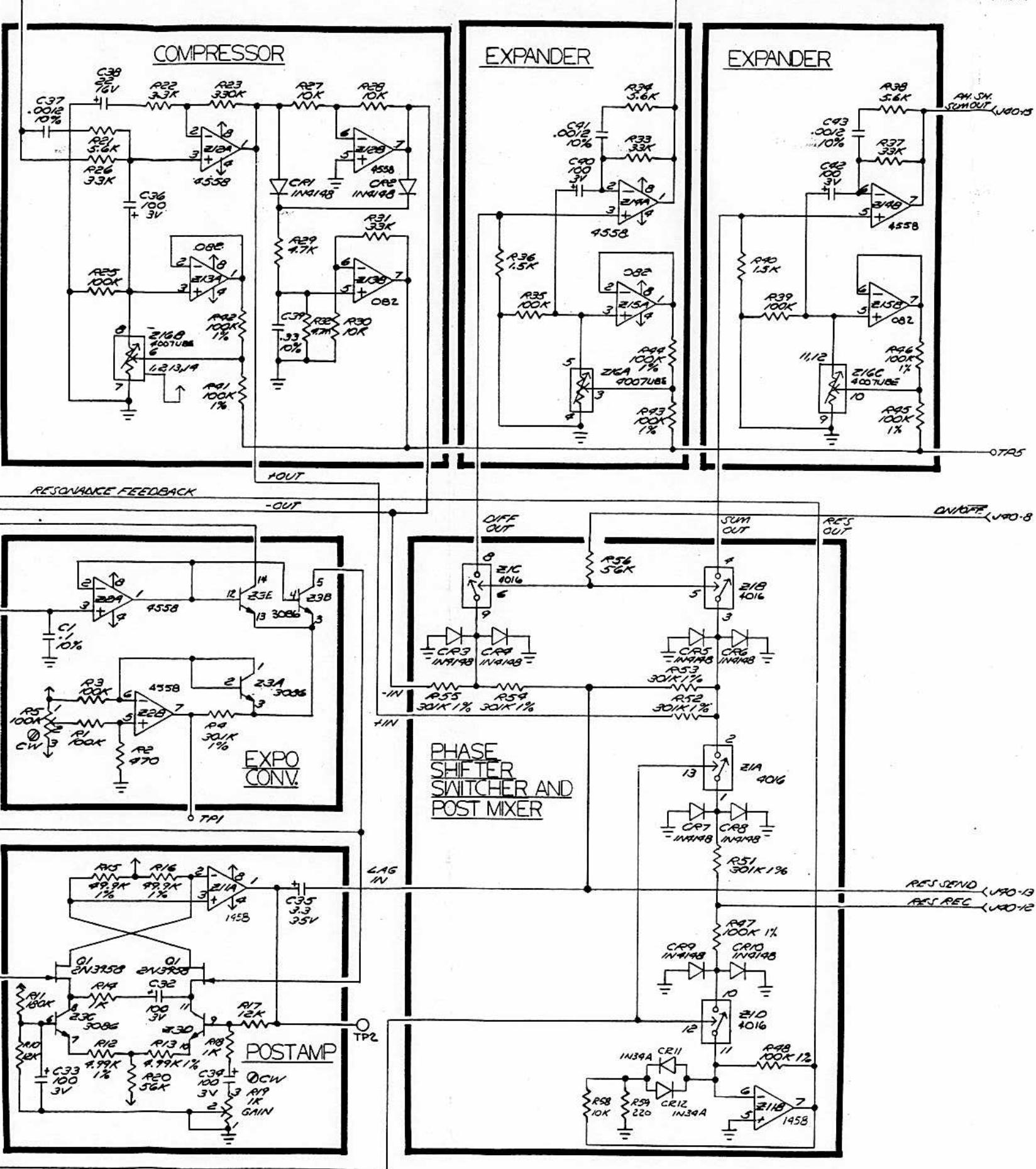




ARP INSTRUMENTS, INC.

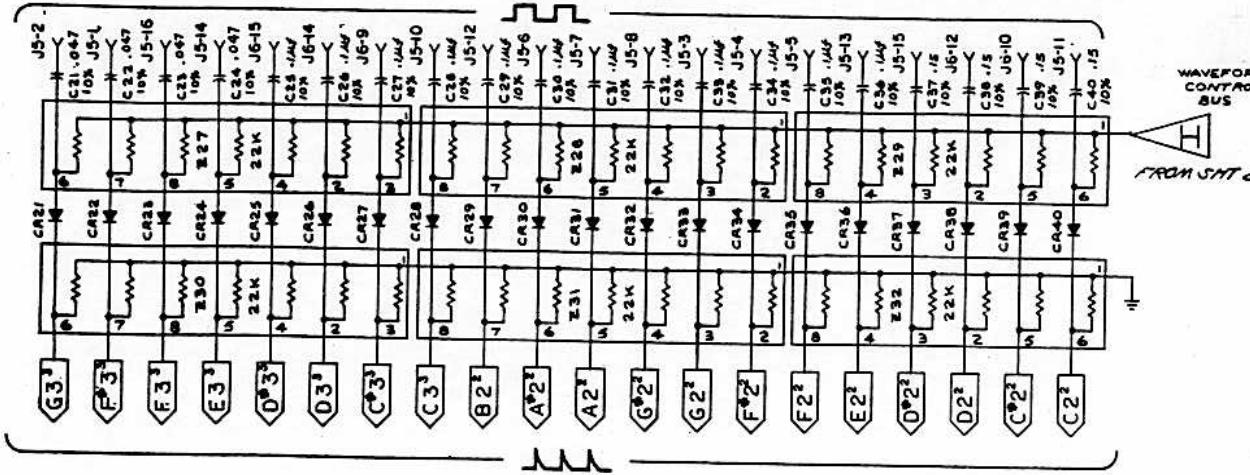
ASSEMBLY, LEAD/MIX BOARD
QUADRA, Model 2460





NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 RESISTOR VALUES ARE IN OHMS, VAR. 5%
 CAPACITOR VALUES ARE IN μ F.
 DIODES ARE IN 4148.

ARP INSTRUMENTS, INC.
SCHEMATIC & ASSEMBLY,
PHASE SHIFTER BOARD
QUADRA, Model 2460

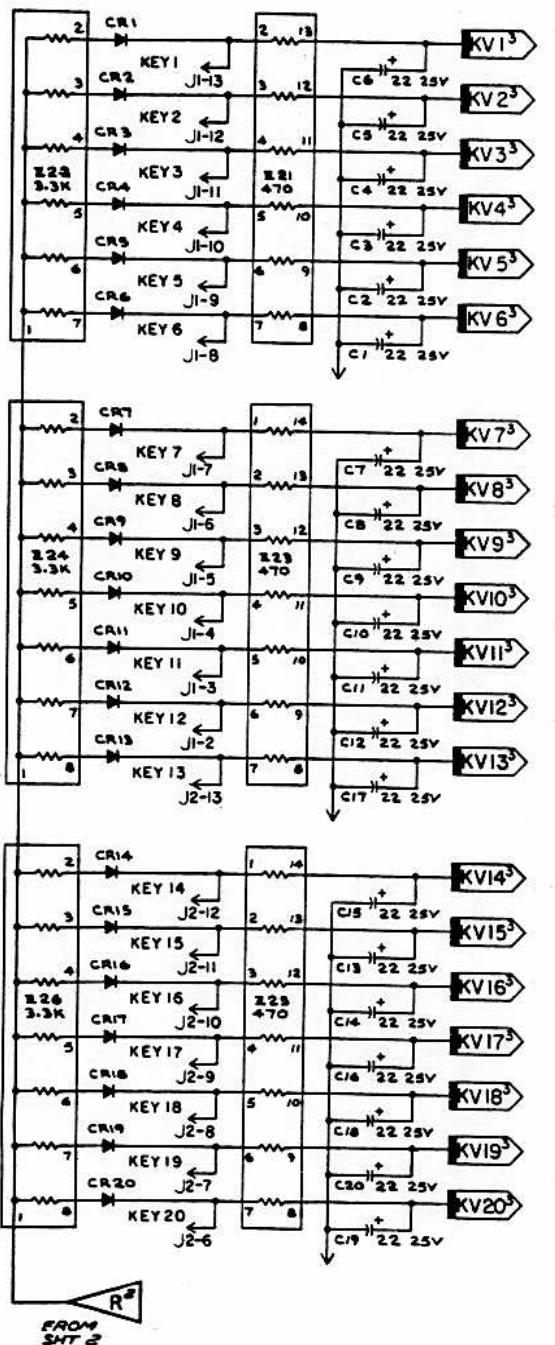


MNEMONIC LEGEND	
SYM	DESCRIPTION
Z	4'D
Y	4'E
X	8'D
W	8'E
H	WAVEFORM CONTROL BUS
S	BASS GATE
R	SUSTAIN BUS

— EXPLANATION OF SYMBOLS USED —

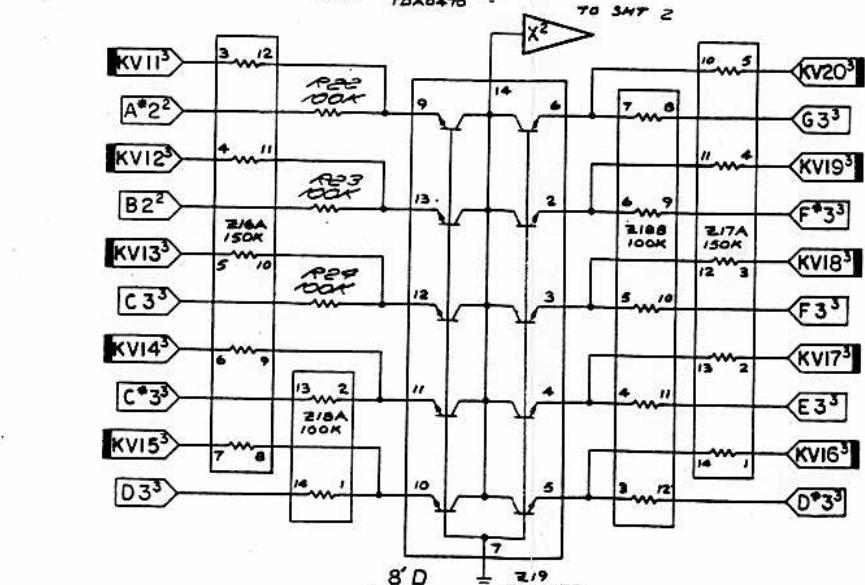
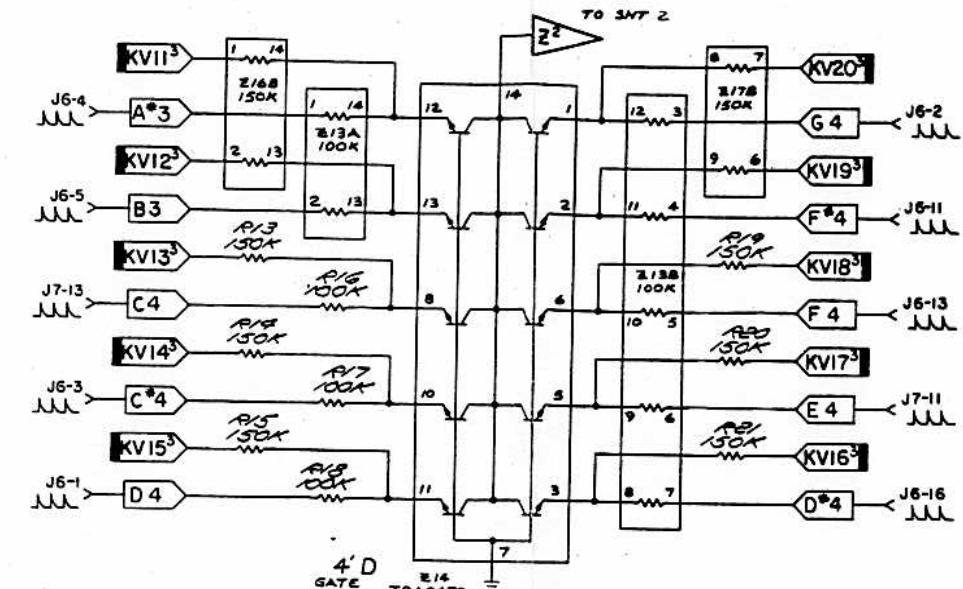
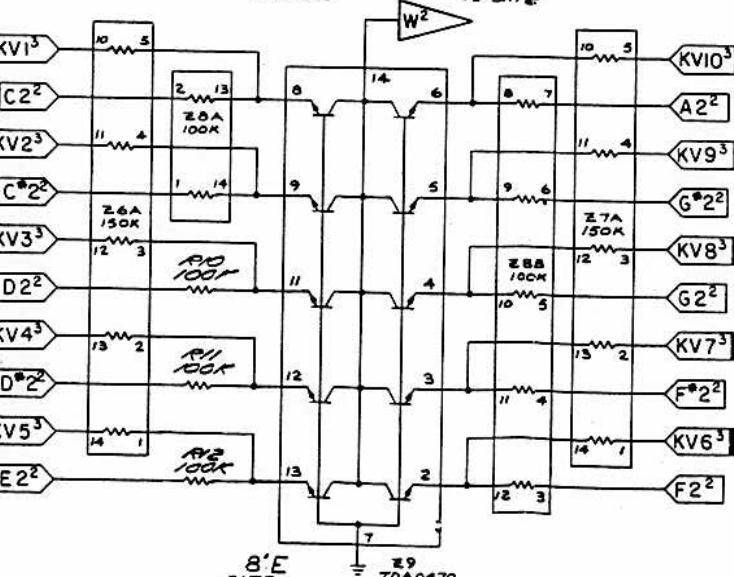
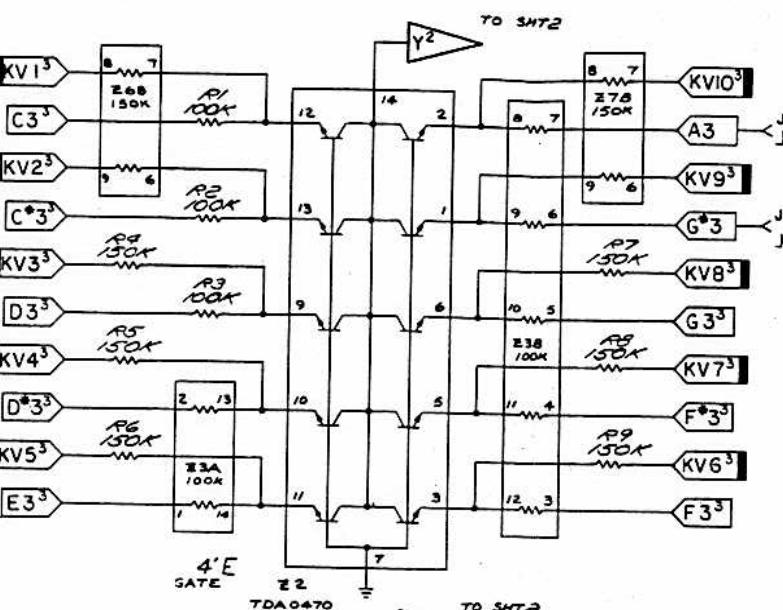
- KVI³ = KEYING VOLTAGE ONE SYMBOL APPEARING THREE PLACES
- G3³ = TONE G3, APPEARING THREE PLACES.
- J5-2² = CONNECTION J5-2, APPEARING TWO PLACES
- J1-13² = CONNECTION J1-13, APPEARING TWO PLACES
- Z² = MNEMONIC SYMBOL INDICATING 4'D APPEARING TWO PLACES

- NOTES:
1. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS, CAPACITOR VALUES ARE IN MICROFARADS (μF).
 2. HIGHEST REF DES: C92, CR116, U19, P7, Q28, R181, Z53
 3. CONVENTIONS USED FOR SUPPLY VOLTAGE CONNECTIONS:
- | |
|------------------|
| ↑ IMPLIES +12V ↑ |
| ↓ IMPLIES -12V ↓ |



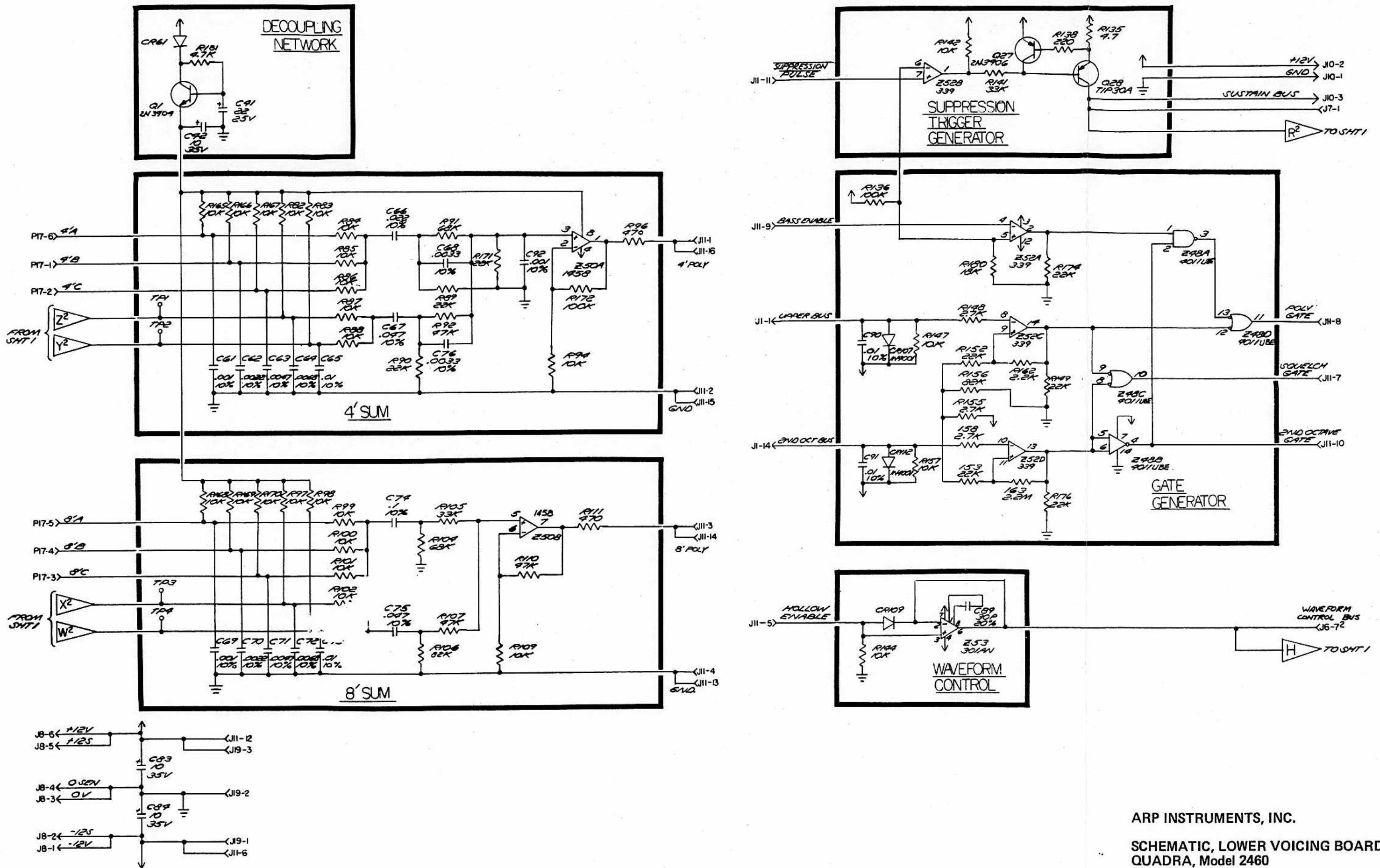
J5-9 GND
J7-2 +12V
J7-7 -12V
J7-16

J2-5 ← J7-5 KEY 21
J2-4 ← J7-4 KEY 22
J2-3 ← J7-3 KEY 23
J2-2 ← J7-8 KEY 24

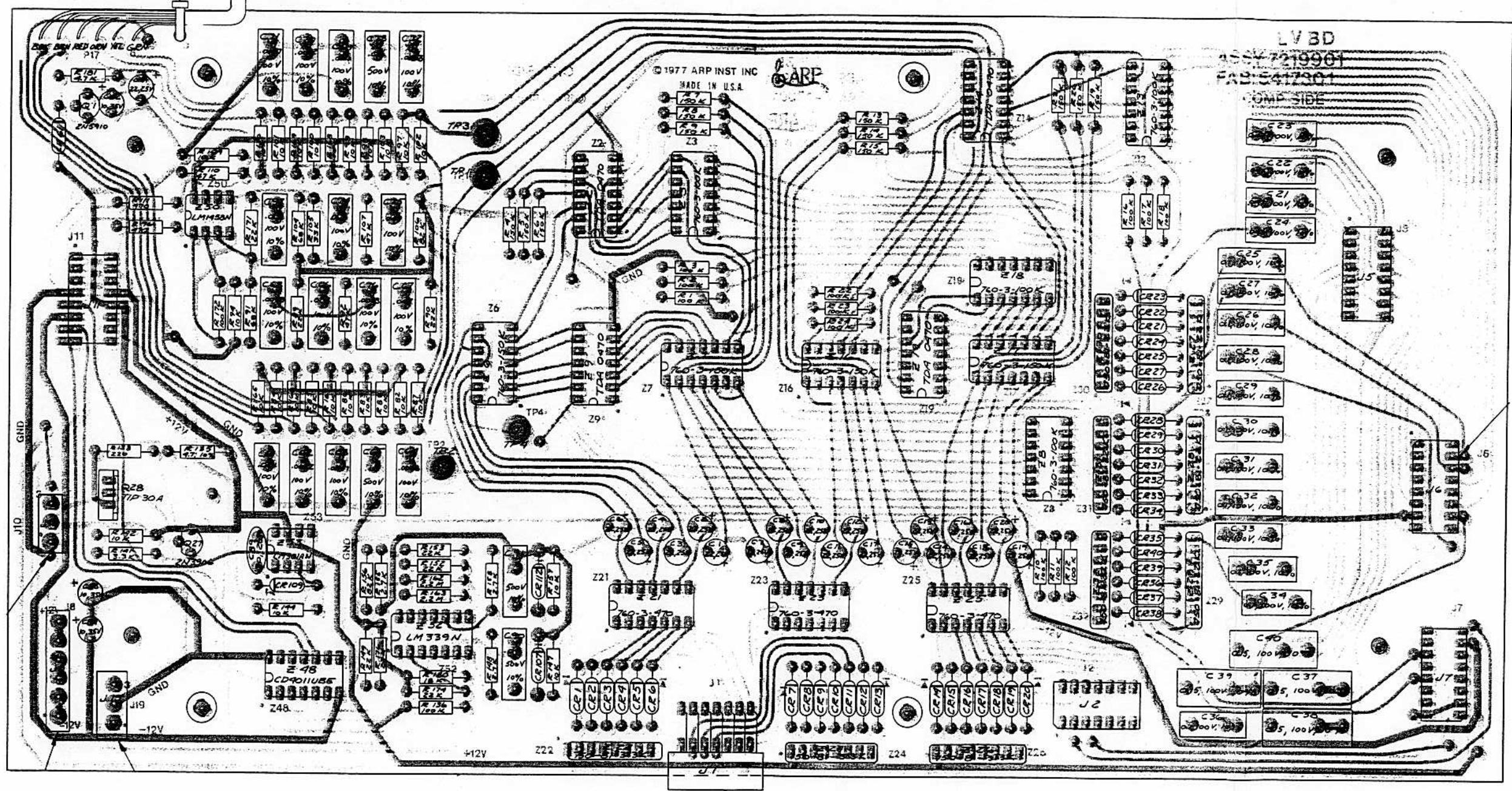


ARP INSTRUMENTS, INC.

SCHEMATIC, LOWER VOICING BOARD
QUADRA, Model 2460
Sheet 1 of 2



ARP INSTRUMENTS, INC.
SCHEMATIC, LOWER VOICING BOARD
QUADRA, Model 2460
Sheet 2 of 2

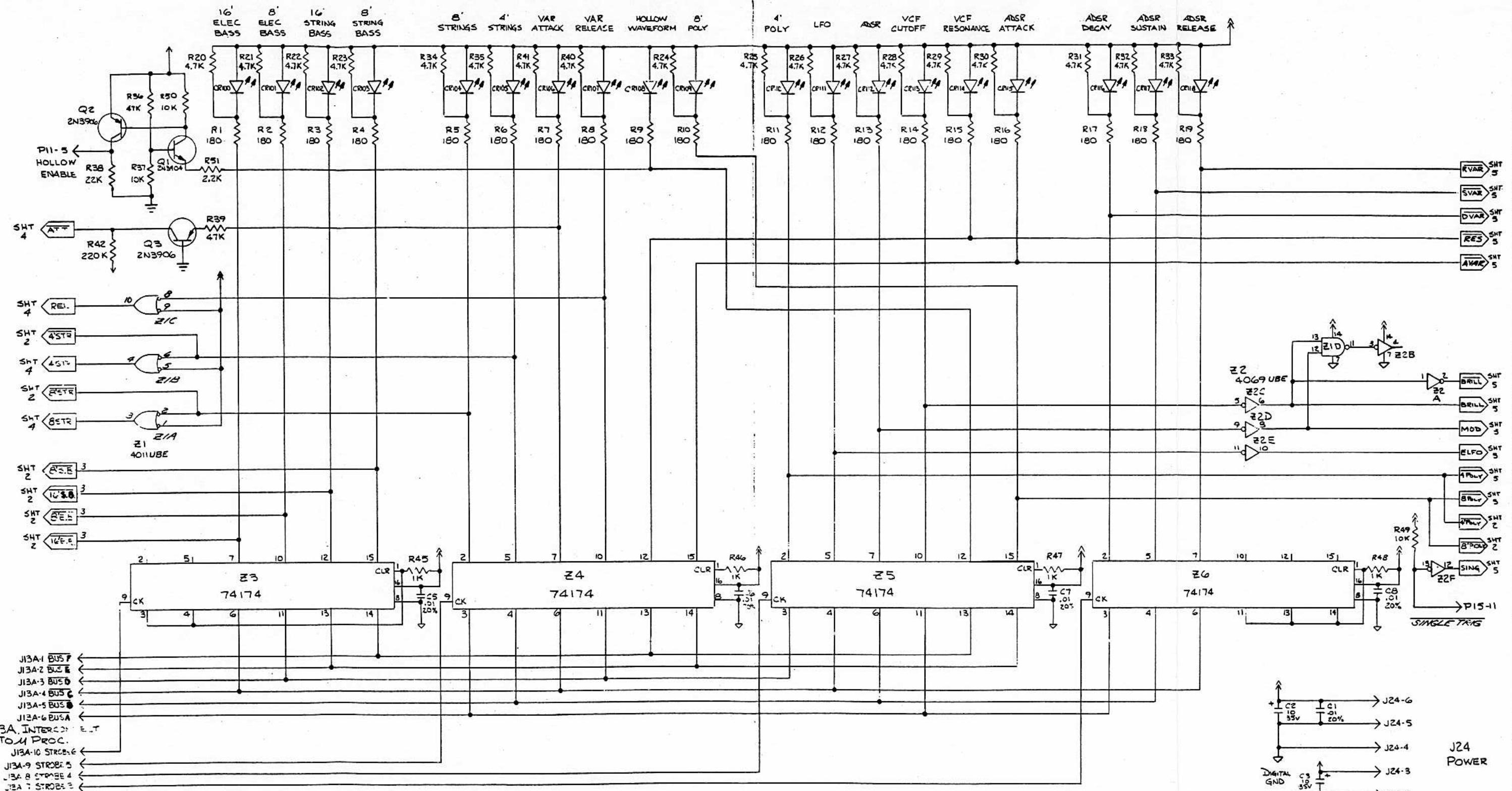


NOTES :

1. UNLESS SPECIFIED,
RESISTOR VALUES ARE IN OHMS.
CAPACITOR VALUES ARE IN μ F.
DIODES ARE IN4148.

ARP INSTRUMENTS INC.

**ASSEMBLY, LOWER VOICING BOARD
QUADRA, Model 2460**



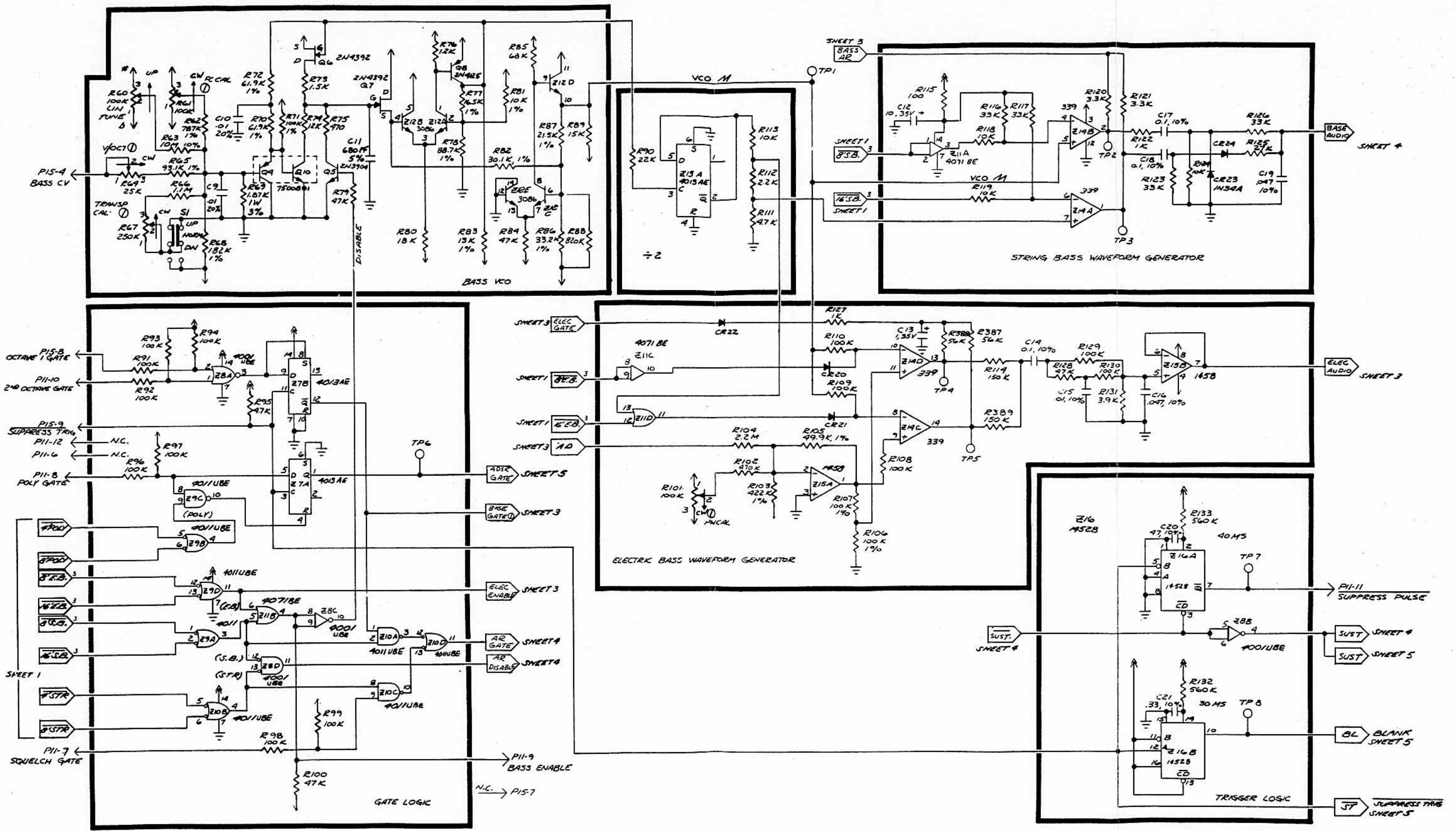
NOTES:

1. UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS, 1/4W, 5%.
CAPACITOR VALUES ARE IN μ F (P = PICOFARADS).
DIODES ARE IN4148. CR100-118 ARE FLV 510, LED'S.
2. HIGHEST REF. DES: C62, CR118, P15, Q11, R406, 245, J24, M1, S1.
3. CONVENTIONS USED FOR SUPPLY VOLTAGE CONNECTIONS:

↑	IMPLIES +12V
↓	IMPLIES -12V
↑	IMPLIES +5V
↓	IMPLIES -5V

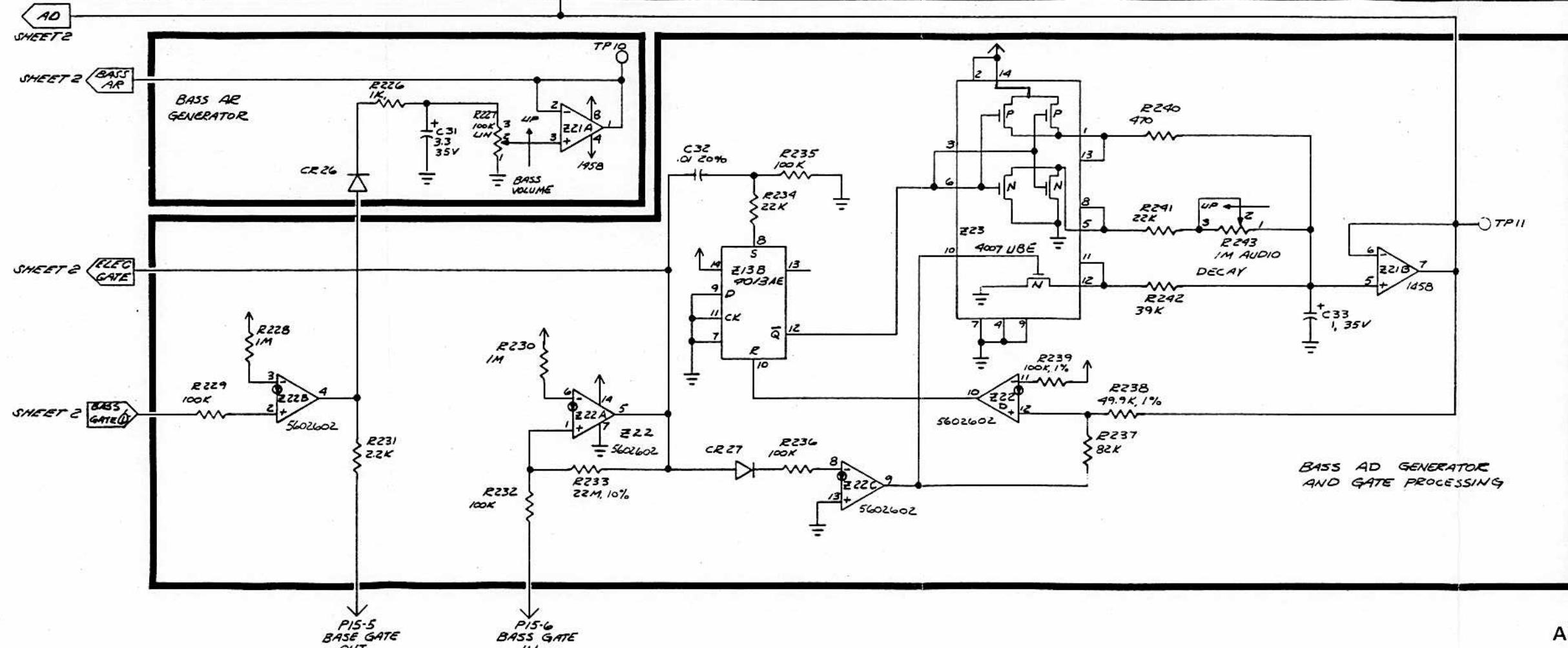
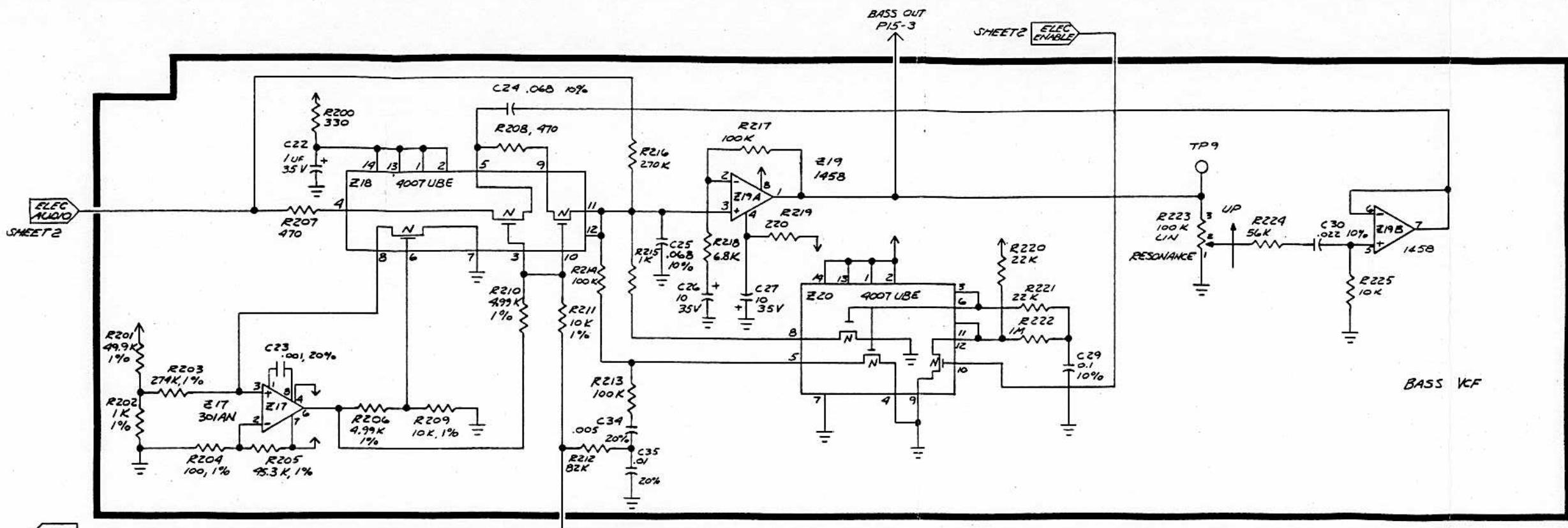
ARP INSTRUMENTS, INC.

SCHEMATIC, POLY SYNTH BOARD
QUADRA, Model 2460
Sheet 1 of 5



ARP INSTRUMENTS, INC.

**SCHEMATIC, POLY SYNTH BOARD
QUADRA, Model 2460**
Sheet 2 of 5



ARP INSTRUMENTS, INC.

SCHEMATIC, POLY SYNTH BOARD
QUADRA, Model 2460
Sheet 3 of 5

Z11	1401101	LM1458
R19	1000904	_____
R5	1000915	_____
C35	1100611	_____
C30, 31, 44, 45	1100612	_____
C38	1100601	_____
C32, 33, 34, 36, 40, 42	1100616	_____
J40	2101302	_____

IC OP AMP DUAL
POT ROT TRIM 1K 1/4W 30%
POT ROT TRIM 100K 1/4W 30%
CAP TANT 3.3UF 35V 10%
CAP TANT 10UF 35V 20%
CAP TANT 22UF 16V 20%
CAP TANT 100UF 3V 20%
SOCKET DUAL IN LINE 16P

LEAD/MIX BOARD

CR25, 26, 27, 28	1200101	1N34A
CR42-59	1200301	1N4148
CR40, 41	1201201	_____
CR119-127, 129, 131-133, 135-142	1201601	_____
CR128, 130, 134	1201602	_____
Q1, 10, 16, 17, 18, 20	1302901	2N3904
Q19, 21, 22	1303001	2N3906
Q9, 15	1305101	4125
Q7, 8, 13, 14	1301301	2N4392
Q5, 6, 11, 12	7500801	_____
Z75, 76	1408702	698-3-R10K-D
Z9, 10, 17, 50, 52, 54, 56 66, 67, 70	1401101	LM1458
Z63, 68, 69	1400801	LM301AN
Z19-23, 57, 58, 65	1400501	CA3086
Z60	1407601	TL081
Z61	1405401	CA339E
Z73	1404301	CD4001AE
Z18	1400601	CD4011BE
Z7	1410001	CD4012BE
Z26, 59, 71, 72	1404501	CD4016AE
Z74	1408401	CD4023
Z13, 14, 53, 55, 62	1406201	CD4053BE
Z8	1405801	CD4069UBE
Z11, 15, 16, 24, 25	1406401	LM4558
Z5	1406601	SN74LS04
Z6	1408901	SN74LS26
Z1-4	1403001	SN74174
Z51, Z12	1409001	TL082
Z64	5602602	_____
M1	7210501	4075
R340	1000901	_____
R341	1000911	_____
R223, 230, 252, 258, 301, 333 338, 350	1000915	_____
A70, 156, 216, 226, 255, 282, 319, 325, 343, 397	5706802	_____
R52-56, 60	5700703	_____
R376, 377, 382	5706801	_____
C132	1100607	_____
C30	1100610	_____
C105	1100611	_____
C1, 2, 3, 8, 43-49, 117, 120, 121, 130, 131, 134, 135	1100612	_____
C125	1100608	_____
C136	1100614	_____
J22, 23, 31	2106101	_____
J15	2101302	_____
P40	2203404	_____
S1	1902401	_____

IC OP AMP DUAL
POT ROT TRIM 1K 1/4W 30%
POT ROT TRIM 100K 1/4W 30%
CAP TANT 3.3UF 35V 10%
CAP TANT 10UF 35V 20%
CAP TANT 22UF 16V 20%
CAP TANT 100UF 3V 20%
SOCKET DUAL IN LINE 16P
DIODE GE
DIODE SIGNAL
DIODE SIGNAL LOW LEAKAGE FD333
DIODE LIGHT EMITTING RED
DIODE LIGHT EMITTING GREEN
TSTR NPN GP
TSTR PNP GP
TSTR PNP GP
TSTR N CHANNEL
TSTR ASSY NPN/PNP
IC RES NETWORK 16P 10K
IC OP AMP
IC OP AMP
IC TSTR ARRAY
IC OP AMP FET
IC QUAD COMP
IC GATE 4 X 2I NOR
IC GATE 4 X 2I NAND
IC GATE 2 X 4I NAND
IC QUAD BILAT SWITCH
IC GATE 3 X 3I NAND
IC TRIPLE 2 CHANNEL MUX
IC HEX INVERTER
IC OP AMP DUAL
IC HEX INVERTER
IC GATE 4 X 2I NAN HI VOLT
IC FF HEX TYPE D
IC OP AMP DUAL FET
IC OP AMP QUAD NORTON
PC BD ASSY VCF
ROT ROT TRIM 100 OHM 1/4W 30%
POT ROT TRIM 25K 1/4W 30%
POT ROT TRIM 100K 1/4W 30%
POT SLIDE LIN 100K 1/4W 30%
POT SLIDE LIN 100K 1/3W 30%
POT SLIDE AUD 1M 1/4W 30%
CAP TANT .47UF 35V 20%
CAP TANT 1.5UF 35V 10%
CAP TANT 3.3UF 35V 10%
CAP TANT 10UF 35V 20%
CAP TANT 1UF 35V 10%
CAP TANT .1UF 35V 20%
SOCKET DUAL IN LINE 16P RT ANGLE
SOCKET DUAL IN LINE 16P
RIBBON CABLE 16P 9"
SWITCH SLIDE DPDT

TOUCH SENSOR SWITCH BOARD

R1	1000915
S1, 2	1900601

POT ROT TRIM 100K 1/4W 30%
SWITCH SLIDE DP3T

MICROCOMPUTER BOARD

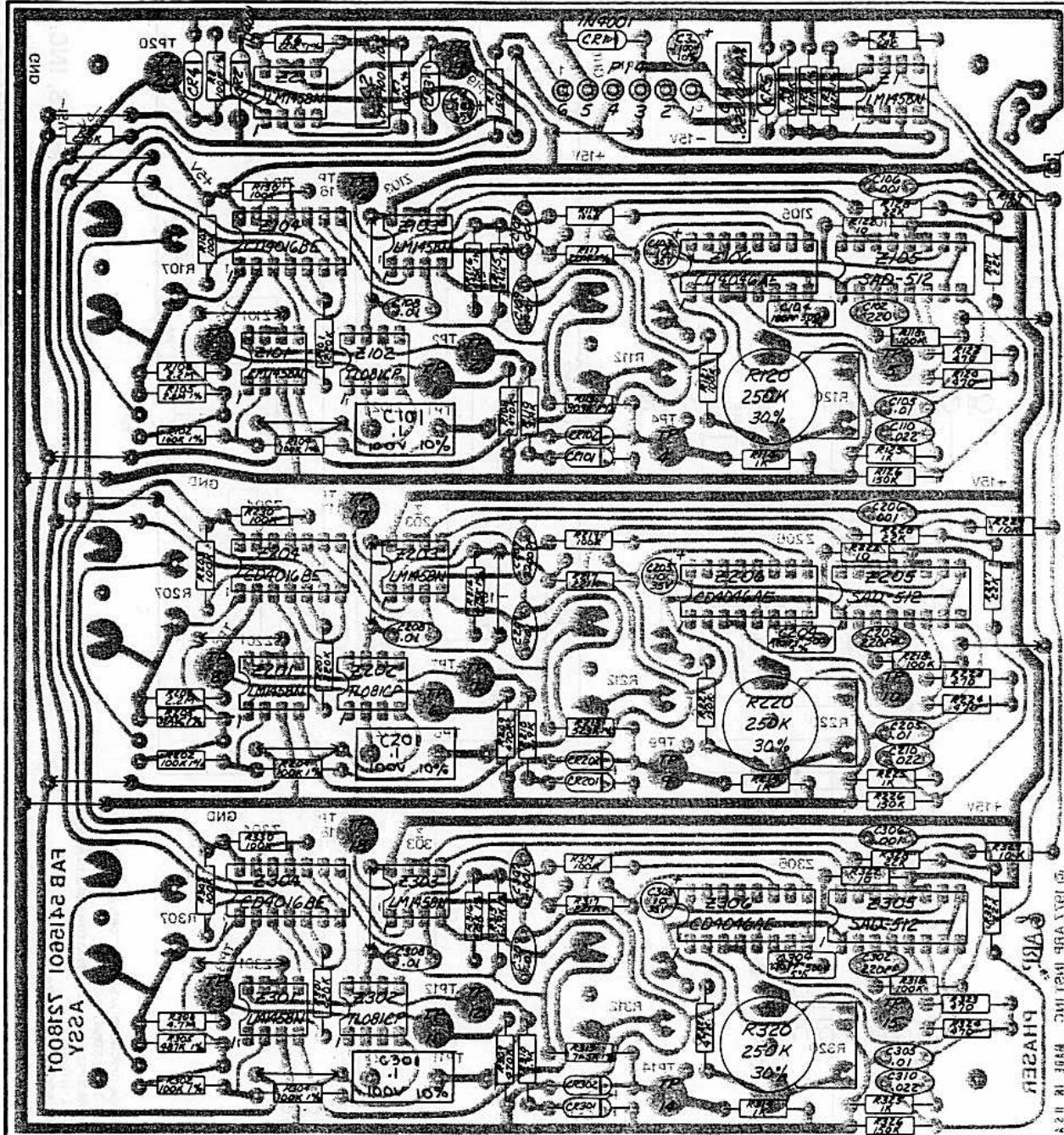
CR17-20, 29, 30, 32-34	1200301	1N4148	DIODE SIGNAL
Q1	1303001	2N3906	TSTR PNP GP
Q2	1301301	2N4392	TSTR N CHAN
CY1	2600301		CRYSTAL 6MHZ
Z1	1409901	8748	IC SINGLE COMP 8-BIT
Z2, 3	1409401	8243	IC INPUT/OUTPUT EXPANDER
Z7	1409301	5101	IC STATIC CMOS RAM
Z8, 9, 15	1406601	SN74LS04	IC HEX INVERTER
Z4, 14	1408001	SN74LS145	IC BCD-DEC DECODER/DRIVER
Z5, 6	1409101	SN74LS175	IC QUAD D FLIP FLOP
Z10-13	1407101	SN74LS368	IC HEX INVERTER 3 STATE BUFFER
Z19, 20	1408901	SN74LS26	IC QUAD NAND GATE OC
Z21	1409501	CD4052BE	IC DUAL 4 CHAN MUX
Z27	1401101	LM1458	IC OP AMP DUAL
Z22, 23	1409001	TL082	IC OP AMP DUAL FET
Z29	1406002	7523	IC RES NETWORK 8P 22K
Z16	1409701	LM301AN	IC 8 BIT CMOS DAC
Z26	1400801		IC OP AMP
C4, 6	1100609		CAP TANT 1UF 35V 20%
C1, 2, 3	1100612		CAP TANT 10UF 35V 20%
P12	2203404		RIBBON CABLE 16P 24"
	2102703		SOCKET DUAL IN LINE 16P
	2102704		SOCKET DUAL IN LINE 22P
	2102705		SOCKET DUAL IN LINE 24P
	2102706		SOCKET DUAL IN LINE 40P
	2504501		BATTERY HOLDER

POWER SUPPLY

Z3	1401301	723DC	IC VOLTAGE REGULATOR
Z4	1400801	LM301AN	IC OP AMP
CR1, 2	1201701		DIODE RECT 50V 6A
CR3-9	1200201	1N4001	DIODE RECT 50V 1A
Q3	1303001	2N3906	TSTR PNP GP
R16	1000915		POT ROT TRIM 100K 1/4W 30%
C1	1101502		CAP ELECT 10,000UF 16V
C2, 3	1101301		CAP ELECT 1000UF 50V 75-10%
C19	1101702		CAP ELECT 250UF 50V 50-10%
C12-15	1100612		CAP TANT 10UF 35V 20%
C16	1100609		CAP TANT 1UF 35V 20%
Z1, 2	1407401	7805	IC +5V REGULATOR
Q1	1305301	110	TSTR DARL NPN
Q2	1305401	115	TSTR DARL PNP
S1	1903501		SWITCH DPDT 115V/230V
T1	5706601		TRANSFORMER 5 VOLT
T2	5704401		TRANSFORMER
F1, 2	1700404		FUSE PIGTAIL SLO-BLO 1/2A 250V

MISCELLANEOUS

R1	1000915		POT ROT TRIM 100K 1/4W 30%
S1, 2	1900601		SWITCH SLIDE DP3T
	7525101		AC RECP
	5207904		RT ENDBLOCK
	5207903		LT ENDBLOCK
	2101601		DIODE LIGHT EMITTING RED
	7500301		SWITCH ASSY 11"

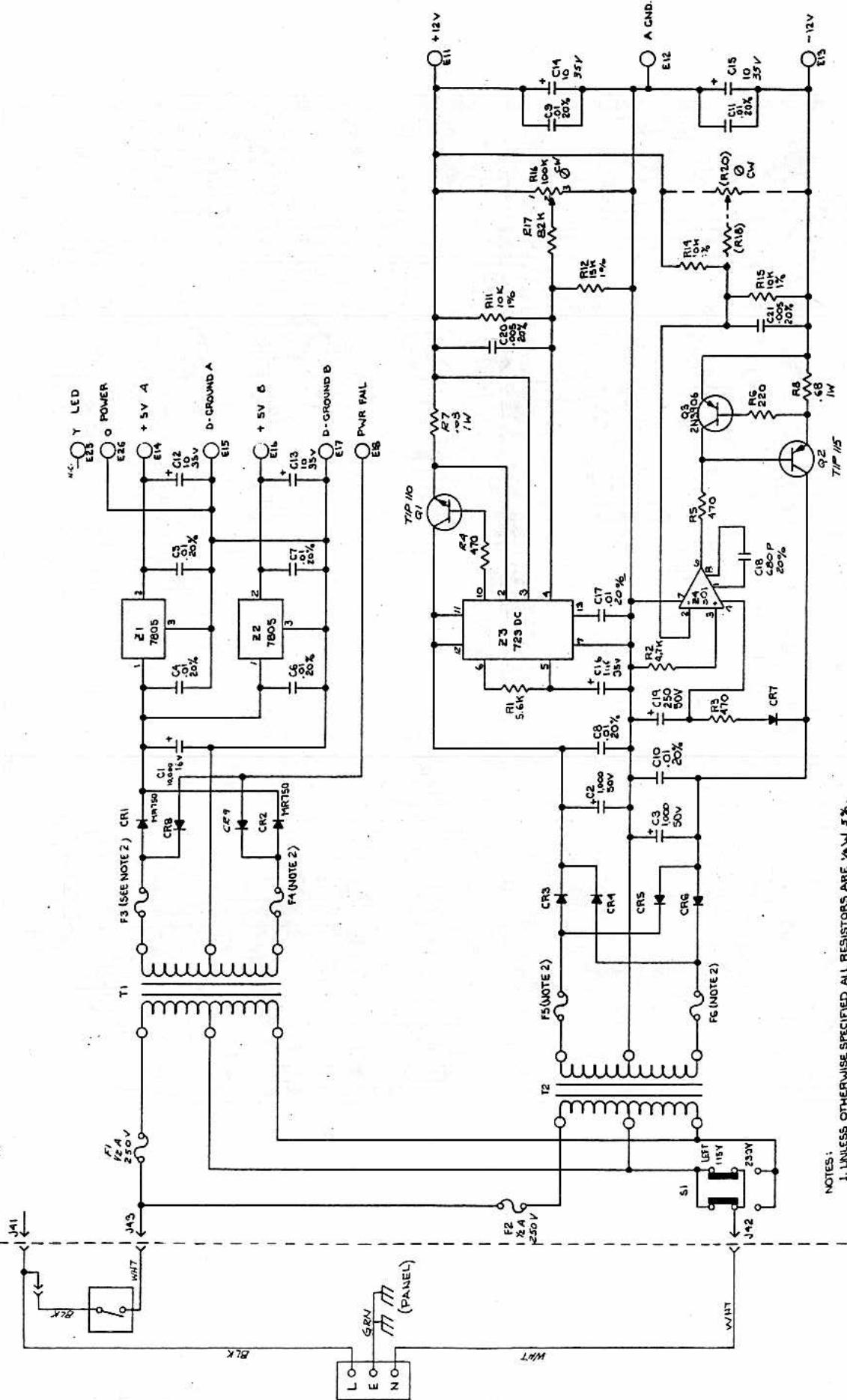


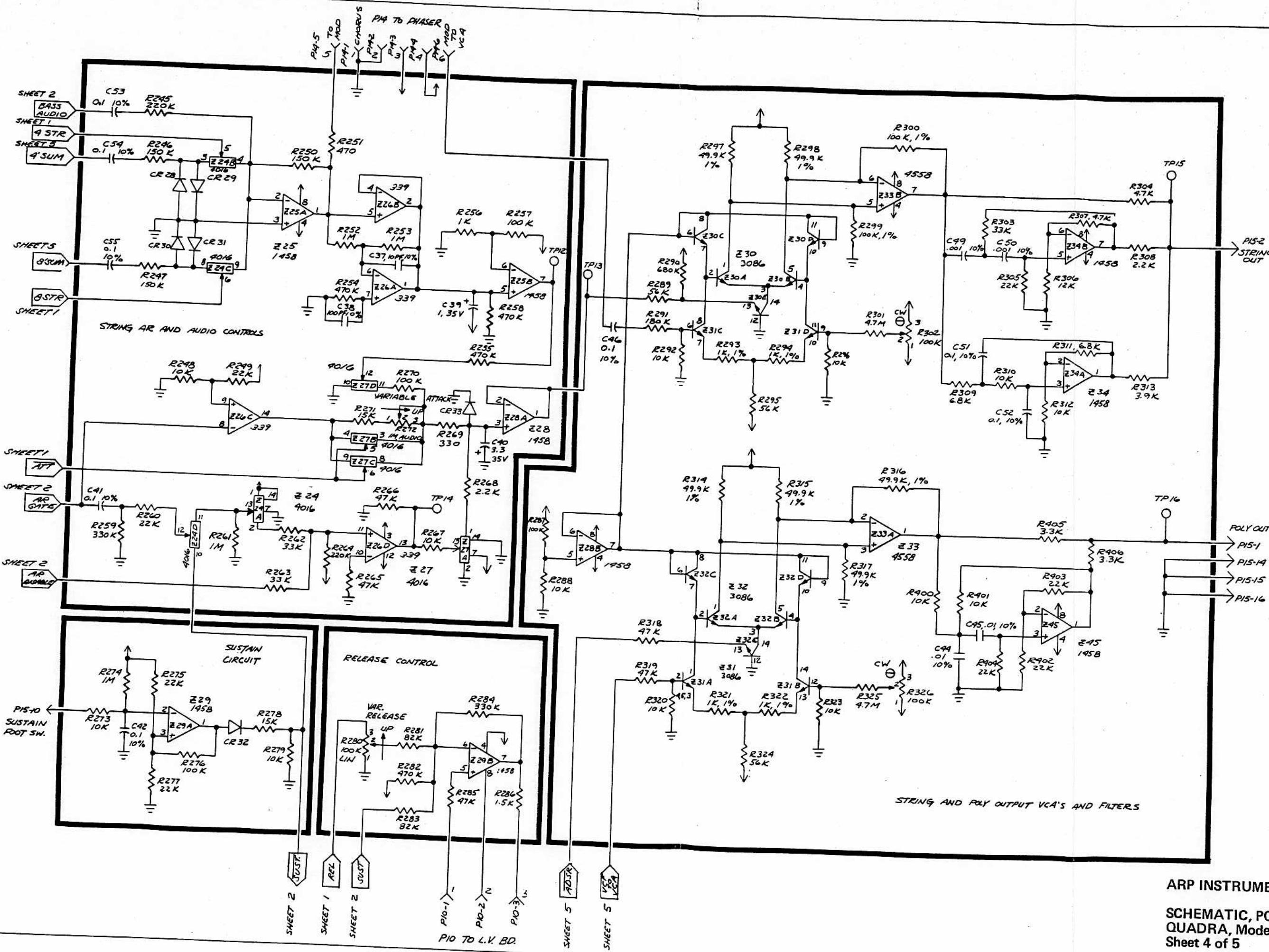
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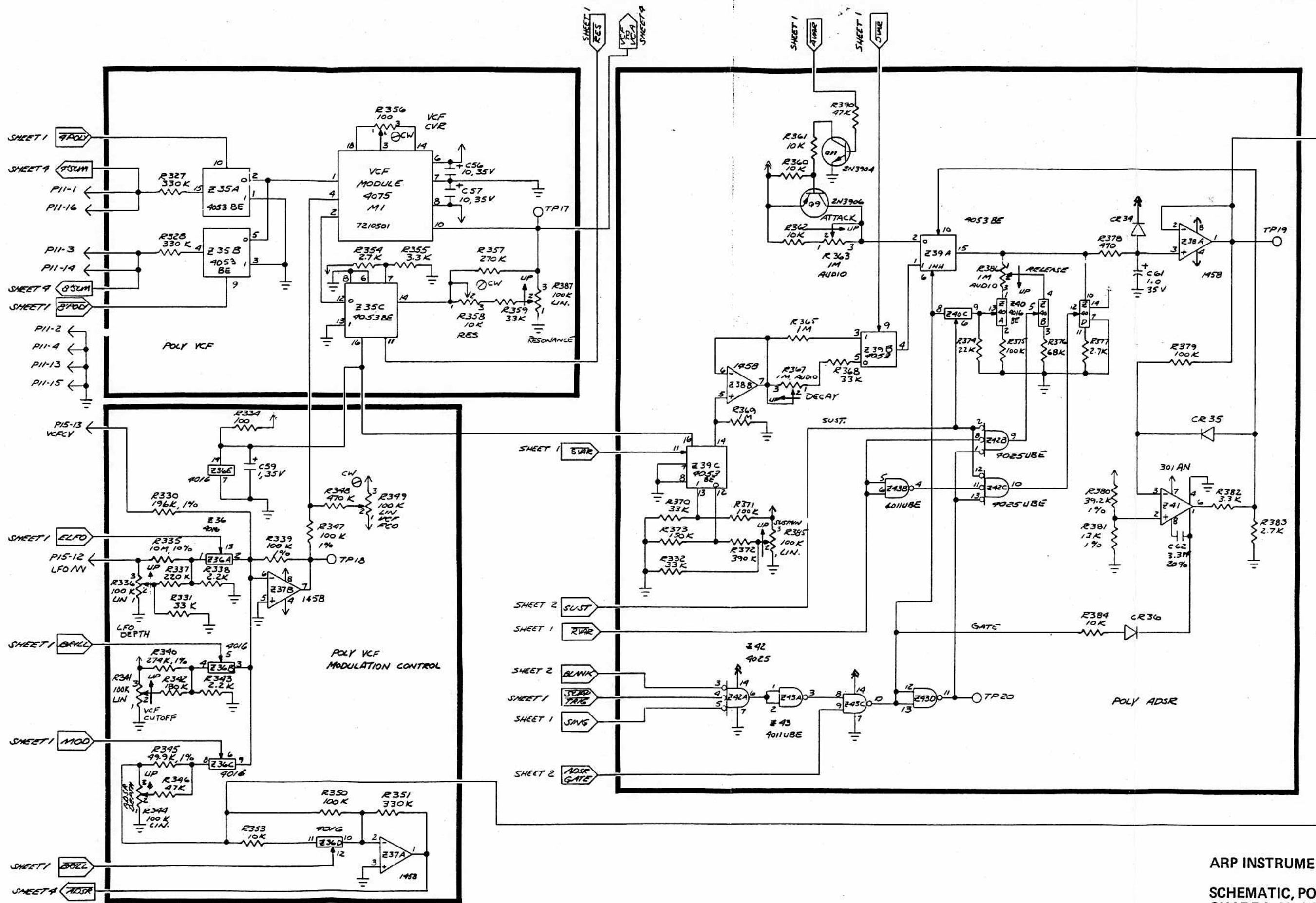
- 1.) UNLESS OTHERWISE SPECIFIED:
RESISTOR VALUES ARE IN OHMS, 1/4W, 5%
CAPACITOR VALUES ARE IN μ F, 50V, 20% (PF = PICOFARADS)
DIODIES ARE IN 1N4148

ARP INSTRUMENTS, INC

**ASSEMBLY, PHASER BOARD
QUADRA, Model 2460**







ARP INSTRUMENTS, INC.

SCHEMATIC, POLY SYNTH BOARD
QUADRA, Model 2460
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