


TSG
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HITACHI



CIRCUIT DIAGRAM
FOR THE
MODEL S-800
SCANNING ELECTRON MICROSCOPE

580-8800-5

Hitachi, Ltd. Tokyo Japan

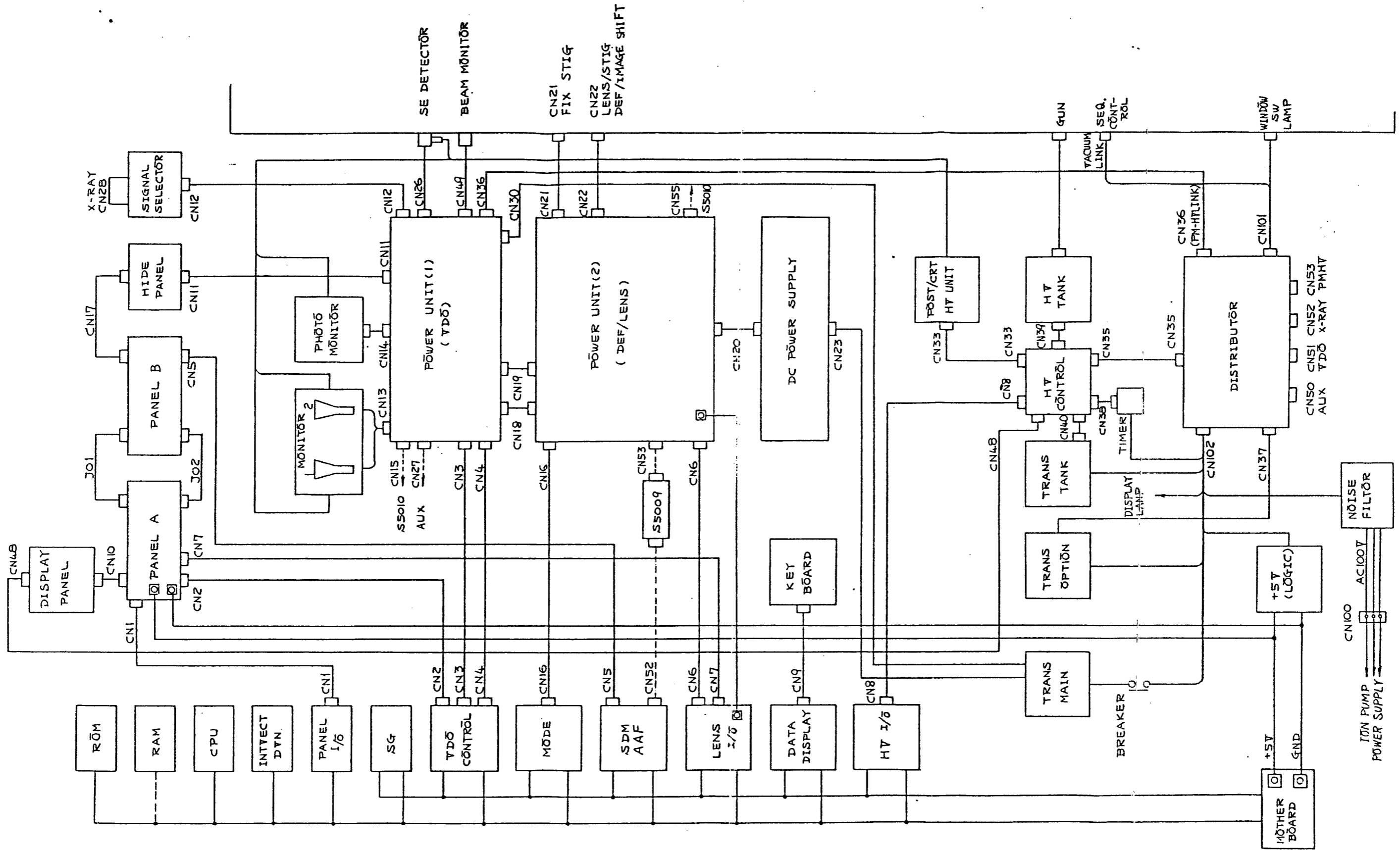
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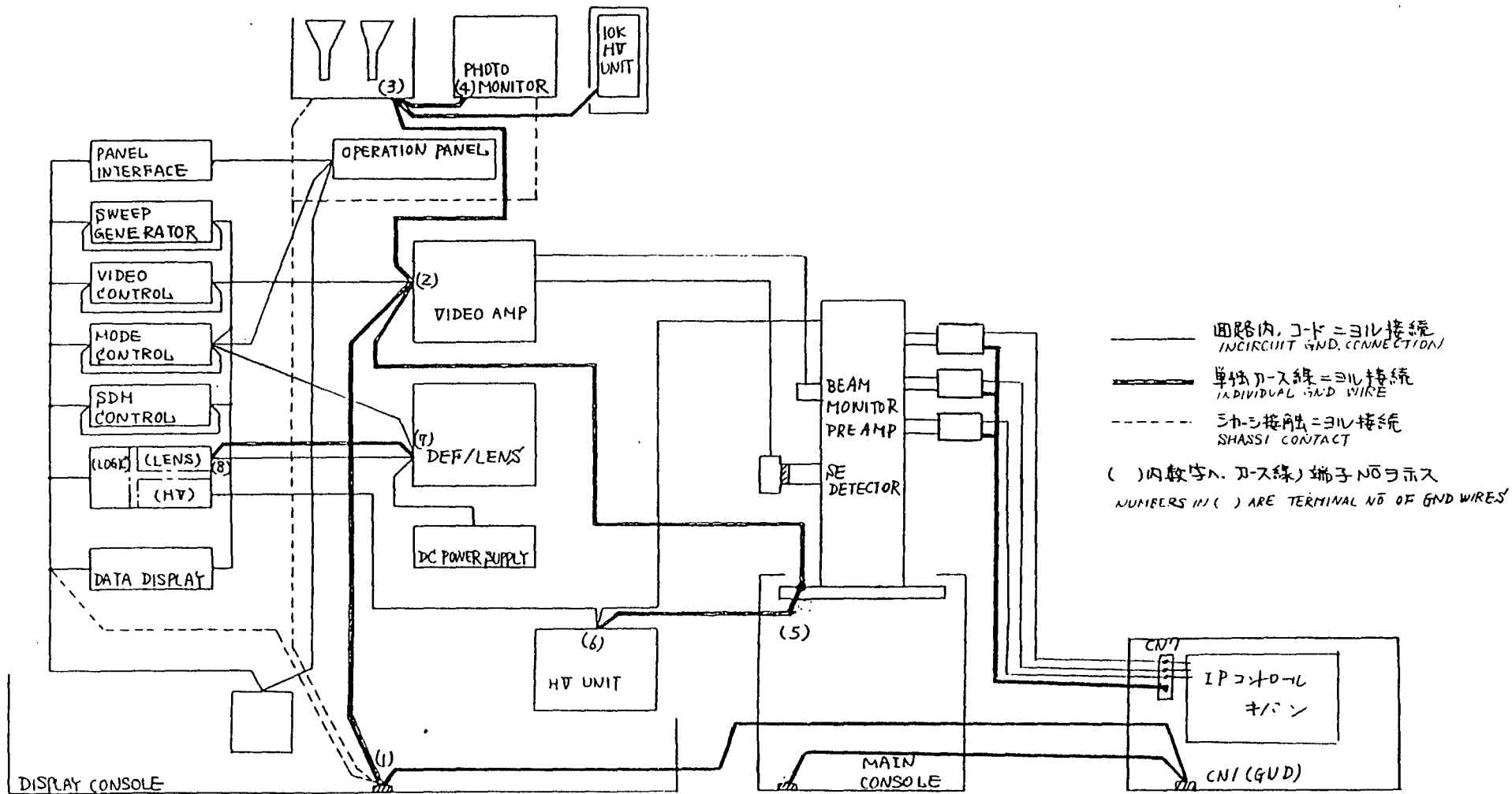
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2 OPTIONAL ACCESSORIES

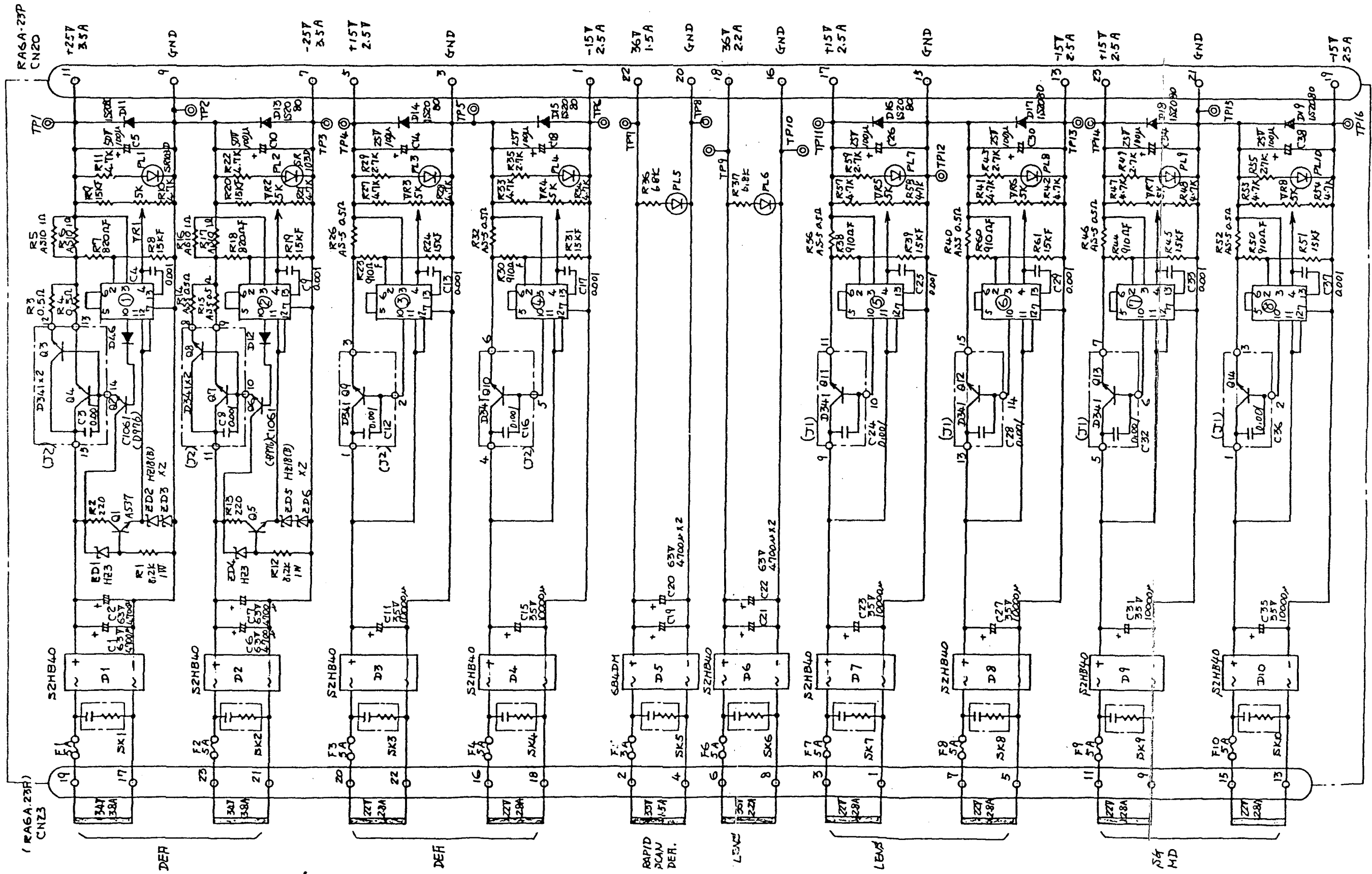
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1.1 WIRING DIAGRAM

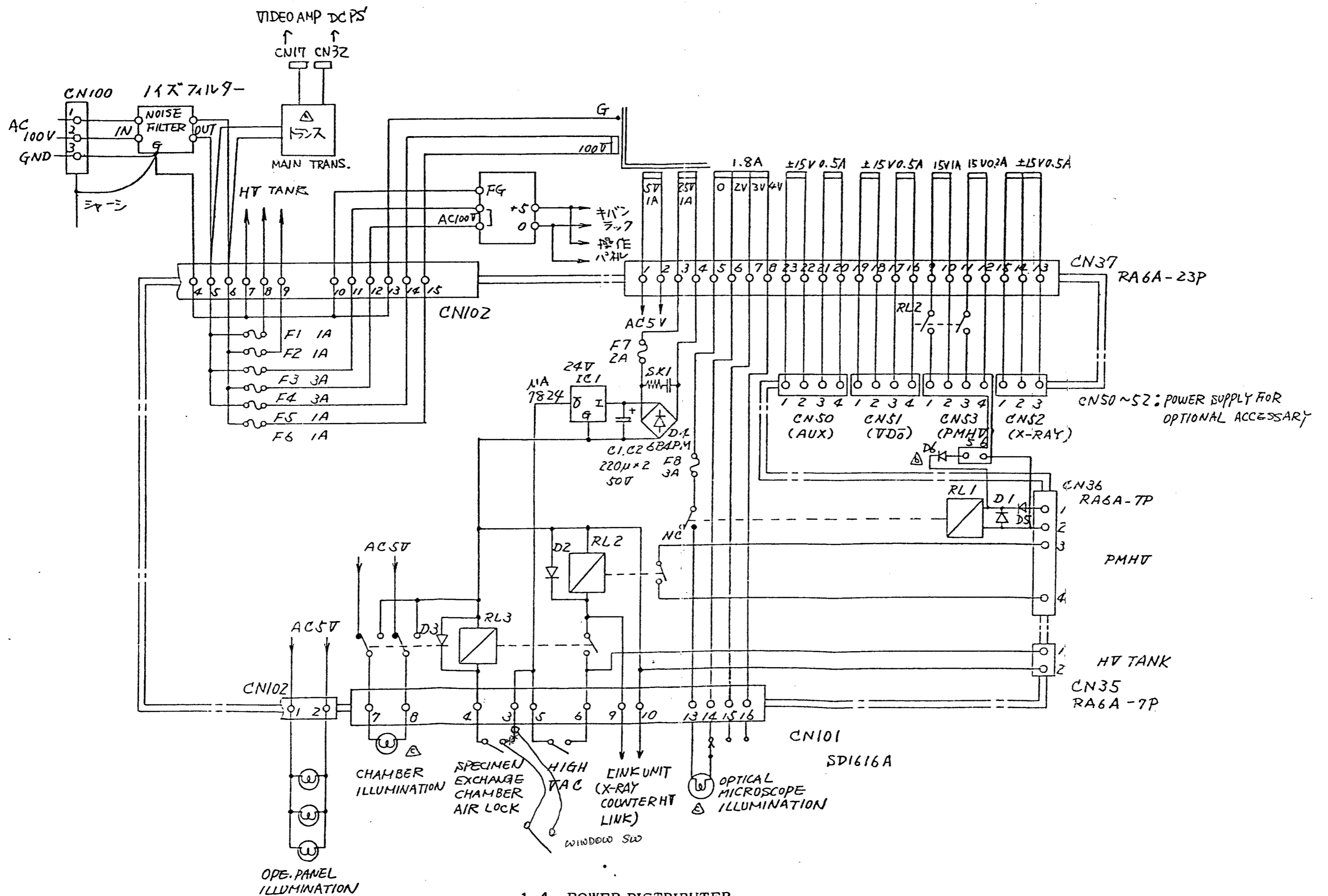


1.2 GND WIRING DIAGRAM

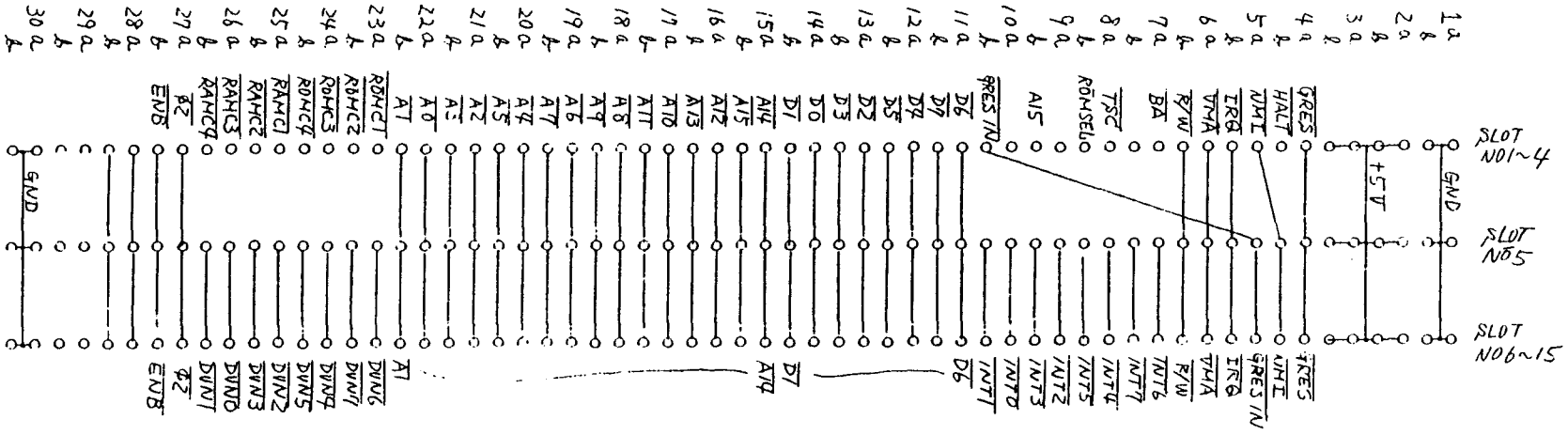


1.3 DC POWER SUPPLY

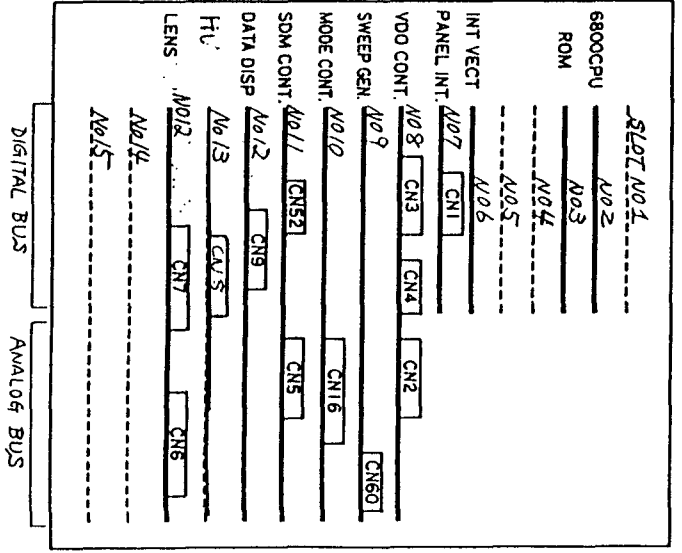
IC1-8: HA1723/μA723



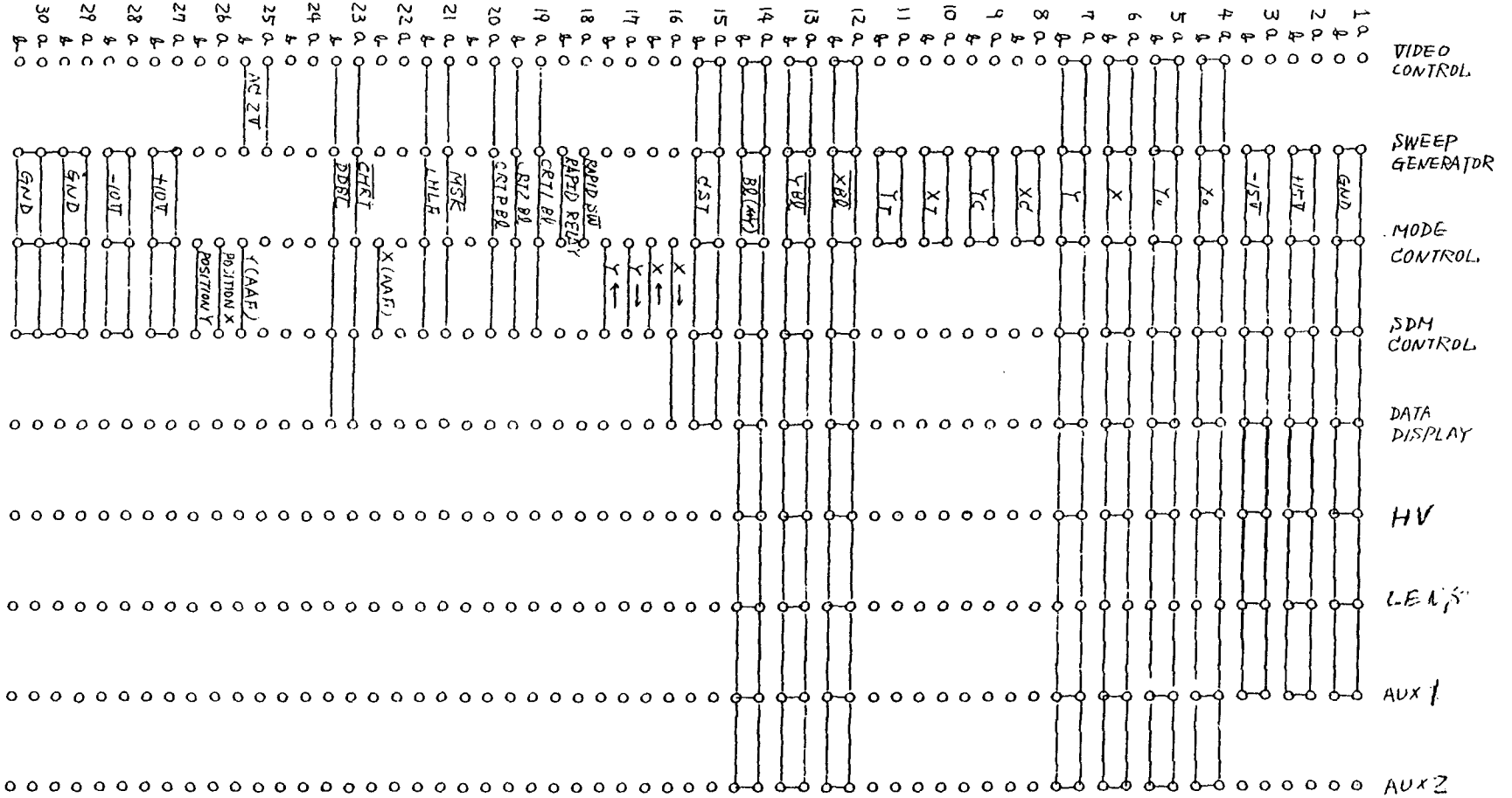
1.4 POWER DISTRIBUTER



DIGITAL BUS LINES

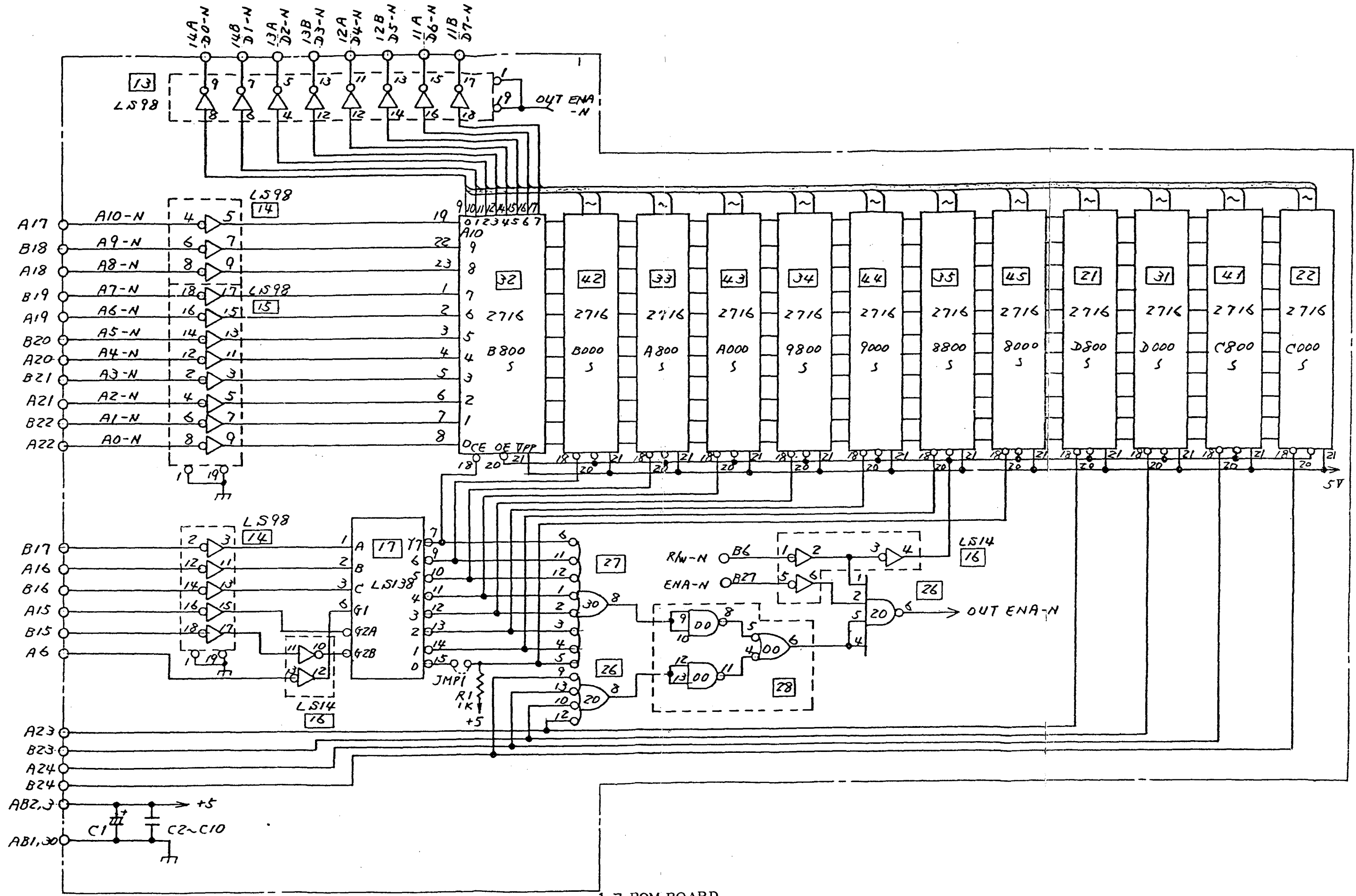


1.5 MOTHER BOARD WIRING (1)

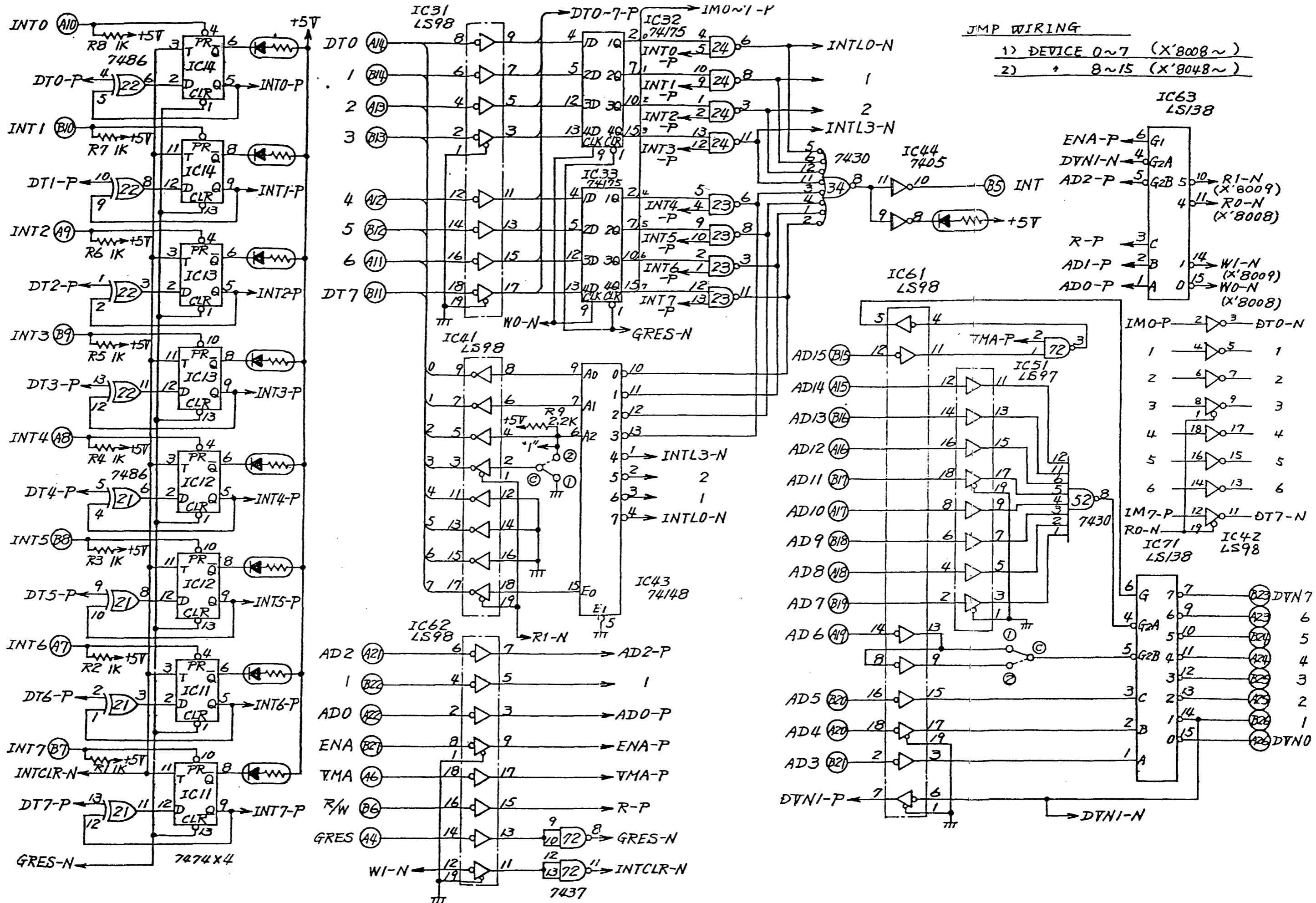


ANALOG BUS LINES

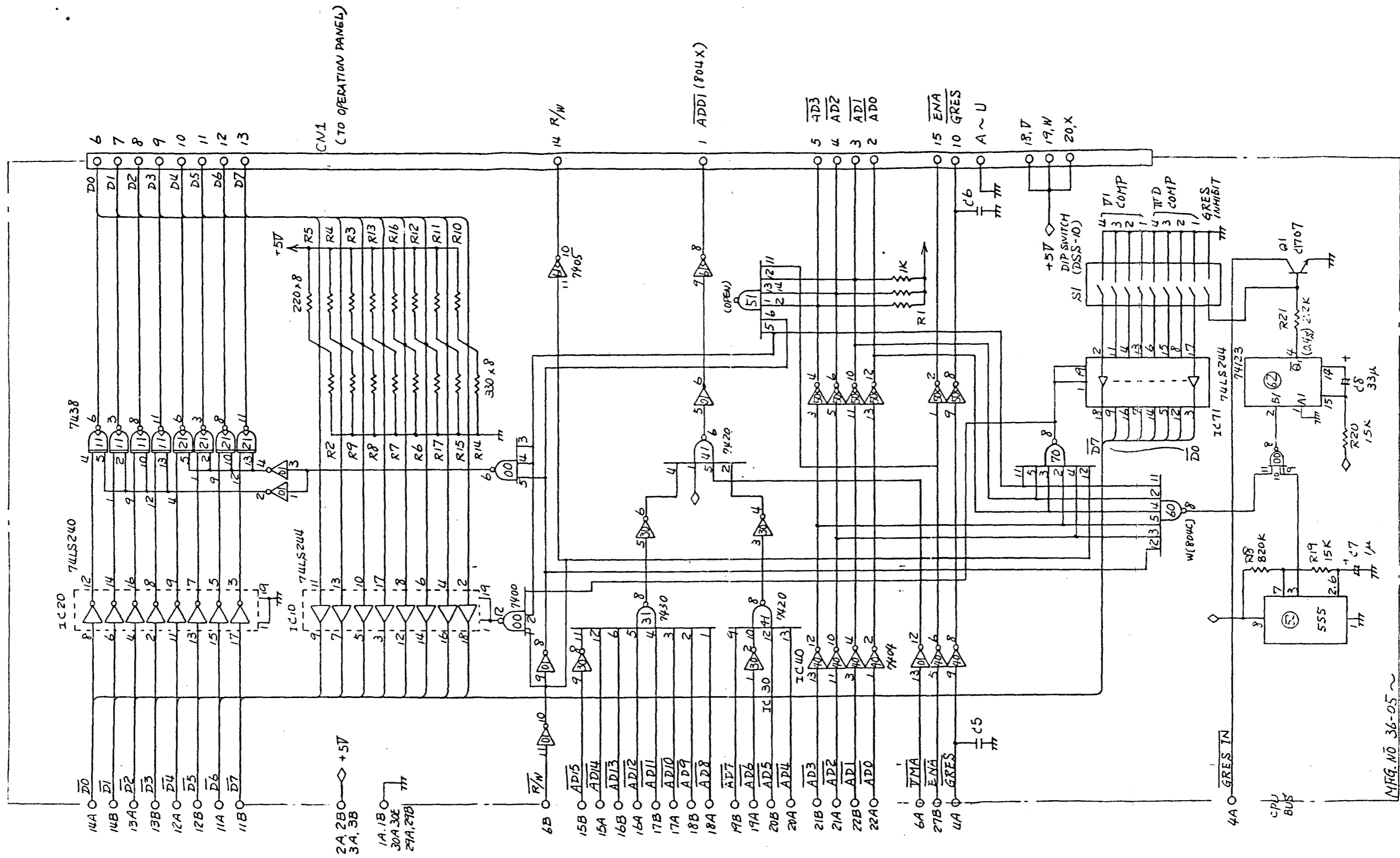
1.6 MOTHER BOARD WIRING (2)



1.7 ROM BOARD

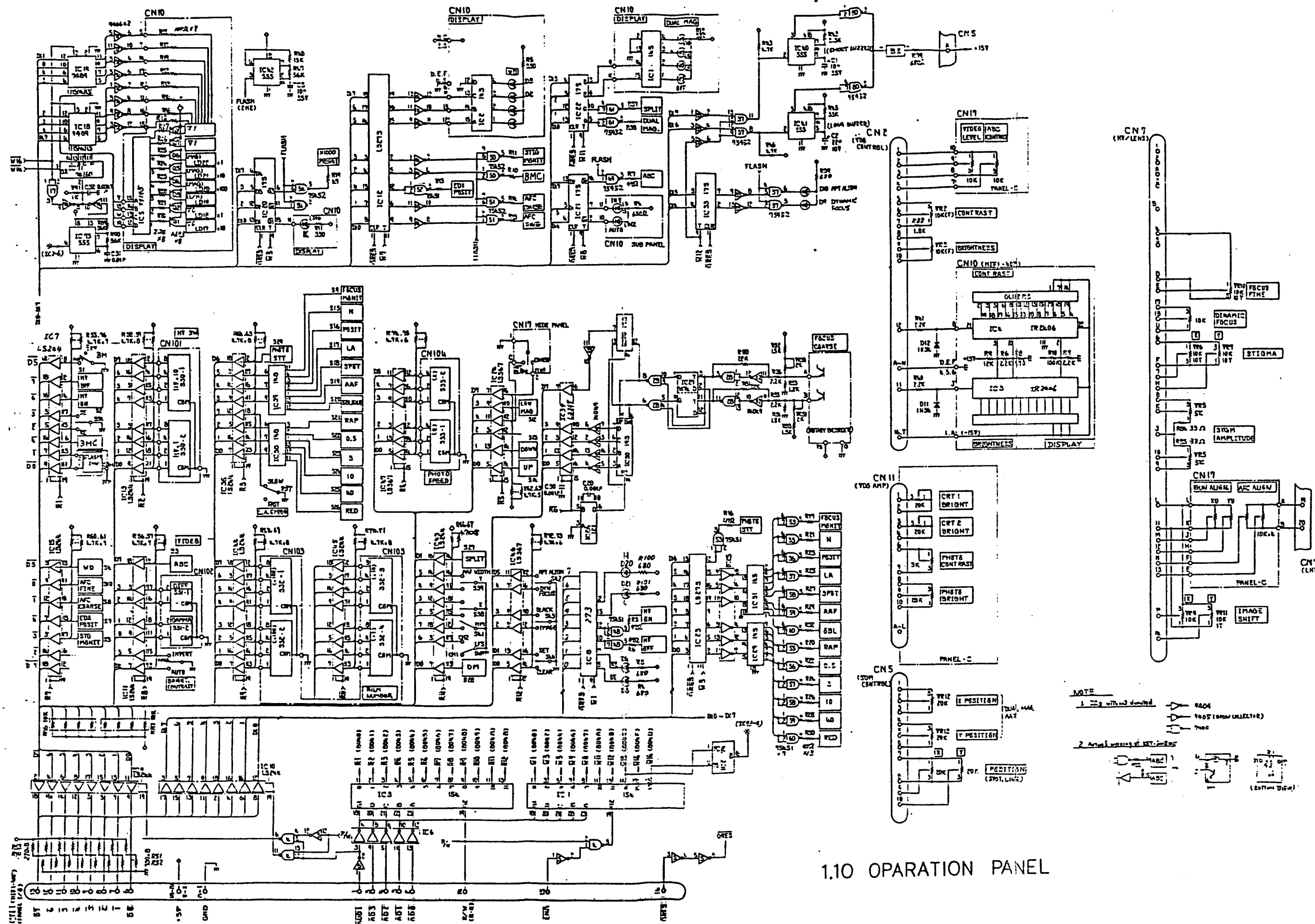


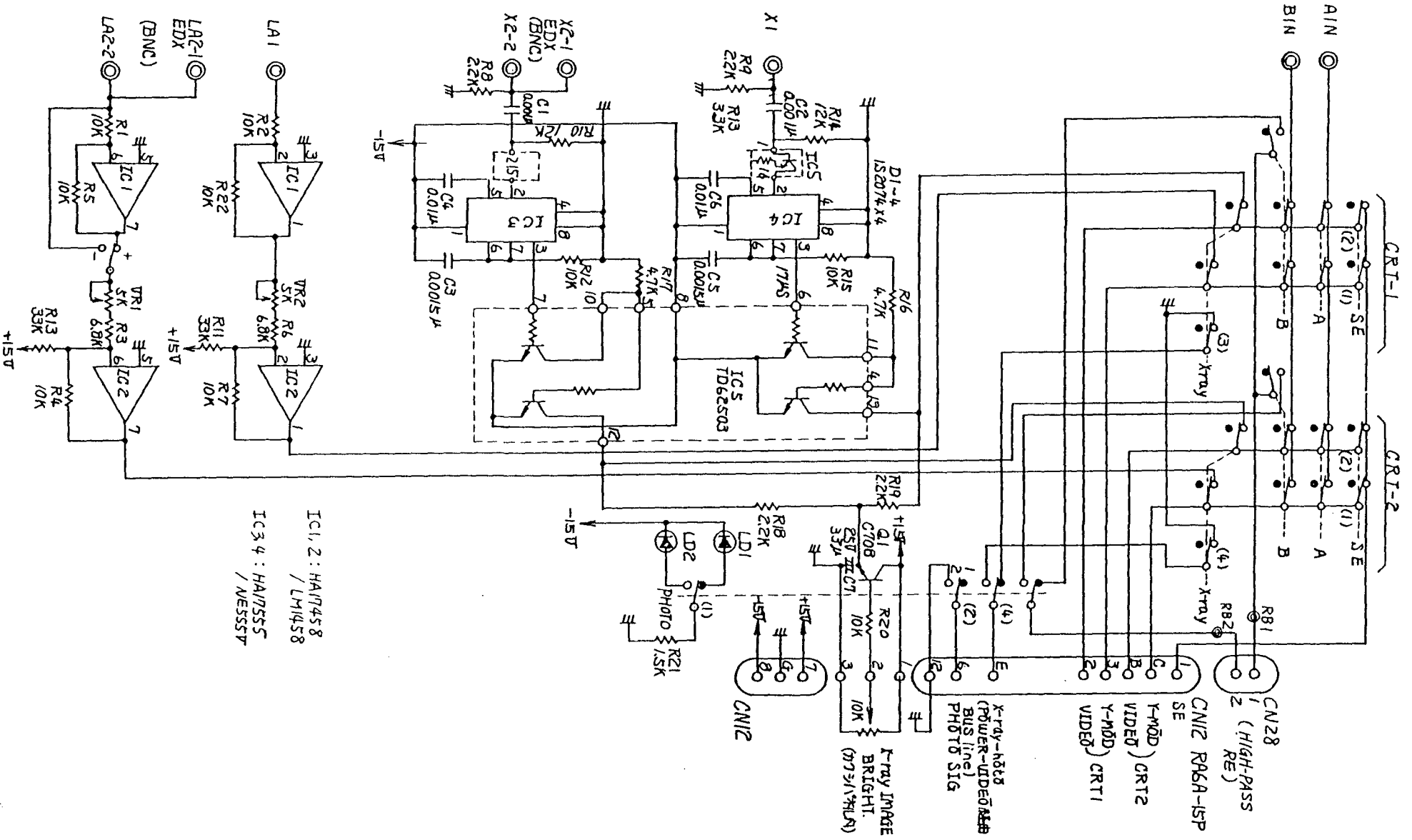
1.8 INT VECT BOARD



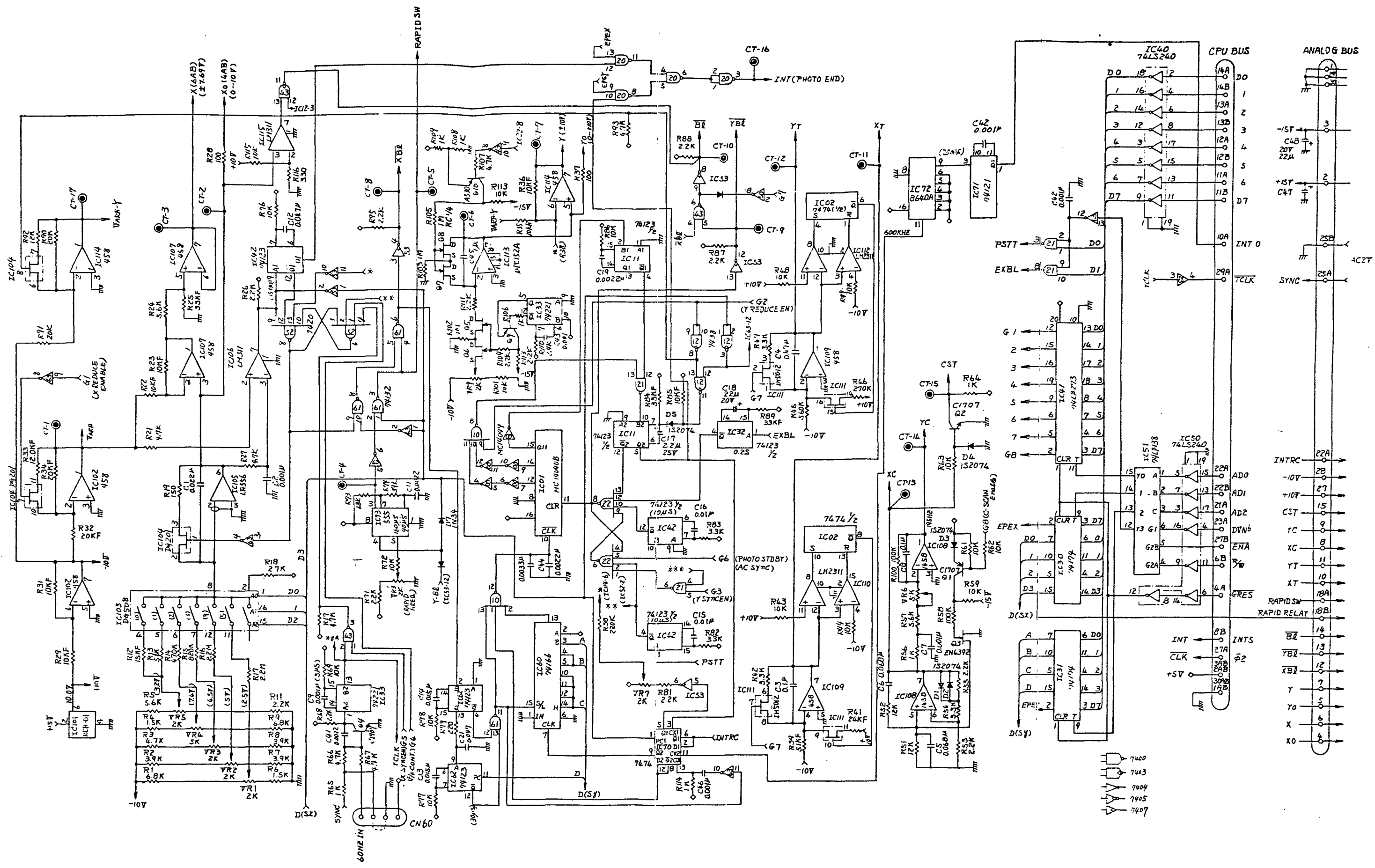
1.9 PANEL INTERFACE

MFQ. NO 36-05 ~

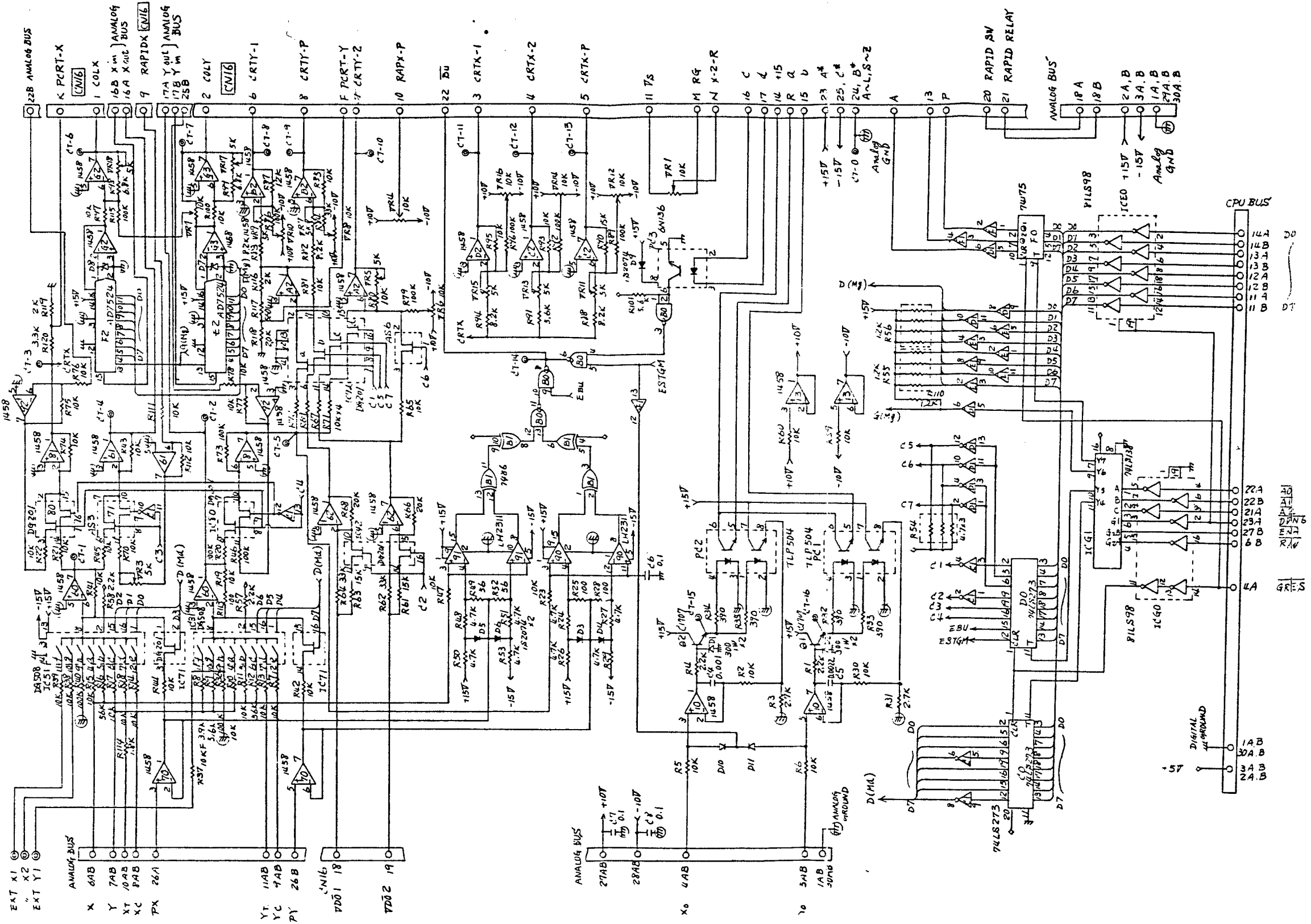




1.11 SIGNAL SELECTOR

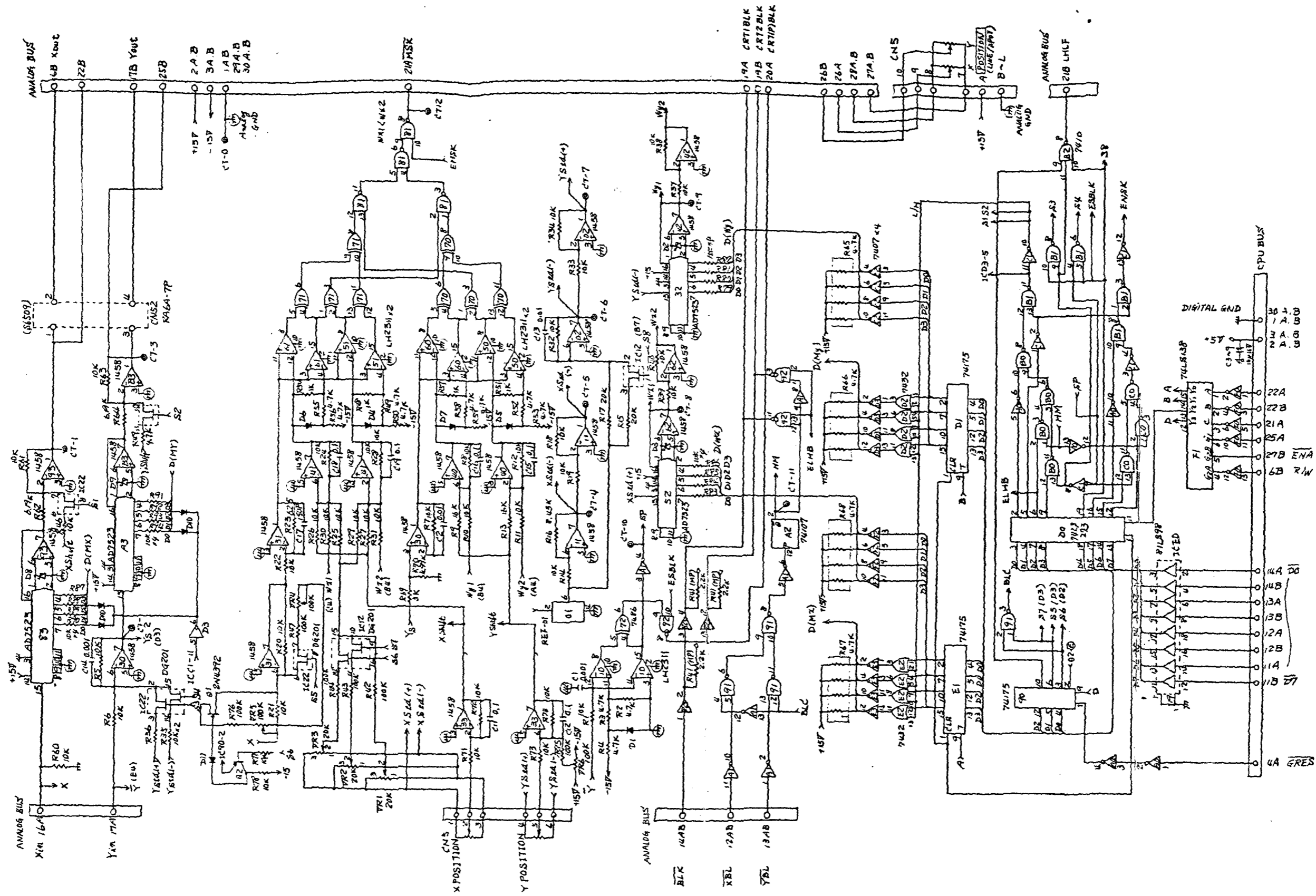


1.12 SWEEP GENERATOR



D7-8 1458-288 (Shimless Body)
 D1-4 Y-LL 18287(11)
 IC 1458 → 74LS98 or 74LS99
 1458 → 7407
 1405 → 7408
 1403

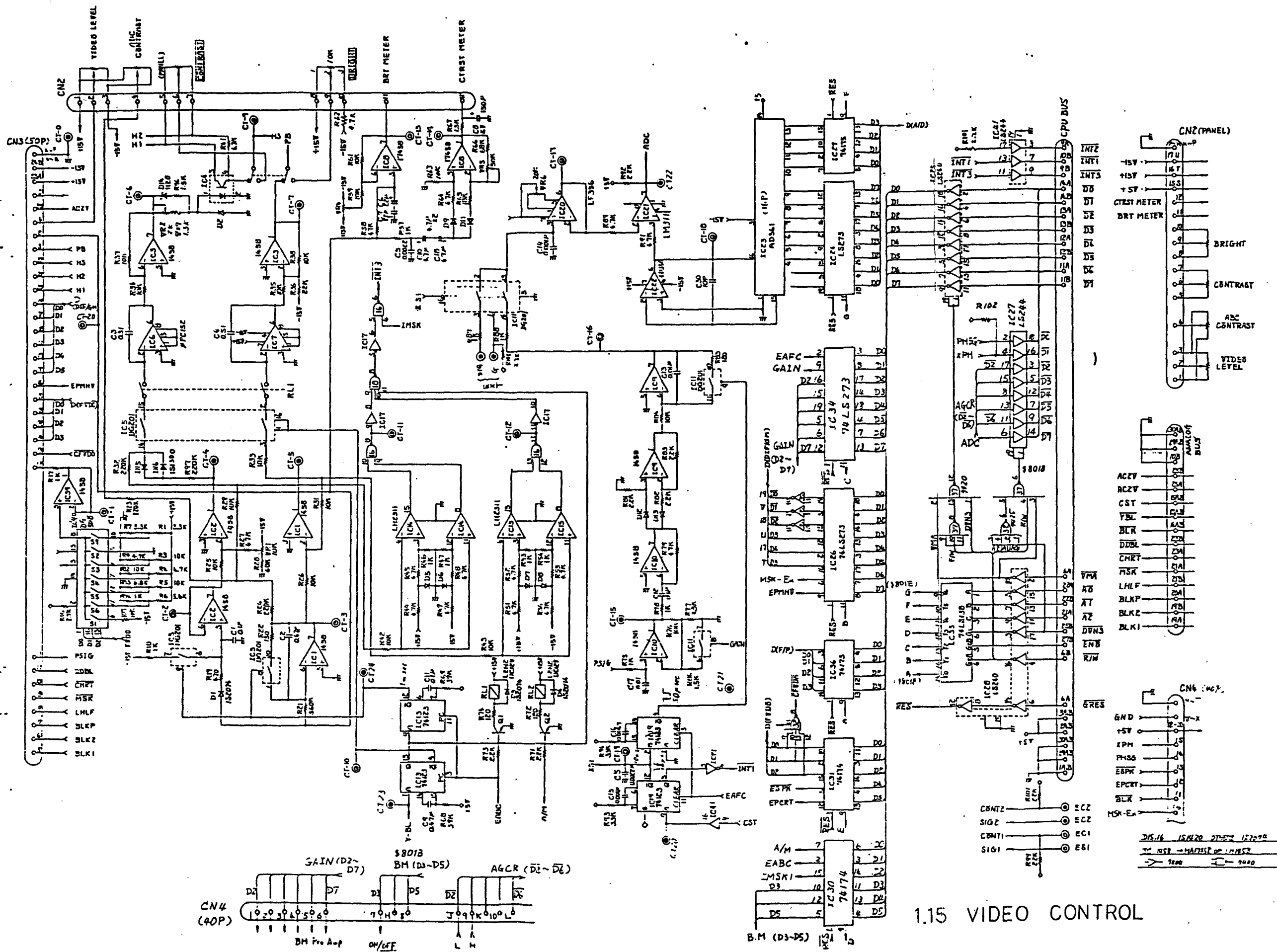
1.13 MODE CONTROL



1.14 SDM CONTROL

- 22.3.B.9 3082-2810 (Shifter Drive)
- PIC 7404 (Logic Array)
- 7404
- 7407
- 7408
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- 7499
- 7500

to Digital Ground

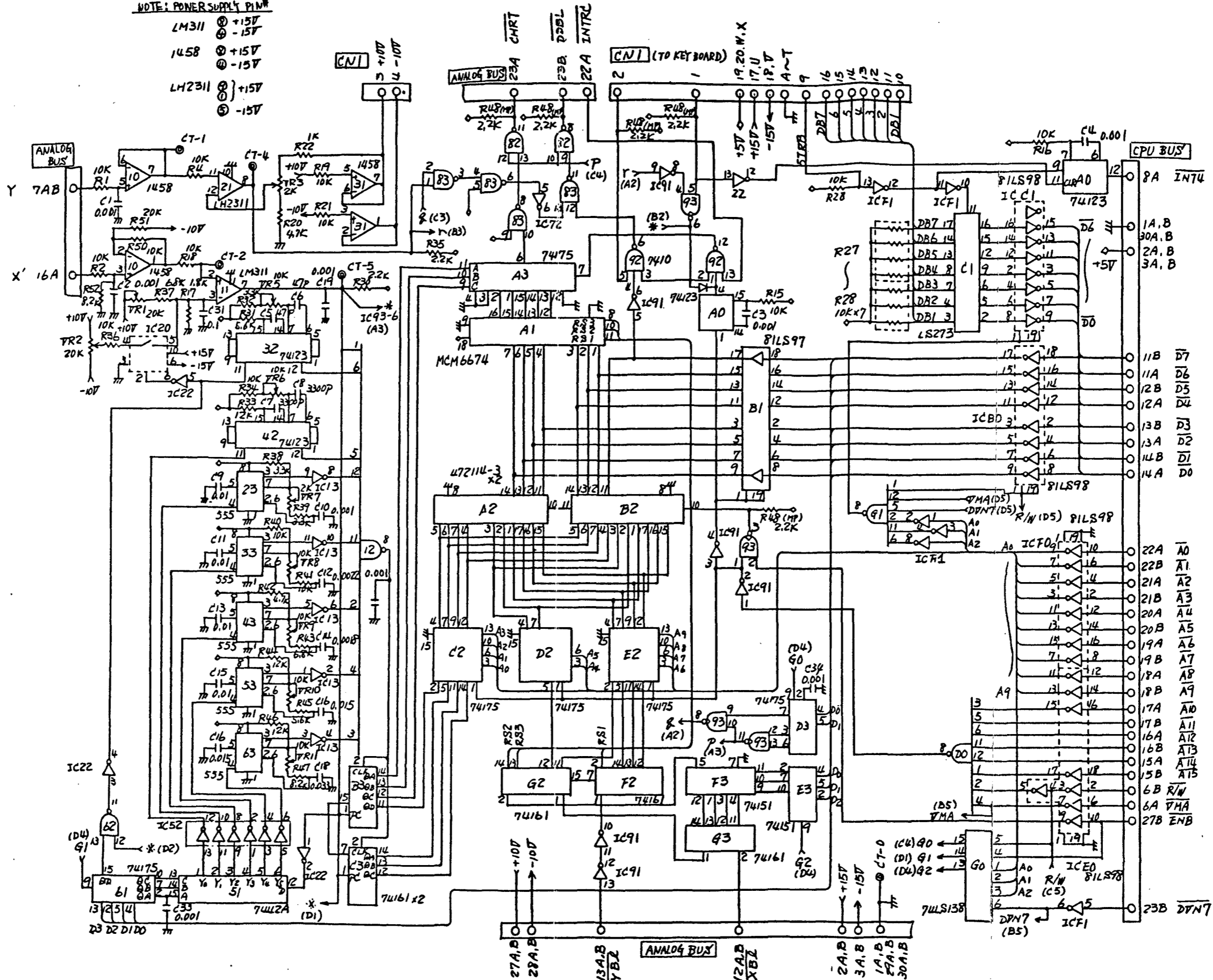


1.15 VIDEO CONTROL

DATE: 10/16/70
 BY: [Signature]
 CHECKED: [Signature]

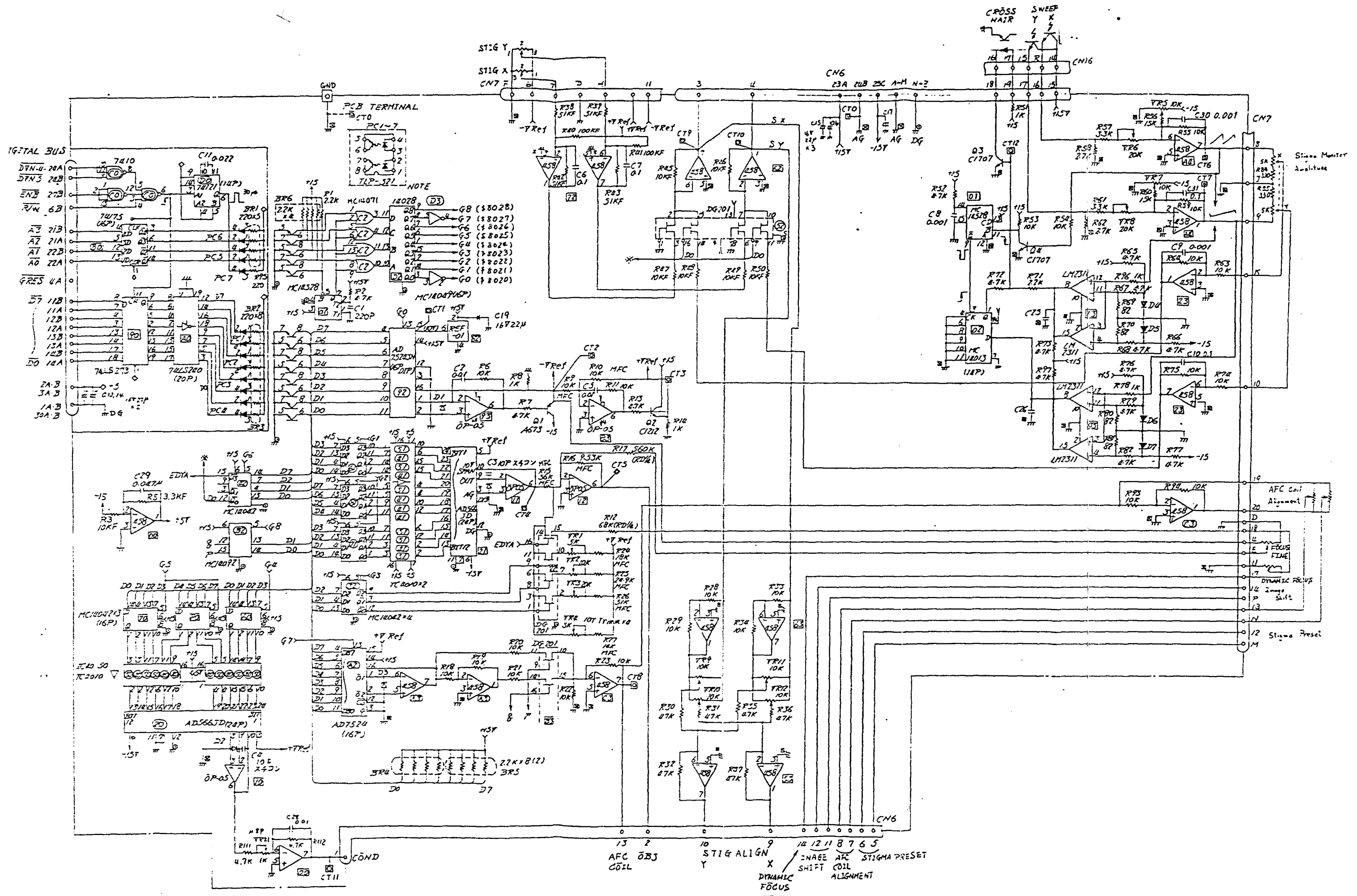
NOTE: POWER SUPPLY PIN#

- LM311 (1) +15V
- (2) -15V
- 1458 (1) +15V
- (2) -15V
- LH2311 (1) +15V
- (2) -15V

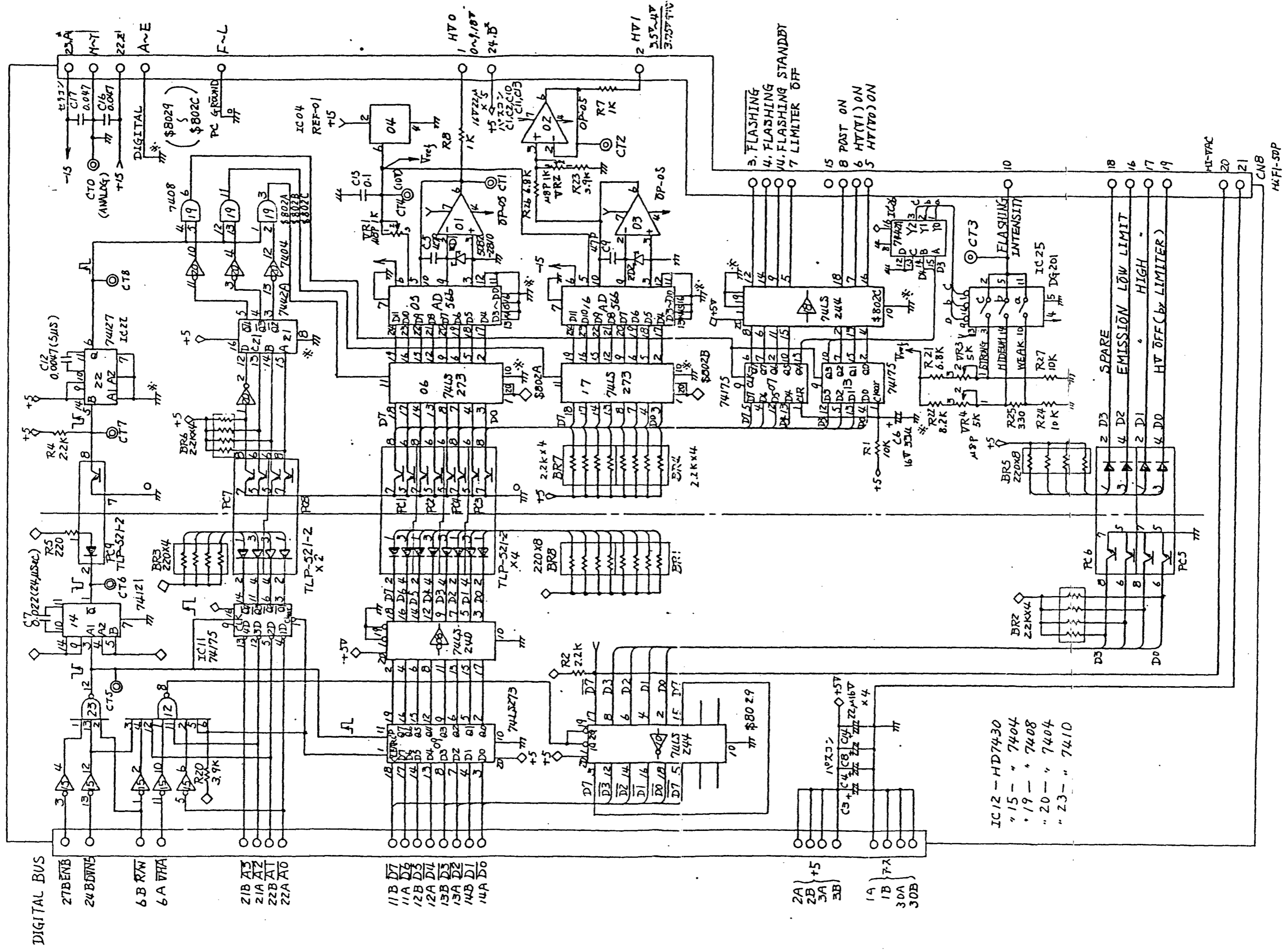


- 7404
- 7400
- 7403
- 1458 → HA17458 or LM145
- 555 → HA17555 or NE555

1.16 DATA DISPLAY

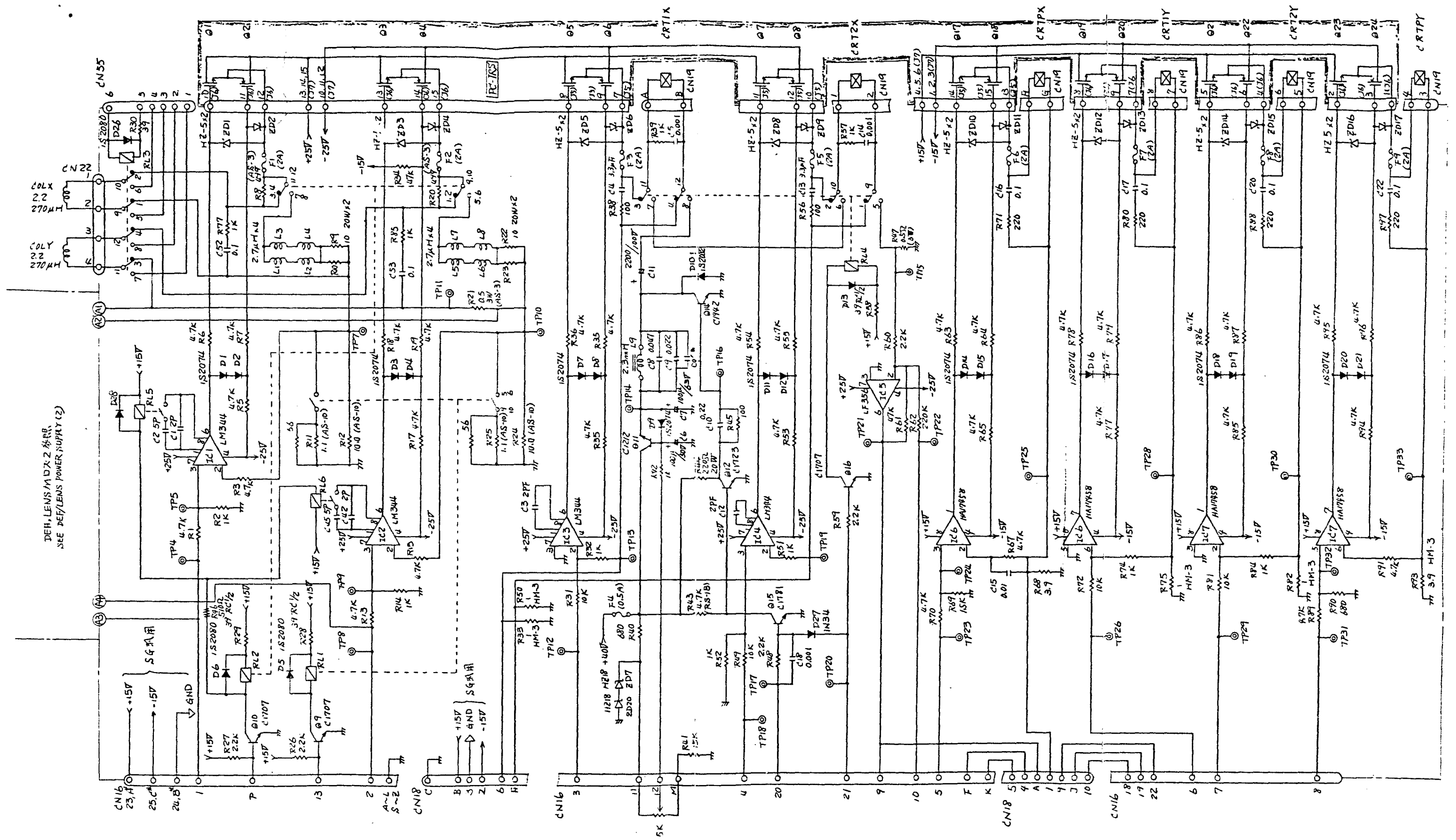


1.17 LENS CONTROL

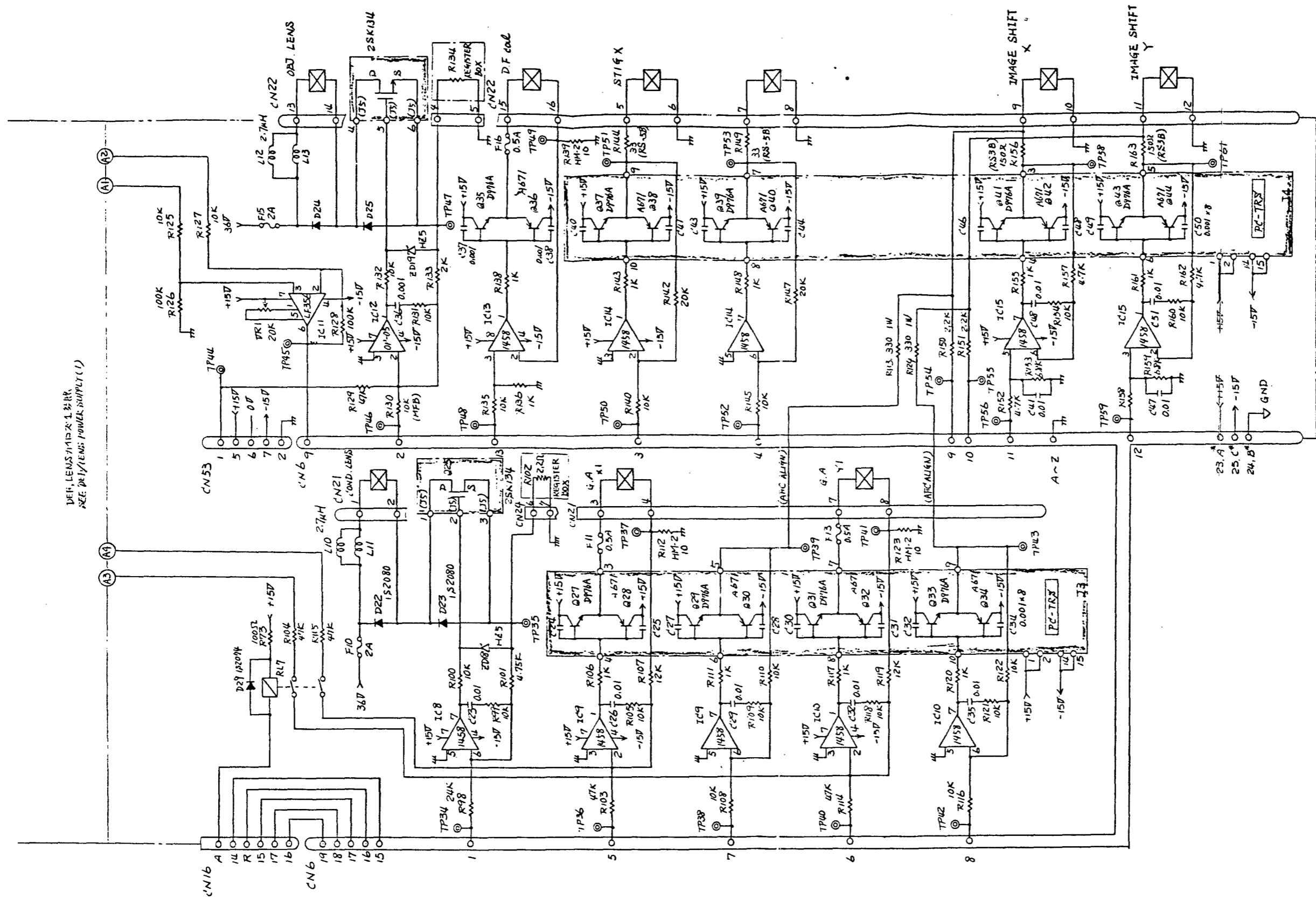


1.18 HV CONTROL

- IC12 - HD7430
- "15 - " 7404
- "19 - " 7408
- "20 - " 7404
- "23 - " 7410



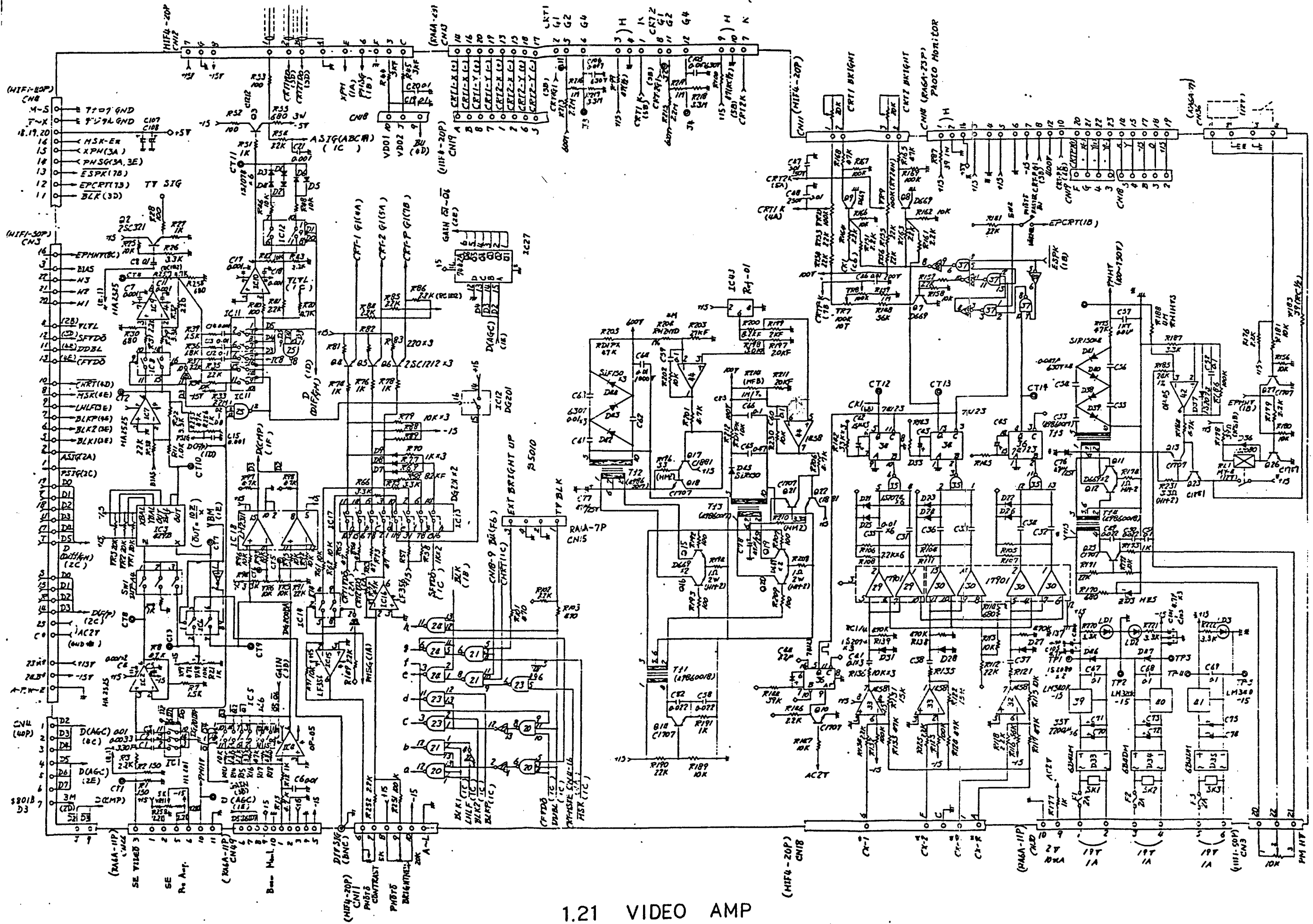
1.19 DEF/LENS POWER SUPPLY (1)



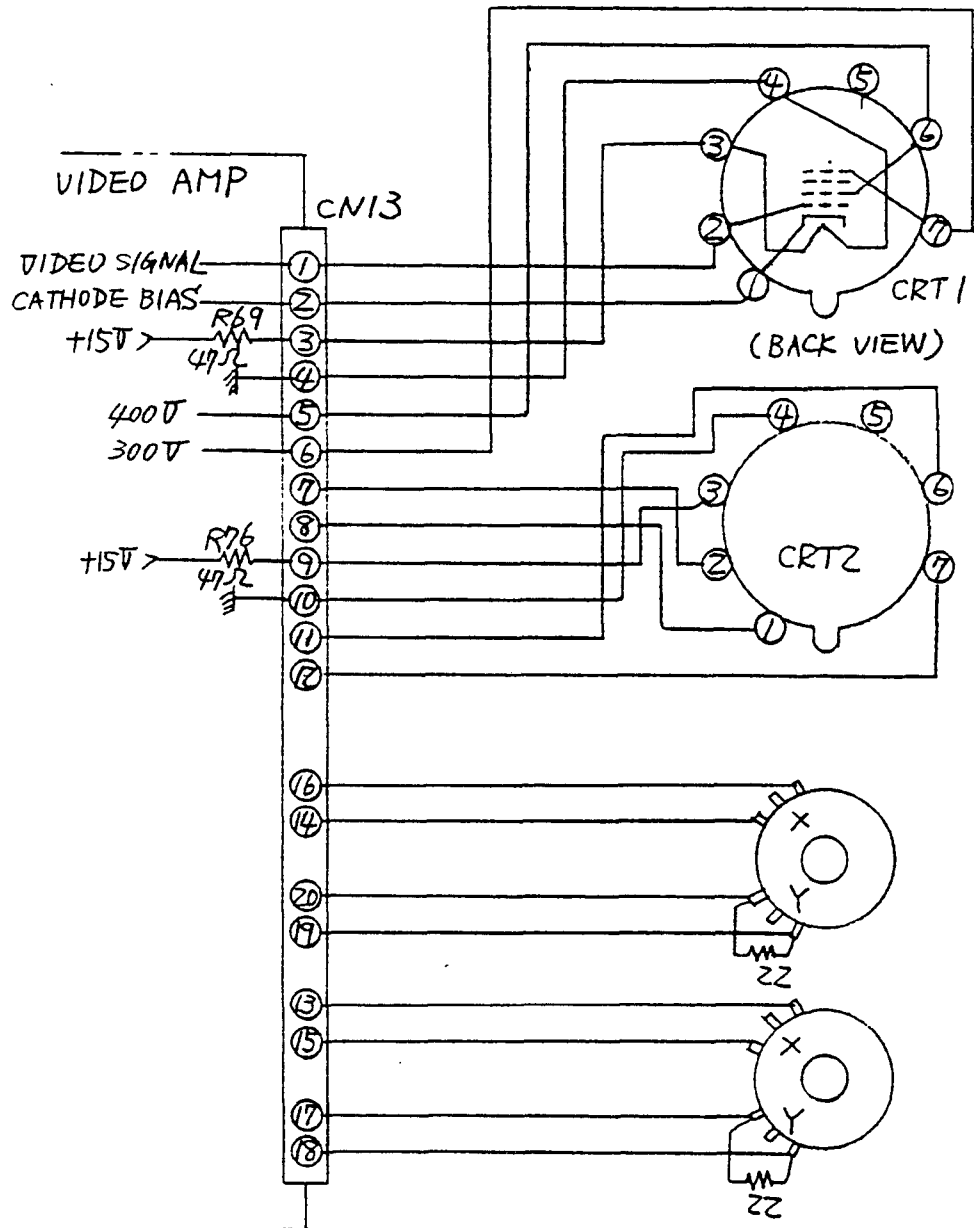
DEF. LENS POWER SUPPLY (1)
SEE DEF/LENS POWER SUPPLY (1)

* IC8, 9, 10, 13, 14, 15 : HA17458, OR LM1458

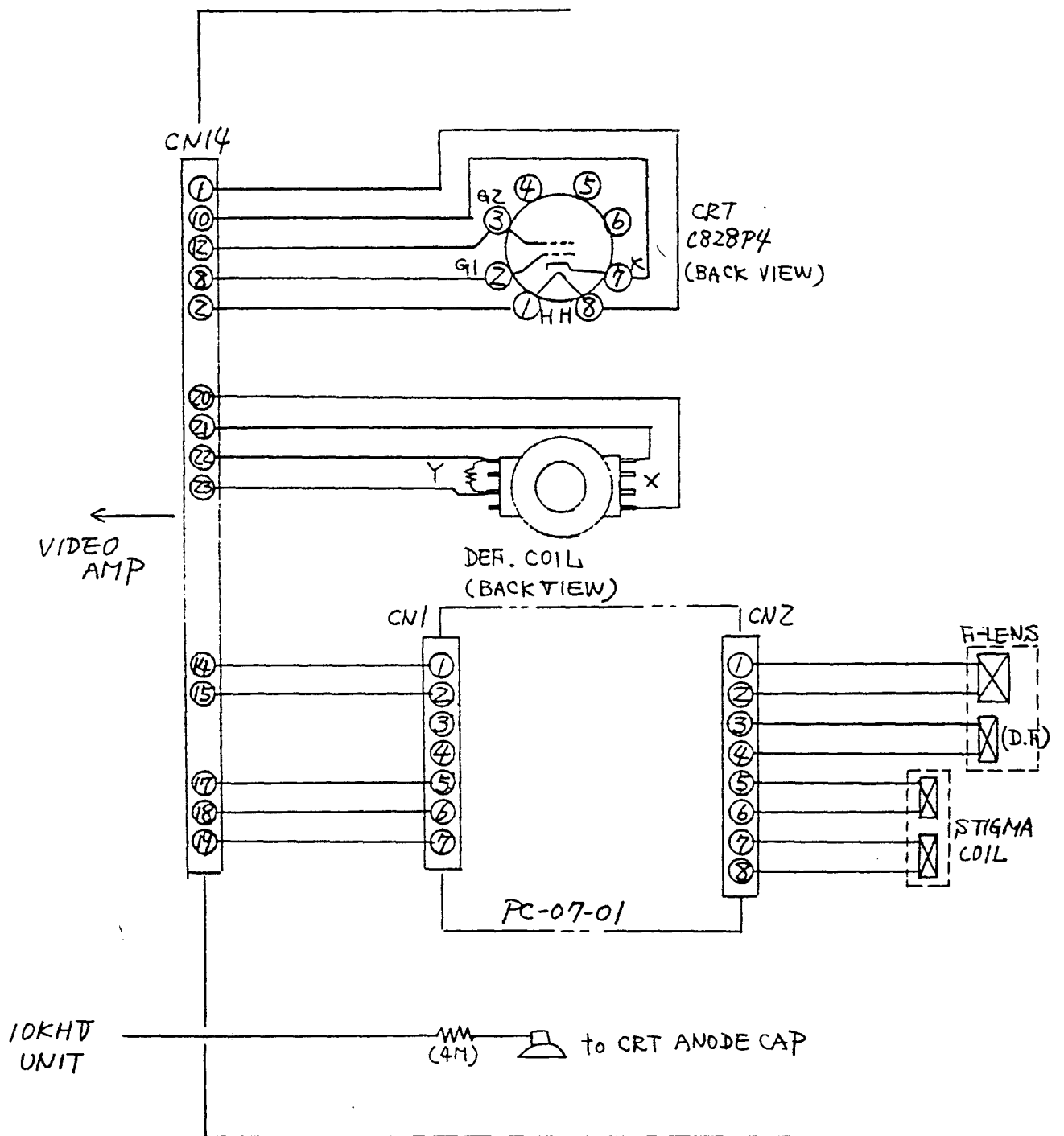
1.20 DEF/LENS POWER SUPPLY (2)



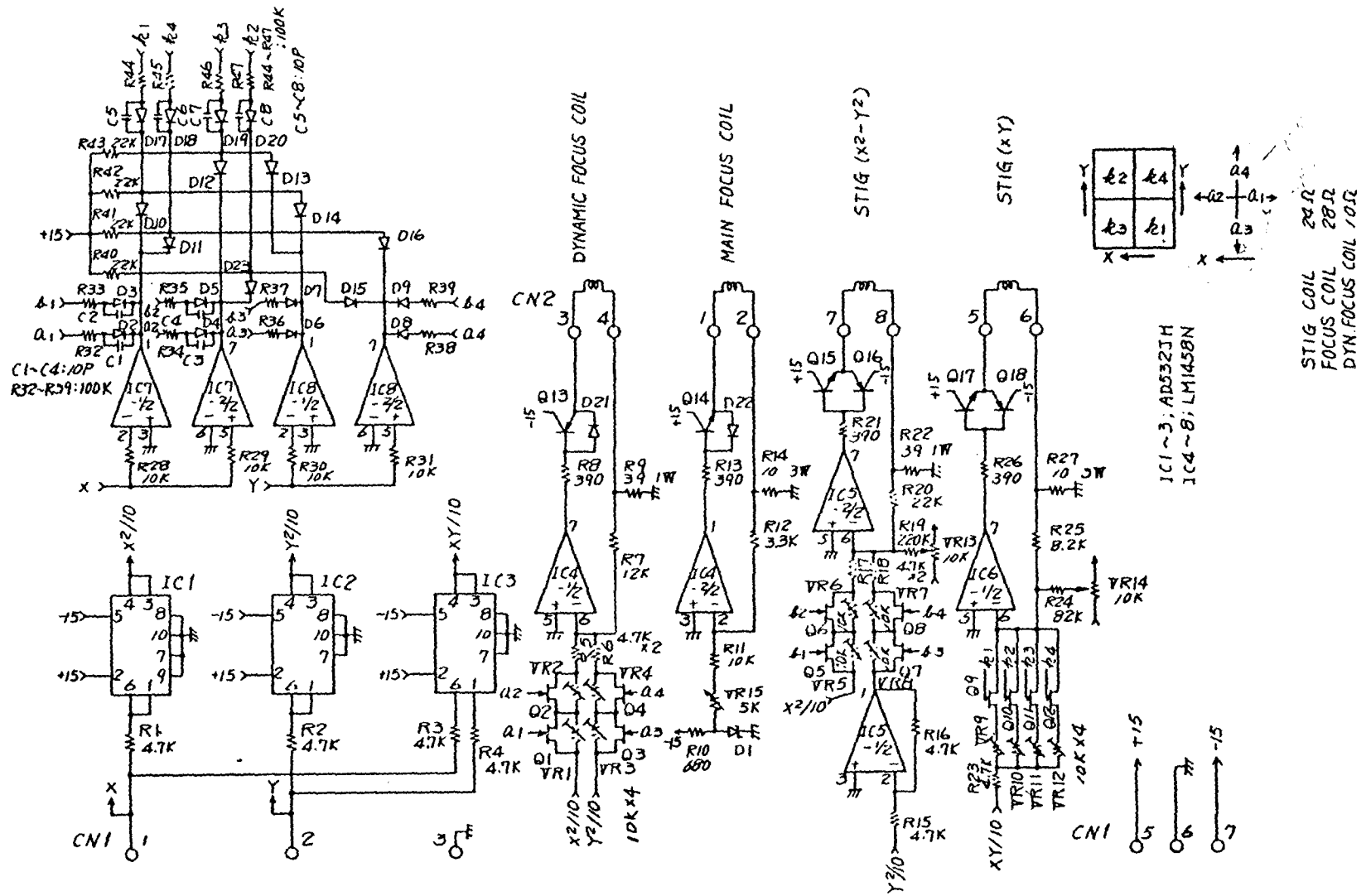
1.21 VIDEO AMP

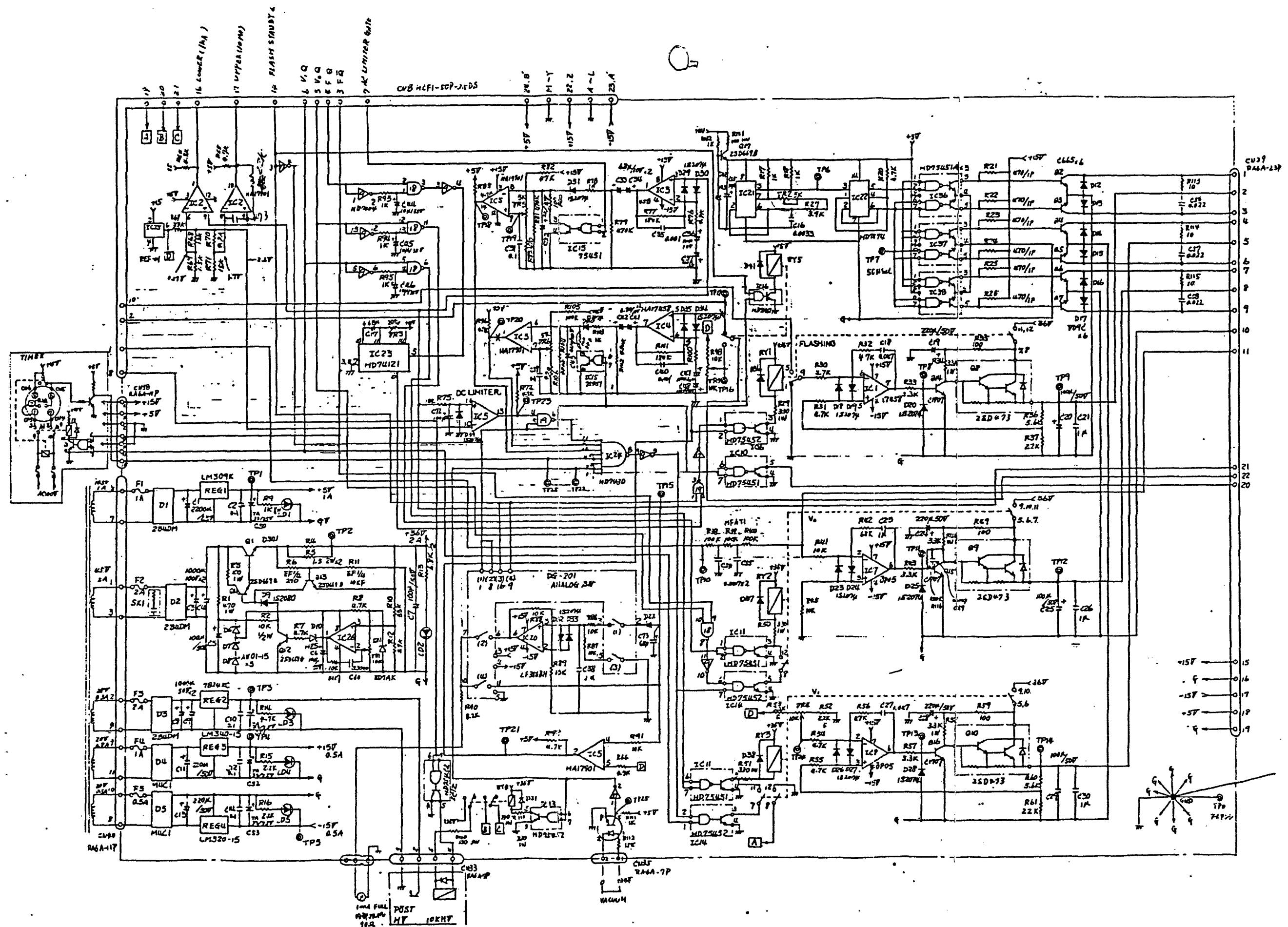


1.22 VIEW CRT UNIT



1.23 PHOTO CRT UNIT

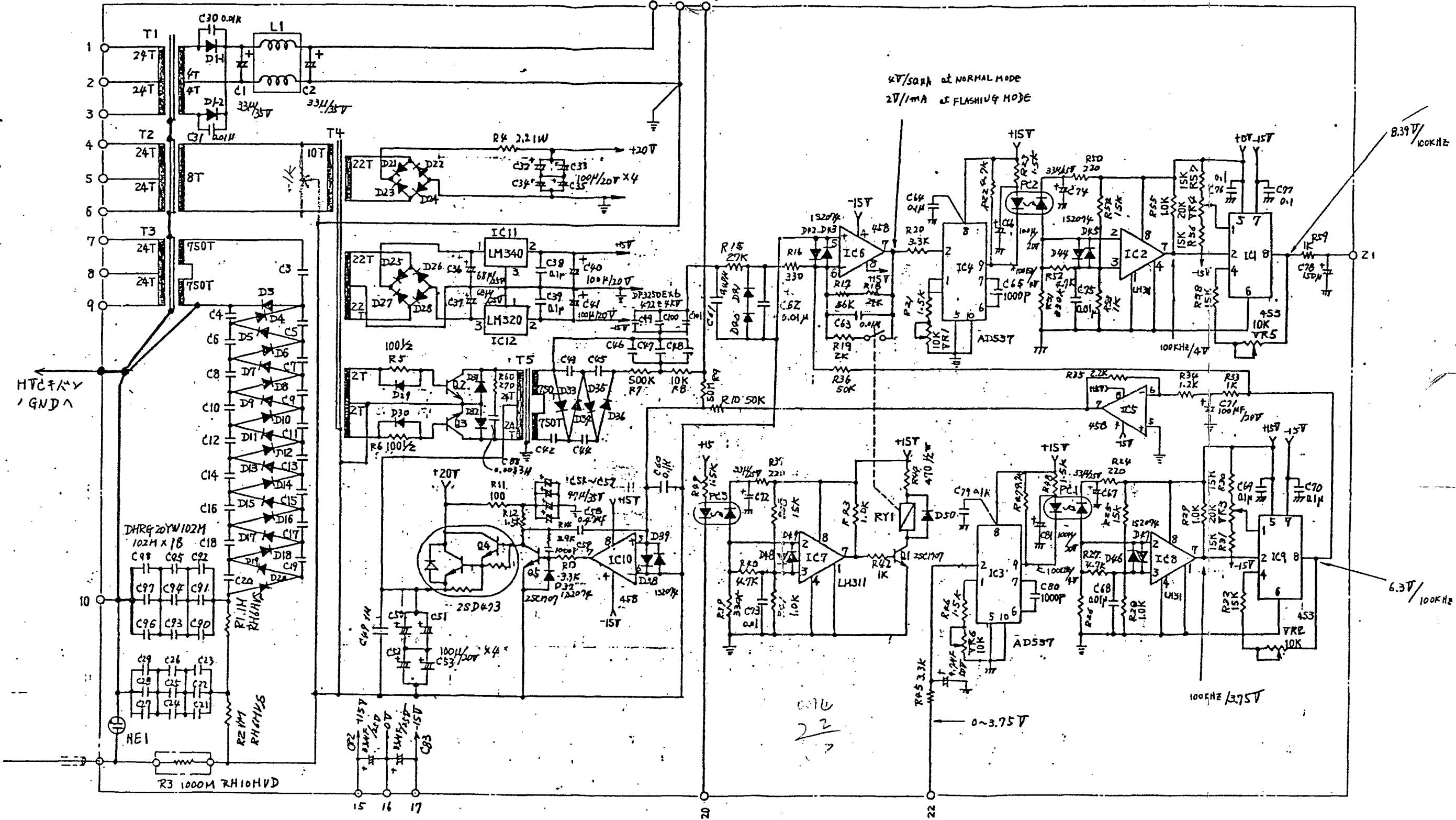




1.25 30KV(V₀)/6KV(V₁) HV POWER SUPPLY(1)

AD 537 KH → J446096
 HA 17458 → J431015
 LM 311 H → J441052

FI F2 V1 MAX. 6.3KV



4V/50μA at NORMAL MODE
 2V/1mA at FLASHING MODE

8.39V / 100kHz

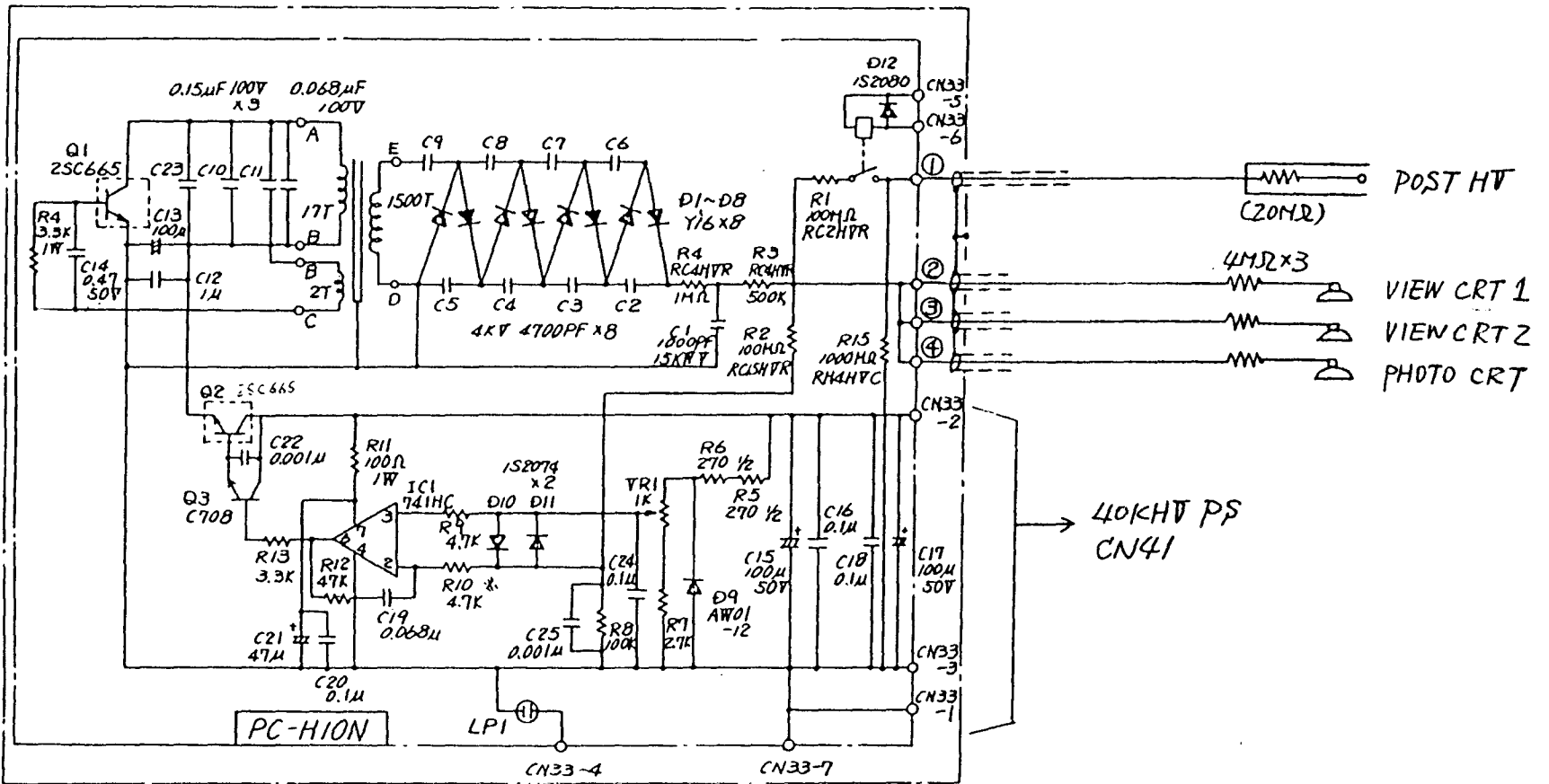
6.3V / 100kHz

0.010
 2.2
 7

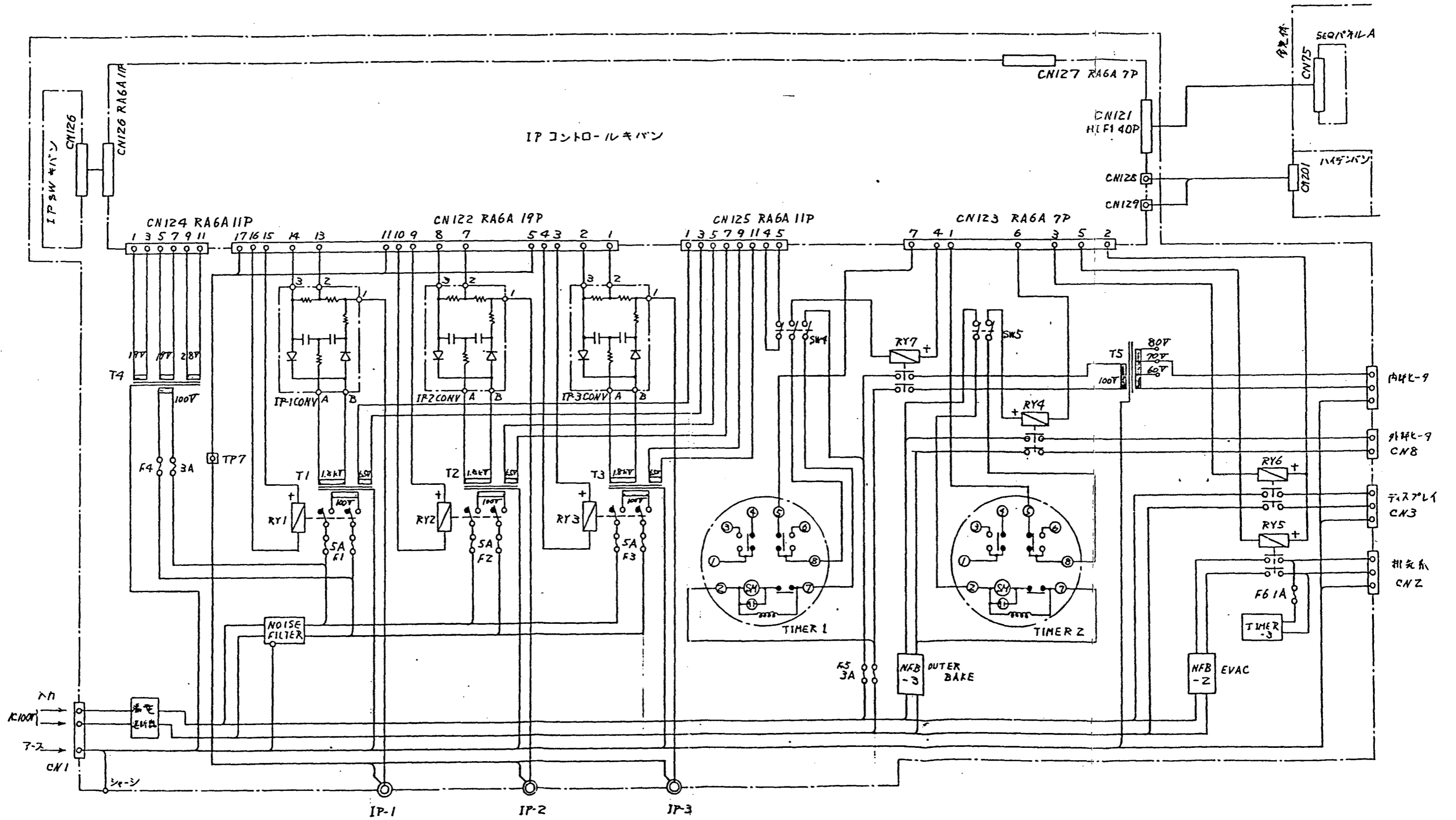
0~3.75V

100kHz / 3.75V

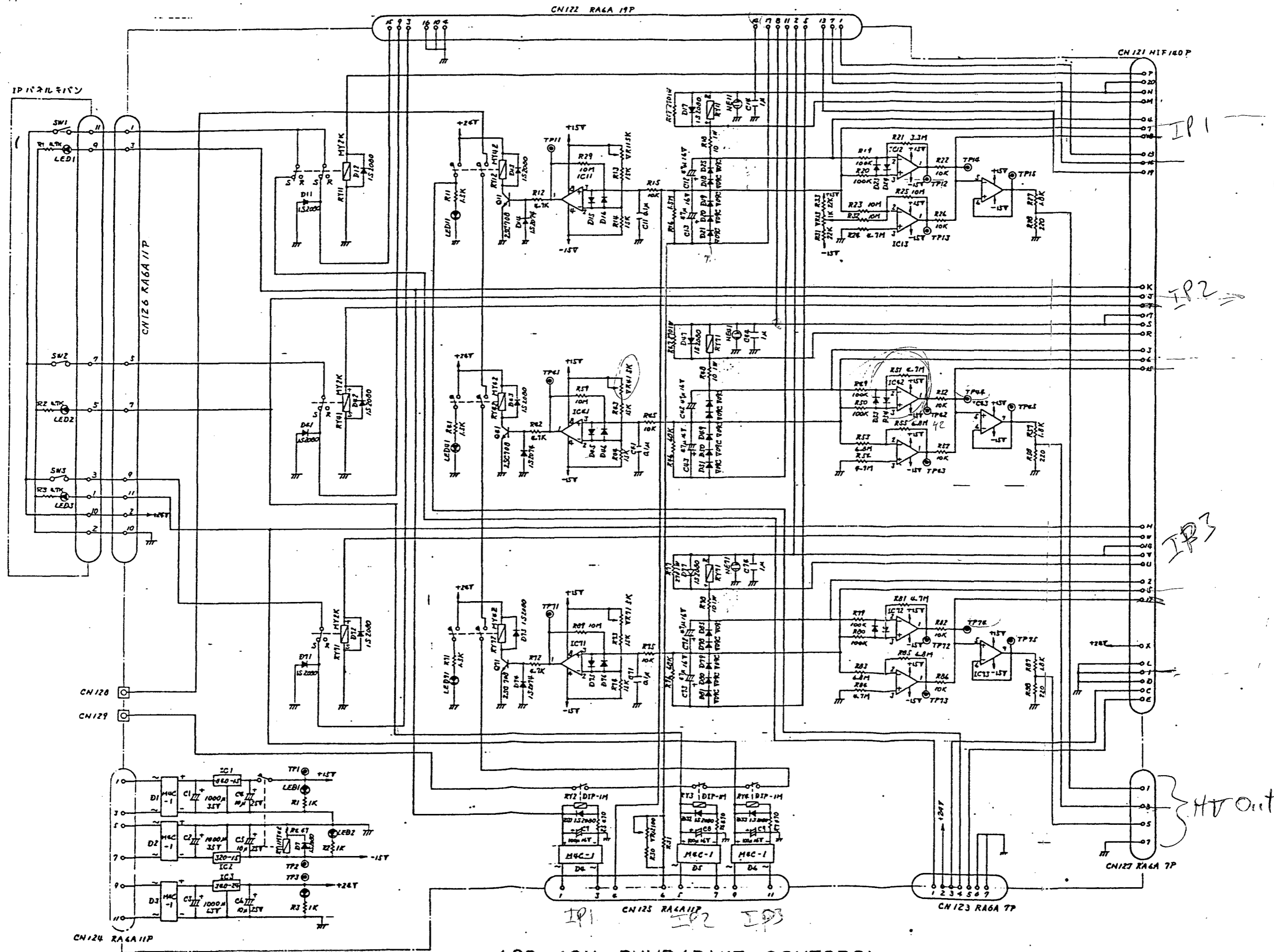
1.26 30KV(V0)/6KV(V1) HV POWER SUPPLY(2)



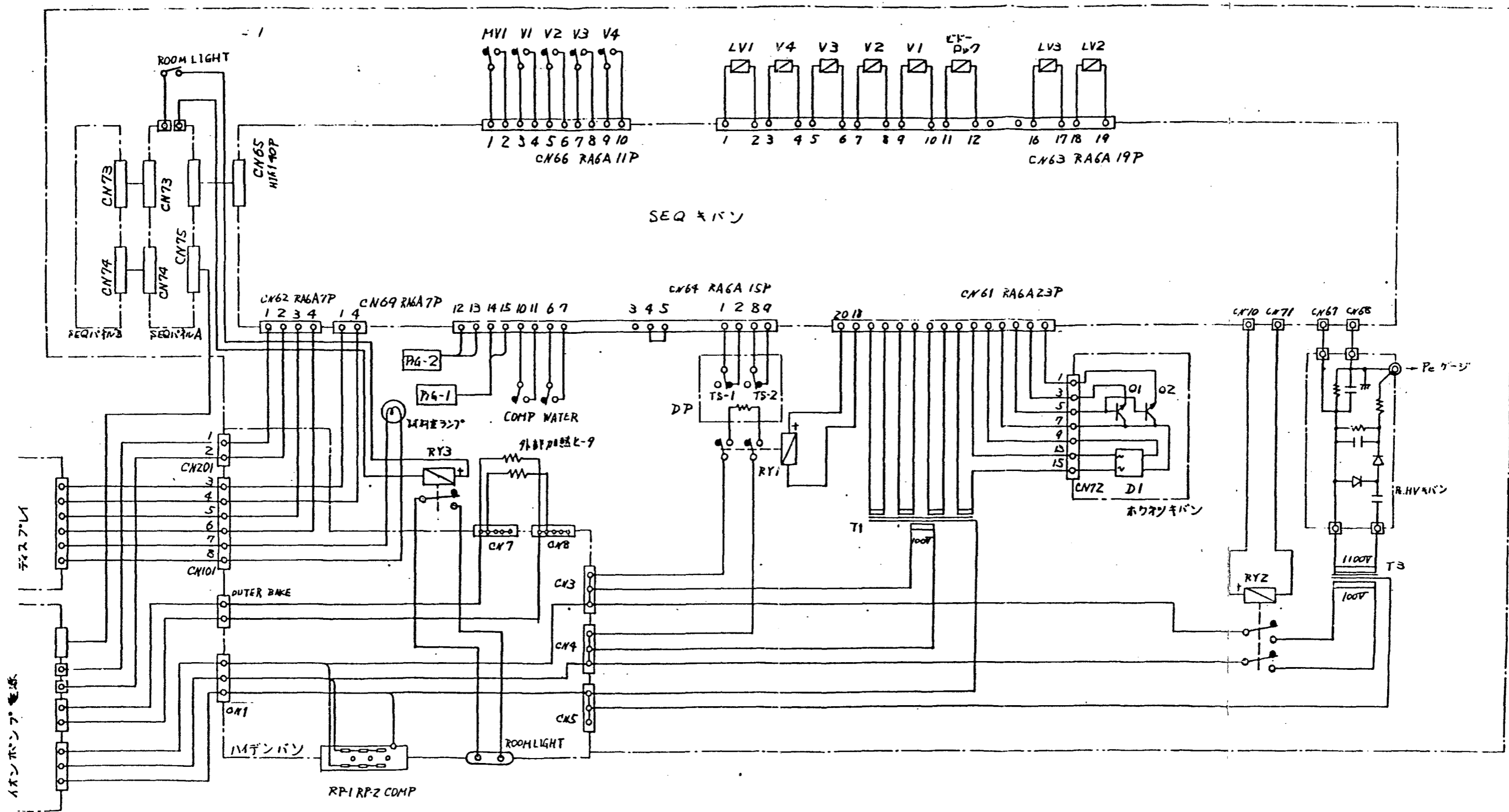
1.27 10KV HV POWER SUPPLY



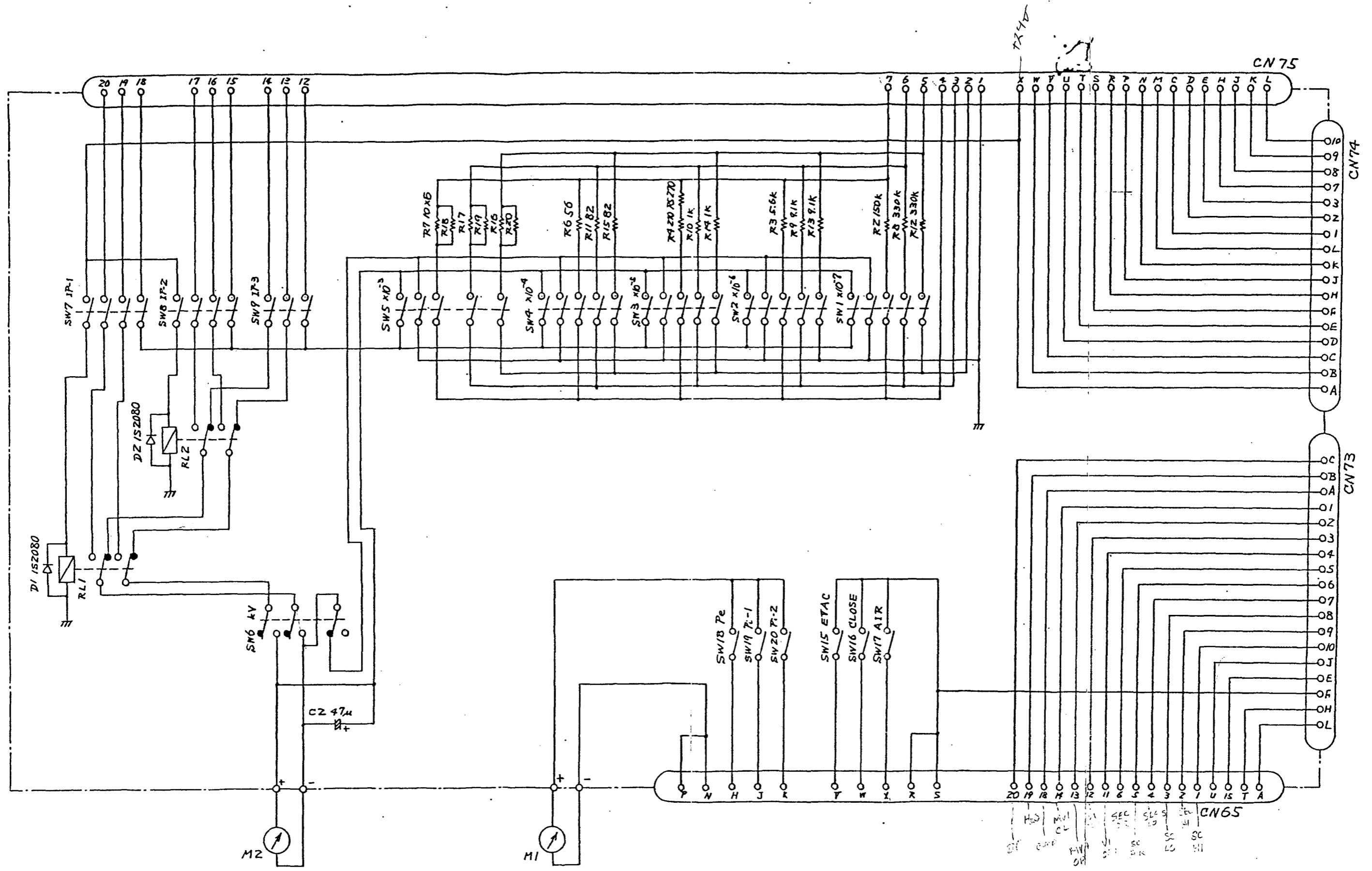
1.28 ION PUMP/BAKE WIRING DIAGRAM



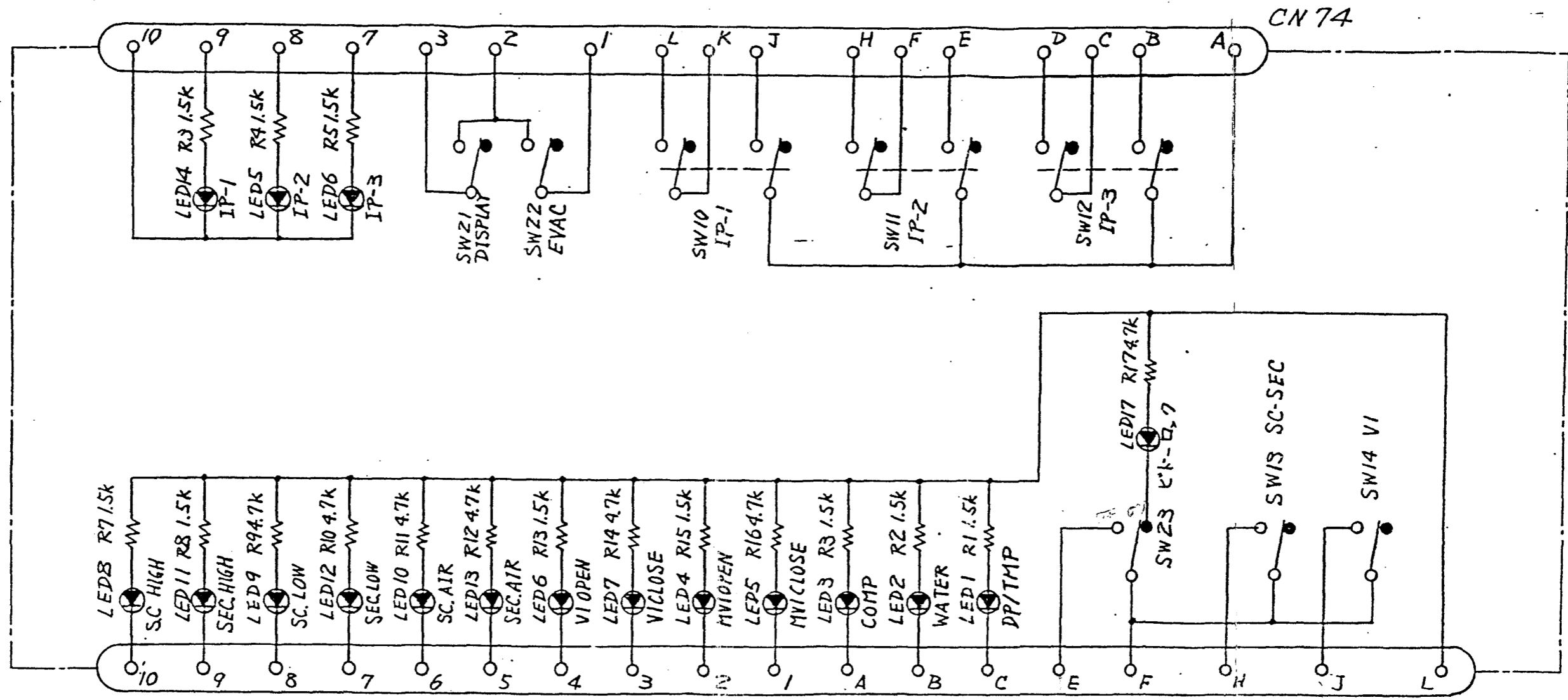
1.29 ION PUMP/BAKE CONTOROL



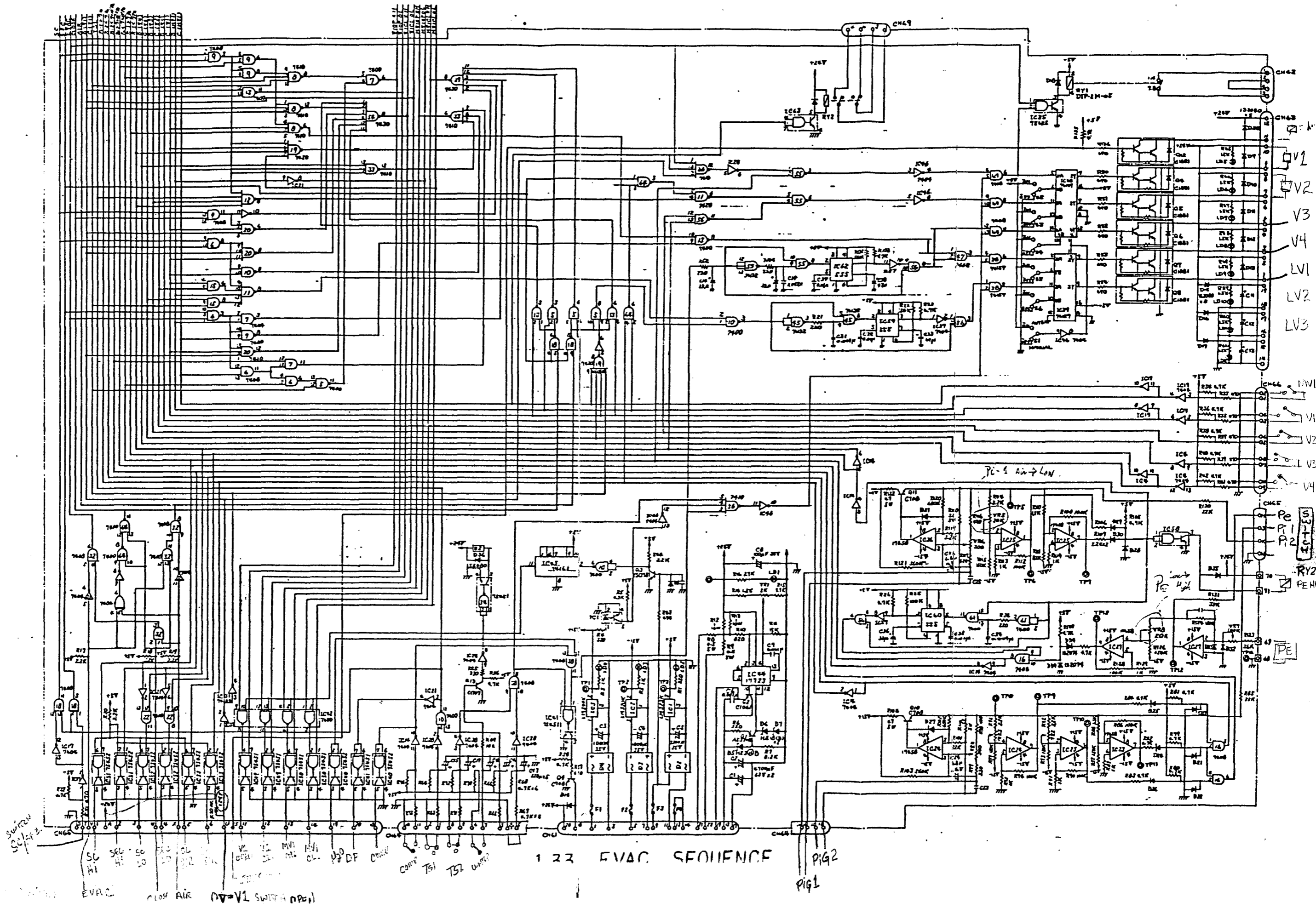
1.30 EVAC SEQUENCE WIRING DIAGRAM



1.31 EVAC SEQUENCE OPERATION PANEL(1)



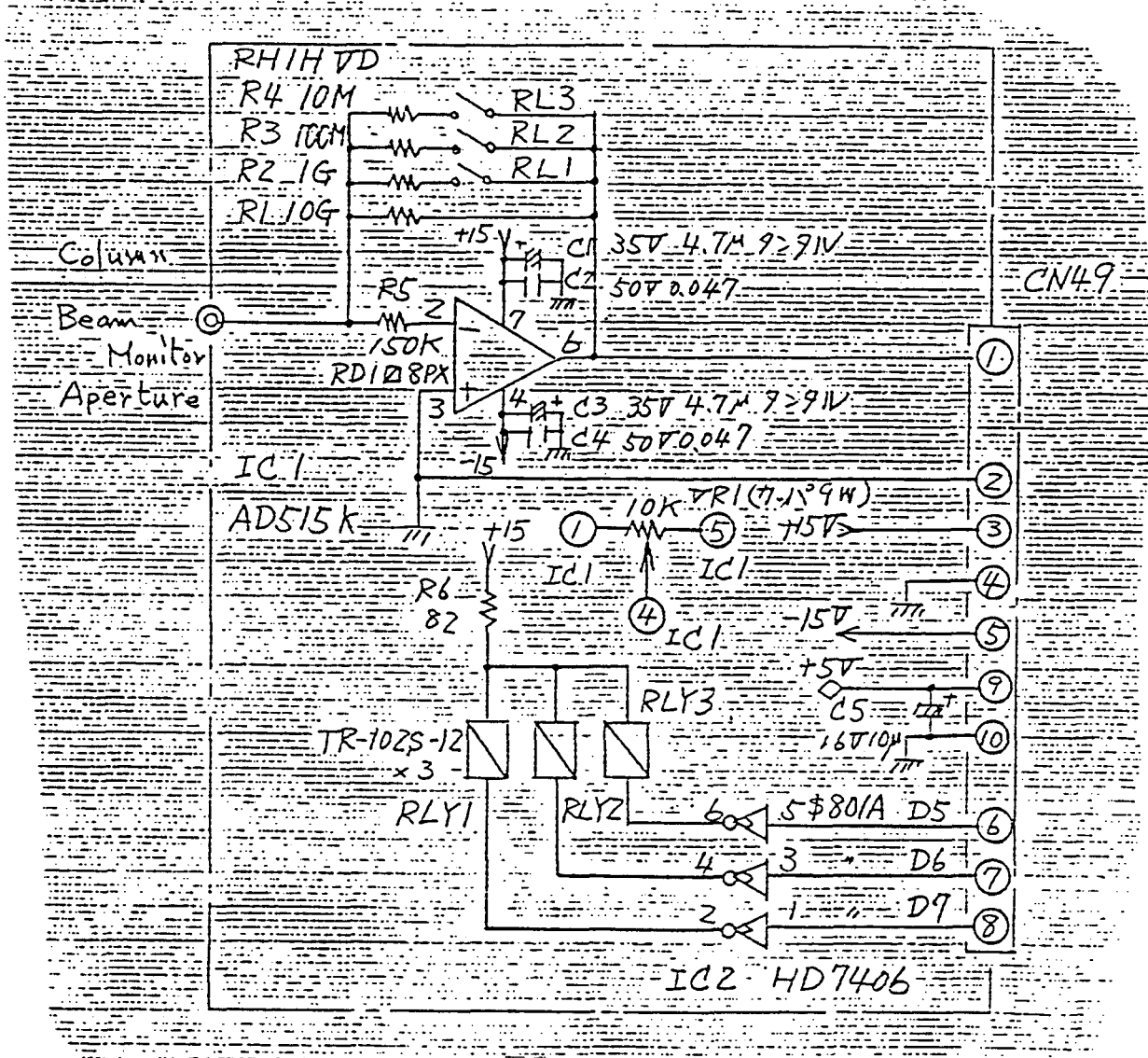
1.32 EVAC SEQUENCE OPERATION PANEL(2)



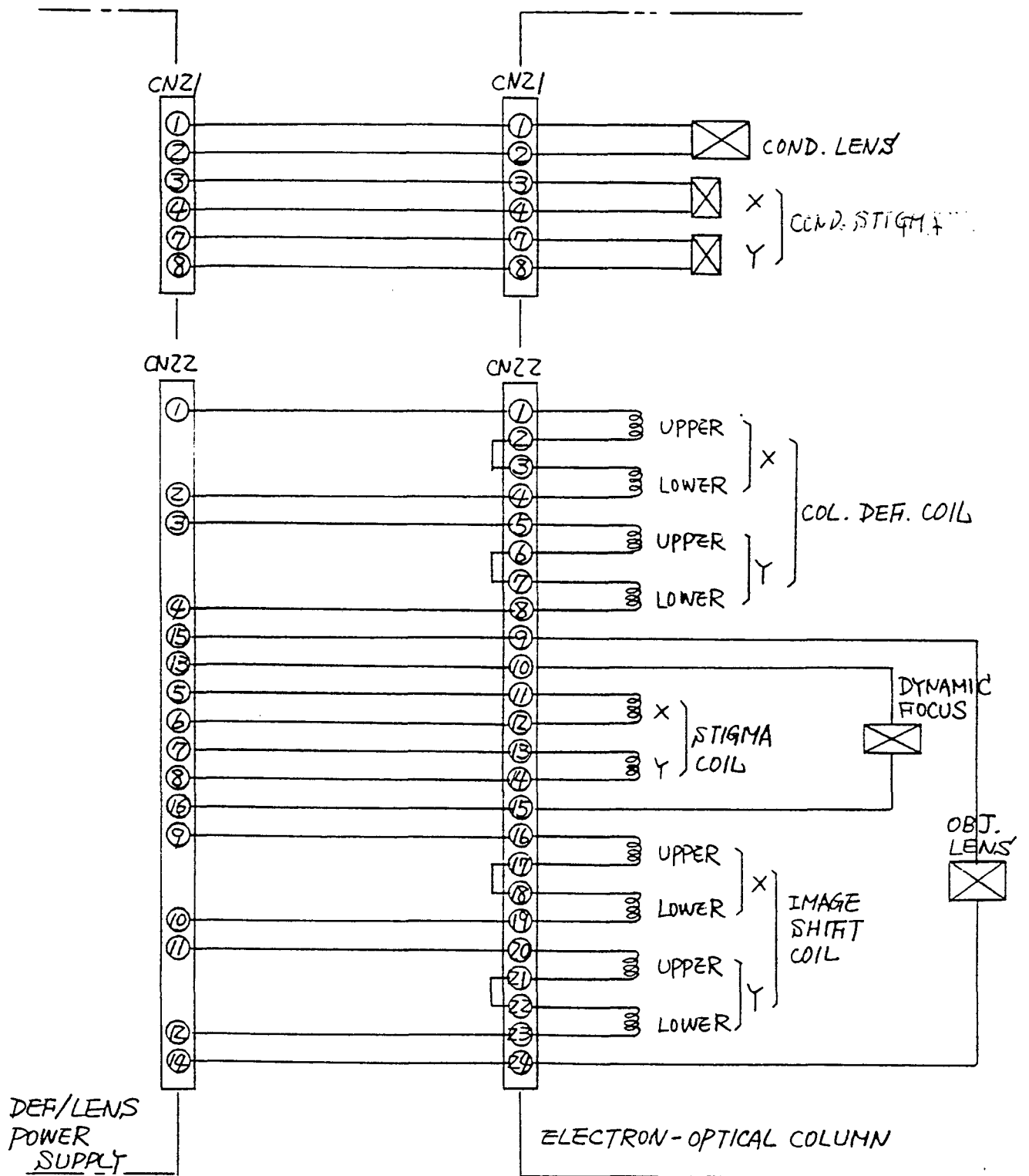
1 2 3 EVAC SEQUENCE

EVAC
AIR
(V1-V4 SWITCH (NO))

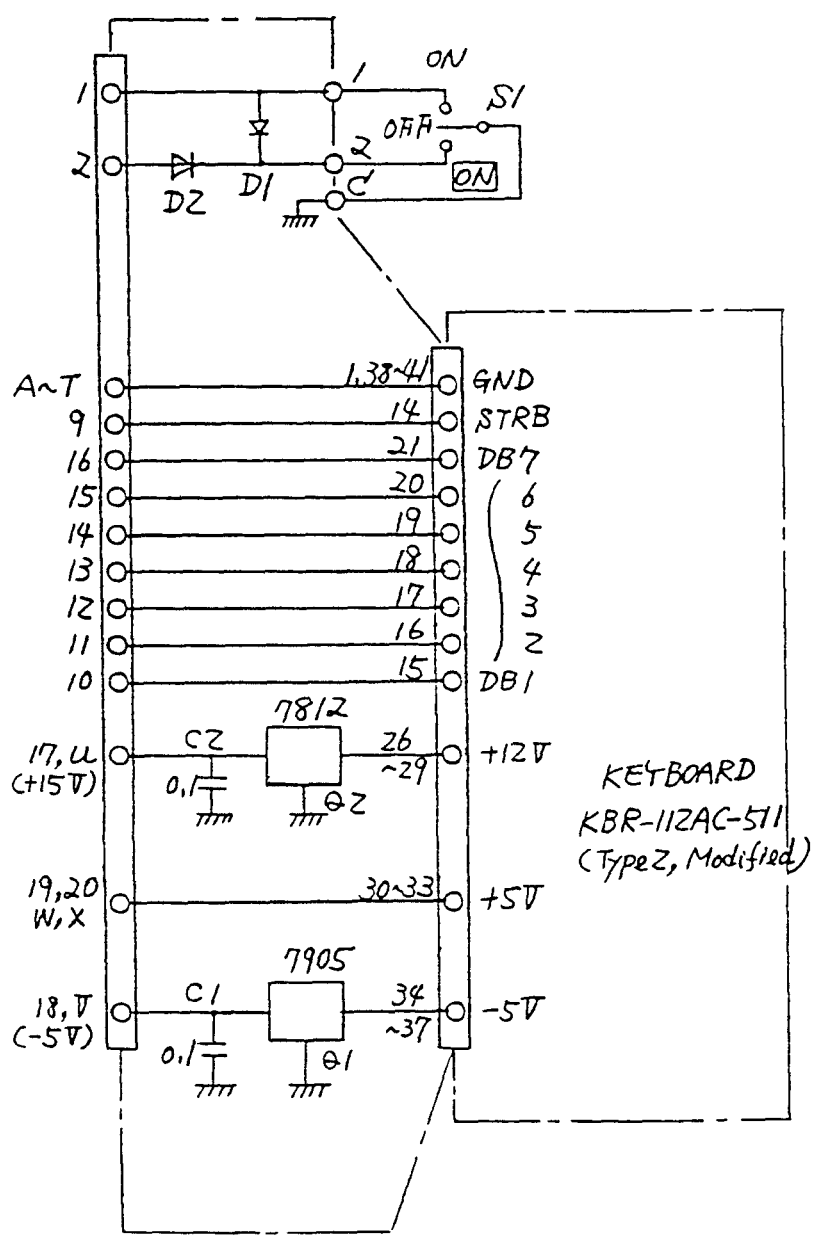
PIG1
PIG2



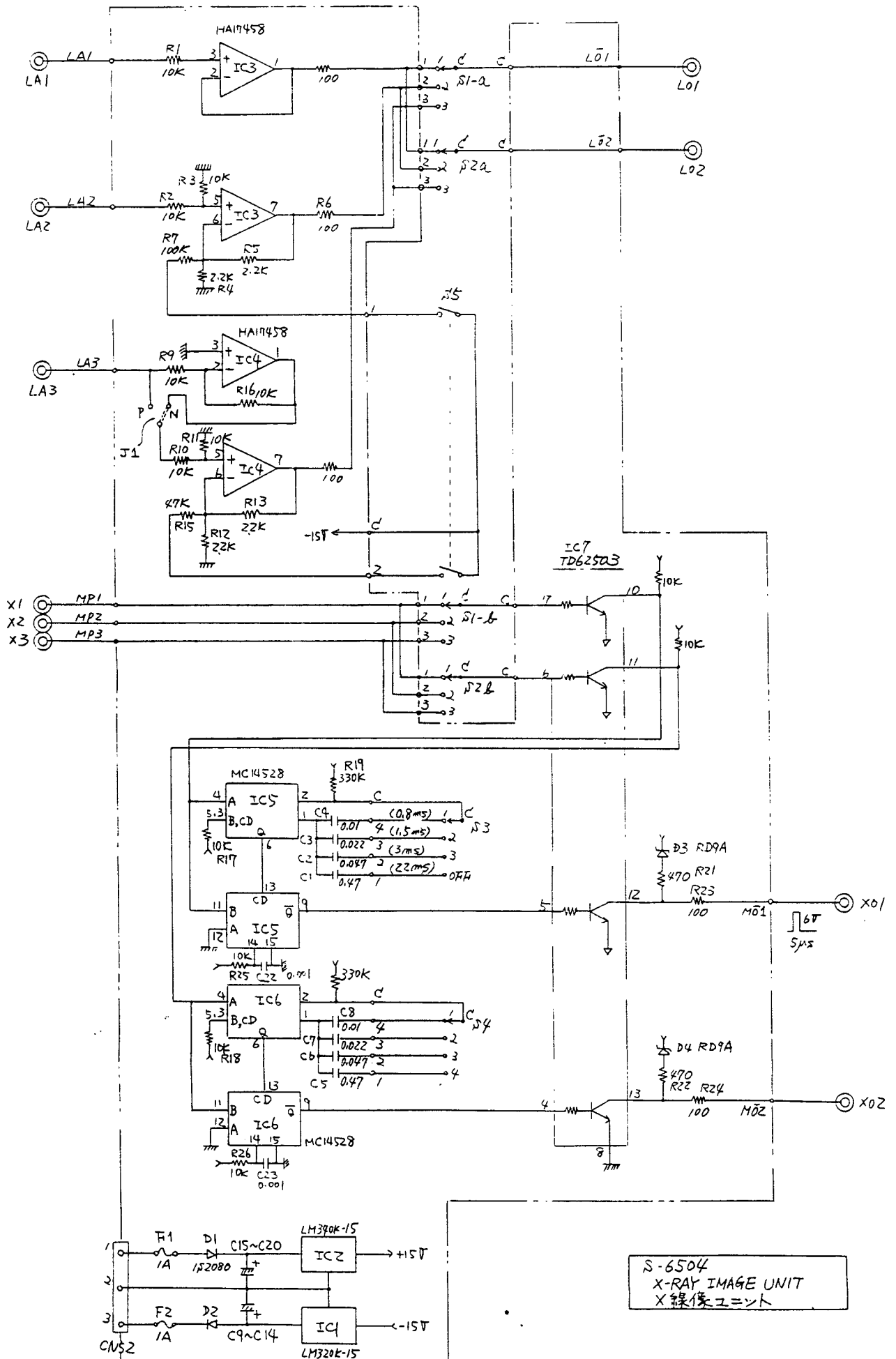
1.34 BEAM MONITOR PRE AMP



1. 35 DISPLAY-COLUMN WIRING DIAGRAM

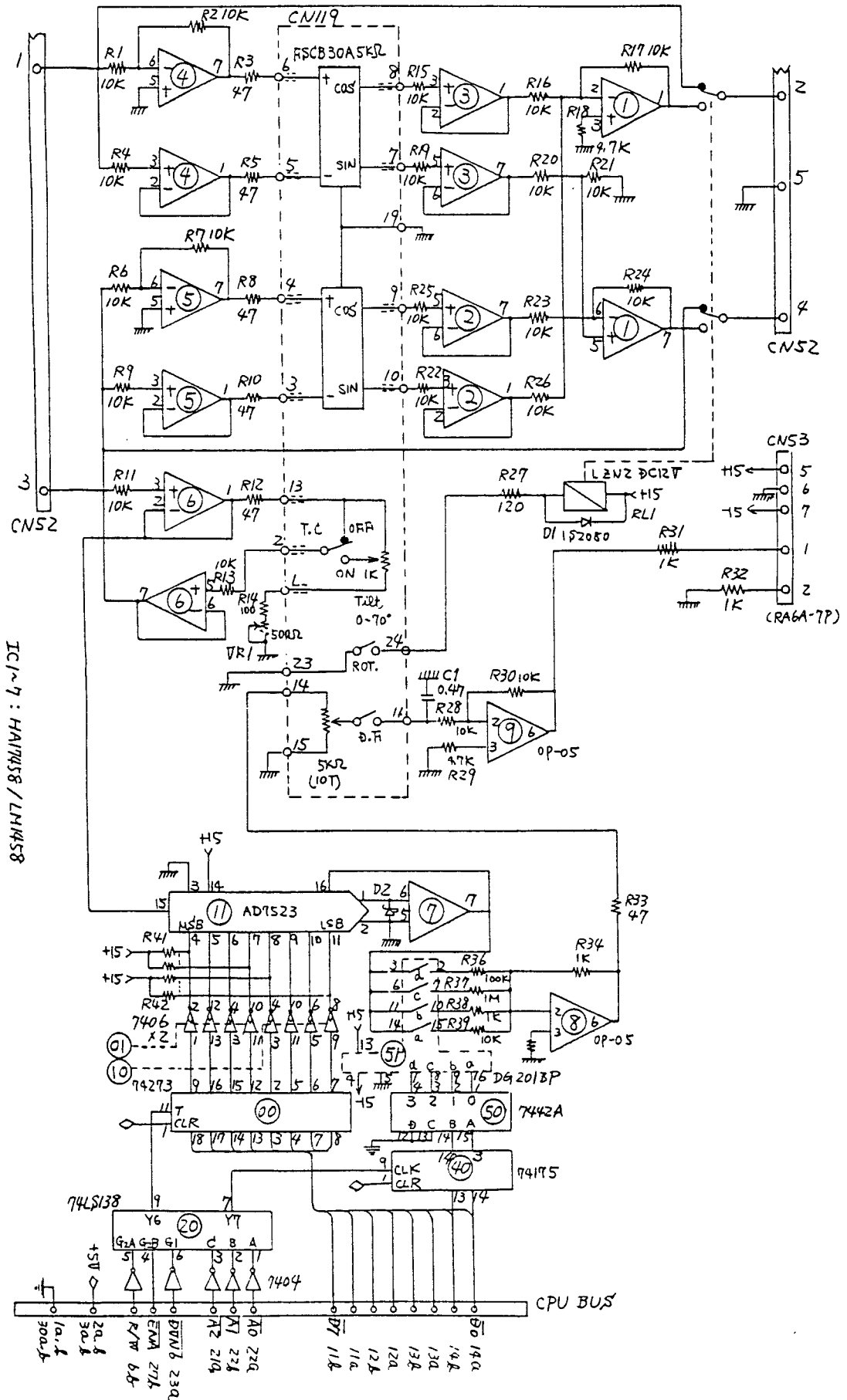


2.1 S-6501 DATA ENTRY KEY BOARD

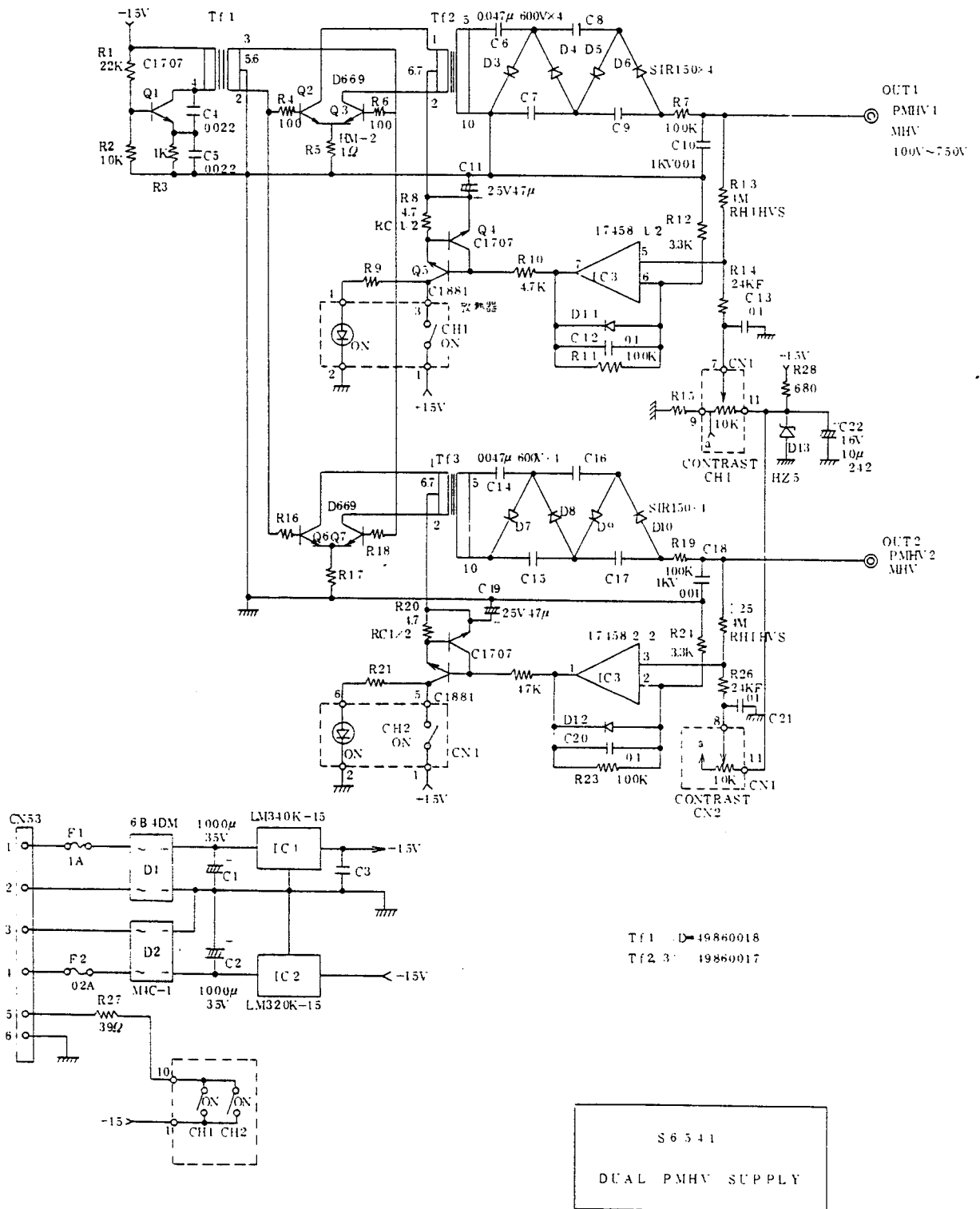


S-6504
X-RAY IMAGE UNIT
X線像ユニット

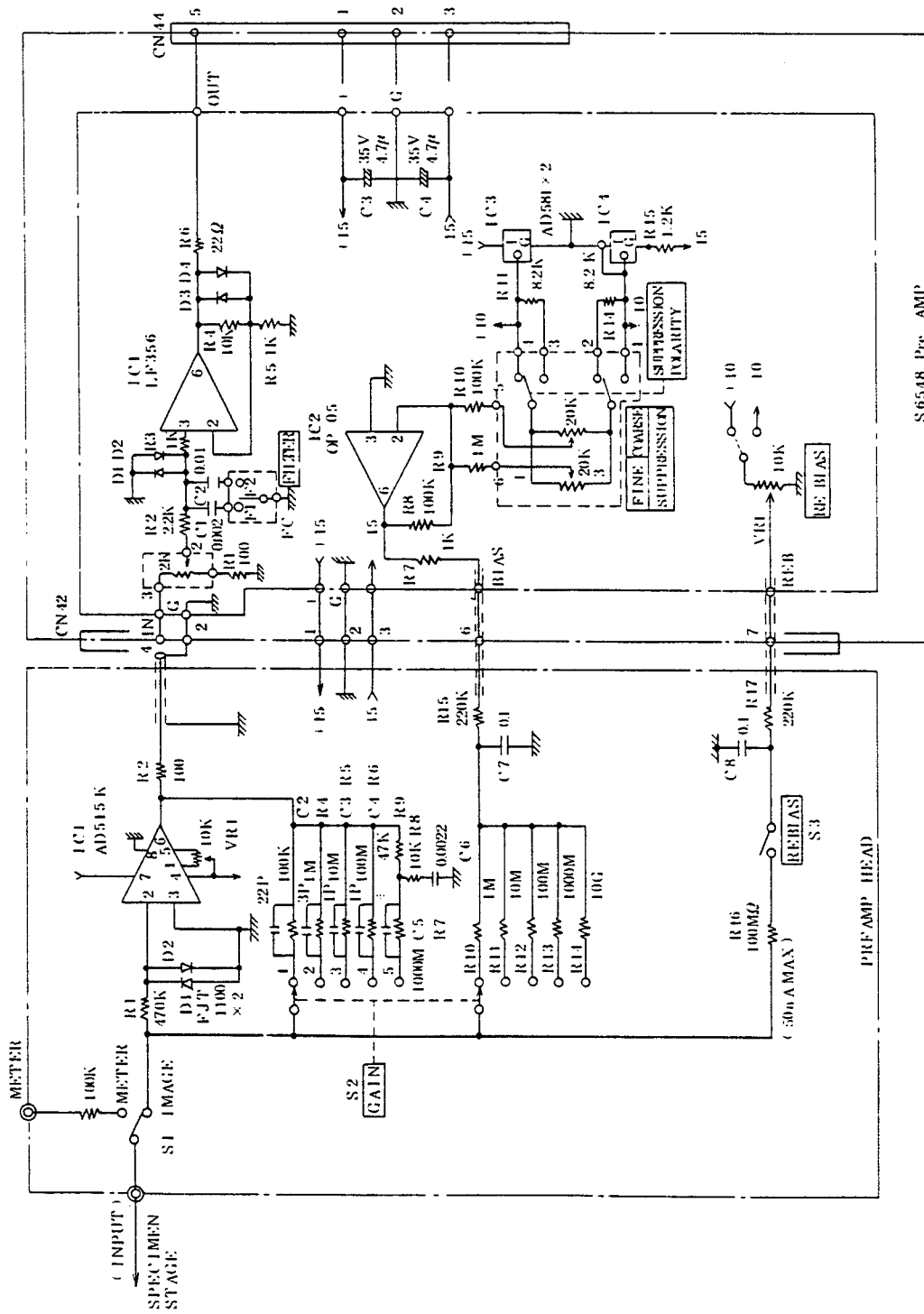
2.2 S-6504 X-RAY IMAGE UNIT



2.3 S-6509 RASTER ROTATION/DYNAMIC FOCUS UNIT



2.4 S-6541 DUAL PMHV UNIT



(S 6 5 4 2)
 AE PRE AMP
 (FOR AE, RE, EBIC)

2.5 S-6542 PRE AMP UNIT