

# Technical Manual

## STEREO CONTROL AMPLIFIER RC-870

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### Specifications

Total Harmonic Distortion . . . . .	No more than 0.004%
(20 to 20,000 Hz) CD/TUNER	(Rated output)
Intermodulation Distortion . . . . .	No more than 0.004%
(60 Hz : 7 kHz = 4 : 1) CD/ TUNER	(Rated output)
Output (Headphone) . . . . .	4 to 16 ohms
Input Sensitivity/Impedance:	
PHONO (MM) . . . . .	2.5 mV/47 kohms
PHONO (MC) . . . . .	350 $\mu$ V/150 ohms
CD . . . . .	450 mV/15 kohms
TUNER, TAPE MONITOR . . . . .	150 mV/33 kohms
Output Sensitivity/Impedance . . . . .	1.0 V/1.2 kohms
Overload Level (T.H.D. 0.5% 1 kHz):	
PHONO (MM) . . . . .	150 mV
PHONO (MC) . . . . .	20 mV
CD, TUNER, TAPE . . . . .	5V

#### Frequency Response:

PHONO . . . . .	40 to 100,000 Hz, $\pm$ 0.2 dB (RIAA STD)
CD, TUNER, TAPE . . . . .	4 to 100,000 Hz, +0 dB, -3 dB

#### Signal-to-Noise Ratio (IHF, A network):

PHONO (MM) . . . . .	78 dB
PHONO (MC) . . . . .	64 dB
CD, TUNER, TAPE . . . . .	95 dB

Power Consumption . . . . . 20 watts

Dimensions (overall) . . . . . 430 (W) x 66 (H) x 317 (D) mm  
16-5/16" x 2-19/32" x 12-15/32"

Weight (net) . . . . . 5.2 kg/11.44lbs.

- Specifications and design subject to possible modification without notice.

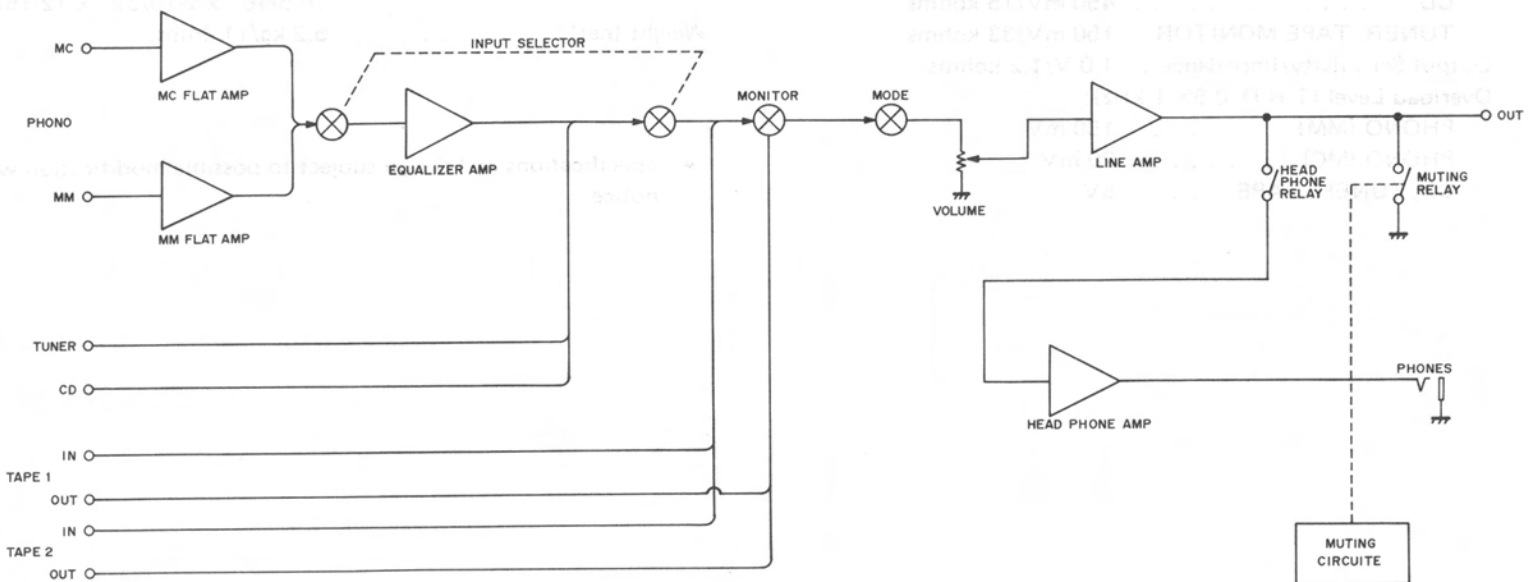
**Serial No.  
Beginning**

# Parts List

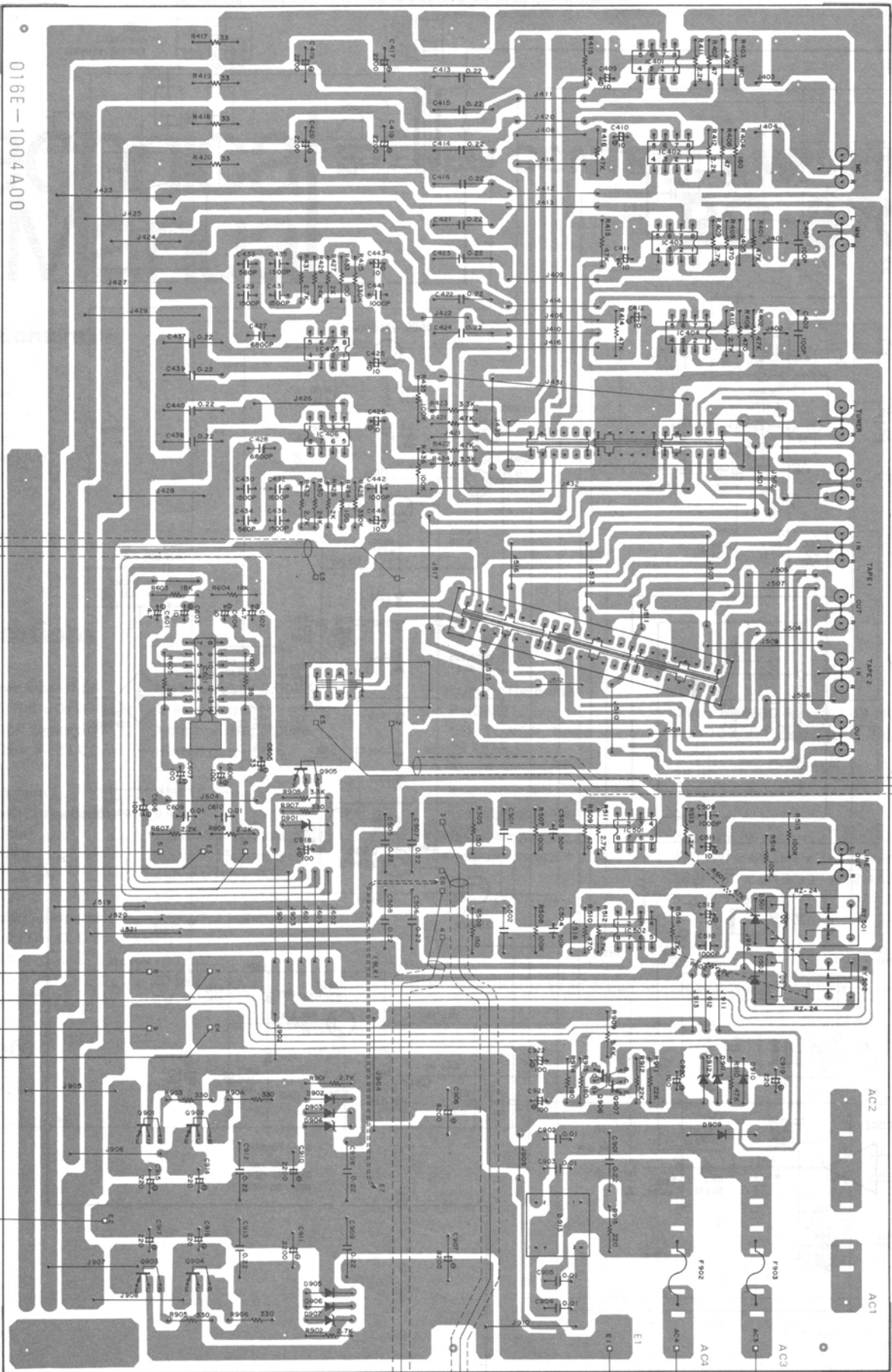
Schematic Location	Computer No.	Description
<b>TRANSISTORS, DIODES AND IC'S</b>		
Q901	0322SD600-EF	Stabilizer
Q902	0322SD600-EF	Stabilizer
Q903	0322SB631-EF	Stabilizer
Q904	0322SB631-EF	Stabilizer
Q905	0322SD600-EF	Stabilizer
Q906	0322SC536-FG	Relay Drive
Q907	0322SC536-FG	Relay Drive
D501	034FDH9615F	Compensator
D502	034FDH9615F	Compensator
D901	034RD15EB	Zener Reg.
D902	034FDH9615F	Compensator
D903	034FDH9615F	Compensator
D904	034RD18EB	Zener Reg.
D905	034RD18EB	Zener Reg.
D906	034FDH9615F	Compensator
D907	034FDH9615F	Compensator
D909	034DS135D	Rectifier
D910	034FDH9615F	Compensator
D911	034RD15EB	Zener Reg.
D912	034RD10EB	Zener Reg.
D913	034KBPC602	Rectifier
D001	034LN224RP	Power LED

Schematic Location	Computer No.	Description
IC401	031NE5534AN	MC. AMP
IC402	031NE5534AN	MC. AMP
IC403	031NE5534AN	MM. AMP
IC404	031NE5534AN	MM. AMP
IC405	031NE5534N	EQ. AMP
IC406	031NE5534N	EQ. AMP
IC501	031NE5534N	Line AMP
IC502	031NE5534N	Line AMP
IC601	031LA4170	Headphone AMP
<b>SWITCHES AND OTHERS</b>		
S501	061C-3442	Input Slide S.E.L
S501	061C-4175A03	Input SW Flex.
S502	061C-4175A52	Monitor Slide SW.
S502	061C-4175A02	Monitor SW Flex.
S503	061C-4175A51	Mode Slide SW.
S503	061C-3437A	Mode SW. Flex.
T001	022T-170G	Power Transformer
RY501	063RZ24W	Relay
RY502	063RZ24W	Relay
VR501	051C-4109	Volume

## Block Diagram



# Wiring Diagram



016E-1004A00

Table of Contents  
 Specifications  
 Total Height  
 120 in. 31.75  
 Interconnects  
 18K 100  
 Table 1  
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 Part List  
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 Schematic

(BLK)  
 TOX-1005-01  
 PCB(1, E1)

To X-1005-02 (WHT)  
 PCB(1)  
 To X-1005-02 (BLK)  
 PCB(1)  
 To X-1005-02 (YLW)  
 PCB(2)

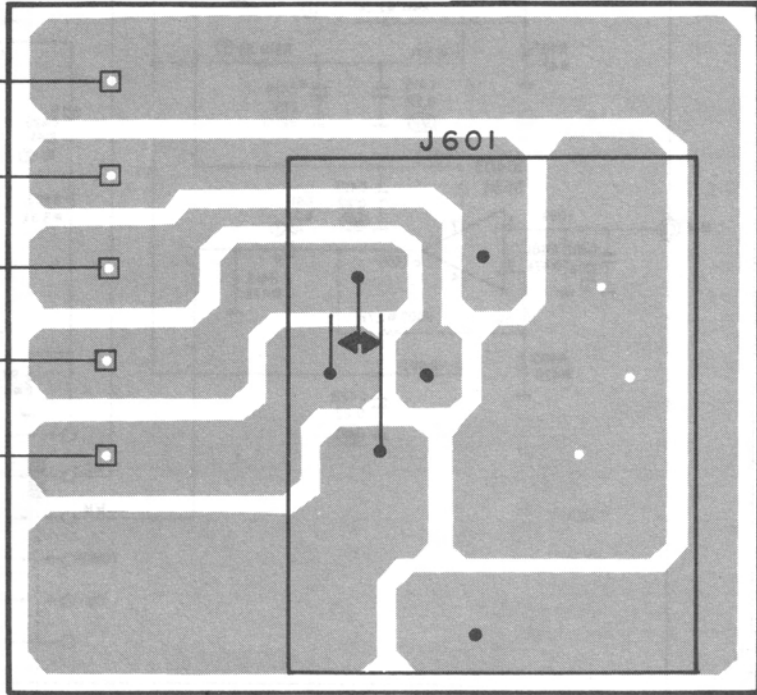
To X-1005-02 (L.BLU)  
 PCB(4)  
 To LED D001 (RED)  
 (A)  
 To X-1005-02 (PPL)  
 PCB(3)  
 To LED D002 (BLK)  
 (K)

CHASSIS GND (BLK)

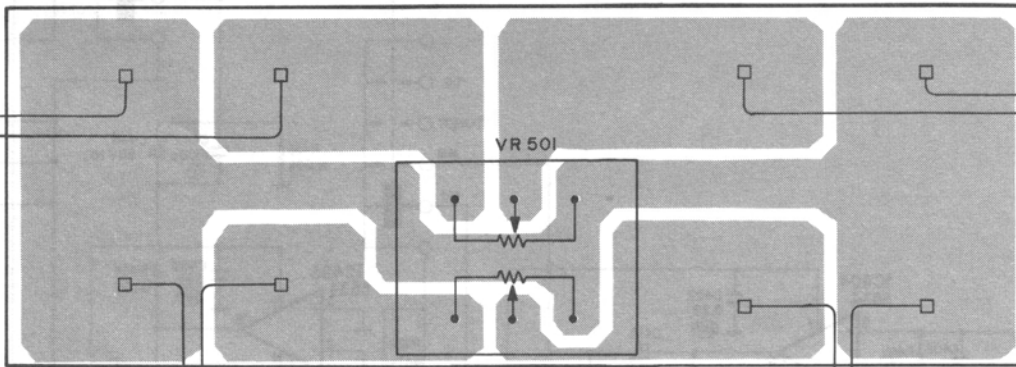
(BLK)  
 To X-1005-01  
 PCB(2, E1)

(BLK)  
 To X-1005-01  
 PCB(1, E2)  
 (BLK)  
 To X-1005-01  
 PCB(1, E2)  
 (BLK)  
 (ORNG)  
 To POWER TRANS  
 1000  
 (ORNG)  
 A C1  
 A C2  
 A C3  
 A C4  
 A C5

- To.E-1004 (BLK)  
PCB(E3)
- To. E-1004 (WHT)  
PCB(5)
- To.E-1004 (YLW)  
PCB(6)
- To.E-1004 (PPL)  
PCB(9)
- To. E-1004 (L. BLU)  
PCB(8)



To.E-1004 (BLK)  
PCB(1.E5)

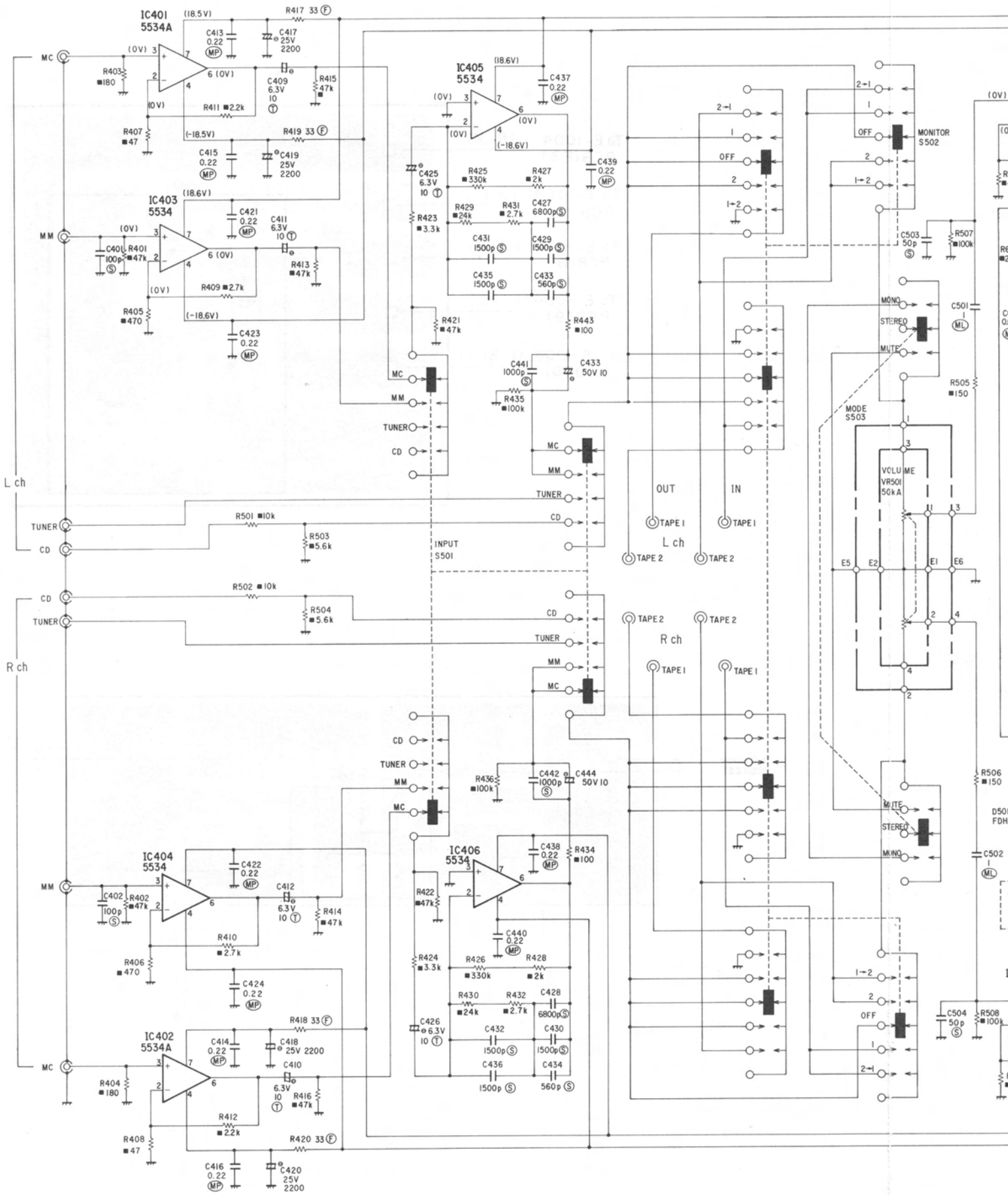


(BLK)  
To.E-1004  
PCB(3.E6)

To.E-1004  
PCB(2.E5)

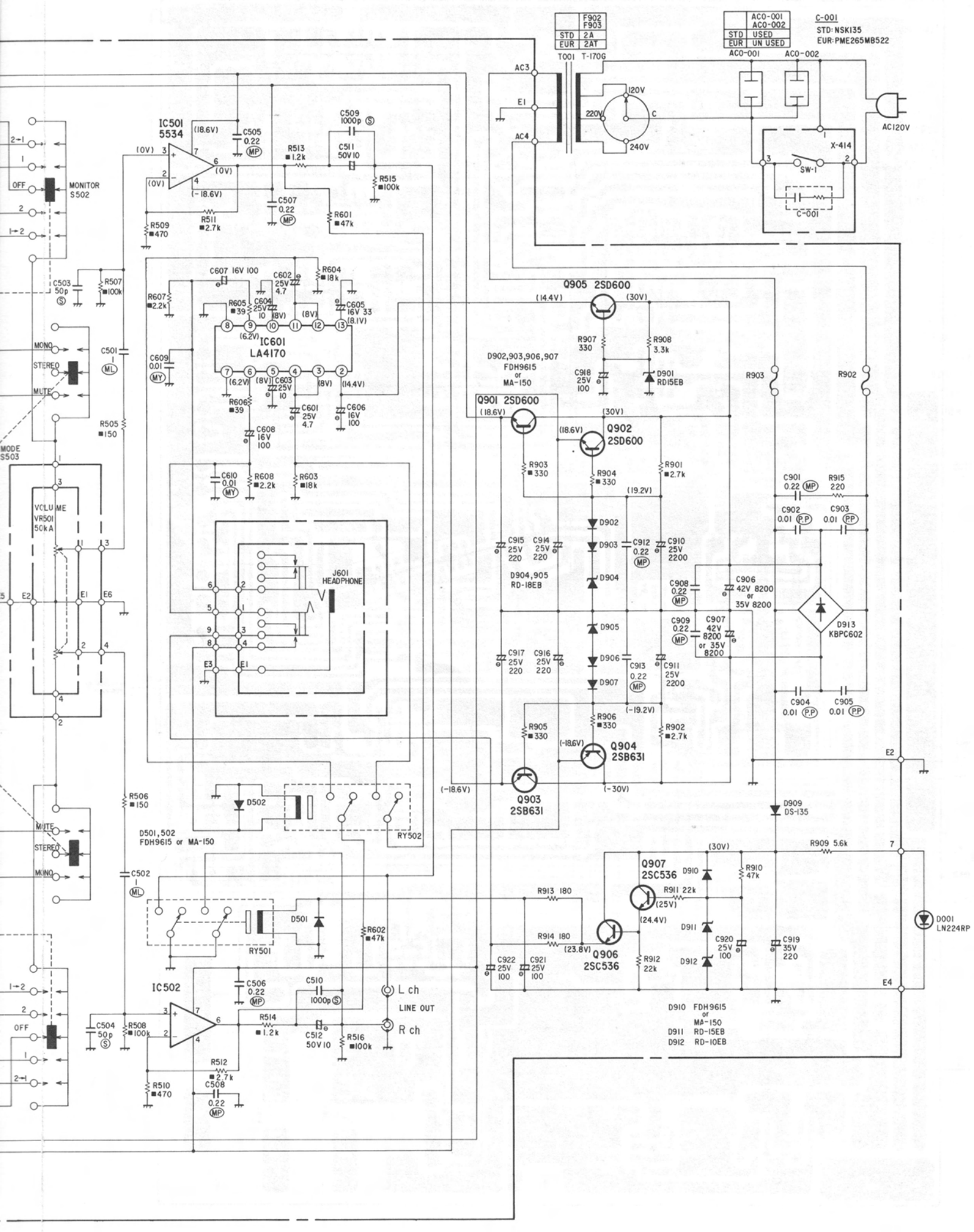
To.E-1004  
PCB(4.E6)

# Schematic Diagram



RESISTORS  
 UNLESS otherwise noted tolerance is 5%  
 K-----Kilohm  
 M-----Megohm  
 ■-----METAL FILM RESISTORS 1% 1/4W  
 ⊕-----TANTALUM CAPACITORS  
 ⊙-----FUSE RESISTORS

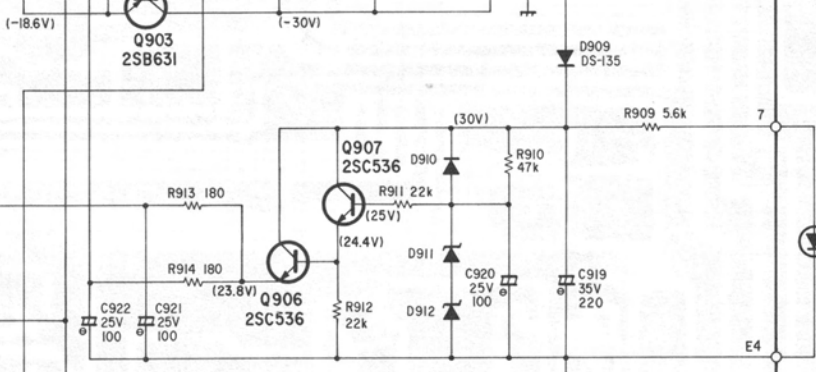
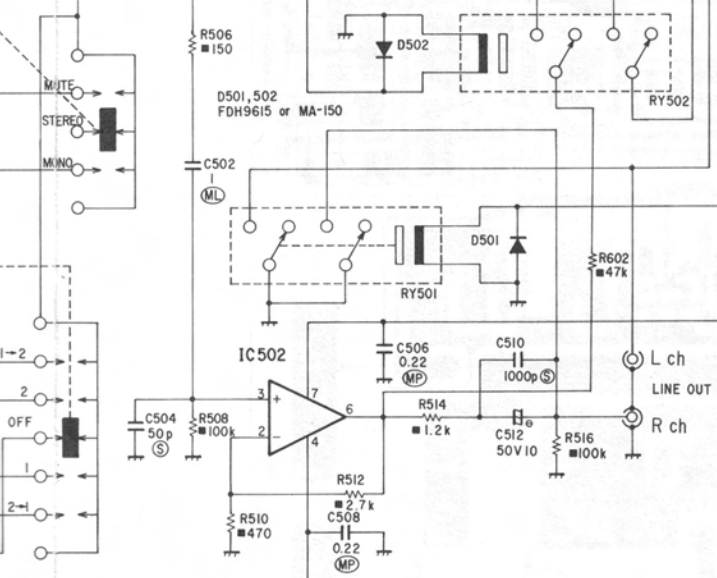
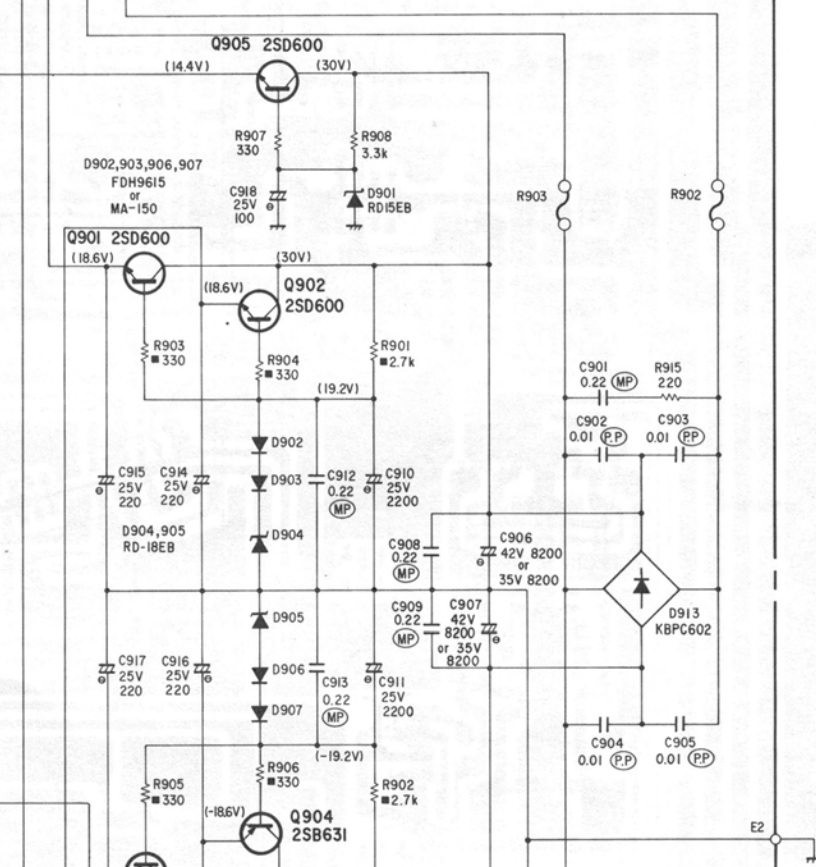
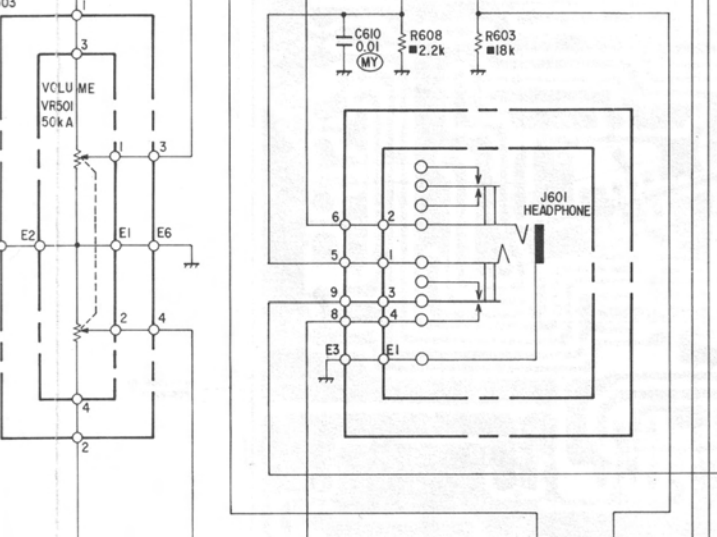
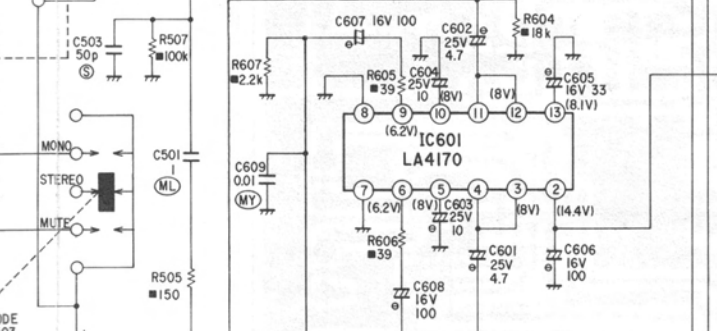
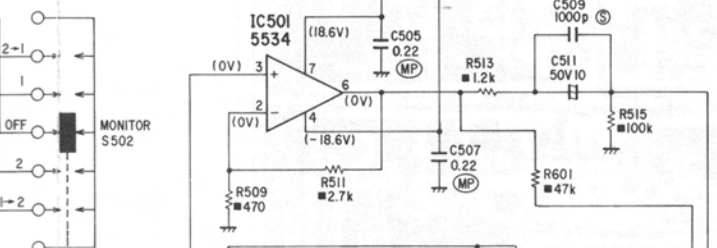
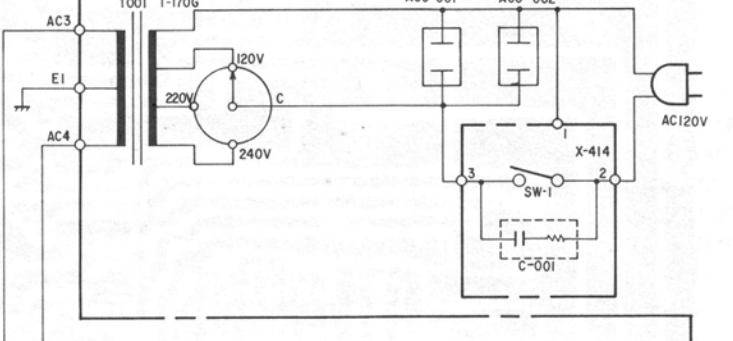
CAPACITORS  
 (PF)-----POLYPROPYLENE FILM CAPACITORS (PRA TYPE)  
 (MP)-----METALIZED POLYSTYLENE CAPACITORS  
 (ML)-----MULTI LAYER CAPACITORS  
 (MY)-----POLYSTYLENE FILM CAPACITORS



F902	2A
F903	2AT
STD	
EUR	

ACO-001	USED
ACO-002	UN USED
STD	
EUR	

C-001	STD: NSK135
	EUR: PME265MB522



D910 FDH9615 or MA-150  
D911 RD-15EB  
D912 RD-10EB