



Technical Manual

FIVE-CHANNEL POWER AMPLIFIER RMB-1095

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Specification

Continuous Power Output (20-20kHz, < 0.03%)	200 wats/ch into 8 ohms
DIN Power Output (1kHz, 1%)	330 wats/ch into 4 ohms
Total Harmonic Distortion (20Hz-20kHz, 8 ohms)	< 0.03 %
Intermodulation Distortion (60Hz : 7kHz, 4:1)	< 0.03 %
Frequency Response (± 0.5 dB, -3 dB)	15 Hz - 100 KHz
Damping Factor (20-20,000kHz, 8 ohms)	400
Speaker Impedance	4 ohms minimum
Signal to Noise Ratio (IHF A network)	116 dB
Input Impedance / Sensitivity	33 k ohms / 1.5 volt (unbalanced) 33 k ohms / ± 1.5 volt (balanced)
Power Requirement	115 volts 60 Hz (U.S. version) 230 volts 50 Hz (European version)
Power Consumption	800 watts
Dimensions (W x H x D)	440 x 240 x 398 mm 17 ³ / ₈ x 9 ¹ / ₂ x 15 ³ / ₄ inches
Weight (net)	34 kg, 75 lb.

THE ROTEL CO., LTD
 SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,
 TOKYO 150-0045, JAPAN

Serial. NO. Beginning

Parts List-1

SYMBOL	PARTS NO.	DESCRIPTION
X-1274-01 PCB ASSEMBLY		
C101	041	50BGF4R7M CAP,ELEC.50V4.7UF
C102	044	TFKP2-2A681H CAP,FILM 100V680PF
C103	044	FSC160V471H CAP,STYROL 160V470PF
C104	044	FSC160V221H CAP,STYROL 160V220PF
C105	041	25BGF100M CAP,ELEC.25V100UF
C107	041	50BGF10M CAP,ELEC,50V10UF
C108	044	FSC160V331H CAP,STYROL 160V330PF
C109	044	S50V100PJ CAP,STYROL 50V100PF
C110,111	041	25BGF100M CAP,ELEC.25V100UF
D101-104	034	T1N4148-86 DIODE
IC101	031	NE5534AN IC
Q101-103	033	TC2362-FG TRANSISTOR
Q104-106	033	TA1016-FG TRANSISTOR
Q107	033	A1209-ST TRANSISTOR
Q108	033	C2911-ST TRANSISTOR
R101	054	TMK2001KFECZ R,METAL 1% 1K
R102	054	TMK2033KFECZ R,METAL 1% 33K
R103	054	TMK2470RFECZ R,METAL 1% 470R
R104-107	054	TMK201K5FECZ R,METAL 1% 1.5K
R108	054	TMK2560RFECZ R,METAL 1% 560R
R109	054	TMK2010RFECZ R,METAL 1% 10R
R110,111	054	TMK2220RFECZ R,METAL 1% 220R
R112	054	TMK2047KFECZ R,METAL 1% 47K
R113,114	054	TMK2100RFECZ R,METAL 1% 100R
R115	054	TMK206K8FECZ R,METAL 1% 6.8K
R116	054	TMK203K9FECZ R,METAL 1% 3.9K
R117	054	TMK2001MFECZ R,METAL 1% 1M
R118,119	054	TMK2022KFECZ R,METAL 1% 22K
R120,121	054	TMK2010KFECZ R,METAL 1% 10K
R122	054	TMK2001KFECZ R,METAL 1% 1K
R133	054	TMK215K4FECZ R,METAL 1% 15.4K
R134	054	TMF3300 R,METAL 330R
R135,136	054	TMK2100KFECZ R,METAL 1% 100K
R137	054	TMK2001KFECZ R,METAL 1% 1K
VR101,102	051	SFR002-222 SEMI-FIXED RESISTOR 2.2K
	017	4TR-2792#3 HEAT SINKER BOARD
	019	TO-126 INSULATION SHEET
	066	C-4575A01 CANNON JACK
	066	4TR-2487#23 1P PINJACK
X-1274-02 PCB ASSEMBLY		
C901-908	041	ALS20S1024XX CAP,ELEC.80V15000UF
	069	C-4446A00 SCREW TERMINAL
X-1274-03 PCB ASSEMBLY		
C119	044KT18-2A104K	CAP,FILM 100V 0.1UF
R166	0542WS10JF	R,METAL 2W 10R
	067C-4493A00	4P TERMINAL(RED/BLK)
	067C-4493A01	4P TERMINAL(BLU/BLK)
	0674TR-3222#1	2P TERMINAL(GRN/BLK)
		(201~, 301~, 401~, 501~ SAME AS 101~)

SYMBOL	PARTS NO.	DESCRIPTION
X-1275-01,02,03 PCB ASSEMBLY		
C113,114	044	FSC160V561H CAP,STYROL 160V560PF
C117,118	041	VX2A102S CAP,ELEC.100V1000UF
C120	041	UTSS1E100-FB CAP,ELEC.25V10UF
C121	041	UTSS1E221-FB CAP,ELEC.25V220UF
C122	041	UTSS1H4R7-FB CAP,ELEC.50V4.7UF
C123	041	UTSS1E470-FB CAP,ELEC.25V47UF
D105,106	034	T1N4003-TB DIODE
D107,108	034	T1N4148-86 DIODE
F101,102	036	5ST6.3 MINI FUSE 250VT6.3A
IC102	031	MPC1237HA IC
Q109	033	TC2910-ST TRANSISTOR
Q110	033	TA1208-ST TRANSISTOR
Q119	033	TC2362-FG TRANSISTOR
Q120,121	033	TA1016-FG TRANSISTOR
Q122	033	TC2362-FG TRANSISTOR
R123,124	054	TMK2220RFECZ R,METAL1%220R
R125	054	TMK2001KFECZ R,METAL1%1K
R126	054	TMK2047RFECZ R,METAL 1% 47R
R127-132	054	NIR2-0.22JF R,METAL 2W 0.22R
R147	054	TMF3900 R,METAL 390R
R148	054	TMF2202 R,METAL 22K
R149	054	TMF1201 R,METAL 1.2K
R150	054	TMF1502 R,METAL 15K
R151	054	TMF5600 R,METAL 560R
R152	054	TMF3302 R,METAL 33K
R153	054	TMF4701 R,METAL 4.7K
R154	054	TMF4702 R,METAL 47K
R155,156	054	TMF1003 R,METAL 100K
R157	054	TMF1203 R,METAL 120K
R158	054	TMF6802 R,METAL 68K
R159	054	TMF1502 R,METAL 15K
R160	054	TMF4702 R,METAL 47K
R161	054	1WS470JF R,METAL 1W 470R
R162	054	TMF2203 R,METAL 220K
R163	054	TMF3301 R,METAL 3.3K
R164,165	054	2WS6.8KJF R,METAL 2W 6.8K
R167	054	TMF2201 R,METAL 2.2K
R363	054	TMF6801 R,METAL 6.8K
RY101	063	DE2TU-24 RELAY
RY301	063	DH2TU-24 RELAY
RY401	063	DE2TU-24 RELAY
TH101	034	TTC-503 THERMISTOR
	069	C-3417A FUSE CLIP
	069	C-4446A00 SCREW TERMINAL
		(201~, 301~, 401~, 501~ SAME AS 101~)
X-1275-04 PCB ASSEMBLY		
C911	044	DE1307E472M SPARK KILLER
D905	034	T1N4148-86 DIODE
R901,902	054	ERF10AJ100 R,WIREWOUND 10W 10R
RY901	063	DE2U-24 RELAY

Parts List-2

SYMBOL	PARTS NO.	DESCRIPTION
TH901	063 UI300B	THERMOSTAT
TH902	034 SCK0512	THERMISTER
	069 C-4370A00	SCREW TERMINAL
X-1275-05 PCB ASSEMBLY		
C909,910	041 UTES1J221	CAP,ELEC.63V220UF
C912,913	041 25BGF470M	CAP,ELEC.25V470UF
D903	034 W02M	BRIDGED DIODE
D904	034 T1N4003-TB	DIODE
D906,907	034 TRD16JST1	ZENER DIODE
Q901	033 D600-EF	TRANSISTOR
Q902	033 B631-EF	TRANSISTOR
R903	054 TMF6801	R,METAL 6.8K
R904	054 1WS390JF	R,METAL 1W 390R
R905	054 2WS1.8KJF	R,METAL 2W 1.8K
R906,907	054 TMK202K7FECZ	R,METAL 1% 2.7K
X-1275-06 PCB ASSEMBLY		
S001	061 C-4176A07	POWER SWITCH
X-1275-07 PCB ASSEMBLY		
	068 DBL25SBTK2NS	DB25 CONNECTOR
HEAT SINKER ASSEMBLY		
Q111	033 D1047-DE	DRIVER TRANSISTOR
Q112	033 B817-DE	DRIVER TRANSISTOR
Q113-115	033 C5200-RO	POWER TRANSISTOR
Q116-118	033 A1943-RO	POWER TRANSISTOR
Q123	032 D1953	TRANSISTOR
	011 SP4-01A00	PANEL HEAT SINKER BOARD
	017 SP4-04A00	HEAT SINKER BOARD

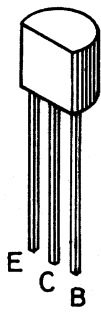
SYMBOL	PARTS NO.	DESCRIPTION
	019 TO-126	INSULATION SHEET(S)
	019 TO-3P	INSULATION SHEET(M)
	019 TO-3PL	INSULATION SHEET(L)
	(211~, 311~, 411~, 511~	SAME AS 111~)
OTHERS		
	011 FP-510	SUB PANEL ASSY
	012 RV4-09A00	PUSH KNOB 14F
	014 SG3-18A00	UPPER COVER
	015 RP-366	REAR CHASSIS
	019 C-4418A00	PLASTIC FOOT 26F
	019 C-4638A00	CASTER
	019 PK4-07A00T	METAL FOOT
	022 T-1072U01	POWER TRANSFORMER
	022 T-1073U01	POWER TRANSFORMER
	034 BR254	POWER DIODE
	069 C-4637A00	AC INLET
	072 C-4392A02	AC CORD SET for STD
	072 C-4393A03	AC CORD SET for CEE
	072 C-4423A03	AC CORD SET for AUSTRALIA
	072 C-4639A01	AC CORD SET for UK
	081 SP4-11A00	INSIDE CARTON
	081 SG4-24A00	PACKING
	081 Z-200	STYROL MOULDING

Adjustment

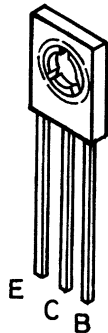
Instruments : DC milli-voltmeter

Notes : Prior to Bias Adjustment, run about 5minutes with rated output(8ohms) and warm up Power Transistor and Heat Sink. Set input off.

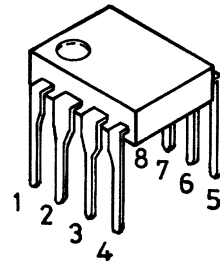
Step	Coupling Location	Adjust Location	Adjust for
1	CH 1 OUT	X-1274-01 PCB VR102	DC milli-voltmeter reads 0mV
2	CH 2 OUT	X-1274-01 PCB VR202	
3	CH 3 OUT	X-1274-01 PCB VR302	
4	CH 4 OUT	X-1274-01 PCB VR402	
5	CH 5 OUT	X-1274-01 PCB VR502	
6	X-1275-01 PCB TP1	X-1274-01 PCB VR101	DC milli-voltmeter reads 5mV
7	X-1275-01 PCB TP2	X-1274-01 PCB VR201	
8	X-1275-03 PCB TP3	X-1274-01 PCB VR301	
9	X-1275-02 PCB TP4	X-1274-01 PCB VR401	
10	X-1275-02 PCB TP5	X-1274-01 PCB VR501	



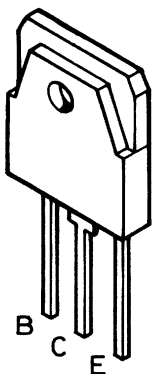
2SA1016K
2SC2362K
2SC2910
2SA1208



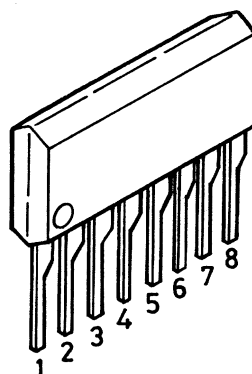
2SC2911
2SA1209
2SD1953



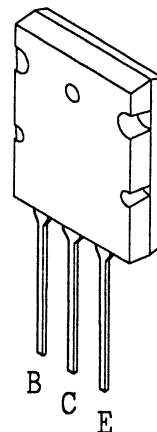
NE5534AN



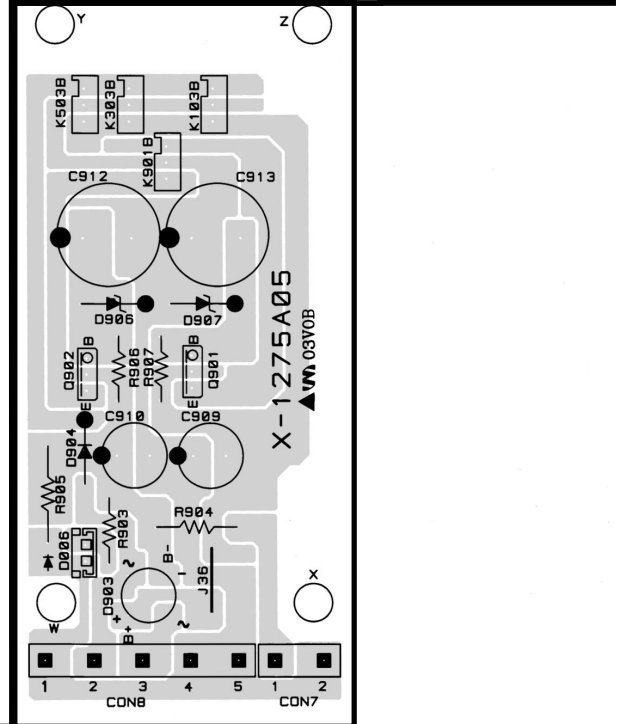
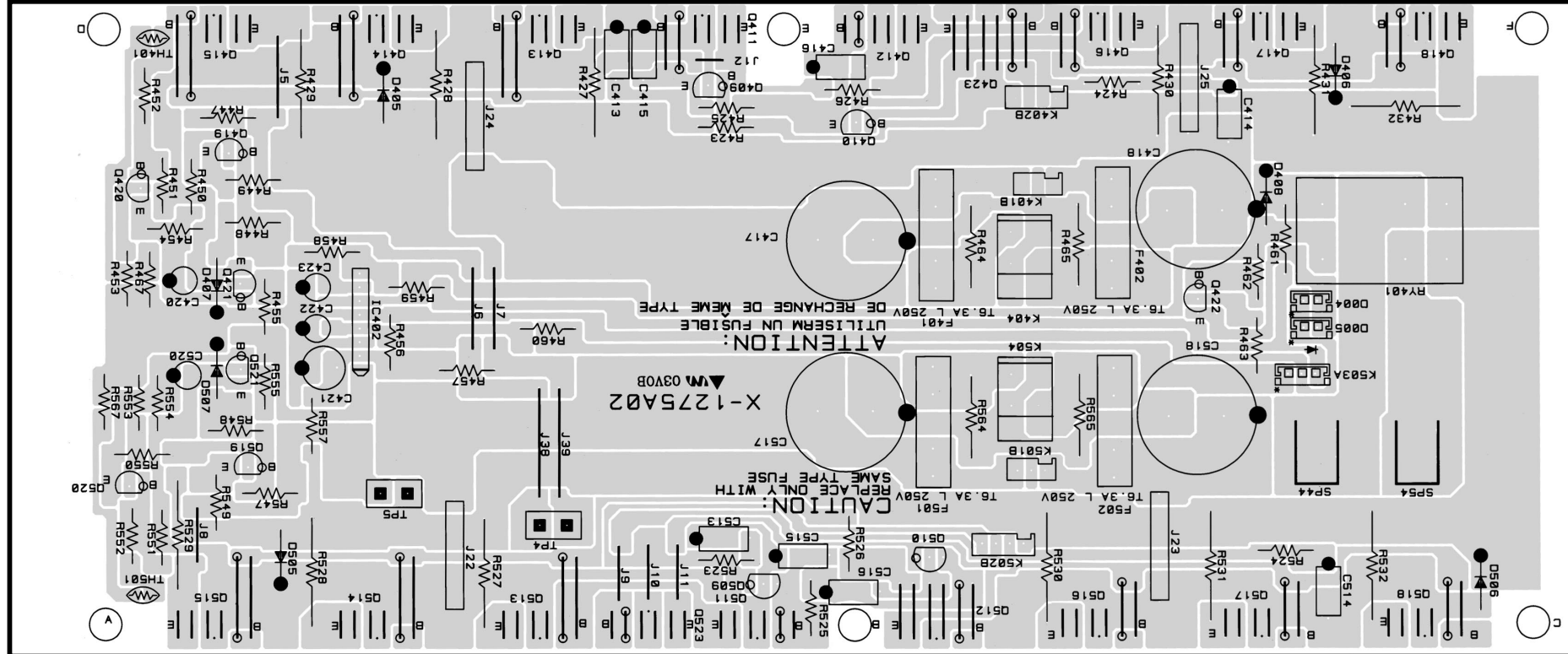
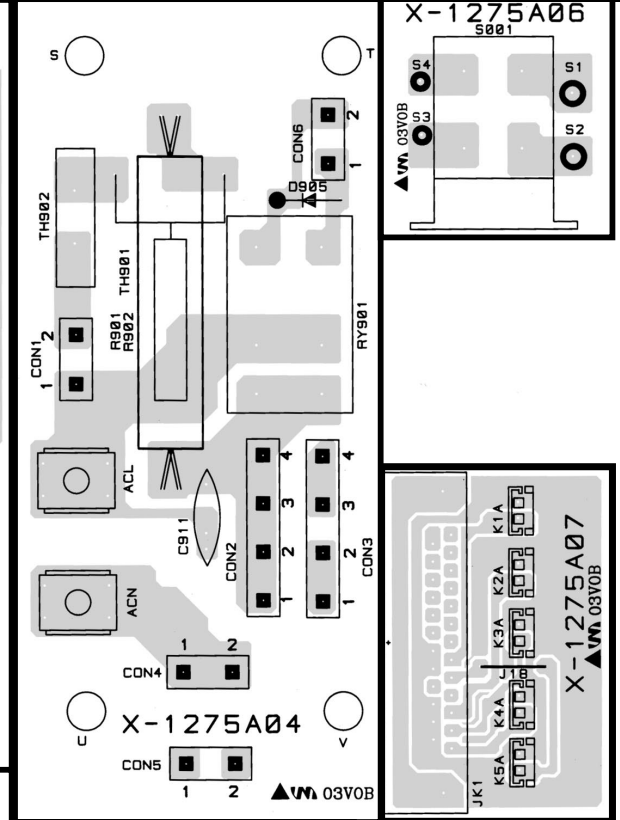
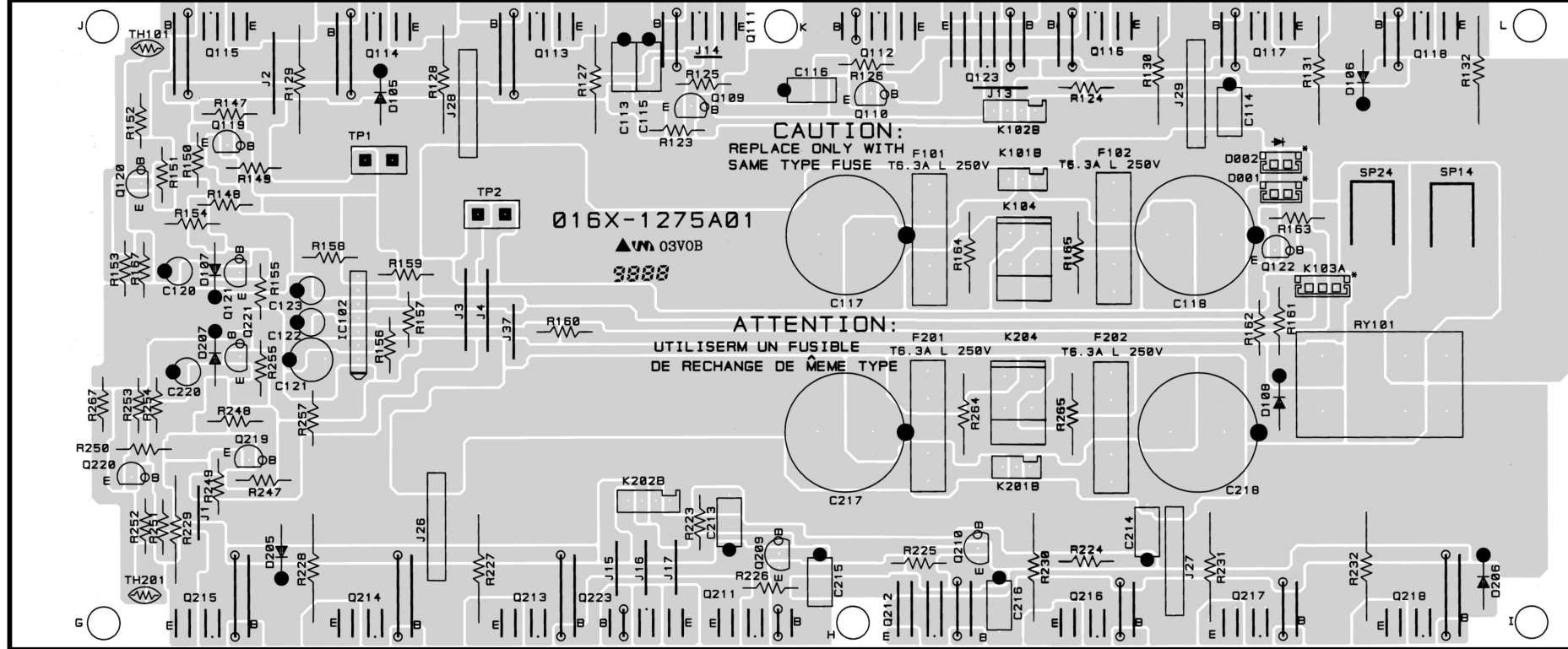
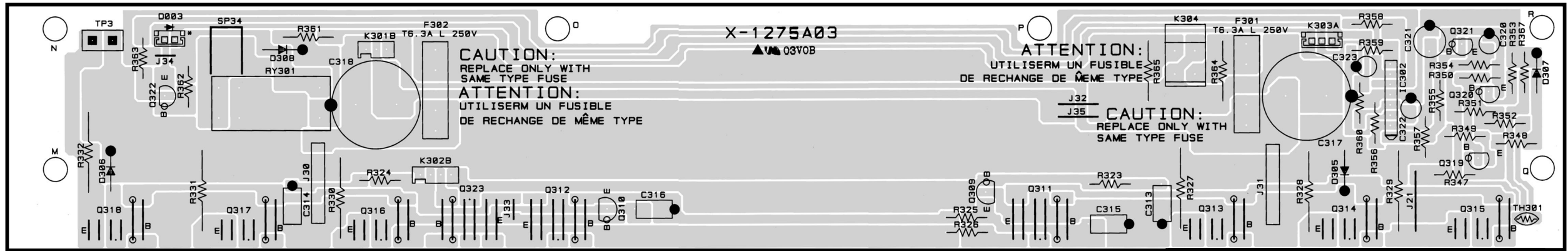
2SB817
2SD1047



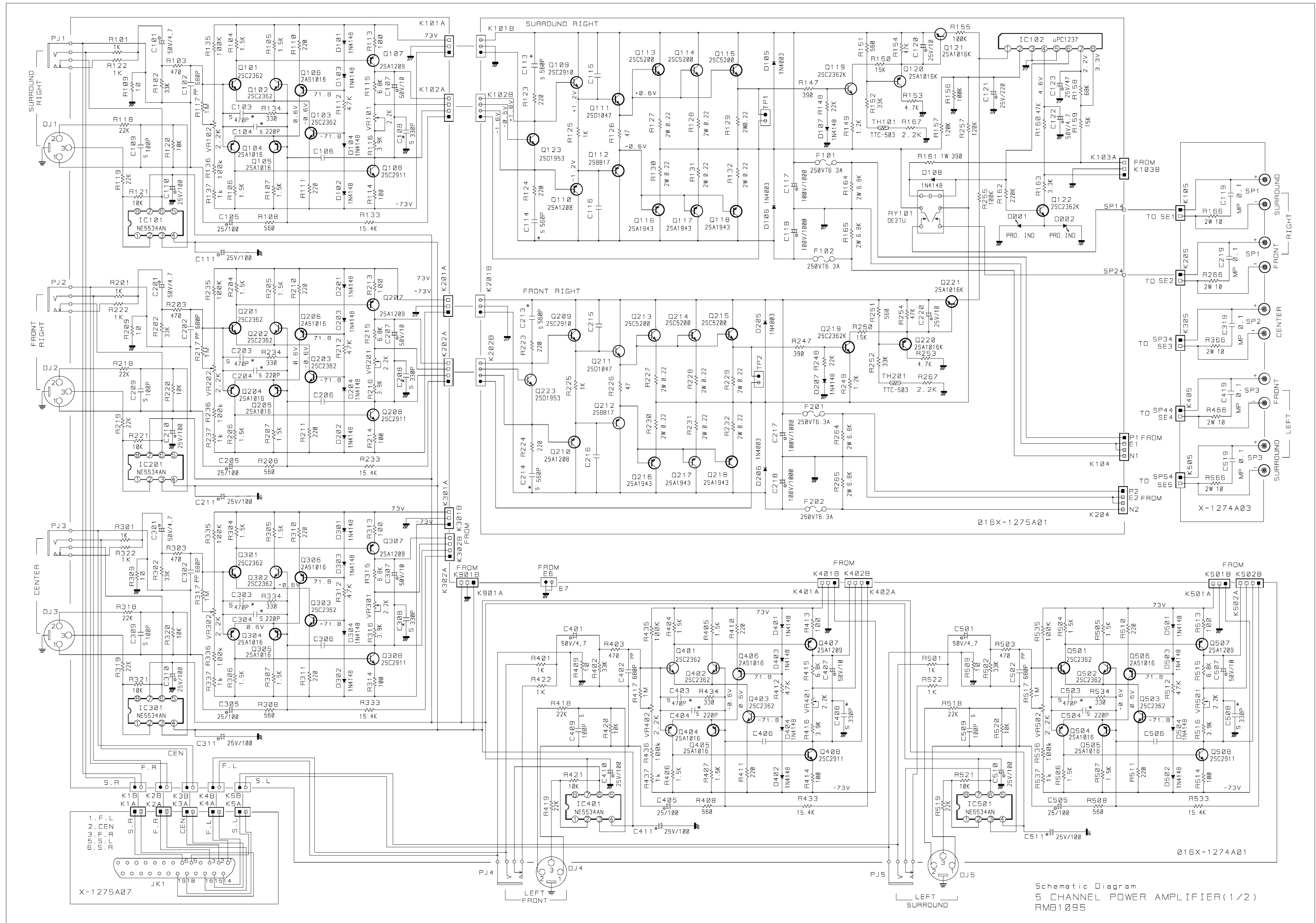
MPC1237HA



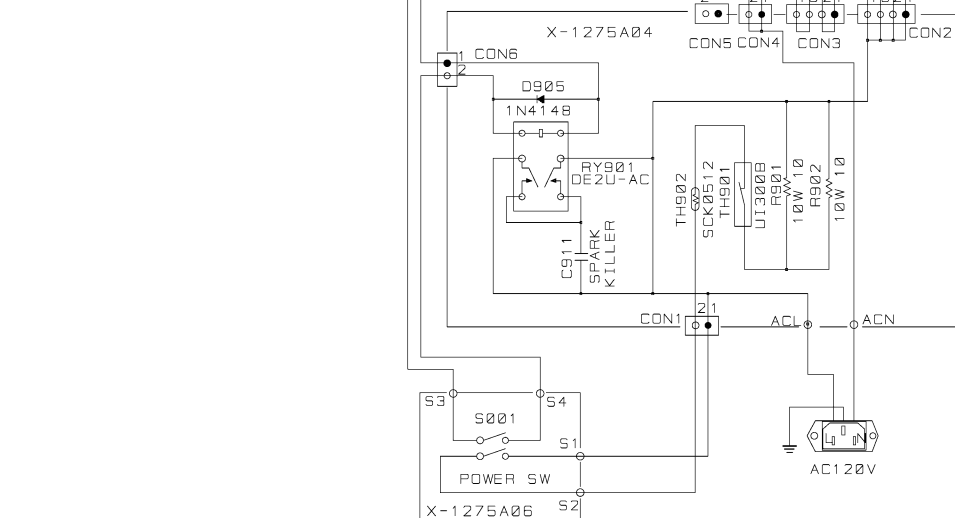
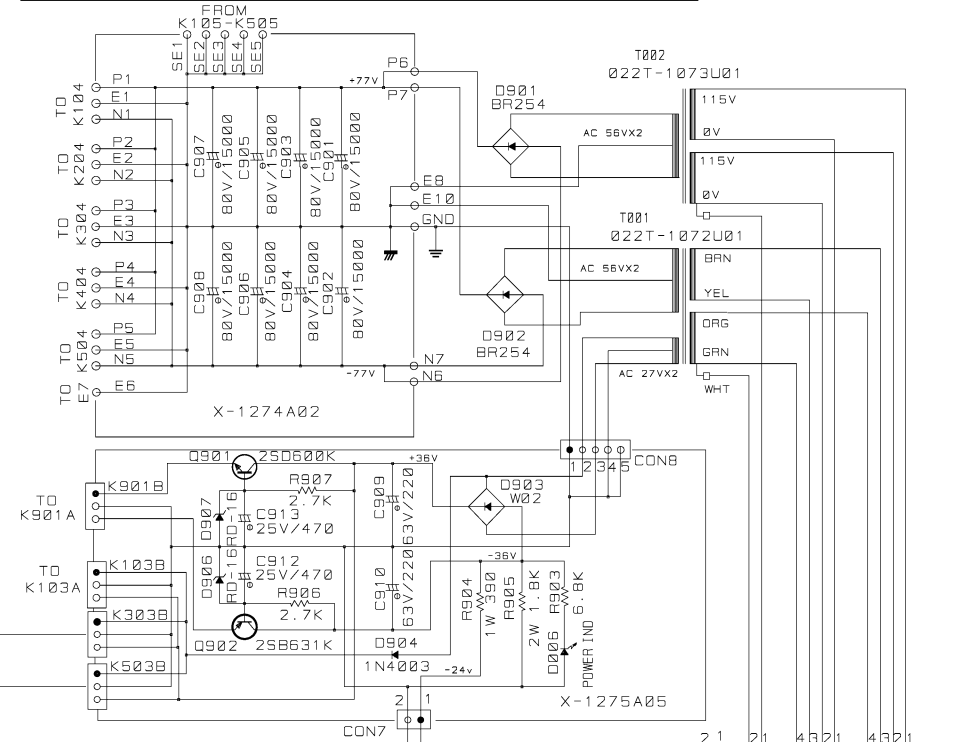
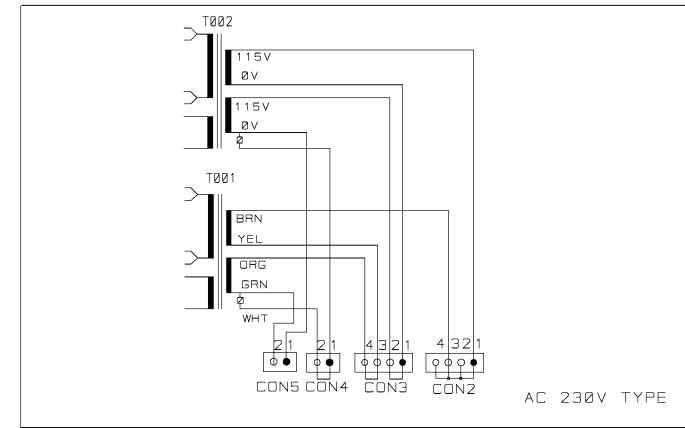
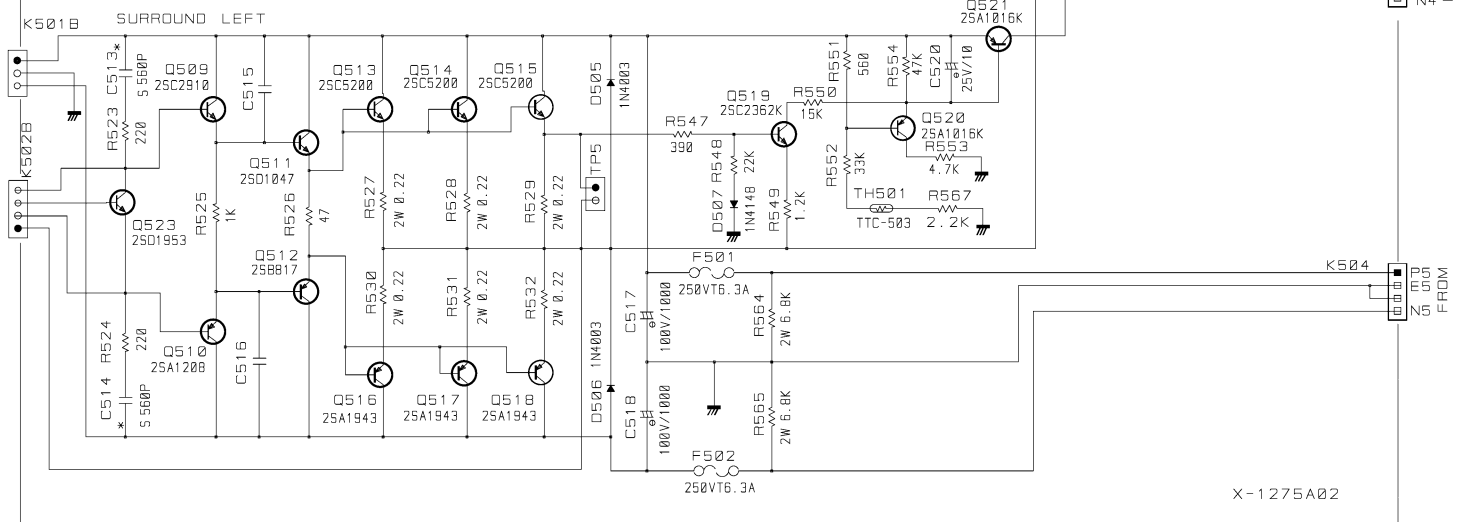
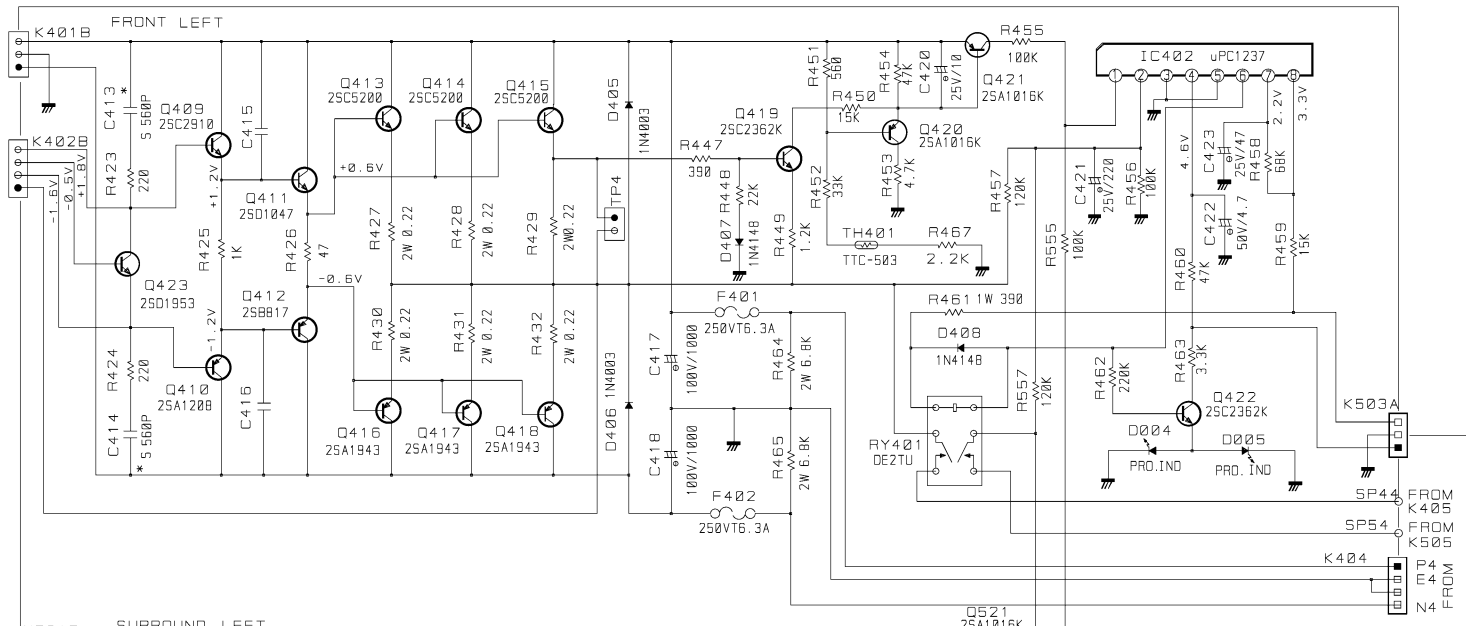
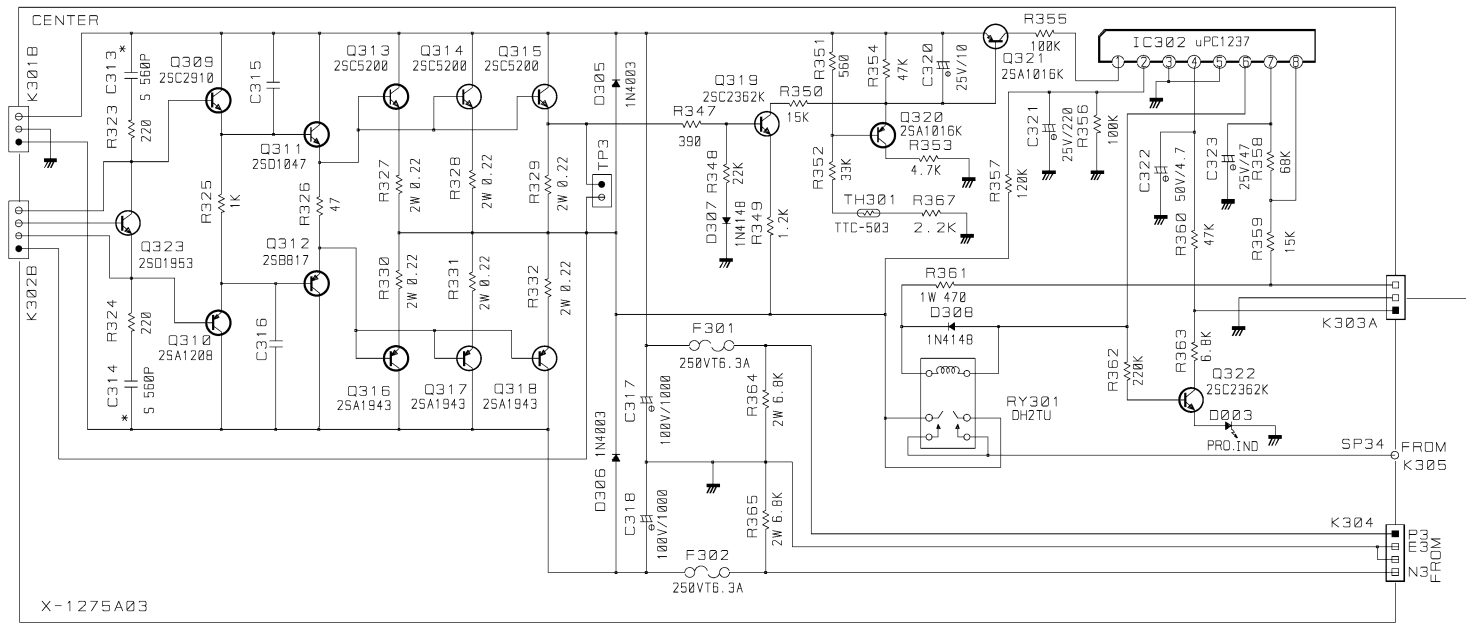
2SA1943
2SC5200



Schematic Diagram-1



Schematic Diagram-2



Schematic Diagram
5 CHANNEL POWER AMPLIFIER(2/2)
RMB1095 NOV.11.98