

ROTEL*hi-fi*

AM / FM STEREO RECEIVER

RX-940AX

TECHNICAL MANUAL

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THE ROTEL CO., LTD.

1-36-8, OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN

ROTEL ELECTRONICS CO., LTD.

3F-2, NO.35, FU HSING NORTH ROAD, TAIPEI, TAIWAN, REPUBLIC OF CHINA

MN20001984

SpecificationsRX-940AX

AMPLIFIER SECTION

Continuous Power Output...40 watts* per channel, min.
RMS both channels driven into
8 ohms from 20 to 20,000 Hz
with no more than 0.03 % total
harmonic distortion.

DIN Power Output.....50 watts per channel (1 kHz, 4
ohms, 1 % THD)

Total Harmonic Distortion...No more than 0.03 % (contin-
(20 to 20kHz from AUX) uous rated power output)

Intermodulation Distortion...No more than 0.03 % (contin-
(60 Hz: 7 kHz = 4:1) uous rated power output)

Output: Speaker.....4 ohms minimum
Headphone.....8 – 2,000 ohms

Damping Factor.....180 (20 to 20,000 Hz, 8 ohms)

Input Sensitivity/ Impedance:

PHONO.....2.5 mV/ 47 kohms
CD, AUX, TAPE 1,2.....150 mV/ 20 kohms

Overload Level (THD 0.5% 1 kHz):

PHONO.....200 mV
CD, AUX, TAPE 1,2.....5 V

Frequency Response:

PHONO.....20 to 20,000 Hz +/- 0.3 dB
(RIAA STD)

CD, AUX, TAPE 1,2.....20 to 20,000 Hz +0 dB,- 1 dB

Tone Control:

BASS..... +/- 6.0 dB (100 Hz)
TREBLE..... +/- 6.0 dB (10 kHz)

Signal-to-Noise Ratio (IHF, A netwrok):

PHONO.....80 dB
CD, AUX, TAPE 1,2.....100 dB

FM TUNER SECTION

Usable Sensitivity.....10.8 dBf/ 0.95 uV (75 ohms)

50 dB Quieting Sensitivity:

Mono.....14.8 dBf/ 1.5 uV (75 ohms)
Stereo.....37.2 dBf/ 20 uV (75 ohms)

Signal-to-Noise Ratio (at 65 dBf):

Mono.....80 dB
Stereo.....75 dB

Harmonic Distortion (at 65 dBf):

1 kHz.....0.07% (mono), 0.25% (stereo)

Frequency Response.....30 to 15,000 Hz +/- 1.0 dB

Capture Ratio.....1.0 dB

Alternate Channel Selectivity:
(+/- 400 kHz).....63 dB

Spurious Response Ratio...95 dB

Image Response Ratio.....70 dB

IF Response Ratio.....95 dB

AM Suppression Ratio.....58 dB

Stereo Separation:

100 Hz/1 kHz/10 kHz.....43 dB/ 46 dB/ 38 dB

Subcarrier Product Ratio...60 dB

Antenna Input.....75 ohms unbalanced

AM TUNER SECTION

	MW	LW
Sensitivity.....	350 uV/ m	750 uV/ m
Selectivity.....	35 dB	35 dB
Signal-to-Noise Ratio.....	55 dB	55 dB
Image Response Ratio.....	40 dB	40 dB
IF Response Ratio.....	60 dB	60 dB
Antenna.....	Loop Antenna	

MISCELLANEOUS

Power Requirement.....120 V/ 60 Hz, 220 V/ 50 Hz,
240 V/ 50 Hz (dependinh on
destinations)

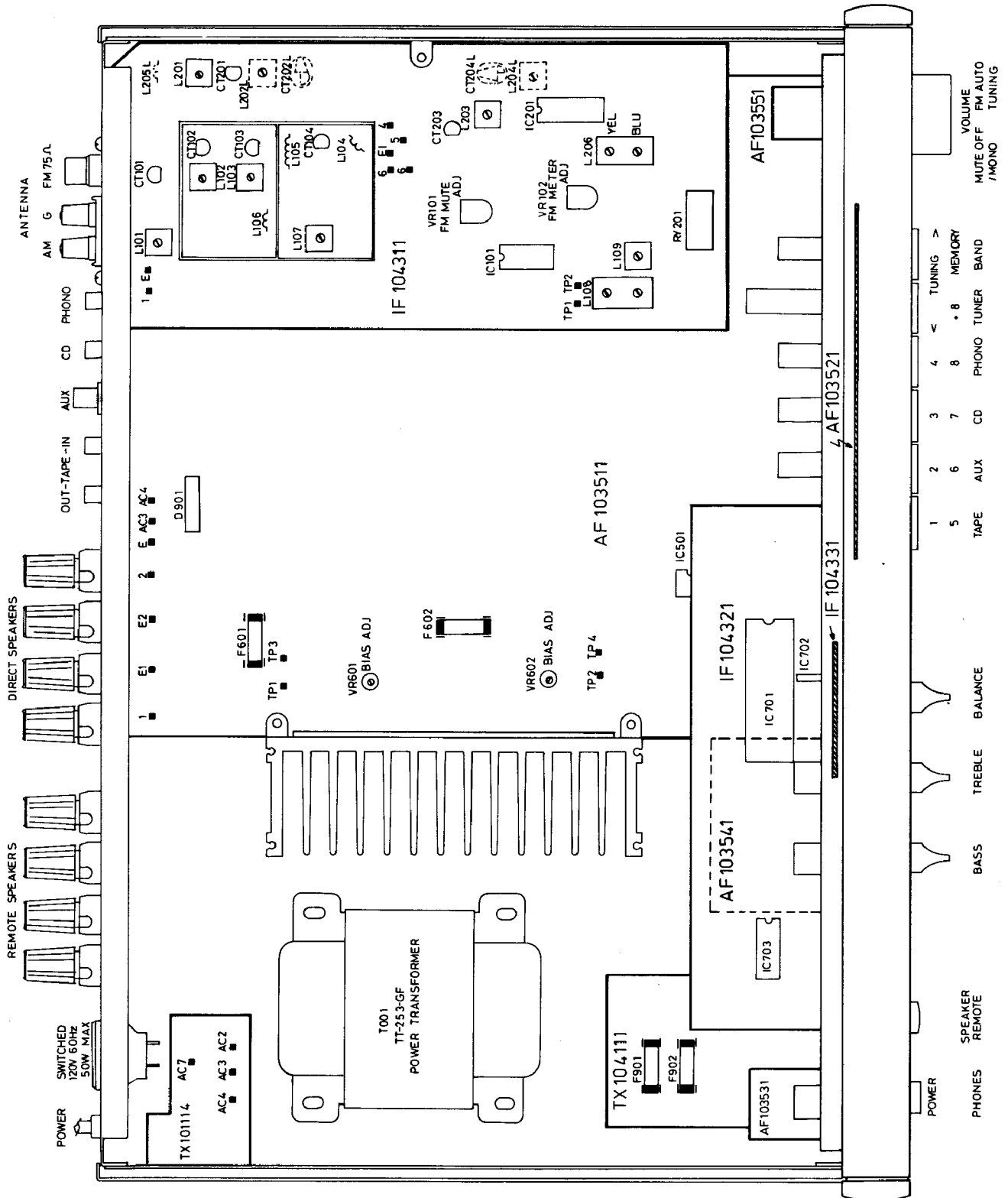
Power Consumption.....180 watts

Dimension (overall).....440 (W) x 92 (H) x 340 (D)mm
17-3/8" x 3-5/8" x 13-3/8"

Weight (net).....7.0 kg/ 15.4 lbs

- Specifications and design subject to possible modifica-
tion without notice.
- *Measured pursuant to the Federal Trade Commis-
sion's Trade Regulation Rule or, Power Claims for
Amplifiers (applicable to the U.S.A. only).

Chassis Layout



FM IF and RF Alignment

Instruments: FM Signal Generator (400Hz,100% Modulated), THD Analyzer, Oscilloscope, AC VTVM, DC Voltmeter, Tuning Meter.

Terminated : DC Voltmeter---Between 4 and E1 on IF-10104311 P.C.B.
Tuning Meter---Between TP1 and TP2 on IF-104311 P.C.B.

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	No use		87.5 MHz	L104	1.4V +/- 0.1V reading on DC Voltmeter
2			108 MHz	CT104	9V +/- 0.1V reading on DC Voltmeter
3	Repeat steps 1 and 2 unit no further improvement is noticed.				
4	Antenna terminal	90 MHz	90 MHz	L101,102 L103	Maximum reading on AC VTVM.
5		106 MHz	106MHz	CT101 CT102 CT103	Maximum reading on AC VTVM.
6	Repeat steps 4,5 and 6 unit no further improvement is noticed. (Muting OFF)				
7	Antenna terminal 1mV input	90 MHz	90 MHz	L108(A)	Adjust center on Tuning Meter
8				L108(B)	Minimum reading on THD Analyzer
9	Repeat steps 7 and 8 unit no further improvement is noticed (Muting OFF)				
10	Antenna terminal 5uV input	90 MHz	90 MHz	VR101	Muting Level (Muting ON)
11	Antenna terminal 1mV input	98 MHz	98 MHz	VR102	Signal Indicator Level 3th LED light On (Muting OFF)

FM MPX Alignment

Instruments: FM Stereo Generator, AC VTVM, Oscilloscope, Frequency Countor, and THD Analyzer.

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Antenna terminal 1mV input	98 MHZ Pilot--10% 1 kHz--90% Mod.	98 MHZ	L107	Stereo indicator light up (muting ON) Minimum reading on T.H.D Analyzer
2	Antenna terminal 1mV input	98 MHZ Pilot--10% 1 kHz--90% Mod.	98 MHZ	VR303 VR304	Best separation

MW IF and RF Alignment

Instruments: AM Signal Generator (400Hz,30% Modulated), AC VTVM, Oscilloscope, DC Voltmeter.
Terminated : DC Voltmeter---Between TP4 and Earth on IF-104311 P.C.B.

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	No use		520 kHz (522 kHz) Europe	L203	About 1.3V+/-0.1V on DC Voltmeter
2			1710 kHz (1611 kHz) Europe	CT203	About 9V+/-0.1V on DC Voltmeter
3	Repeat steps 1 and 2 unit no further improvement is noticed.				
4	Test loop radiate signal into loop antenna	450 kHz	520 kHz	L204,205 L206	Maximum reading on AC VTVM.
5		600 kHz	600 kHz	L201	
6		1400 kHz	1400 kHz	CT201	
7	Repeat steps 4 to 6 unit no further improvement is noticed.				

LW RF Alignment

Instruments: AM Signal Generator (400Hz,30% Modulated), AC VTVM,
Oscilloscope, DC Voltmeter.

Terminated : DC Voltmeter---Between TP4 and Earth on IF-104311 P.C.B.

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	NO use		153 kHz	L204L	About 2.5V+/-0.1V on DC Voltmeter
2			281 kHz	CT204L	About 8V+/-0.1V on DC Voltmeter
3	Repeat steps 1 and 2 unit no further improvement is noticed.				
4	Test loop radiate signal into loop antenna	160 kHz	160 kHz	L202L	Maximum reading on AC VTVM.
5		260 kHz	260 kHz	CT202L	
6	Repeat steps 4 to 5 unit no further improvement is noticed.				

Power Amplifier Bias Adjustment

Instruments: DC milli-voltmeter

Notes: Prior to Bias Adjustment, run about 5 minutes with rated output (8 ohm) and warm up Power Transistor and Heat Sink.
Set Volume control to minimum.

Step	Coupling		Adjust	Adjust for
	Plus Lead	Minus Lead		
1	TP1	TP3	VR601	DC milli-voltmeter reads 4 mV
2	TP2	TP4	VR602	

Parts List

NOTE: THE COMPONENTS INDENTIFIED BY Δ MARK ARE FOR SAFETY. REPLACE ONLY WITH ORIGINAL PARTS. DO NOT SUBSTITUTE.

SYMBOL	PARTS NO.	DESCRIPTION
	IF104311	P.C.B. ASSEMBLY
R101	RD14702825	R, CARBON 47K 1/4W J
R102	RD12209820	R, CARBON 22 1/4W J
R103	RD41500820	R, CARBON 150 1/4W J
R104	RD41003823	R, CARBON 100K 1/4W J
R108, 109	RD14702825	R, CARBON 47K 1/4W J
R110	RD14701821	R, CARBON 4.7K 1/4W J
R111	RD42202827	R, CARBON 22K 1/4W J
R112	RD42201823	R, CARBON 2.2K 1/4W J
R113, 114	RD44709822	R, CARBON 47 1/4W J
R115, 116	RD41002820	R, CARBON 10K 1/4W J
R117	RD16800826	R, CARBON 680 1/4W J
R118	RD43301825	R, CARBON 3.3K 1/4W J
R119	RD41003823	R, CARBON 100K 1/4W J
R120	RD13300820	R, CARBON 330 1/4W J
R121	RD44700820	R, CARBON 470 1/4W J
R122	RD13300820	R, CARBON 330 1/4W J
R123	RD46802825	R, CARBON 68K 1/4W J
R124, 125	RD41000822	R, CARBON 100 1/4W J
R126	RD13300820	R, CARBON 330 1/4W J
R127	RD13300820	R, CARBON 330 1/4W J
R128	RD14702825	R, CARBON 47K 1/4W J
R129	RD11002828	R, CARBON 10K 1/4W J
R130	RD11000820	R, CARBON 100 1/4W J
R131	RD42201823	R, CARBON 2.2K 1/4W J
R132	RD44701823	R, CARBON 4.7K 1/4W J
R133	RD11801828	R, CARBON 1.8K 1/4W J
R134	RD12203829	R, CARBON 220K 1/4W J
R135	RD41001826	R, CARBON 1K 1/4W J
R136	RD15600829	R, CARBON 560 1/4W J
R137	RD11802821	R, CARBON 18K 1/4W J
R138	RD12702822	R, CARBON 27K 1/4W J
R139	RD48201821	R, CARBON 8.2K 1/4W J
R140	RD42401824	R, CARBON 2.4K 1/4W J
R141	RD14709820	R, CARBON 47 1/4W J
R142	RD14702825	R, CARBON 47K 1/4W J
R143	RD48201821	R, CARBON 8.2K 1/4W J
R144	RD44701823	R, CARBON 4.7K 1/4W J
R145	RD41002820	R, CARBON 10K 1/4W J
R146	RD48202825	R, CARBON 82K 1/4W J
R147	RD14702825	R, CARBON 47K 1/4W J
R148	RD42202827	R, CARBON 22K 1/4W J
R149	RD44701823	R, CARBON 4.7K 1/4W J
R150	RD42200820	R, CARBON 220 1/4W J
R151	RD42202827	R, CARBON 22K 1/4W J
R152	RD41003823	R, CARBON 100K 1/4W J
R153	RD44702827	R, CARBON 47K 1/4W J
R154	RD41000822	R, CARBON 100 1/4W J
R155	RD42202827	R, CARBON 22K 1/4W J
C101	CC53013416	CAP, CERAMIC 3P CH 50V
C102	CC41011432	CAP, CERAMIC 100P 50V
C103, 104	CC41010439	CAP, CERAMIC 0.001uF 50V
C105, 107	CC55013419	CAP, CERAMIC 5P CH 50V
C108	CC31013481	CAP, CERAMIC 1P 50V
C109	CC05013485	CAP, CERAMIC 5P 50V
C110	CC41011432	CAP, CERAMIC 100P 50V
C111	CC51012410	CAP, CERAMIC 10P CH
C112	CC55013419	CAP, CERAMIC 5P CH 50V
C113	CC53312419	CAP, CERAMIC 33P CH 50V
C114, 115	CC55013419	CAP, CERAMIC 5P CH 50V
C116	CE41005105	CAP, ELEC. 100uF 10V
C117	CE41007503	CAP, ELEC. 1uF 50V
C118-120	CC41010439	CAP, CERAMIC 0.001uF 50V
C121	CE41005166	CAP, ELEC. 100uF 16V
C122-127	CC41010439	CAP, CERAMIC 0.001uF 50V
C128-130	CC45009456	CAP, CERAMIC 0.047uF 50V
C131	CE04707252	CAP, ELEC. 4.7uF 25V
C132	CS43311433	CAP, STYROL 330P 50V
C133, 134	CL31006258	CAP, LOW NOISE U25V10LN

SYMBOL	PARTS NO.	DESCRIPTION
C135	CE41007503	CAP, ELEC. 1uF 50V
C136	CE41005105	CAP, ELEC. 100uF 10V
C137	CC45009456	CAP, CERAMIC 0.047uF 50V
C138	CE41005166	CAP, ELEC. 100uF 16V
C139, 140	CC45009456	CAP, CERAMIC 0.047uF 50V
C141	CE41007503	CAP, ELEC. 1uF 50V
C142, 143	CC45009456	CAP, CERAMIC 0.047uF 50V
C144	CE41007503	CAP, ELEC. 1uF 50V
C145	CC45009456	CAP, CERAMIC 0.047uF 50V
D101-104	DD50000020	DIODE SVC202AF
D106-110	DD10000100	DIODE IN4148
Q101	TR50000140	TRANSISTOR 3SK107-F
Q103, 104	TR30000133	TRANSISTOR 2SC1674
Q105	TR50000103	TRANSISTOR 2SK544(F)
Q106	TR30000133	TRANSISTOR 2SC1674
Q107, 108	TR30000108	TRANSISTOR 2SC1571(E,F)
Q109, 110	TR30000327	TRANSISTOR 2SC536G
IC101	IC000001103	IC LA1235
L101	LC23390009	FM ANT. COIL TRL-339
L102	LC23380004	FM RF COIL TRL-338
L103	LC23370000	FM RF COIL TRL-337
L104	LC23360005	FM OSC COIL TRL-336
L105, 106	LM00000073	MICRO INDUCTOR 2.2uH
L107	LC02330000	FM IF COIL RL-233T
L108	LC31090007	IF COIL RLV109T
L109	LC23060009	MPX FILTER TRL-306
CT101-103	CF00000159	CAP, FILM TRIMMER VCT51C
CT104	CF00000184	CAP, FILM TRIMMER VCT51A
X101	LF00000014	CERAMIC FILTER SFE10.7MA8-A
	LF00000166	CERAMIC FILTER SFE10.7MS2G (LW)
X102	LF00000166	CERAMIC FILTER SFE10.7MS2G
X103	LF00000166	CERAMIC FILTER SFE10.7MS2G
	CC41009562	CAP, CERAMIC 0.01uF 50V (LW)
VR101, 102	RV20000193	R, SEMI-FIXED 08-301 10KB
R201	RD44709822	R, CARBON 47 1/4W J
R202, 203	RD41003823	R, CARBON 100K 1/4W J
R204	RD44709822	R, CARBON 47 1/4W J
R205	RD43300821	R, CARBON 330 1/4W J
R206L	RD46801821	R, CARBON 6.8K 1/4W J
R207L	RD46801821	R, CARBON 6.8K 1/4W J
R208L	RD46801821	R, CARBON 6.8K 1/4W J
R209L	RD46801821	R, CARBON 6.8K 1/4W J
R210L	RD46801821	R, CARBON 6.8K 1/4W J
R211L	RD46801821	R, CARBON 6.8K 1/4W J
R212	RD41000822	R, CARBON 100 1/4W J
R213	RD42200820	R, CARBON 220 1/4W J
R214	RD11501821	R, CARBON 1.5K 1/4W J
R215	RD41000822	R, CARBON 100 1/4W J
R216	RD44700820	R, CARBON 470 1/4W J
R217	RD41000822	R, CARBON 100 1/4W J
R218	RD41001826	R, CARBON 1K 1/4W J
R219	RD41002820	R, CARBON 10K 1/4W J
R220	RD41000822	R, CARBON 100 1/4W J
R221	RD42200820	R, CARBON 220 1/4W J
R222	RD41002820	R, CARBON 10K 1/4W J
R223	RD44701823	R, CARBON 4.7K 1/4W J
R224	RD44701823	R, CARBON 4.7K 1/4W J
R225	RD41003823	R, CARBON 100K 1/4W J
R226	RD41002826	R, CARBON 10K 1/4W J
R227	RD41500820	R, CARBON 150 1/4W J
R228	RD41001826	R, CARBON 1K 1/4W J
C201	CC41009462	CAP, CERAMIC 0.01uF 50V
C202L	CM08210426	CAP, MYLAR 822 J 50V
C203	CC55013419	CAP, CERAMIC 5P CH 50V
C204L	CC51012410	CAP, CERAMIC 10P CH 50V
C205	CC41009462	CAP, CERAMIC 0.01uF 50V
C206	CS43911424	CAP, STYROL 390P 50V
C207	CC11512418	CAP, CERAMIC 15P CH 50V
C208L	CC16812416	CAP, CERAMIC 68P CH 50V

SYMBOL	PARTS NO.	DESCRIPTION
C209L	CS41811426	CAP,STYROL 180P 50V
C210L	CC41009462	CAP,CERAMIC 0.01uF 50V
C211L	CC41009462	CAP,CERAMIC 0.01uF 50V
C212	CC41009462	CAP,CERAMIC 0.01uF 50V
C213	CC45009456	CAP,CERAMIC 0.047uF 50V
C214	CC42009457	CAP,CERAMIC 0.02uF 50V
C215	CC41010439	CAP,CERAMIC 0.001uF 50V
C216	CC45009456	CAP,CERAMIC 0.047uF 50V
C217	CC41009462	CAP,CERAMIC 0.01uF 50V
C218	CC41009462	CAP,CERAMIC 0.01uF 50V
C219	CE41005166	CAP,ELEC. 100uF 16V
C220	CC41009462	CAP,CERAMIC 0.01uF 50V
C221	CC42009457	CAP,CERAMIC 0.02uF 50V
C222	CC41010439	CAP,CERAMIC 0.001uF 50V
C223	CE41005166	CAP,ELEC. 100uF 16V
C224	CC41009462	CAP,CERAMIC 0.01uF 50V
C225	CM02208434	CAP,MYLAR 224 K 50V
C226	CM02209426	CAP,MYLAR 223 J 50V
C227	CC41009462	CAP,CERAMIC 0.01uF 50V
C228	CE41007503	CAP,ELEC. 1uF 50V
C229	CE44708504	CAP,ELEC. 0.47uF 50V
C230	CE03307254	CAP,ELEC. 3.3uF 25V
D201,202	DD50000031	DIODE SVC321B
D203L	DD10000100	DIODE IN4148
D204-206	DD10000100	DIODE IN4148
Q201	TR50000097	TRANSISTOR 2SK49 (E,H)
Q202L	TR30000327	TRANSISTOR 2SC536G
Q203L	TR30000327	TRANSISTOR 2SC536G
Q204L	TR30000327	TRANSISTOR 2SC536G
Q205L	TR30000327	TRANSISTOR 2SC536G
Q206L	TR30000327	TRANSISTOR 2SC536G
Q207L	TR30000327	TRANSISTOR 2SC536G
IC201	IC00001322	IC LA1245
CT201	CF00000159	CAP,FILM TRIMMER VCT51C
CR202L	CF00000263	CAP,FILM TRIMMER AT1-53-9W
CT203	CF00000159	CAP,FILM TRIMMER VCT51C
CT204L	CF00000263	CAP,FILM TRIMMER AT1-53-9W
L201	LC31070008	AM ANT. COIL RLV107A00
L202L	LC31080002	LW ANT. COIL RLV108A00
L203	LC31050009	AM OSC COIL RLV105T
L204L	LC31060003	LW OSC COIL RLV106
L205L	LM00000073	MICRO INDUCTOR 2.2uH
L206	LC01980000	AM IFT COIL RL198T
X210	LF00000221	CAP,FILTER BFU450C
RY201	LY00000253	RELAY RY-12W-OH-KJ Δ
IF104321 P.C.B. ASSEMBLY		
R701	RD45601824	R,CARBON 5.6K 1/4W J
R702	RD44702827	R,CARBON 47K 1/4W J
R703	RD41002820	R,CARBON 10K 1/4W J
R704	RD41002820	R,CARBON 10K 1/4W J
R705,706	RD43302829	R,CARBON 33K 1/4W J
R707	RD41002820	R,CARBON 10K 1/4W J
R708	RD46802825	R,CARBON 68K 1/4W J
R709	RD48202825	R,CARBON 82K 1/4W J
R710	RD43302829	R,CARBON 33K 1/4W J
R711	RD41002820	R,CARBON 10K 1/4W J
R712	RD48201821	R,CARBON 8.2K 1/4W J
R713	RD42201823	R,CARBON 2.2K 1/4W J
R714,715	RD42700827	R,CARBON 270 1/4W J
R716	RD48201821	R,CARBON 8.2K 1/4W J
R717	RD44700820	R,CARBON 470 1/4W J
R718	RD12209820	R,CARBON 22 1/4W J
R719	RD42202827	R,CARBON 22K 1/4W J
R720	RD42202827	R,CARBON 22K 1/4W J
R721	RD41003823	R,CARBON 100K 1/4W J
R722	RD42202827	R,CARBON 22K 1/4W J
R723,724	RD41003823	R,CARBON 100K 1/4W J
R725	RD41003823	R,CARBON 100K 1/4W J

SYMBOL	PARTS NO.	DESCRIPTION
R726,727	RD41003823	R,CARBON 100K 1/4W J
R728	RD12702822	R,CARBON 27K 1/4W J
R753	RD42201823	R,CARBON 2.2K 1/4W J
R754	RD11803825	R,CARBON 180K 1/4W J
R755	RD41002820	R,CARBON 10K 1/4W J
R729	RN31003080	THICK FILM RS NETWORK RA8-104-8K CAP,CERAMIC 15P 50V
C701,702	CC41512433	
C703	CE44706106	CAP,ELEC. 47uF 10V
C704	CE02204068	CAP,ELEC. 2200uF 6.3V Δ
C705,706	CC41009462	CAP,CERAMIC 0.01uF 50V
C707,708	CE41007503	CAP,ELEC. 1uF 50V
C709	CE44706106	CAP,ELEC. 47uF 10V
C710,711	CC41009462	CAP,CERAMIC 0.01uF 50V
C712	CC41010439	CAP,CERAMIC 0.001uF 50V
C713	CC41009462	CAP,CERAMIC 0.01uF 50V
C714	CE01338508	CAP,ELEC. 0.33uF 50V
C715	CM14709423	CAP,MYLAR 473 J 50V
C716	CC41009462	CAP,CERAMIC 0.01uF 50V
C717	CE41005166	CAP,ELEC. 100uF 16V
C718	CC45009456	CAP,CERAMIC 0.047uF 50V
C719	CE41005105	CAP,ELEC. 100uF 10V
C720	CE01005258	CAP,ELEC. 100uF 25V
C721	CC41009462	CAP,CERAMIC 0.01uF 50V
C722-724	CC45009456	CAP,CERAMIC 0.047uF 50V
C735	CE41005166	CAP,ELEC. 100uF 16V
D701-704	DD10000100	DIODE IN4148
D705L	DD10000100	DIODE IN4148
D706	DD20000065	DIODE RD6.8E
Q701	TR10000126	TRANSISTOR 2SA608K
Q702	TR50000127	TRANSISTOR 2SK246-Y
Q703	TR30000327	TRANSISTOR 2SC1570
Q704	TR10000126	TRANSISTOR 2SA608K
Q705	TR30000327	TRANSISTOR 2SC536G
Q711	TR30000327	TRANSISTOR 2SC536G
IC701	IC00001346	IC TC9157AP
IC702	IC00000482	IC TD6104P
IC703	IC00000901	IC TC9158P
FL701	DD40000915	FL TUBE FIP7B8F
X701	DD60000040	CRYSTAL OSCILLATOR HC49U7.2MHz
R801	RD23300827	R,CARBON 330 1/4W J
IF194331 P.C.B. ASSEMBLY		
R229	RD23902827	R,CARBON 39K 1/4W J
R230	RD21002825	R,CARBON 10K 1/4W J
R232	RD22201829	R,CARBON 2.2K 1/4W J
C231	CE03307254	CAP,ELEC. 3.3uF 25V
C232	CE01007504	CAP,ELEC. 1uF 50V
D207	DD40000095	LED LN224 R
D209-211	DD40000095	LED LN224 R
D212	DD40000101	LED LN324 G
IC202	IC00000883	IC LB1423
TX104111 P.C.B. ASSEMBLY		
R643	RM93300123	R,METAL OXIDE FILM 330 1W
R644	RM93300123	R,METAL OXIDE FILM 330 1W
F901,902	FU25000030	FUSE 125V 5A UL/CSA Δ
	FU23000141	FUSE 250V T5A S Δ
S14	SH11000410	1 KEY PUSH SW 4TR-2863
AF103511 P.C.B. ASSEMBLY		
R301	RD56809828	R,CARBON 68 1/4W J
R302	RD42002826	R,CARBON 20K 1/4W J
R303,304	RM81002616	R,METAL MK2010KFECZ.
R305	RD46801821	R,CARBON 6.8K 1/4W J
R306,307	RD42202827	R,CARBON 22K 1/4W J
R308,309	RM83012613	R,METAL MK230K1FECZ.

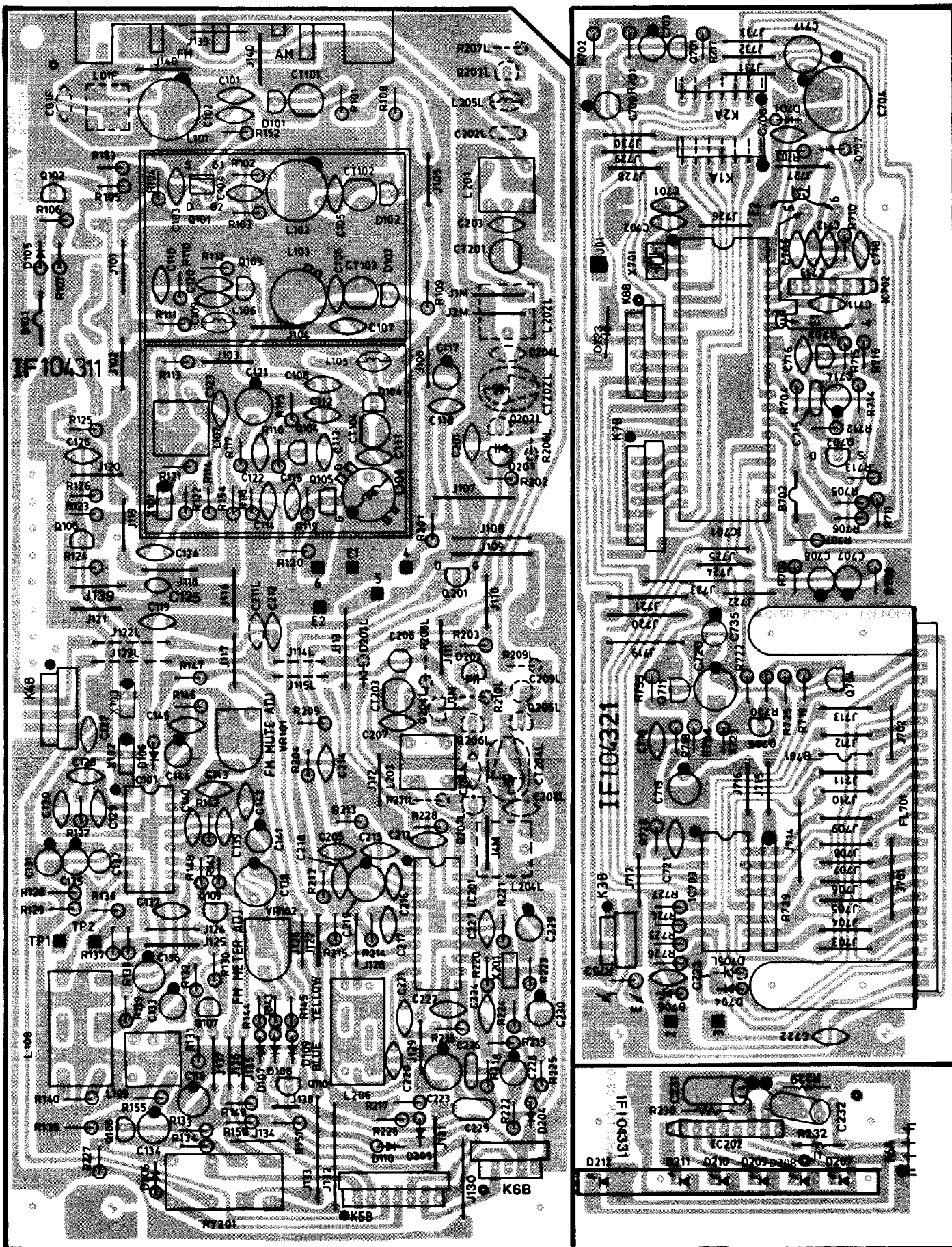
SYMBOL	PARTS NO.	DESCRIPTION
R310, 311	RM83321610	R, METAL MK23K32FECZ.
R312, 313	RM81002616	R, METAL MK2010KFECZ.
R314	RD42700827	R, CARBON 270 1/4W J
R315	RD41003823	R, CARBON 100K 1/4W J
R316	RD44700820	R, CARBON 470 1/4W J
R317	RD48202825	R, CARBON 82K 1/4W J
R318	RD41502827	R, CARBON 15K 1/4W J
R319	RD41803827	R, CARBON 180K 1/4W J
R320	RD55600828	R, CARBON 560 1/4W J
R321	RD41003823	R, CARBON 100K 1/4W J
R322	RD41002820	R, CARBON 10K 1/4W J
R323	RD43302829	R, CARBON 33K 1/4W J
R324	RD41002820	R, CARBON 10K 1/4W J
R325	RD41201827	R, CARBON 1.2K 1/4W J
R326	RD41002820	R, CARBON 10K 1/4W J
R327, 328	RD41503820	R, CARBON 150K 1/4W J
R329	RD42202827	R, CARBON 22K 1/4W J
R330	RD41003823	R, CARBON 100K 1/4W J
R331	RD41002820	R, CARBON 10K 1/4W J
R332	RD44702827	R, CARBON 47K 1/4W J
C301	CE04705164	CAP, ELEC. 470uF 16V
C302	CL31005163	CAP, LOW NOISE U16V100LN
C303	CL32206164	CAP, LOW NOISE U16V22LN
C304	CS44710426	CAP, STYROL 4700P J 50V
C305	CE04705164	CAP, ELEC. 470uF 16V
C306	CS44710438	CAP, STYROL 4700P K 50V
C307, 308	CS31510321	CAP, STYROL SRA152J125
C309, 310	CS48211428	CAP, STYROL 820P J 50V
C311, 312	CL34707259	CAP, LOW NOISE U25V4R7LN
C313	CM14709435	CAP, MYLAR 473 K 50V
C314	CE01008508	CAP, ELEC. 0.1uF 50V
C315	CE41006250	CAP, ELEC. 10uF 25V
C316	CE04708505	CAP, ELEC. 0.47uF 50V
C317	CE04707252	CAP, ELEC. 4.7uF 25V
C318	CS42710435	CAP, STYROL 2700P 50V
C319	CS43911424	CAP, STYROL 390P 50V
C320	CS48211430	CAP, STYROL 820P K 50V
C321	CM14709435	CAP, MYLAR 473 K 50V
C322	CE43307253	CAP, ELEC. 3.3uF 25V
D301	DD10000100	DIODE IN4148
Q301-303	TR30000327	TRANSISTOR 2SC536G
IC301	IC000001905	IC uPC1223C
IC302	IC00000603	IC TA7324P
L301	LM00000360	MICRO INDUCTOR TRL-312
L302	LC23400003	MPX FILTER COIL TRL-340
VR301	RV20000193	R, SEMI-FIXED 08-301 10KB
VR302	RV20000284	R, SEMI-FIXED 08-301 30KB
VR303, 304	RV20000181	R, SEMI-FIXED 08-301 100KB
R401, 402	RM81001612	R, METAL MK2001KFECZ.
R403, 404	RM84752616	R, METAL MK247K5FECZ.
R405, 406	RM81211618	R, METAL MK21K21FECZ.
R407, 408	RM84751612	R, METAL MK24K74FECZ.
R409, 410	RM85622613	R, METAL MK256K2FECZ.
R411, 412	RM89093611	R, METAL MK2909KFECZ.
R413, 414	RM86810619	R, METAL MK2681RFECZ.
IC705	IC000002340	IC TC4081BP
R901, 902	RM92200121	R, METAL OXIDE FILM 220 J 1W
R903, 904	RM92701924	R, METAL OXIDE FILM 2.7K 1/2W
R905, 906	RD43300821	R, CARBON 330 1/4W J
R907	RM91501125	R, METAL OXIDE FILM 1.5K 1W
R908	RD44709822	R, CARBON 47 1/4W J
R909	RD41801820	R, CARBON 1.8K 1/4W J
R911	RD42202827	R, CARBON 22K 1/4W J
R912	RD41003823	R, CARBON 100K 1/4W J
R913	RD41002820	R, CARBON 10K 1/4W J
R914	RD42701820	R, CARBON 2.7K 1/4W J
R915	RD43302829	R, CARBON 33K 1/4W J
R916	RD41002820	R, CARBON 10K 1/4W J
R917	RD42203820	R, CARBON 220K 1/4W J

SYMBOL	PARTS NO.	DESCRIPTION
R918	RD44702827	R, CARBON 47K 1/4W J
R919, 920	RM31002818	R, METAL 10K 1/4W F
R921	RM93909221	R, METAL OXIDE FILM 39 J 2W
R922	RM92701924	R, METAL OXIDE FILM 2.7K 1/2W
R923	RD41001826	R, CARBON 1K 1/4W J
R924	RM93901120	R, METAL OXIDE FILM 3.9K 1W
R925	RD43300821	R, CARBON 330 1/4W J
R926	RD41201827	R, CARBON 1.2K 1/4W J
R927	RD43300821	R, CARBON 330 1/4W J
C901-904	CC01009256	CAP, CERAMIC 0.01uF 250V Δ
C905, 906	CE56804451	CAP, ELEC. 50LPSS6800M Δ
C907	CE04705255	CAP, ELEC. 470uF 25V
C908	CE04705255	CAP, ELEC. 470uF 25V
C909, 910	CE01005258	CAP, ELEC. 100uF 25V
C911	CE41006250	CAP, ELEC. 10uF 25V
C912	CE01005258	CAP, ELEC. 100uF 25V
C913	CE02205504	CAP, ELEC. 220uF 50V
C914	CE03306250	CAP, ELEC. 33uF 25V
C915	CE04705255	CAP, ELEC. 470uF 25V
C916	CE02205164	CAP, ELEC. 220uF 16V
C917	CE02205255	CAP, ELEC. 220uF 25V
C918	CE01005258	CAP, ELEC. 100uF 25V
C919, 920	CE02205103	CAP, ELEC. 220uF 10V
C921	CE02205164	CAP, ELEC. 220uF 16V
D901	DD10000020	DIODE KBL-02 Δ
D902	DD10000068	DIODE IN4003
D903	DD10000068	DIODE IN4003
D904-906	DD20000028	DIODE RD20E
D907	DD20000028	DIODE RD20E
D908	DD20000193	DIODE RD15E
D909	DD20000181	DIODE RD6.2E
D910	DD20000193	DIODE RD15E
Q901	TR30000121	TRANSISTOR 2SC2274 (E, F)
Q902	TR10000140	TRANSISTOR 2SA984K (E, F)
Q903	TR30000327	TRANSISTOR 2SC536G
Q904	TR10000126	TRANSISTOR 2SA608K (F, G)
Q905	TR30000029	TRANSISTOR 2SD313D
Q906	TR30000327	TRANSISTOR 2SC536G
Q907	TR30000080	TRANSISTOR 2SD863 (E, F)
S16-S21	SH16000151	6 KEY PUSH SW 4TR-2629A
S22, 23	SH12000351	2 KEY PUSH SW 4TR-2501
R415, 416	RM81001612	R, METAL MK2001KFECZ.
R417, 418	RM81003610	R, METAL MK2100KFECZ.
C401, 402	CS31511318	CAP, POLYSTYRENE 160V 150P
C403, 404	CL31006258	CAP, LOW NOISE U25V10LN
C405, 406	CS41010417	CAP, STYROL 1000P 50V
C407, 408	CS42011417	CAP, STYROL 200P 50V
C409, 410	CS44310412	CAP, STYROL 4300P 50V
C411, 412	CE01007504	CAP, ELEC. 1uF 50V
C413, 414	CP11008330	CAP, MP 0.1uF 100V
C415, 416	CE01005258	CAP, ELEC. 100uF 25V
IC401	IC000001693	IC NE5532AN
C417, 418	CC05009457	CAP, CERAMIC 0.047uF 50V
R501, 502	RM81001612	R, METAL MK2001KFECZ.
R503, 504	RM84750619	R, METAL MK2475RFECZ.
R505, 506	RM84752616	R, METAL MK247K5FECZ.
R507, 508	RM81001612	R, METAL MK2001KFECZ.
R509, 510	RM31802811	R, METAL 17.8K 1/4 F
R511, 512	RM84752616	R, METAL 47.5K 1/4W F
VR502	RV10001644	R, VARIABLE 4TR-2856 100KMN
C501, 502	CE51006507	CAP, ELEC. U50V10RC2
C503, 504	CS34712311	CAP, POLYSTYRENE 47P 160V
C505, 506	CE51006507	CAP, ELEC. U50V10RC2
C507, 508	CE01005258	CAP, ELEC. 100uF 25V
IC501	IC000001693	IC NE5532AN
R601, 602	RM81821615	R, METAL MK21K82FECZ.
R603, 604	RM84752616	R, METAL MK247K5FECZ.
R605, 606	RM31501811	R, METAL 1.5K 1/4W F
R607, 608	RM34750818	R, METAL 475 1/4W F
R609, 610	RM36811811	R, METAL 6.81K 1/4W F

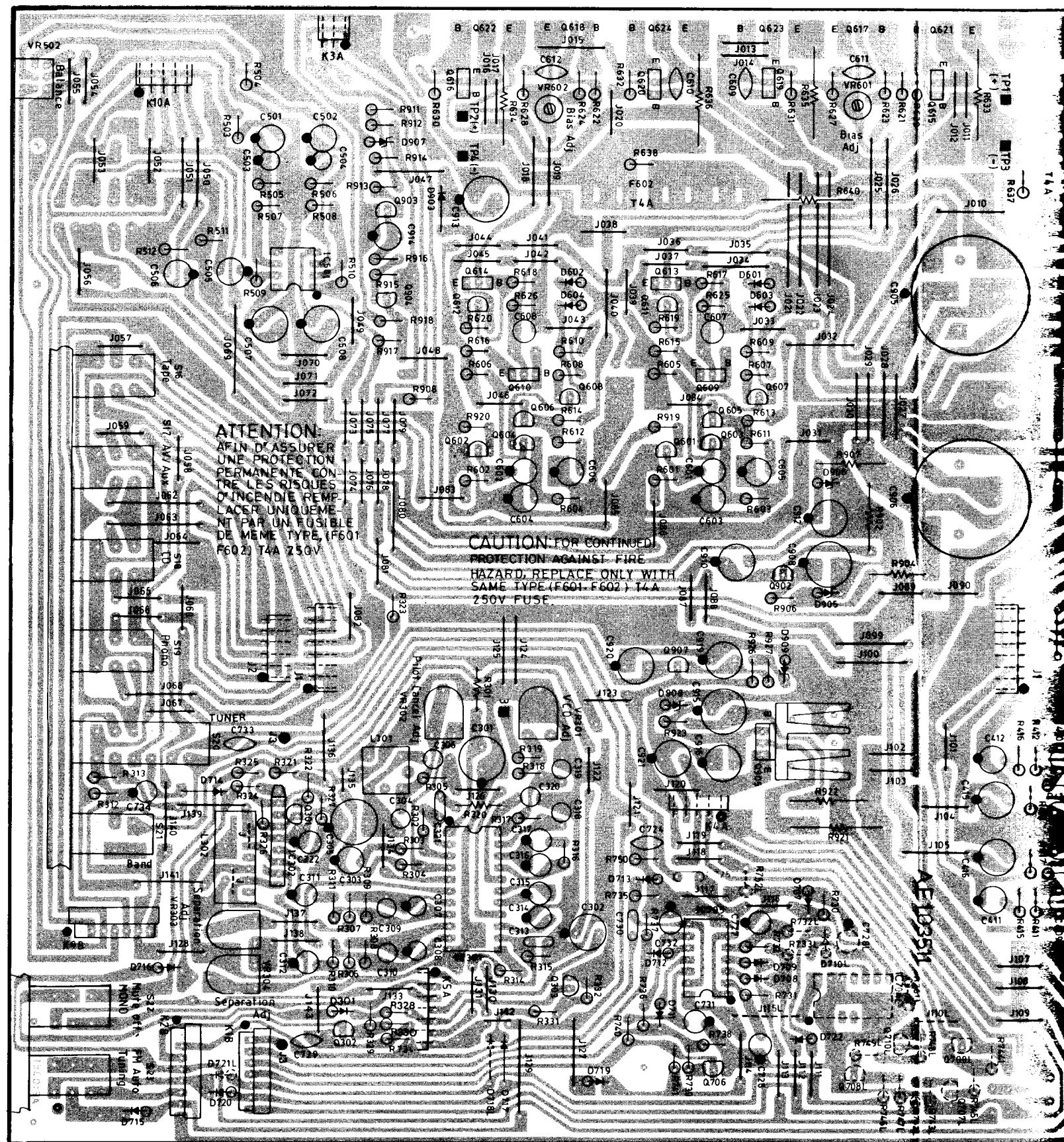
SYMBOL	PARTS NO.	DESCRIPTION
R611, 612	RM84750619	R, METAL 475R 1/4W F
R613, 614	RM88251610	R, METAL MK28K25FECZ.
R615, 616	RM34759810	R, METAL 47.5 1/4W F
R617, 618	RM31002828	R, METAL 10K 1/4W F
R619, 620	RM31000810	R, METAL 100 1/4W F
R621, 622	RM36811811	R, METAL 6K81 1/4W F
R623, 624	RM32211813	R, METAL 2.21K 1/4W F
R625, 626	RM33322813	R, METAL 33.2K 1/4W F
R627, 628	RM32209818	R, METAL 22 1/4W F
R629, 630	RM32210810	R, METAL 221 1/4W F
R631, 632	RM32210810	R, METAL 221 1/4W F
R633-636	RM90228220	R, METAL 0.22 J 2W
R637, 638	RM33322813	R, METAL 33.2K 1/4W F
R639, 640	RM90228220	R, METAL 0.22 J 2W
R641, 642	RM91009127	R, METAL 10 J 1W
C601, 602	CE51006507	CAP, ELEC. U50V10RC2
C603, 604	CS31211300	CAP, STYROL 120P 160V
C605, 606	CE51005904	CAP, ELEC. U6.3V100RC2
C607, 608	CS43911424	CAP, STYROL 390P J 50V
C609, 610	CS31511318	CAP, STYROL 150P J 50V
C611, 612	CC41010439	CAP, CERAMIC 0.001uF 50V
C613, 614	CM11008434	CAP, MYLAR 104 K 50V
C615	CC05009457	CAP, CERAMIC 0.047uF 50V
C616, 617	CE01007504	CAP, ELEC. 1uF 50V
D601-604	DD10000100	DIODE IN4148
Q601, 602	TR30000327	TRANSISTOR 2SC536G
Q603-608	TR10000023	TRANSISTOR 2SA1016(F,G)
Q609, 610	TR30000169	TRANSISTOR 2SC1941(K,L)
Q611, 612	TR10000023	TRANSISTOR 2SA1016(F,G)
Q613, 614	TR10000047	TRANSISTOR 2SB631K(E,F)
Q615, 616	TR40000069	TRANSISTOR 2SD600K(E,F)
Q617, 618	TR40000069	TRANSISTOR 2SD600K(E,F)
Q619, 620	TR10000047	TRANSISTOR 2SB631K(E,F)
Q621, 622	TR40000045	TRANSISTOR 2SD1047(D,E)
Q623, 624	TR20000040	TRANSISTOR 2SB817(D,E)
VT601, 602	RV40000022	R, SEMI-FIXED VM6CKPV-1S-B 2.2K
F601, 602	FU25000028	FUSE 125V 4A UL/CSA Δ
	FU23000190	FUSE 250V T4A S Δ
R730	RD44703820	R, CARBON 470K 1/4W J
R731, 732	RD41003823	R, CARBON 100K 1/4W J
R732L	RD41003823	R, CARBON 100K 1/4W J
R733L	RD41003823	R, CARBON 100K 1/4W J
R734	RD44702827	R, CARBON 47K 1/4W J
R735	RD44703820	R, CARBON 470K 1/4W J
R736	RD41003823	R, CARBON 100K 1/4W J
R737	RD41003823	R, CARBON 100K 1/4W J
R738	RD41003823	R, CARBON 100K 1/4W J
R739	RD44702827	R, CARBON 47K 1/4W J
R740	RD41003823	R, CARBON 100K 1/4W J
R741	RD41002820	R, CARBON 10K 1/4W J
R742L	RD41003823	R, CARBON 100K 1/4W J
R743L	RD44702827	R, CARBON 47K 1/4W J
R744L	RD44702827	R, CARBON 47K 1/4W J
R745L	RD41002820	R, CARBON 10K 1/4W J
R746L	RD41003823	R, CARBON 100K 1/4W J
R747L	RD44702827	R, CARBON 47K 1/4W J
R748L	RD44702827	R, CARBON 47K 1/4W J
R749L	RD41002820	R, CARBON 10K 1/4W J
R750	RD44702827	R, CARBON 47K 1/4W J
R751L	RD41003823	R, CARBON 100K 1/4W J
R752L	RD41003823	R, CARBON 100K 1/4W J
C724	CC41010439	CAP, CERAMIC 0.001uF 50V
C725	CM14709423	CAP, MYLAR 473 J 50V
C726, 727	CE41007503	CAP, ELEC. 1uF 50V
C728L	CE41007503	CAP, ELEC. 1uF 50V
C729	CC41010439	CAP, CERAMIC 0.001uF 50V
C730	CM14709423	CAP, MYLAR 473 J 50V
C731	CE42207500	CAP, ELEC. 2.2uF 50V
C732	CE42207500	CAP, ELEC. 2.2uF 50V

SYMBOL	PARTS NO.	DESCRIPTION
C733	CC41009462	CAP, CERAMIC 0.01uF 50V
C734	CE04707252	CAP, ELEC. 4.7uF 25V
D707-709	DD10000100	DIODE IN4148
D710L	DD10000100	DIODE IN4148
D711-717	DD10000100	DIODE IN4148
D718L	DD10000100	DIODE IN4148
D719, 720	DD10000100	DIODE IN4148
D721L	DD10000100	DIODE IN4148
D722	DD10000100	DIODE IN4148
Q706	TR30000327	TRANSISTOR 2SC536G
Q707L, 708L	TR30000327	TRANSISTOR 2SC536G
Q709L, 710L	TR10000126	TRANSISTOR 2SA608(F,G)
IC704L	IC00002340	IC TC4081BP
	AF103521	P.C.B. ASSEMBLY
D801	DD10000100	DIODE IN4148
S2-S13	SHS6000070	KEY BOARD SW C-4004-T
	AF103531	P.C.B. ASSEMBLY
C001	CK00000035	SPARK KILLER DE7150F472M Δ
S1	SH40000120	POWER SW C3600B-T Δ
	AF103541	P.C.B. ASSEMBLY
R517, 518	RM32211813	R, METAL 2.21K 1/4W F
R519, 520	RM31821817	R, METAL 1.82K 1/4W F
R521, 522	RM32212817	R, METAL 22.1K 1/4W F
R523, 524	RM32211813	R, METAL 2.21K 1/4W F
R525, 526	RM31501811	R, METAL 1.5K 1/4W F
R527, 528	RM38251810	R, METAL 8.25K 1/4W F
C509, 510	CM01008423	CAP, MYLAR 104 J 50V
C511, 512	CM01208424	CAP, MYLAR 124 J 50V
C513, 514	CS41510414	CAP, STYROL 1500P 50V
C515, 516	CM01008423	CAP, MYLAR 104 J 50V
VR503, 504	RV10001632	R, VARIABLE 4TR-2588 20KbX2
	AF103551	P.C.B. ASSEMBLY
VR501	RV10001553	R, VARIABLE 4TR-2775 50KbX2
OTHERS		
	AB00000341	BOTTOM BOARD 3TTH-10A#2
	AF10000249	FRONT CHASSIS 2TQS-2
	AM00001574	CHASSIS BODY 2TTU-3A
	AR10000574	PRINTED REAR CHASSIS TRP-605
	AS01000221	SIDE CHASSIS 3TTH-8A#1
	LB07068000	AM LOOP ANT. TRL-345
	PT25307102	POWER TRANSFORMER TT-253GF Δ
	FT00000229	PLASTIC FOOT 4TSH-19#2 50Fx14H
	TP20000265	4P SPEAKER TERMINAL 4TR-2267#2
	CD00000218	AC CORD SPT-2 AWG#18 4TR-670#4 Δ (U,C,A,J)
	CD00000292	AC POWER CORD UP-401F 4TR-2631#1 Δ (D)
	CD00000048	AC POWER CORD 4TR-1037 Δ (H,E,K2)
	CD00000085	AC POWER CORD C-2504A Δ (K1)
	CD00000115	AC POWER CORD C-3763-T Δ (G)
	NP00001949	NAME STICKER AC120V (U,A,H6) 4TR-2828A#1 TNP-382
	NP00001974	NAME STICKER AC120V (C) 4TR-2828A#4 TNP-385
	NP00001962	NAME STICKER AC240V TNP-384 4TR-2828A#3 (H3,H4,E6,K1,G)
	NP00001998	NAME STICKER AC230V (E8) 4TR-2828A#5 TNP-389

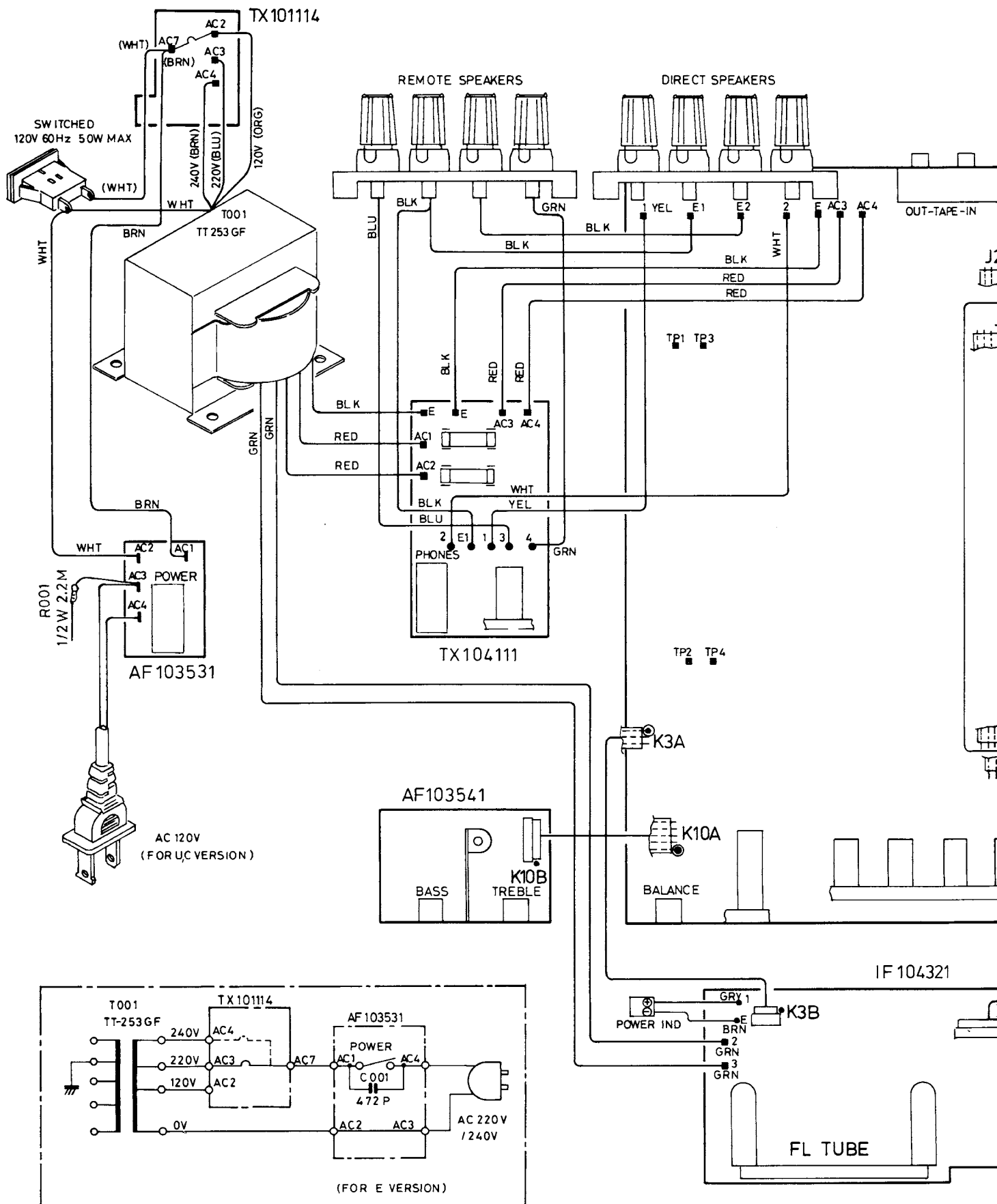
SYMBOL	PARTS NO.	DESCRIPTION
	NP00002012	NAME STICKER AC100V (J) 4TR-2828A#6 TNP-391
	NP00001950	NAME STICKER AC220V 4TR-2828A#6 TNP-383
	SC00000131	AC CORD STOPPER SN-5N-4 ⚠ (A,K1)
	SC00000039	AC CORD STOPPER SR-6W-1 ⚠ (D)
	SC00000027	AC CORD STOPPER SR-4N-4 ⚠
	SA00001450	AC OUTLET SOCKET S-16519 (C,U,A,H6,J) ⚠
	AH20000540	HEAT SINKER BOARD 4TTH-11#2
	AA10000972	FRONT PANEL 2TQS-1 TFP-657
	AW00000617	PANEL WINDOW 4TQS-7#1
	BU00001145	POWER RING 4TQF-13 14x14
	BU00001169	KNOB RING 4TQF-17 39F
	BU00001212	PUSH BUTTON RING PR4-09A00T
	BU00001248	PUSH BUTTON RING 3TQS-4
	BU00001250	PUSH BUTTON RING 4TQS-5
	KB20002681	POWER BUTTON 4TQF-15 14x14
	KB20002760	TACT BUTTON 2TQN-6
	KB20002759	PUSH BUTTTON PR4-13A00T
	KB20002826	PUSH BUTTON 4TQS-6 5x19.2
	OM10001272	ORNAMENTAL SIDE BOARD 4TR-2797#2 H=80MM
	OM70000065	PUSH BUTTON CONNECTOR 4TTL-15
	AU00001201	TOP COVER POLY 3TTF-5#7
	KB10001722	KNOB 4TQF-18 13F
	KB10001760	KNOB 4TQG-6 33F
	SR00000882	UPPER COVER SPACER 4TR-2418
	MN10002872	OWMER'S MANUAL RX-940AX/AXL
	KB20002693	PUSH BUTTON 4TQF-16 5x10
	OM10001430	FL ORNAMENTAL PLATE 4TTU-7#2 TFP-658
	PL00001142	STYROL SIDE MOULDING 2TTF-9A#2 TZ-165-1

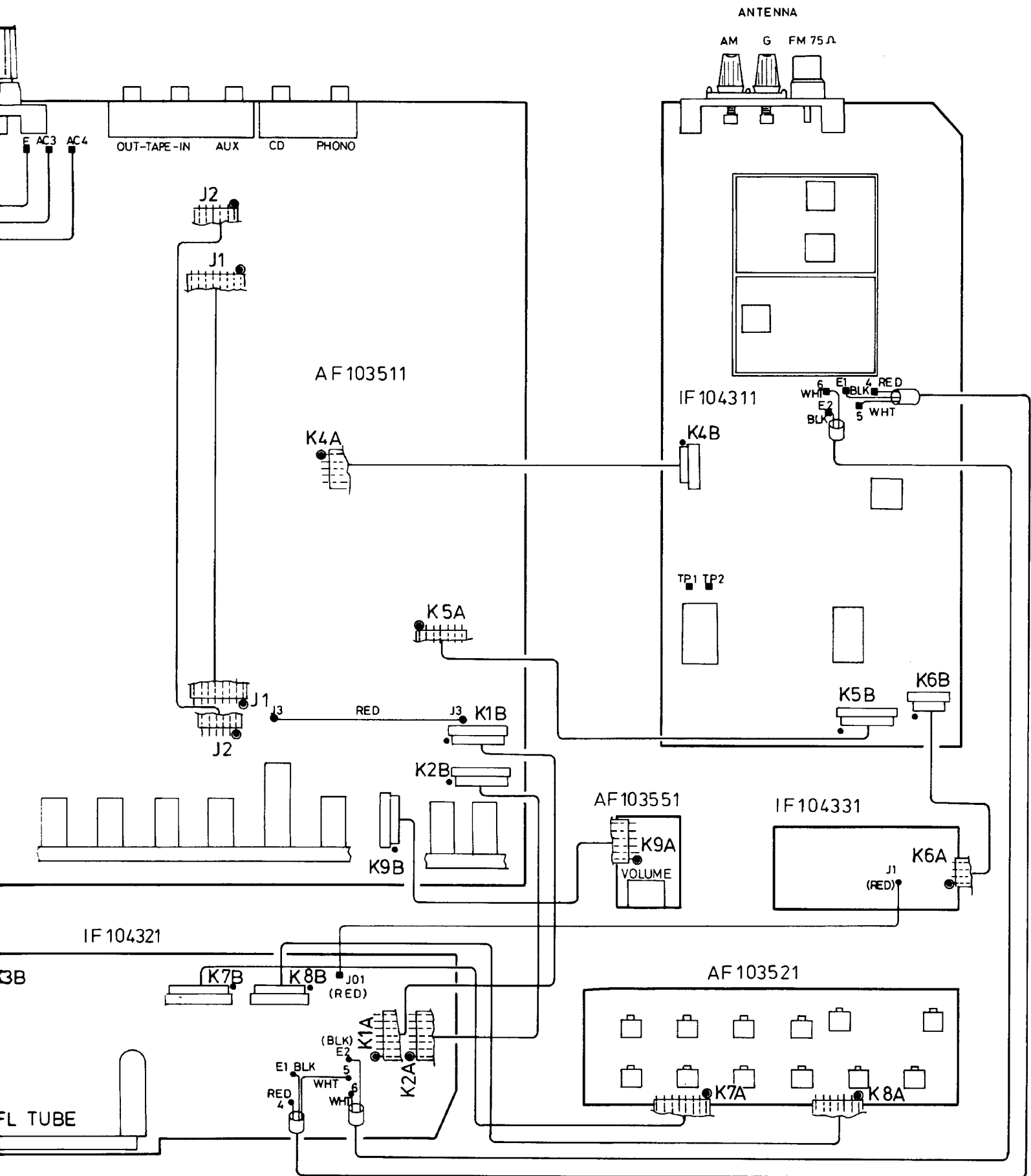


Printed Circuit Boards



Wiring Diagram

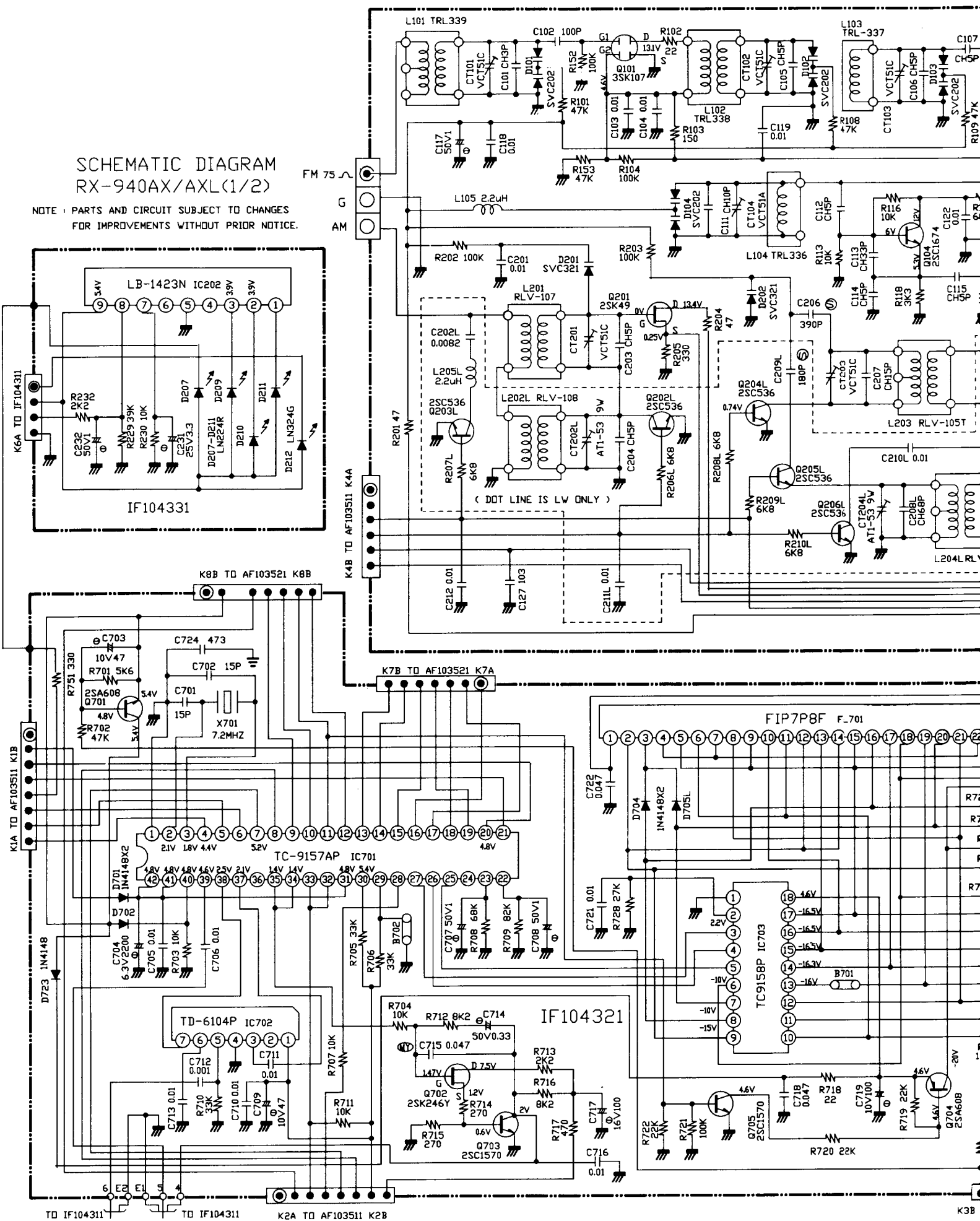


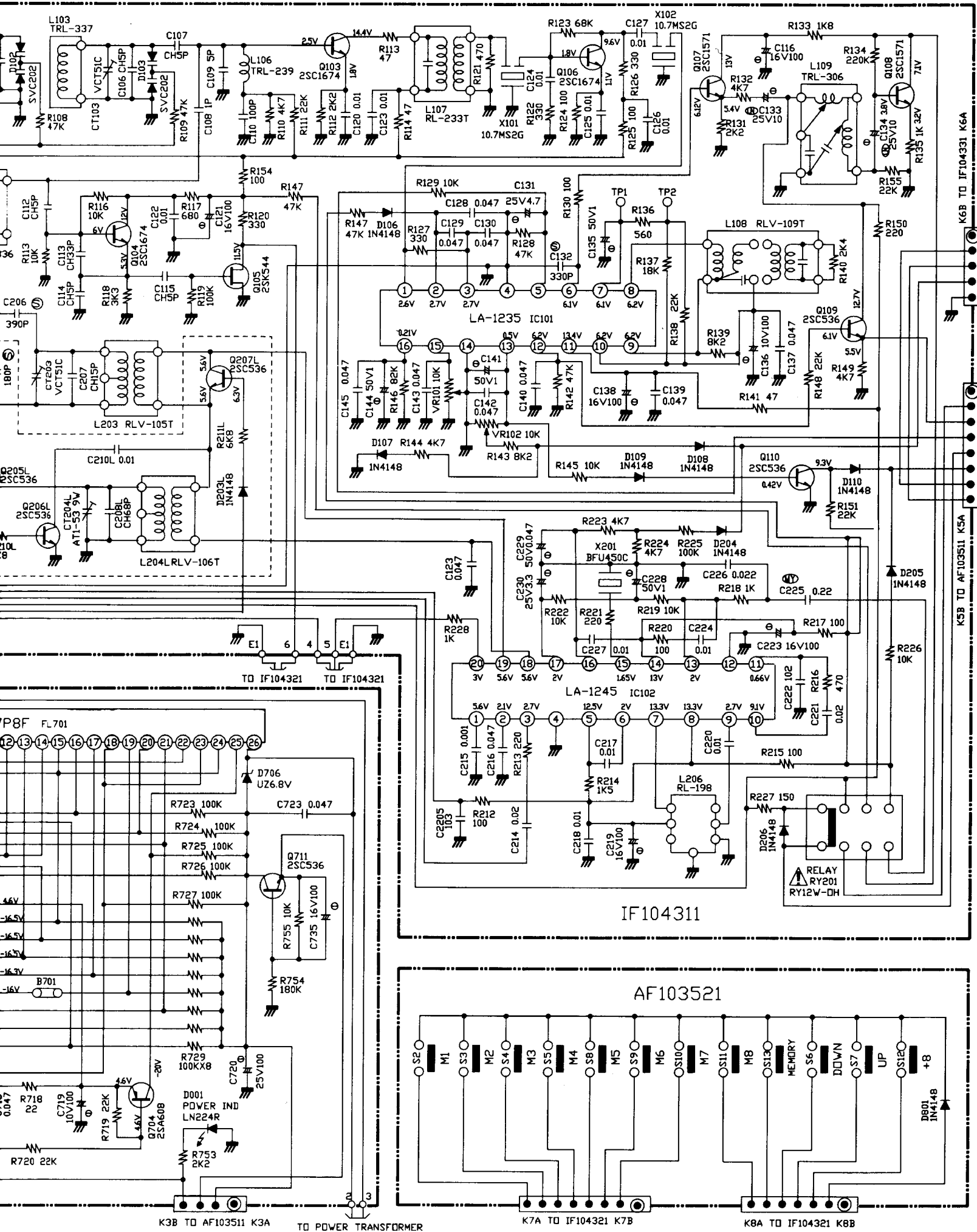


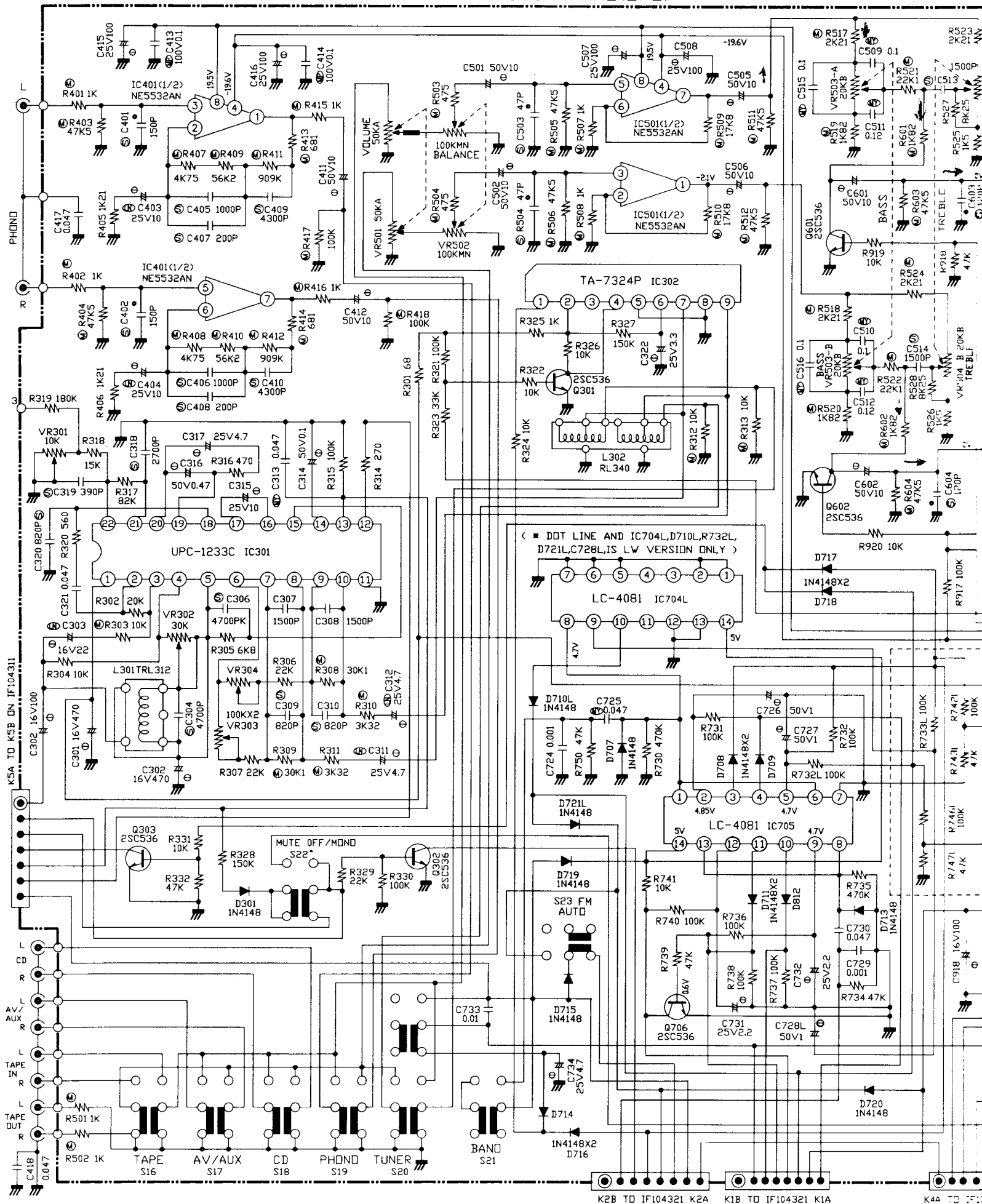
Schematic Diagram

SCHEMATIC DIAGRAM
RX-940AX/AXL(1/2)

NOTE : PARTS AND CIRCUIT SUBJECT TO CHANGES
FOR IMPROVEMENTS WITHOUT PRIOR NOTICE.







INSTRUCTION FOR SERVICING PERSONNEL:

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