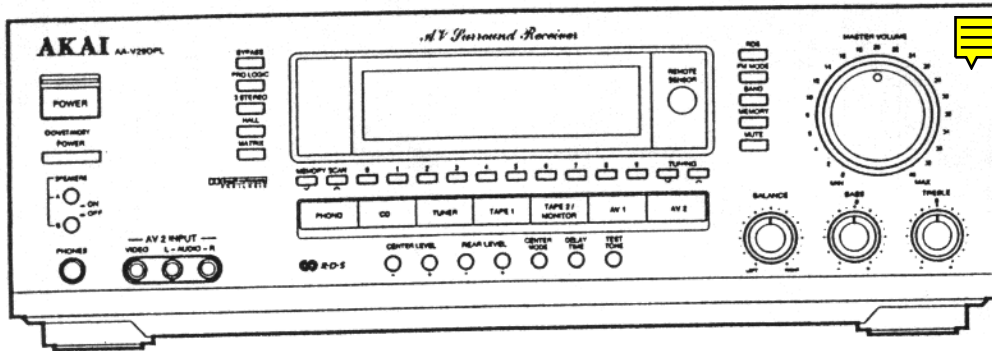


AKAI SERVICE MANUAL



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V80659

AV SURROUND STEREO RECEIVER

SPECIFICATION

MODEL: AA-V29DPL

AMPLIFIER

1. When SURROUND is "OFF"

Sensitivity and Impedance

PHONO: 2.5mV/47kΩ

CD, TAPE, AV: 180mV/47kΩ

Frequency Response

PHONO (RIAA STANDARD CURVE)

: 50Hz ~ 15KHz (±1dB)

CD, TAPE, AV: 30Hz ~ 75KHz

Signal to Noise Ratio

PHONO (IHF-A) : 65dB

CD, TAPE, AV (IHF-A) : 85dB

Power Output

80W, 1KHz, 8ohm, 0.5% THD

2. When SURROUND is "ON"

(4 Ch surround mode)

Power Output

Front : 50 + 50W (1KHz, 0.1% THD, 8ohm)

Rear : 15 + 15W (1KHz, 0.5% THD, 8ohm)

3. When Dolby Pro Logic is "ON"

Power output

Front : 50 + 50W (1KHz, 0.1% THD, 8ohm)

Center : 50W (1KHz, 0.1% THD, 8ohm)

Rear : 15 + 15W (1KHz, 0.5% THD, 8ohm)

TUNER

1. FM SECTION

Frequency Range : 87.50MHz to 108.00MHz
 (50KHz step)

Sensitivity (S/N 30dB) : 3.0 μV

Total Harmonic Distortion

MONO: 0.2%, STEREO: 0.5%

Signal to Noise Ratio

MONO: 65dB, STEREO: 60dB

Frequency Response : 20Hz ~ 15KHz

Image Rejection : 60dB

Stereo Separation (1KHz) : 40dB

2. AM SECTION

Frequency Range :

522KHz to 1620KHz (9KHz step)

Sensitivity (S/N 30dB) : 60dB

Total Harmonic Distortion : 2%

Signal to Noise Ratio : 40dB

Image Rejection : 35dB

GENERAL

Power consumption : 170W

Power supply : 230V, 50Hz

Dimension (W x H x D) : 425 x 145 x 394 mm

Weight : 9.35Kg

Standard accessories

Remote control unit.....	1
Operator's manual.....	1

* Because we continually strive to improve our products, we reserve the right to alter specifications with notice.

CONTENTS

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III. MEASUREMENTS AND ADJUSTMENTS

ALIGNMENT INSTRUCTIONS

EQUIPMENT NEEDED:

- AM Signal Generator
- FM Signal Generator
- Oscilloscope
- VTVM (AC,DC)
- Test loop antenna (AM Adjustment)
- Dummy antenna (FM Adjustment)
- Stereo signal modulator (RDS IN)

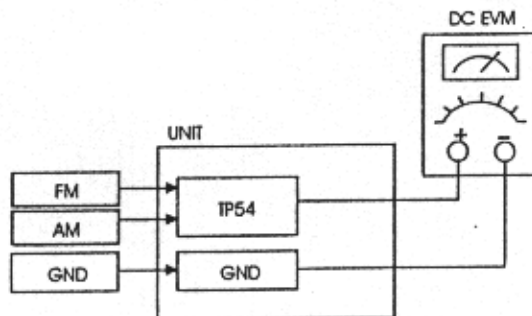
IMPORTANT

1. Check power-source voltage.
2. Set the function switch to band aligned.
3. Keep the signal input as low as possible to adjust accurately.
4. Modulation and modulation frequency.

Band \ Item	Modulation	Modulation frequency
AM	30%	400Hz
FM	100% (75KHz Dec.)	400Hz

1. TUNING FREQUENCY RANGE ADJUSTMENTS

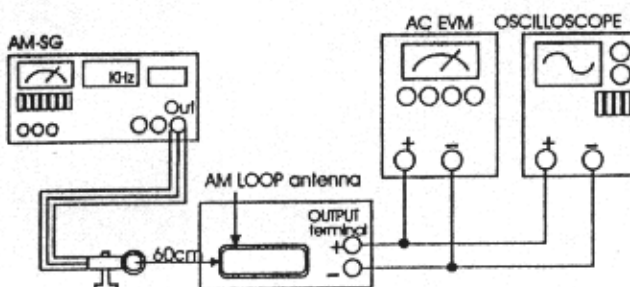
(FM,AM) DC VOLTMETER CONNECT TO TEST POINT TP54 AND GND



NO	Band	Frequency	Adjust for	Adjustment
1	FM	87.50MHz	1.5V	L7
2	AM	522KHz	1V	L502

2. AM TRACKING ADJUSTMENT

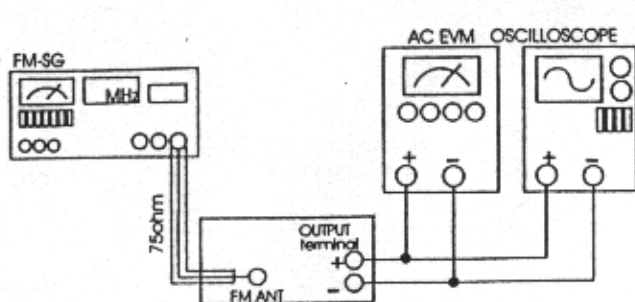
Signal Generator Connects to the AM ANT. Coil through the loop antenna.
Adjust for the indication of VTVM of the wave form scope to be maximum.



Band	Step	Frequency	Adjust for	Adjustment
AM	1	612KHz	Maximum sensitivity	L501,L502
	2	1503KHz	Maximum sensitivity	CT51
	3	Repeat steps 1 and 2 several times		

3. FM RF ADJUSTMENT

Signal Generator Connects to the FM ANT JACK(FM IN) through the dummy.



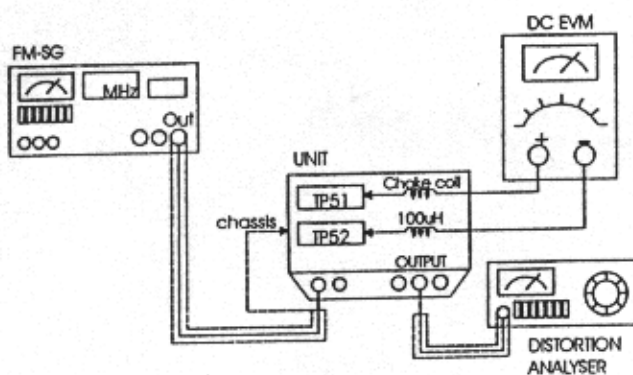
No.	Frequency	Adjust for	Adjustment
1	87.50MHz	Maximum sensitivity	L2,L5,L6
2	Repeat steps 1 and 2 several times		

4. FM MONO DISTORTION ADJUSTMENT

DC VOLTMETER CONNECT TO TP51(-),TP52(+) Through the choke coil(100uH)

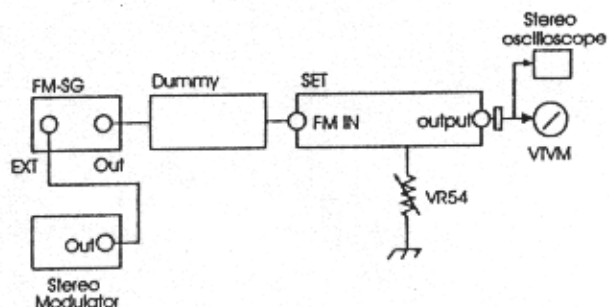
Signal Generator Connects to the FM ANT JACK(FM IN) through the dummy.

Distortion Meter..... Connect to the output.



No.	Frequency	Adjust for	Adjustment
1	100.10MHz	DC Voltmeter 0V	T501
2	100.10MHz	Minimum T.H.D.	T502
3	Repeat steps 1 and 2 several times		

5. FM STEREO SEPARATION



Pilot signal	Adjust for	Adjustment
ON	Different of R or L must be maximum	VR54

NOTE : In case of adjusting the stereo separation of input is L(or R) channel,R (or L) channel must be maximum.

6. FM/AM AUTO STOP LEVEL ADJUSTMENT

FM Signal Generator Connect to the FM ANT JACK(FM IN) through the dummy.

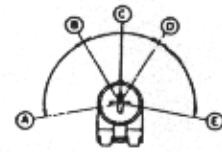
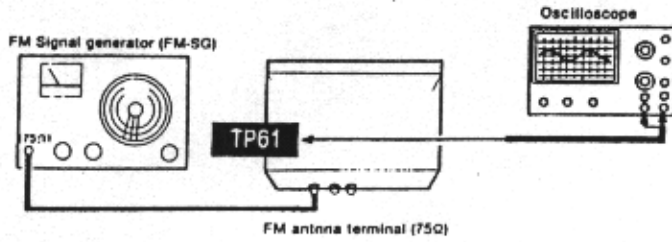
Signal Generator Connect to the AM ANT. Coil through the loop antenna.

Band	Step	Frequency	Adjust for	Adjustment
FM	1	100.1MHz, 35dB	TUNED Display OFF	VR52
	2	100.1MHz, 35dB	TUNED Display ON	VR52
AM	1	999KHz, 80dB	TUNED Display OFF	VR51
	2	999KHz, 80dB	TUNED Display ON	VR51

7. FM RDS ADJUSTMENT

FM Signal Generator(RDS IN) Connect to the FM ANT JACK(FM IN) through the dummy.

Oscilloscope..... Connect to TP53(+), GND(-)



VR62

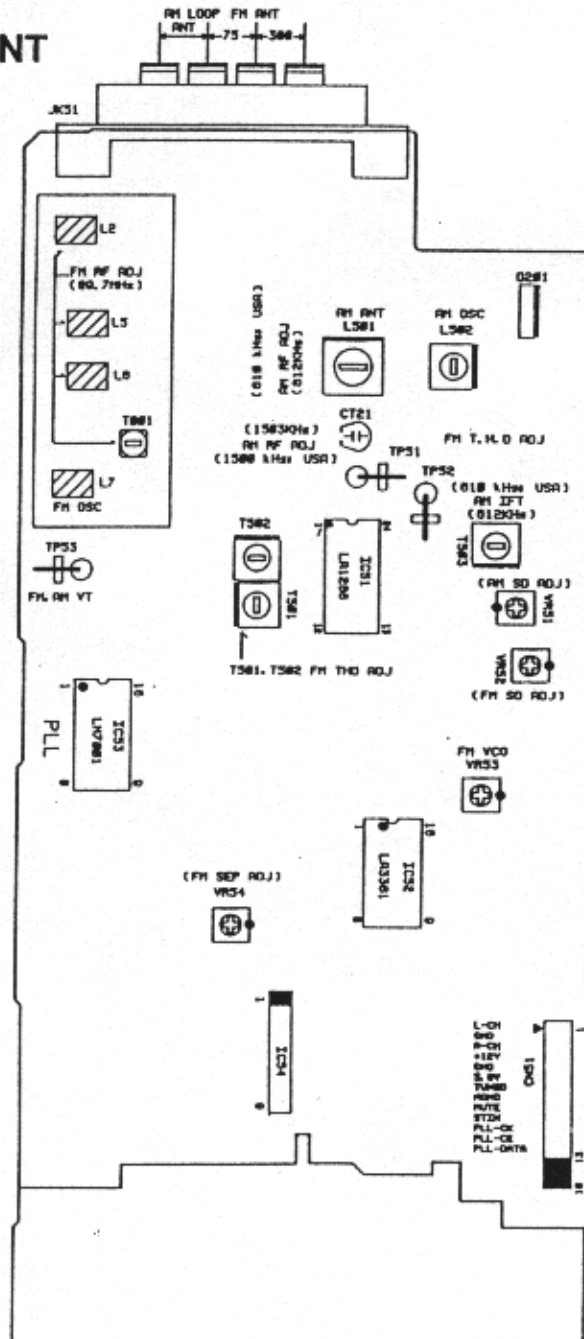
A-B,D-E : RDS OFF position.

B-D : RDS ON position.(Indicator lighting)

C : Adjust point of RDS circuit.

(TP53:1.0 ~ 1.2V)

ADJUSTMENT POINT



IC PIN FUNCTION (IC : ANAM1174M)

PIN No.	PIN NAME	I/O	DESCRIPTION
1	VDD	-	Power supply (+5V)
2~5	OPTION	I	Devices option port
6	TUNER MUTE	O	Tuner mute on/off control output
7	MONO	I	MONO control input
8	RDS MUTE	O	RDS mute on/off control output
9	FUNCTION MUTE	O	Function mute on/off control output
10	N.C	-	Non connection
11	RDS DATA	O	RDS data output
12	N.C	-	Non connection
13	RDS CLOCK	O	RDS clock output
14	STEREO IN	I	Stereo in control input
15	TUNED	I	Tuned control input
16	PROTECT IN	I	Input form protection circuit
17~21	KEY MATRIX	I	Key MATRIX ports
22	VSS	-	GND
23	AVSS	-	GND
24	VAREF	-	A/D convertor reference voltage
25	VDD	-	Power supply (+5V)
26	BACK UP	I	Back-up mode control input
27	TEST	-	GND
28,29	N.C	-	Non connection
30	VSS	-	GND
31	XIN	I	8MHz Crystal connecting terminal
32	XOUT	O	8MHz Crystal connecting terminal
33	RESET	I	System reset pulse input
34	REMOTE IN	I	Remote control signal input
35		-	
36		-	
37	POWER ON/OFF	O	Power on/off control output
38	SURROUND ON/OFF	O	Surround on/off control output
39	-20dB MUTE	O	-20dB mute on/off control output
40		-	
41	SURROUND CLOCK	O	Surround clock output
42	PLL CE	O	PLL CE output
43	STROBE	O	STROBE output
44	REQ	O	REQ output
45	CLOCK	O	CLOCK output
46	DATA	O	DATA output
47	AV2 CONTROL	O	AV2 Video function control output
48	AV1 CONTROL	O	AV1 Video function control output
49	CD CONTROL	O	CD Video function control output
50	VFLP	-	(-33V) Negative power supply for FIP blinking
51~74	SEGMENT	O	FIP SEGMENT control outputs
75~89	GRID	O	FIP grid control outputs
90	N.C	-	Non connection
91	VR UP	O	Volume UP control outputs
92	VR DOWN	O	Volume DOWN control outputs
93	VR LED	O	Volume LED ON/OFF control outputs
94	POWER LED	O	Power LED ON/OFF control outputs
95~98	N.C	-	Non connection
99,100	SEGMENT	O	FIP SEGMENT control outputs

ACTIVE DEVICES VOLTAGE

TEST CONDITION

- Function : CD (No signal)
- Surround mode : OFF (BYPASS)
- Unit : V

Ref. No.	E	C	B	Ref. No.	E	C	B
Q1,Q2	0	0	-11.7	Q713,Q714	-0.6	-54.4	-1.1
Q101,Q103	0	0	-11.7	Q715,Q716	0	57.3	0.6
Q102,Q104	0	0	-11.9	Q717,Q718	0	-57.3	-0.6
Q105,Q106	0.6	-52.6	0	Q719,Q720	0	0	-11.7
Q107,Q108	0.6	-52.6	0	Q721,Q722	0	0	-11.9
Q109,Q110	-1.1	1.2	-0.5	Q723,Q724	0	11.7	0
Q111,Q112	-53.1	-0.6	-52.6	Q725	11.8	0	11.8
Q113,Q114	-53.1	-1.1	-52.6	Q726	0	11.5	0
Q115,Q116	0.6	54.4	1.2	Q727	0	11.7	0
Q117,Q118	-0.6	-54.4	-1.1	Q728	0	11.7	0
Q119,Q120	0	57.3	0.6	Q729	0	1.1	0
Q121,Q122	0	-57.3	-0.6	Q730	12	0	12
Q123,Q124	0	11.7	0	Q801	55	57	55.6
Q125	12	0	12	Q802	57	56	55
Q126	0	12	0	Q803	0	0	0.6
Q127	0	12	0	Q804	-55	-57	-55.6
Q128	12	0	12	Q805	-57	-56	-55.7
Q130	0	11.7	0	Q806	12	-53	0
Q131,Q132	0	0	2.1	Q807	0	12	11.4
Q261,Q262,Q263	3.2	0	2.6	Q808	0	0	0.6
Q264,Q265,Q266	3.7	2	3.1	Q901	5.6	5.6	5
Q701,Q702	0.6	-52.6	0	Q902	0	4.9	0
Q703,Q704	0.6	-52.6	0	Q904	4.5	0	4.5
Q705,Q706	-53.1	-0.6	-52.6	Q905	5	0	5
Q707,Q708	-53.1	-1.1	-52.6	Q908	5	5	0
Q709,Q710	-1.1	1.2	-0.5	Q909	0	0	5
Q711,Q712	0.6	54.4	1.2	Q910	0	5.6	0

IC27		
PIN No.	DESCRIPTION	VOLTAGE
1	IN/OUT 1	0
2	OUT/IN 1	2.6
3	OUT/IN 2	2.6
4	IN/OUT 2	0
5	CONT 2	0
6	CONT 3	0
7	VSS	0
8	IN/OUT 3	0
9	OUT/IN 3	2.6
10	OUT/IN 4	2.6
11	IN/OUT 4	0
12	CONT 4	0
13	CONT 1	0
14	VCC	6

IC1,IC4,IC31,IC32,IC35		
PIN No.	DESCRIPTION	VOLTAGE
1	A OUTPUT	0
2	A - INPUT	0
3	A + INPUT	0
4	VEE	-11.7
5	B + INPUT	0
6	B - INPUT	0
7	B OUTPUT	0
8	VCC	11.7

IC42		
PIN No.	DESCRIPTION	VOLTAGE
1	RLC2	4
2	RLC1	4
3	RLC4	3.6
4	RLC7	3.6
5	RLC3	4
6	RLC8	4
7	RLC6	3.4
8	LLI	4
9	LBPf	4
10	RLI	4
11	RBPF	4
12	LT	4
13	RT	4
14	LIN	4
15	RIN	4
16	HOLDC	4
17	VCC	10
18	NGC3	4
19	NGC2	4
20	NGC1	2.5
21	VDD	4.8
22	DATA	DATA
23	SCK	SCK
24	REQ	REQ
25	IDS	0
26	VSS	0
27	LOUT	4
28	ROUT	4
29	CT	4
30	COUT	4
31	ST	4
32	SOUT	4
33	CMC	4
34	SMRO	4
35	SMRI	4
36	SD	4
37	SIMB	4
38	SIMA	4
39	L+R	4
40	L-R	4
41	GND	0
42	VREF	4
43	VREFG	4
44	IREF	1.4
45	DBIN	4
46	LPIN	4
47	DBC1	4
48	DBC2	4
49	DBC3	0
50	PSC3	4
51	PSC6	4
52	PSC2	4
53	PSC5	4
54	PSC1	4
55	PSC4	4
56	RLC5	3.4

IC2,IC3		
PIN No.	DESCRIPTION	VOLTAGE
1	VEE	-12
2	L1/L1	0
3	L2/L2	0
4	L3/LCOM1	0
5	L4/L3	0
6	LCOM1/L4	0
7	LS/LCOM2	0
8	L6/L5	0
9	LCOM2/L6	0
10	L7/LCOM3	0
11	L8/L7	0
12	LCOM3/LCOM4	0
13	STROBE	STROBE
14	GND	0
15	CK	CK
16	DATA	DATA
17	RCOM3/RCOM4	0
18	R8/R7	0
19	R7/RCOM3	0
20	RCOM2/R6	0
21	R6/R5	0
22	R5/RCOM2	0
23	RCOM1/R4	0
24	R4/R3	0
25	R3/RCOM1	0
26	R2/R2	0
27	R1/R1	0
28	VDD	11.7

IC43		
PIN No.	DESCRIPTION	VOLTAGE
1	VDD	4.7
2	XIN	1MHz
3	XOUT	1MHz
4	REQ	REQ
5	SCK	SCK
6	DATA	DATA
7	IDSW	0
8	IDFLAG	4.7
9	TEST1	0
10	TEST2	0
11	DGND	0
12	AGND	0
13	LPF2OUT	2.4
14	LPF2IN	2.4
15	OP2OUT	2.4
16	OP2IN	2.4
17	CC2	0.7
18	CC1	0.7
19	PEF	2.4
20	OP1IN	2.4
21	OP1OUT	2.4
22	LPF1OUT	2.4
23	LPF1IN	2.4
24	VCC	4.7

IC54		
PIN No.	DESCRIPTION	VOLTAGE
1	VCC	10.4
2	A OUTPUT	5.2
3	A - INPUT	5.2
4	A + INPUT	5.2
5	VEE	0
6	B + INPUT	5.2
7	B - INPUT	5.2
8	B OUTPUT	5.2
9	VCC	10.4

IC81		
PIN No.	DESCRIPTION	VOLTAGE
1	INPUT	18.3
2	GND	0
3	OUTPUT	12

IC82		
PIN No.	DESCRIPTION	VOLTAGE
1	GND	0
2	INPUT	-20
3	OUTPUT	-12

IC83		
PIN No.	DESCRIPTION	VOLTAGE
1	INPUT	11.5
2	GND	0
3	OUTPUT	5

IC84		
PIN No.	DESCRIPTION	VOLTAGE
1	INPUT	10.3
2	GND	0.6
3	OUTPUT	5.6

IC92		
PIN No.	DESCRIPTION	VOLTAGE
1	VOUT	5
2	GND	0
3	VCC	5

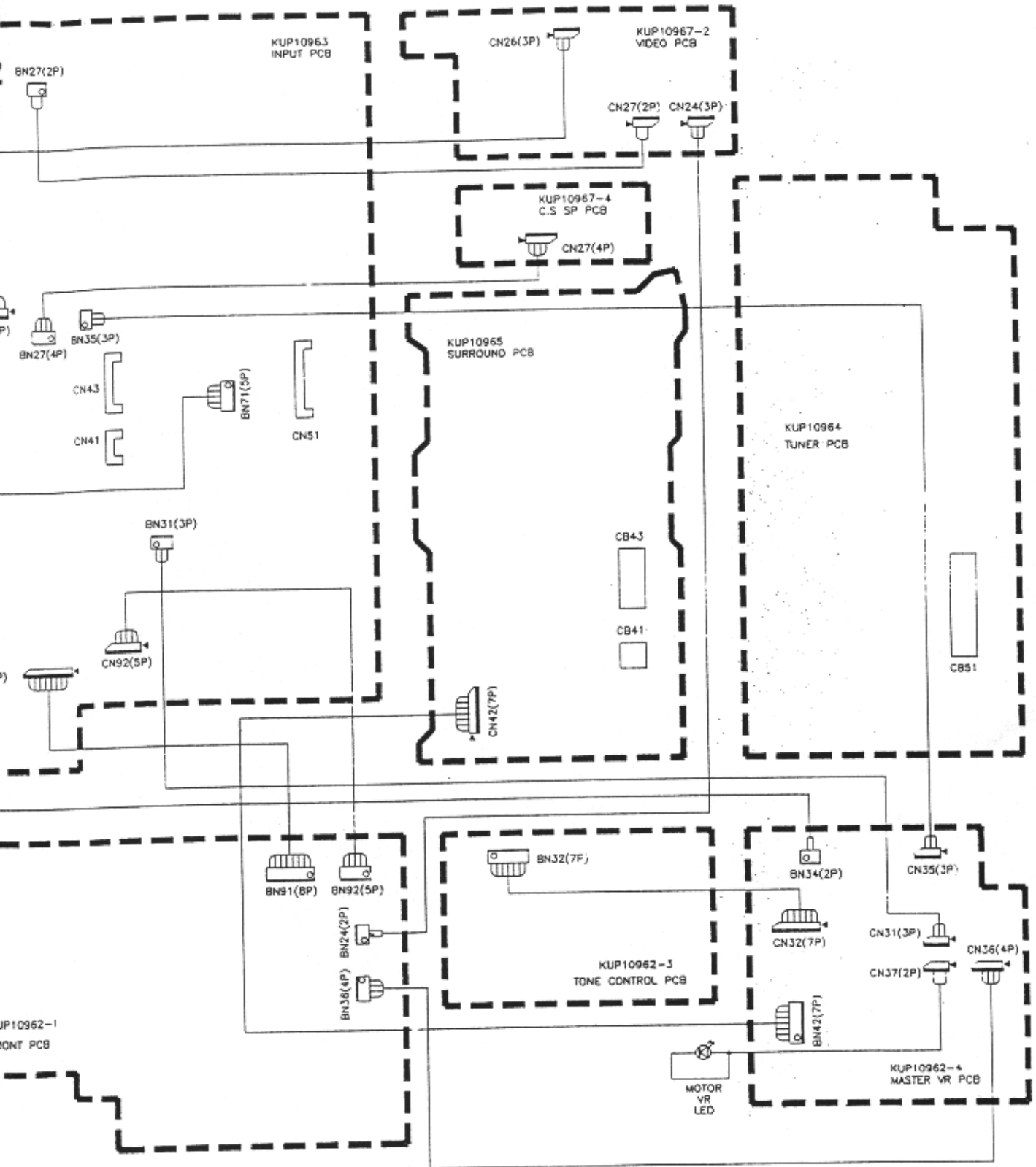
IC93		
PIN No.	DESCRIPTION	VOLTAGE
1	OUT	5
2	VDD	5
3	GND	0

IC51			
PIN No.	DESCRIPTION	FM	AM
1	FM IF IN	2.4	1
2	IF BYPASS	2.4	1
3	IF BYPASS	2.4	1
4	GND	0	0
5	FM DET OUT	10.7	10.7
6	FM DET IN	10.7	10.7
7	VCC	10.7	10.7
8	TUNED	0	0
9	AFC	3.7	3.7
10	FM IF	N.C	
11	AM IF	N.C	
12	FM OUT	3.2	3.1
13	STRQ	N.C	
14	AM NARROW	1.2	1.2
15	AM OUT	1.5	2.0
16	FM ADJ	1.5	0.6
17	AM ADJ	0	1.2
18	AM DET IN	2.4	2.0
19	AM AGC	1.5	1.4
20	AM DET OUT	0	10.7
21	AM RF IN	3.9	3.6
22	V REG	3.9	3.6
23	AM OSC IN	3.9	3.6
24	AM OSC OUT	3.2	2.2

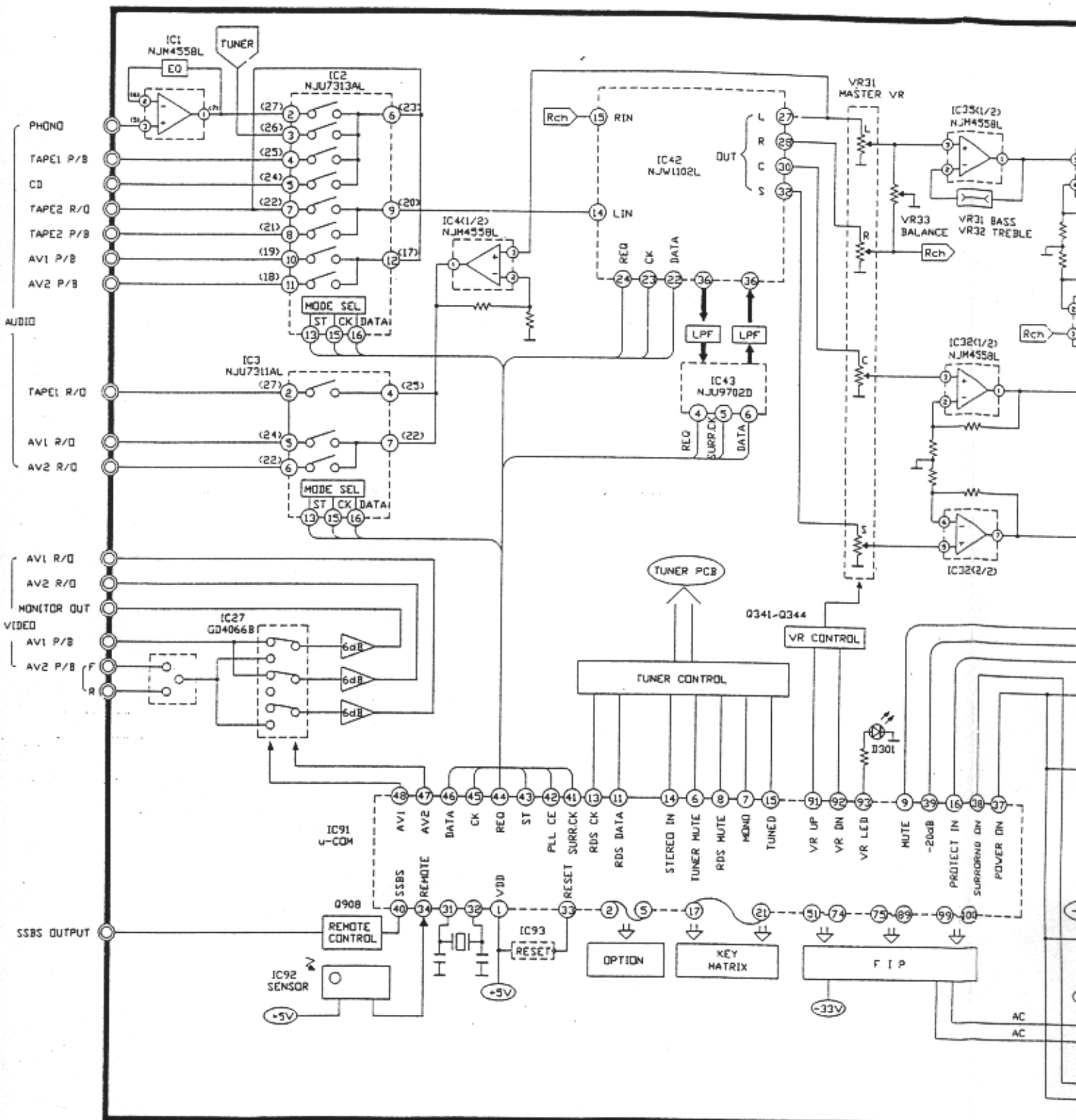
IC62 (RDS)		
PIN No.	DESCRIPTION	VOLTAGE
1	DK FILTER	1.6
2	Q ² -DET	1.5
3	RDS ADJ	N.C
4	I - DET	1.4
5	B.P.F CHECK	2.3
6	RDS IN	2.4
7	SK FILTER	2.8
8	RDS FILTER	1.2
9	PLL LOOP FILTER	1.5
10	PLL LOCP FILTER	0
11	FILTER ADJ	0.7
12	GND	0
13	DK - IND	N.C
14	SK - IND	N.C
15	RDS - IND	N.C
16	SK - ADJ	0
17	DATA OUT	DATA
18	CLOCK	CLOCK
19	D - PLL	1.5
20	INTEG/D	1.1
21	B.P.F.	2.1
22	B.P.F	2.1
23	VCC	4.3
24	456KHz OSC	456KHz OSC

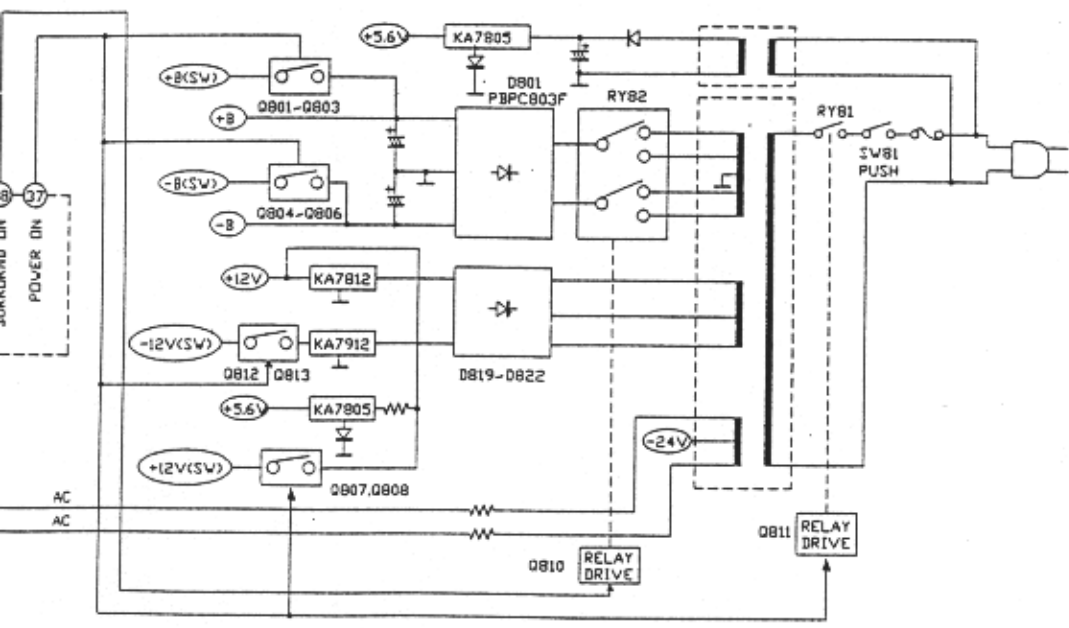
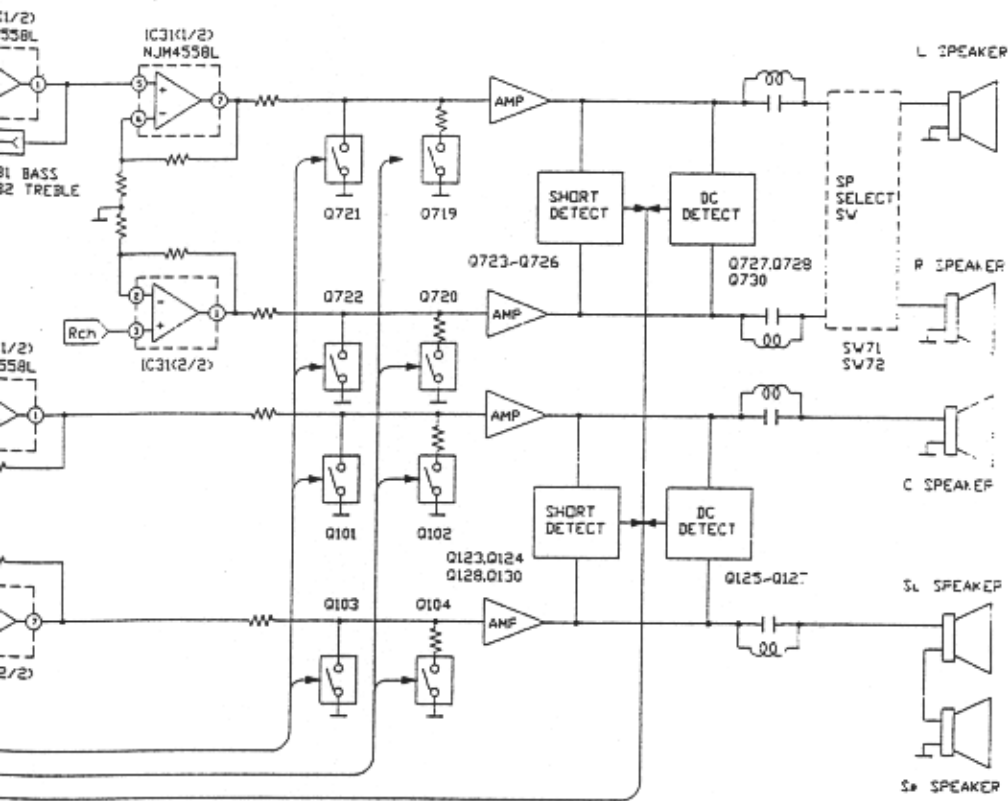
IC53			
PIN No.	DESCRIPTION	FM	AM
1	X IN	7.2MHz	
2	X OUT	7.2MHz	
3	CE	CE	
4	CL	CL	
5	DATA	DATA	
6	SYC	N.C	
7	OUT 1	N.C	
8	OUT 2	0	10.7
9	OUT 3	0	3.9
10	AM OSC IN	AM OSC	
11	FM OSC IN	FM OSC	
12	VDD 1	4.8	
13	VDD 2	4.8	
14	PD 1	N.C	
15	PD 2	1.2	
16	GND	0	

IC52		
PIN No.	DESCRIPTION	VOLTAGE
1	VCC	9.7
2	MPX IN	2.4
3	COMP. AMP OUT	1.7
4	L - OUT	1.5
5	R - OUT	1.5
6	STEREO LED	5
7	GND	0
8	SEPA. ADJ	0.5
9	VCO STOP	0.8
10	PILOT FILTER	1.4
11	PILOT FILTER	1.4
12	19KHz CHECK	1
13	PLL IN	1.4
14	PLL FILTER	1.4
15	PLL FILTER	1.4
16	VCO	0.8



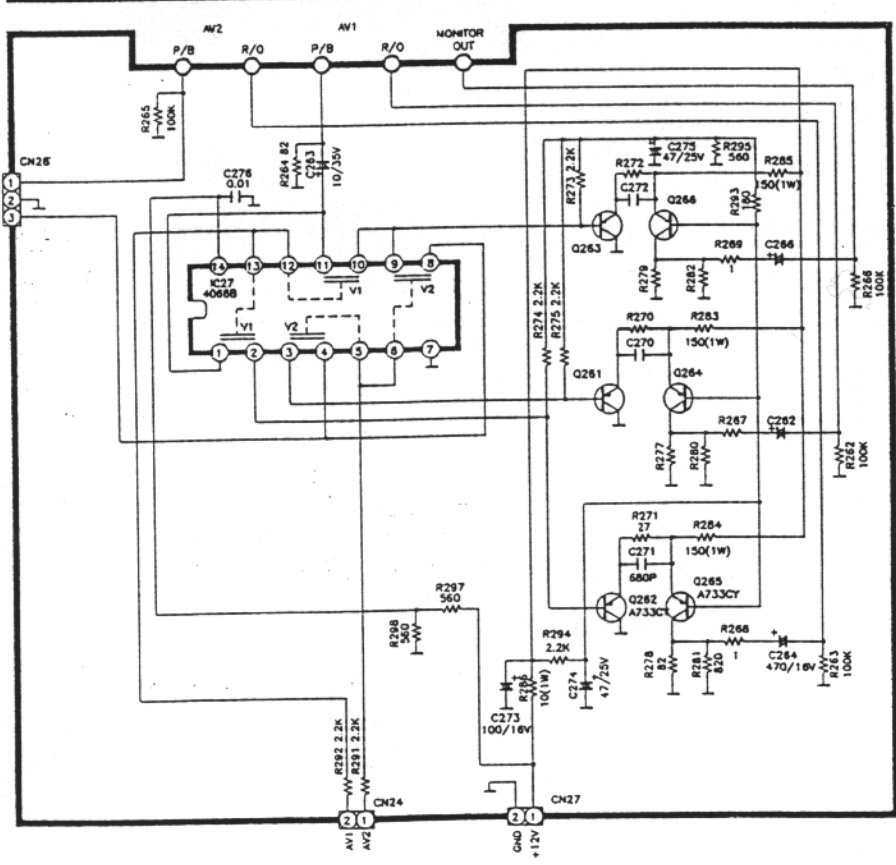
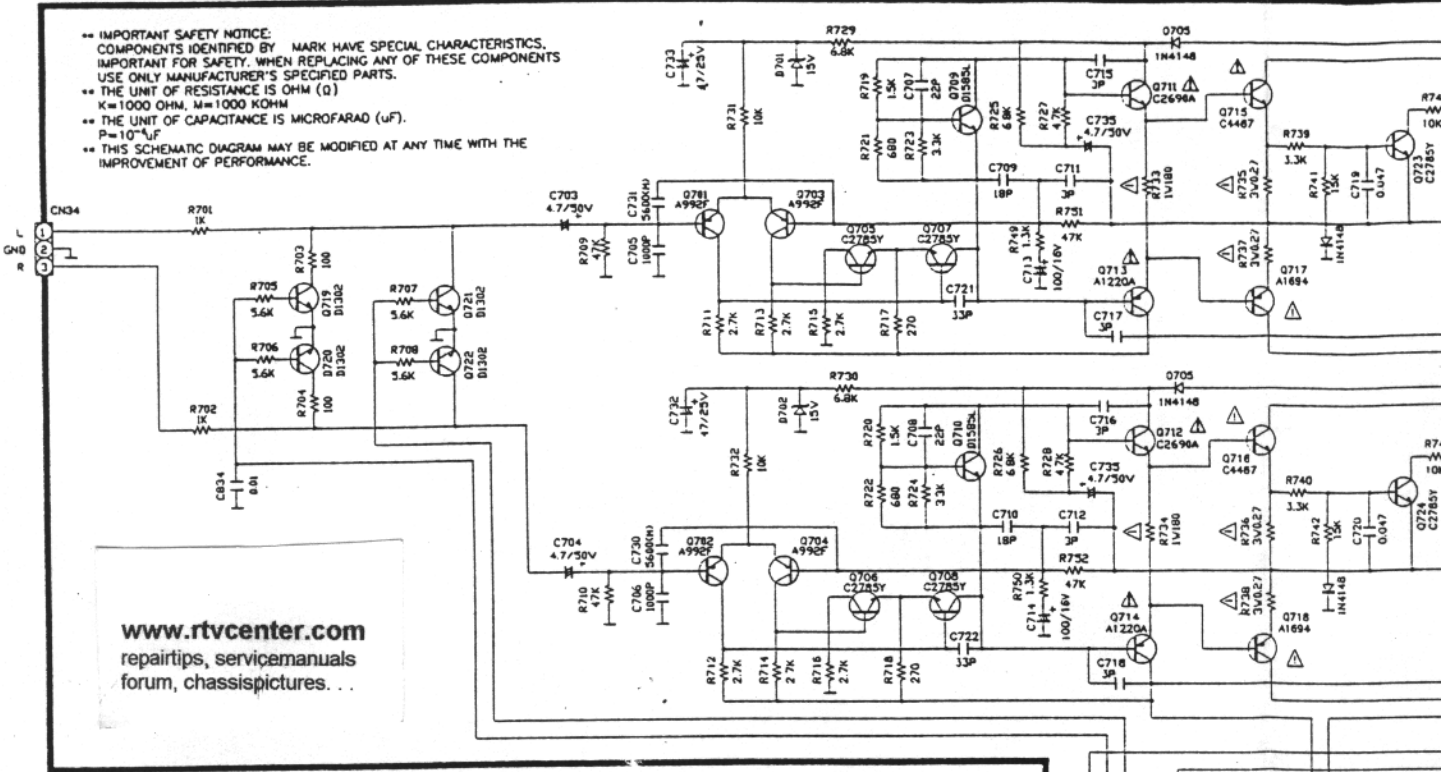
BLOCK DIAGRAM

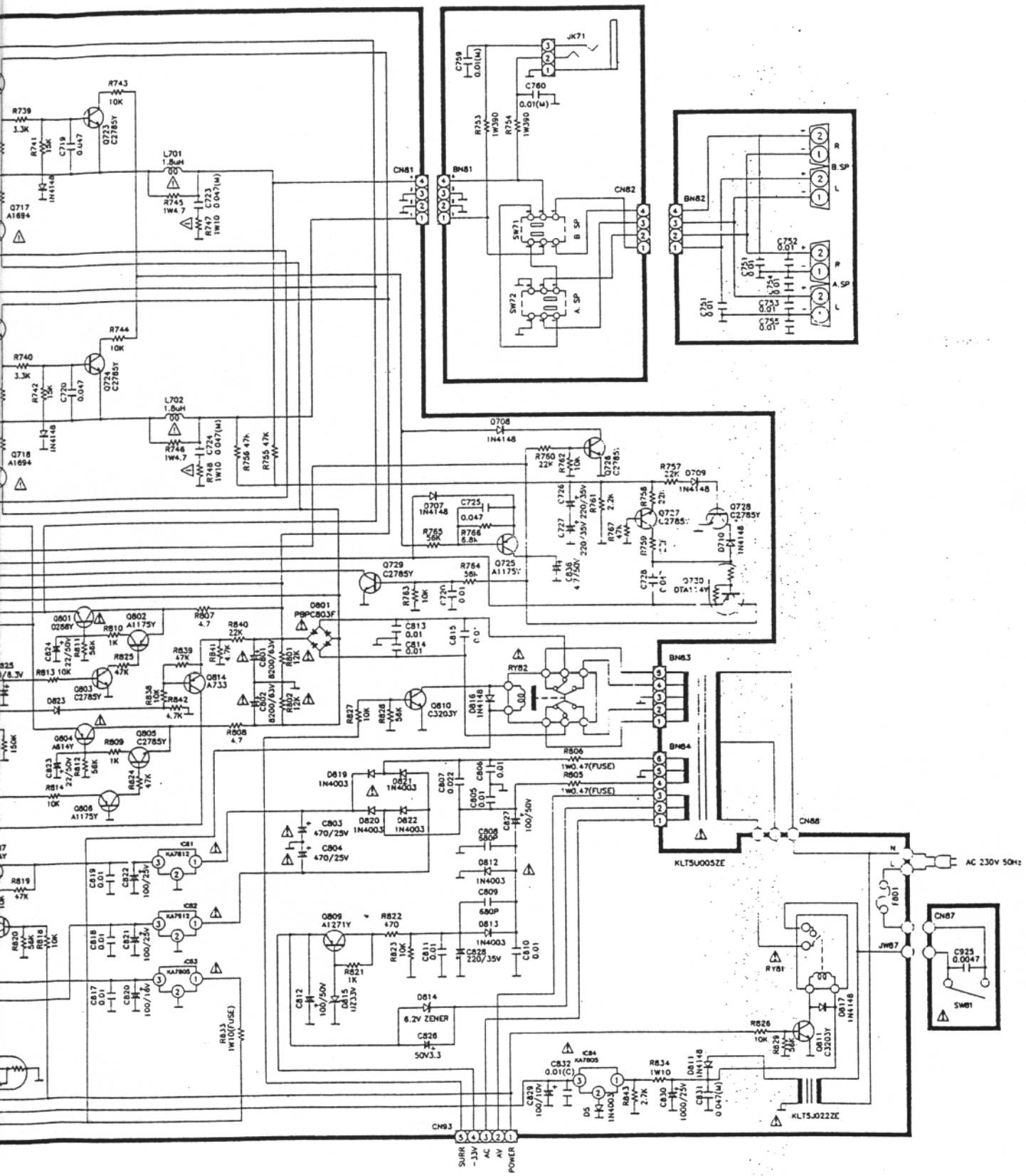


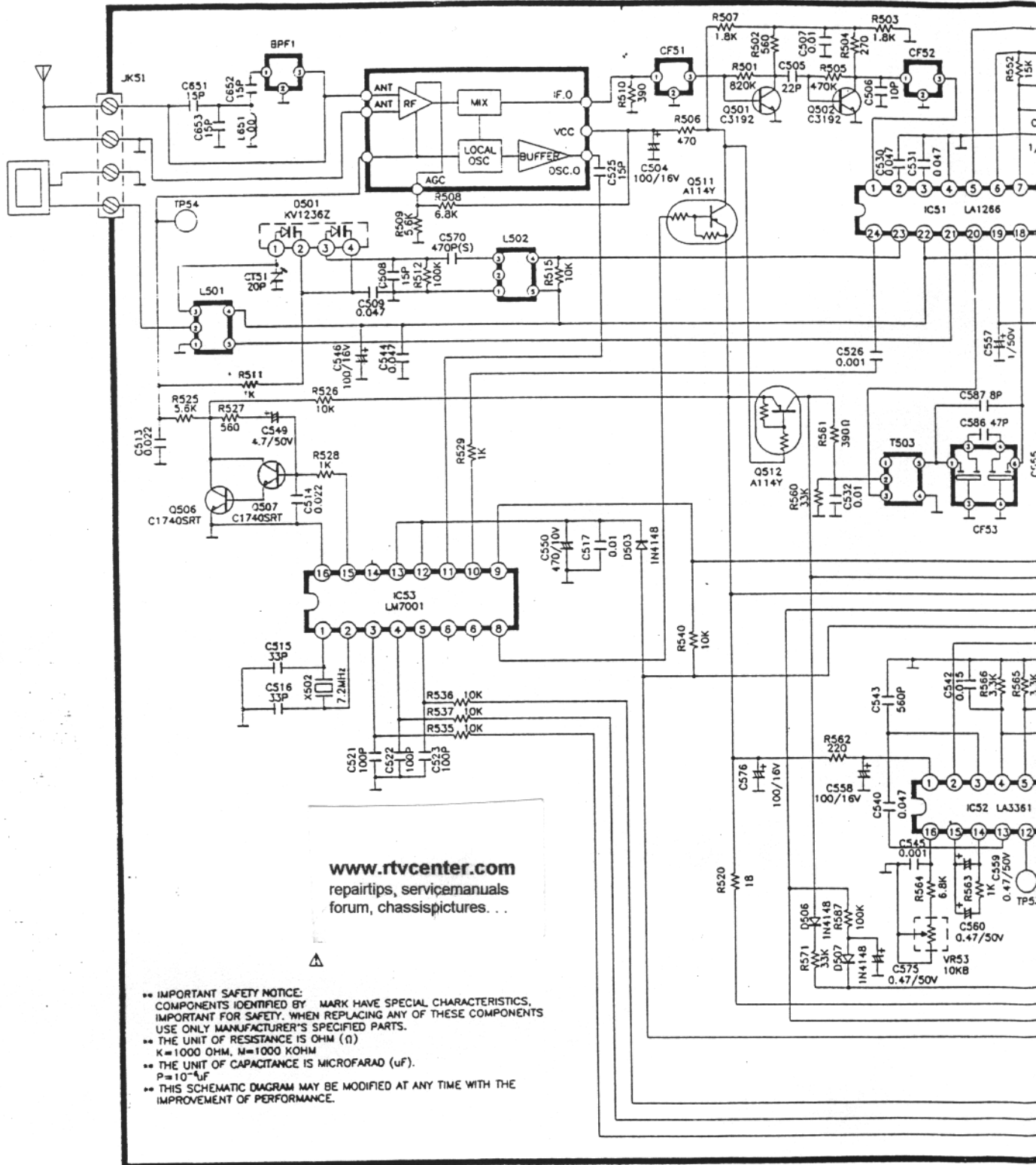


SCHEMATIC DIAGRAM

- IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS. IMPORTANT FOR SAFETY, WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY MANUFACTURER'S SPECIFIED PARTS.
- THE UNIT OF RESISTANCE IS OHM (Ω)
K=1000 OHM, M=1000 KOHM
- THE UNIT OF CAPACITANCE IS MICROFARAD (μ F).
P=10⁻¹² F
- THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

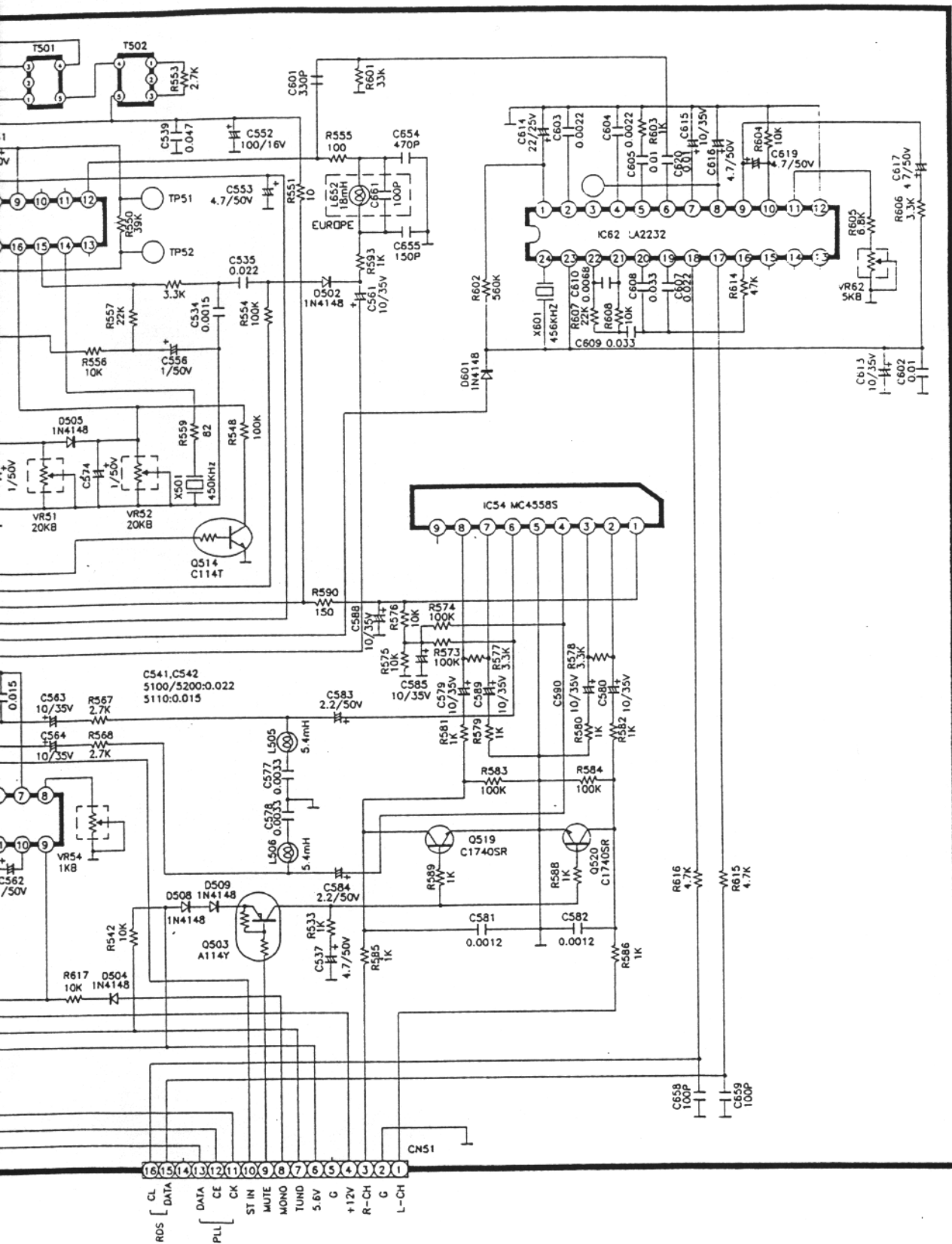


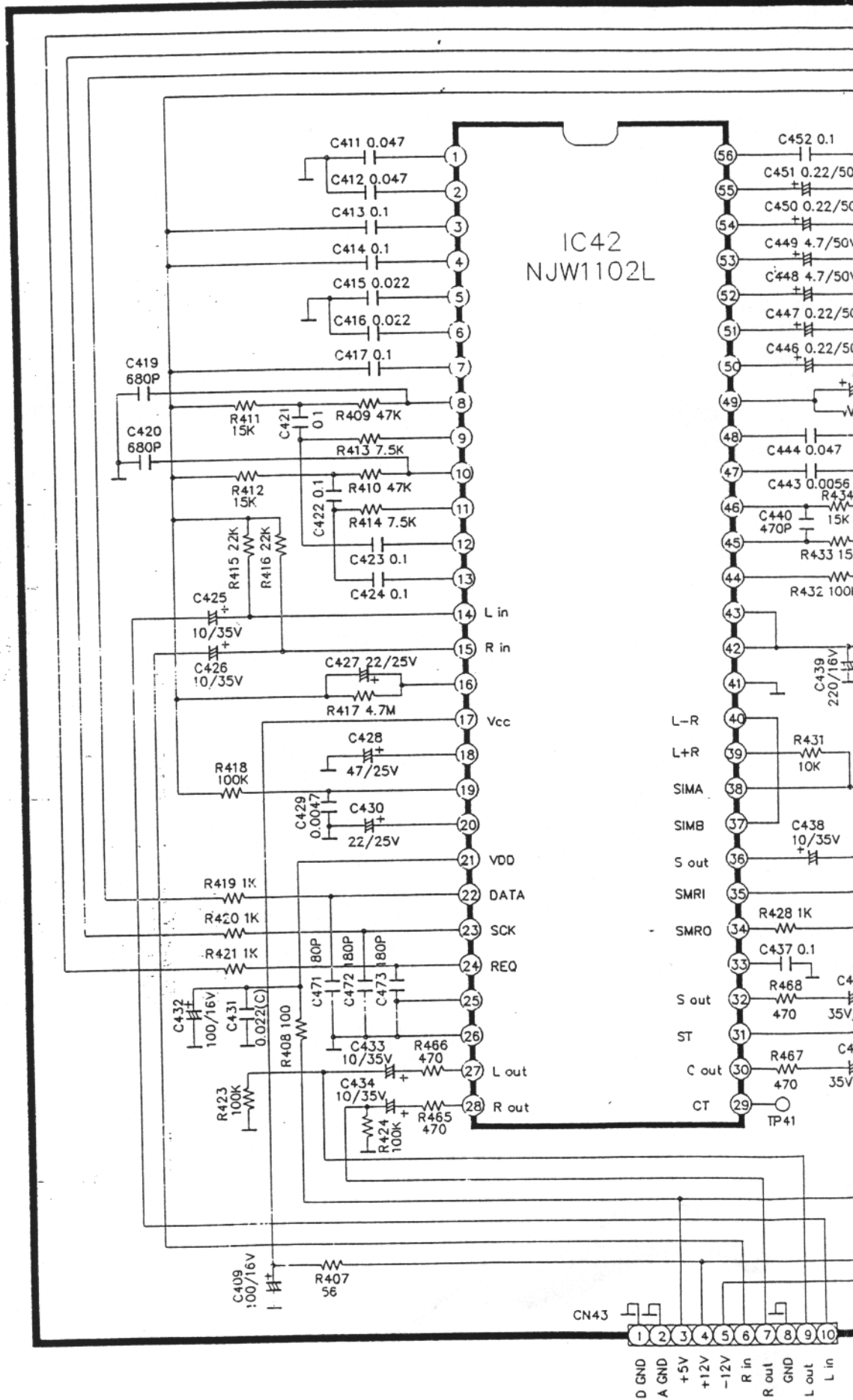


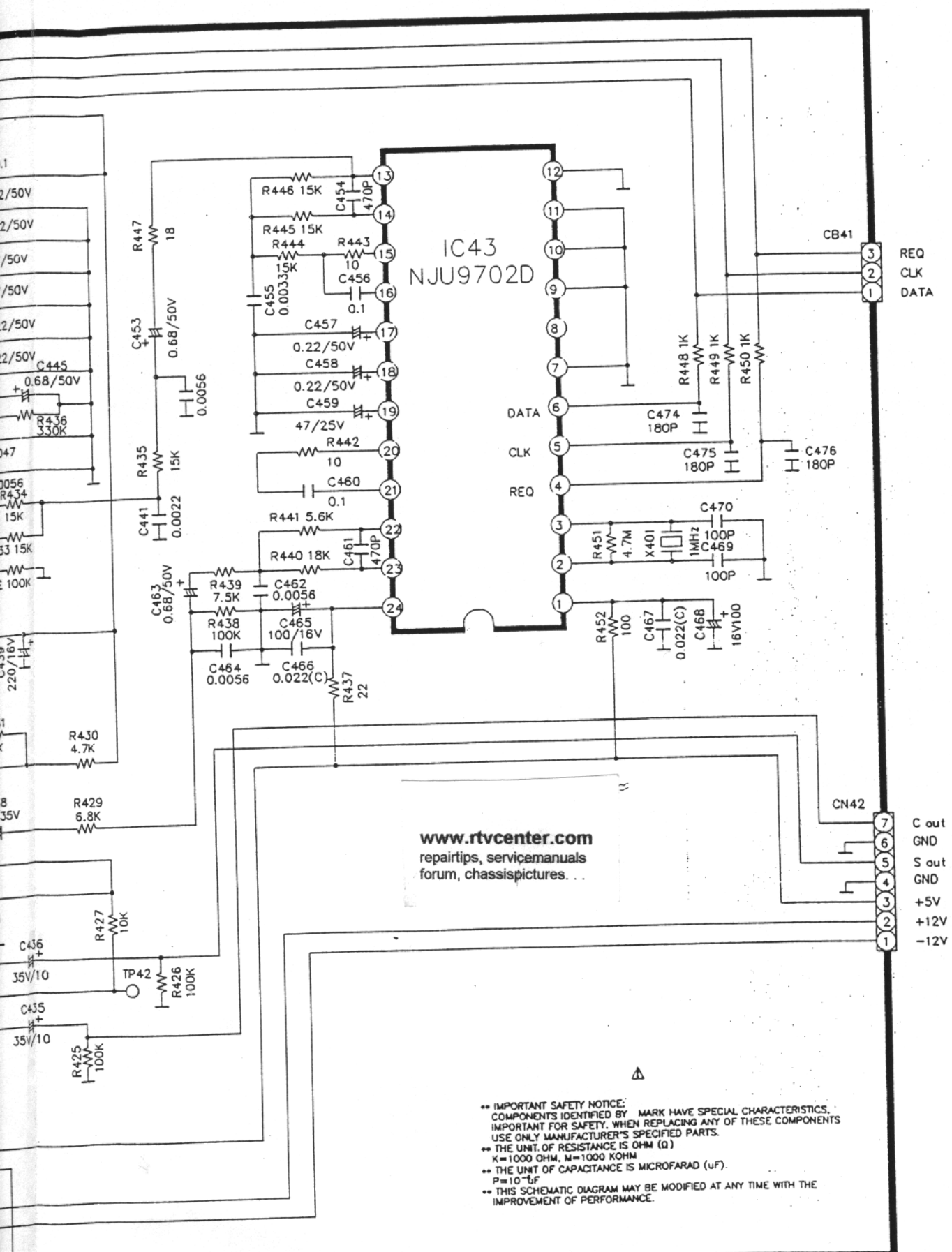


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 K=1000 OHM, M=1000 KOHM
 ** THE UNIT OF CAPACITANCE IS MICROFARAD (μF).
 P=10⁻⁴μF
 ** THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE
 IMPROVEMENT OF PERFORMANCE.







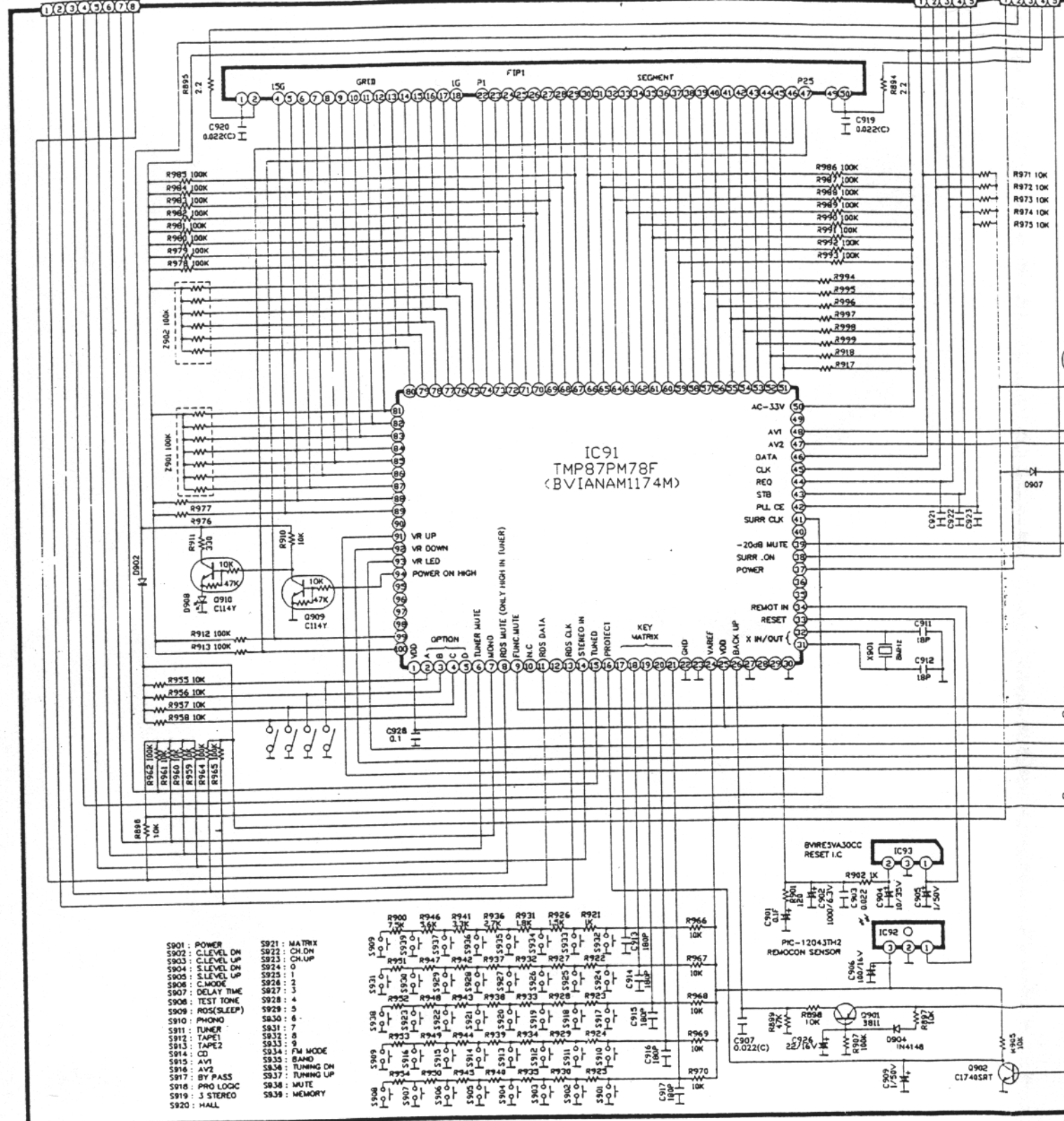
www.rtvcenter.com
 repairtips, servicemanuals
 forum, chassispictures. . .

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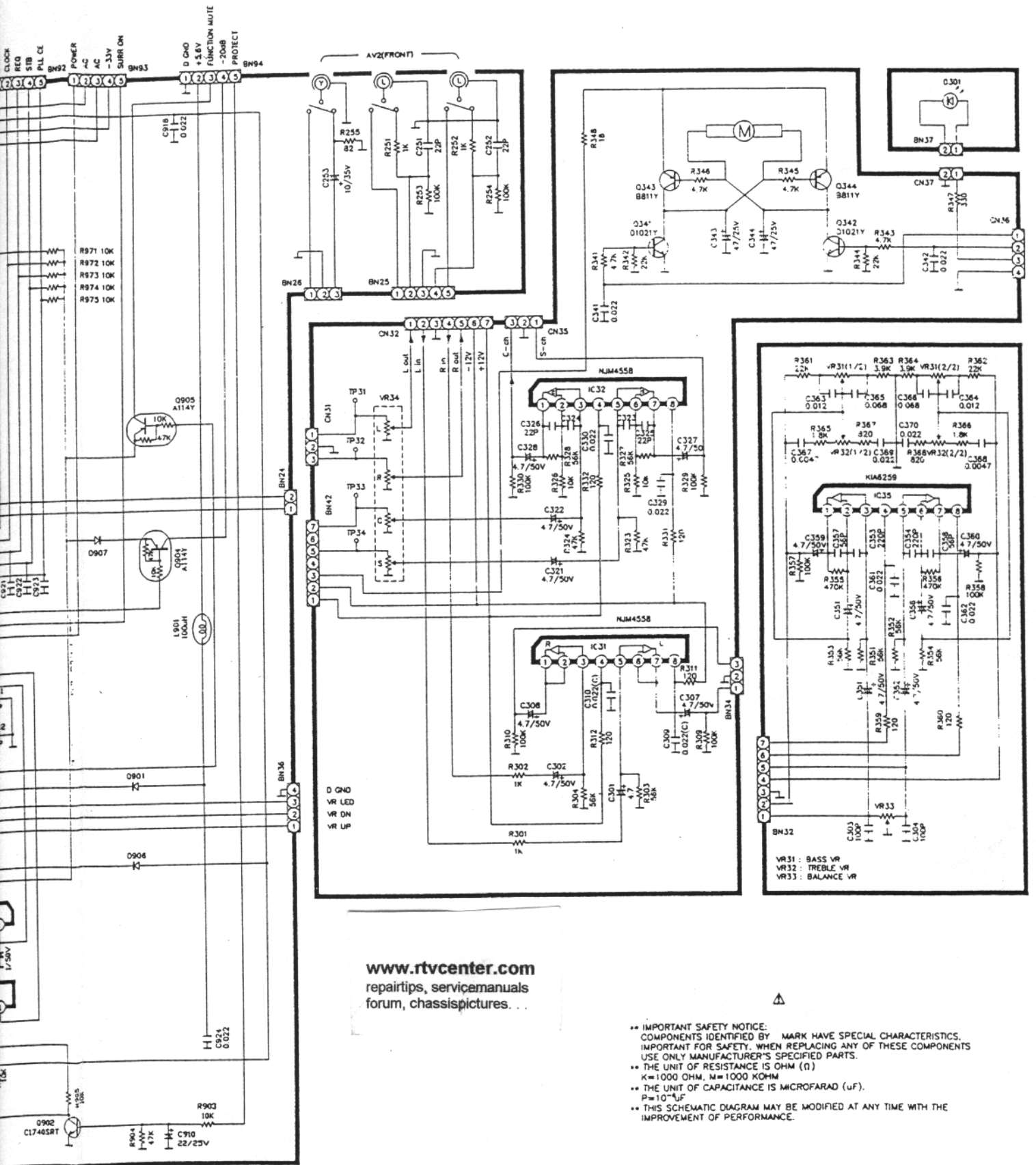
•• IMPORTANT SAFETY NOTICE:
 COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS.
 IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
 USE ONLY MANUFACTURER'S SPECIFIED PARTS.
 •• THE UNIT OF RESISTANCE IS OHM (Ω)
 K=1000 OHM, M=1000 KOHM
 •• THE UNIT OF CAPACITANCE IS MICROFARAD (μF).
 P=10⁻¹²F
 •• THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE
 IMPROVEMENT OF PERFORMANCE.

RDS CLK
 RDS DATA
 SURR CLK
 STEREO IN
 TUNER MUTE
 MONO
 TUNED
 RDS MUTE

DATA
 CLOCK
 REQ
 STB
 PLL CE
 BNS2
 POWER
 AC
 -33V
 SURR ON



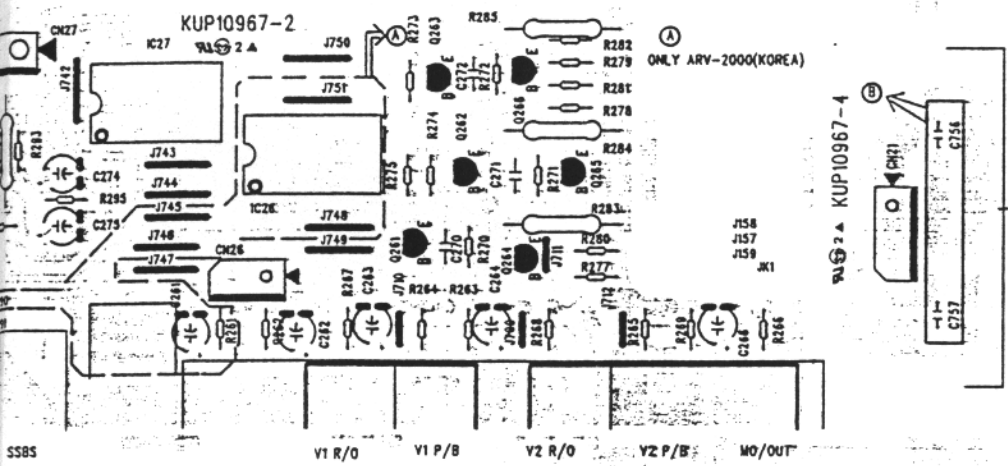
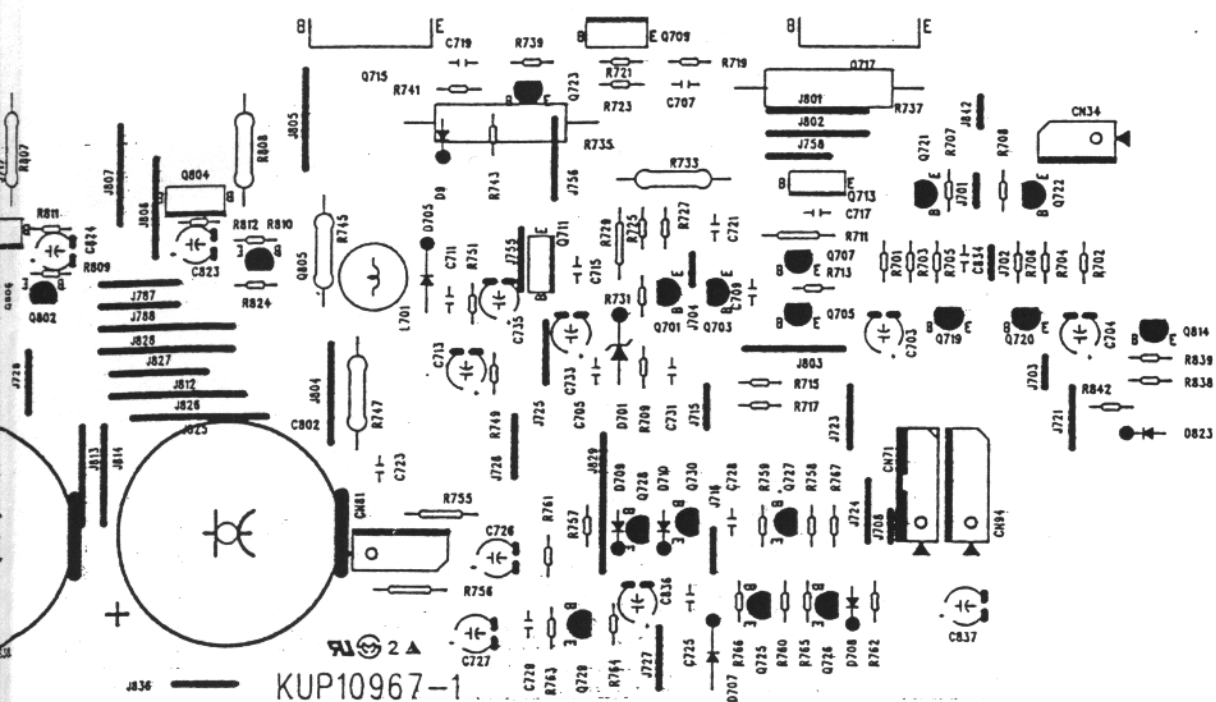
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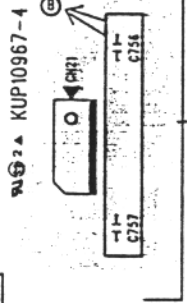
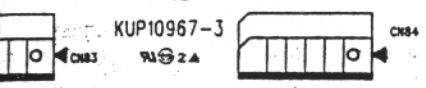
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 repair tips, servicemanuals
 forum, chassis pictures...



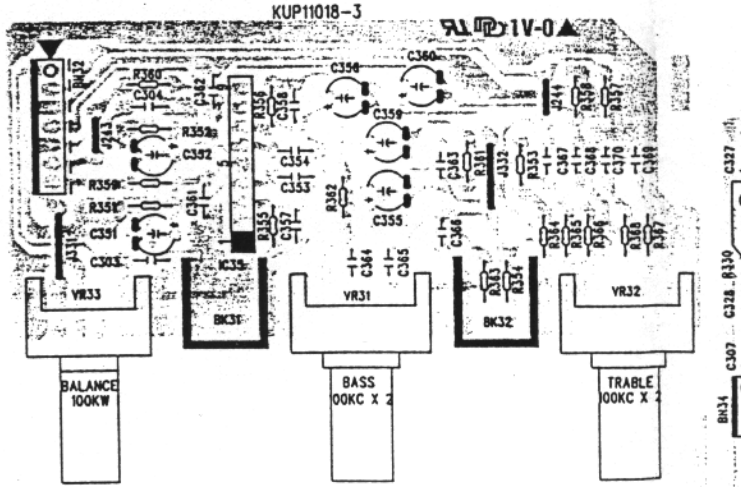
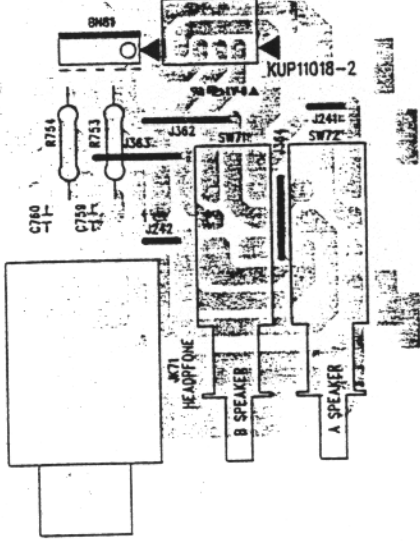
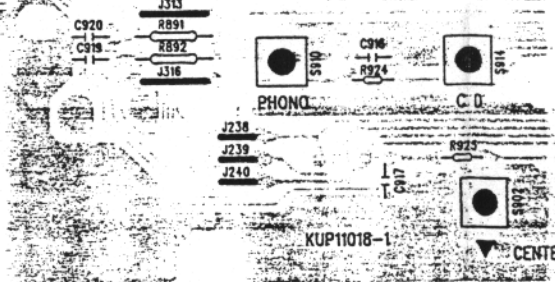
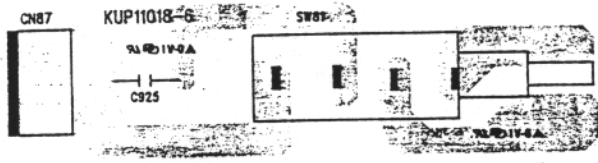
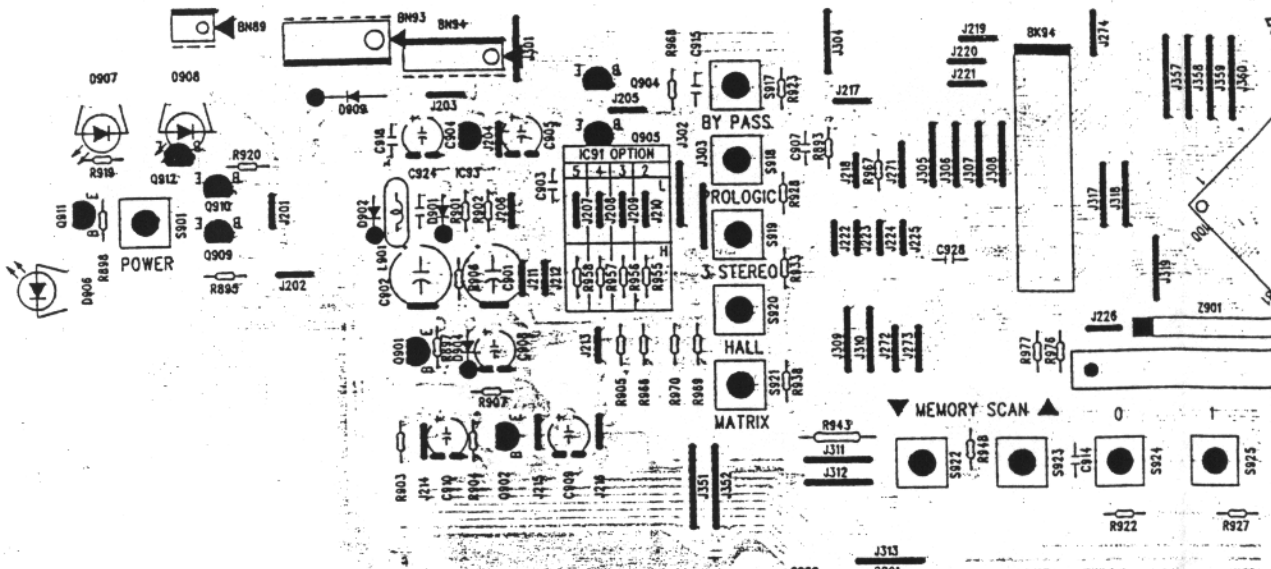
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00AVSS):NO INSERT

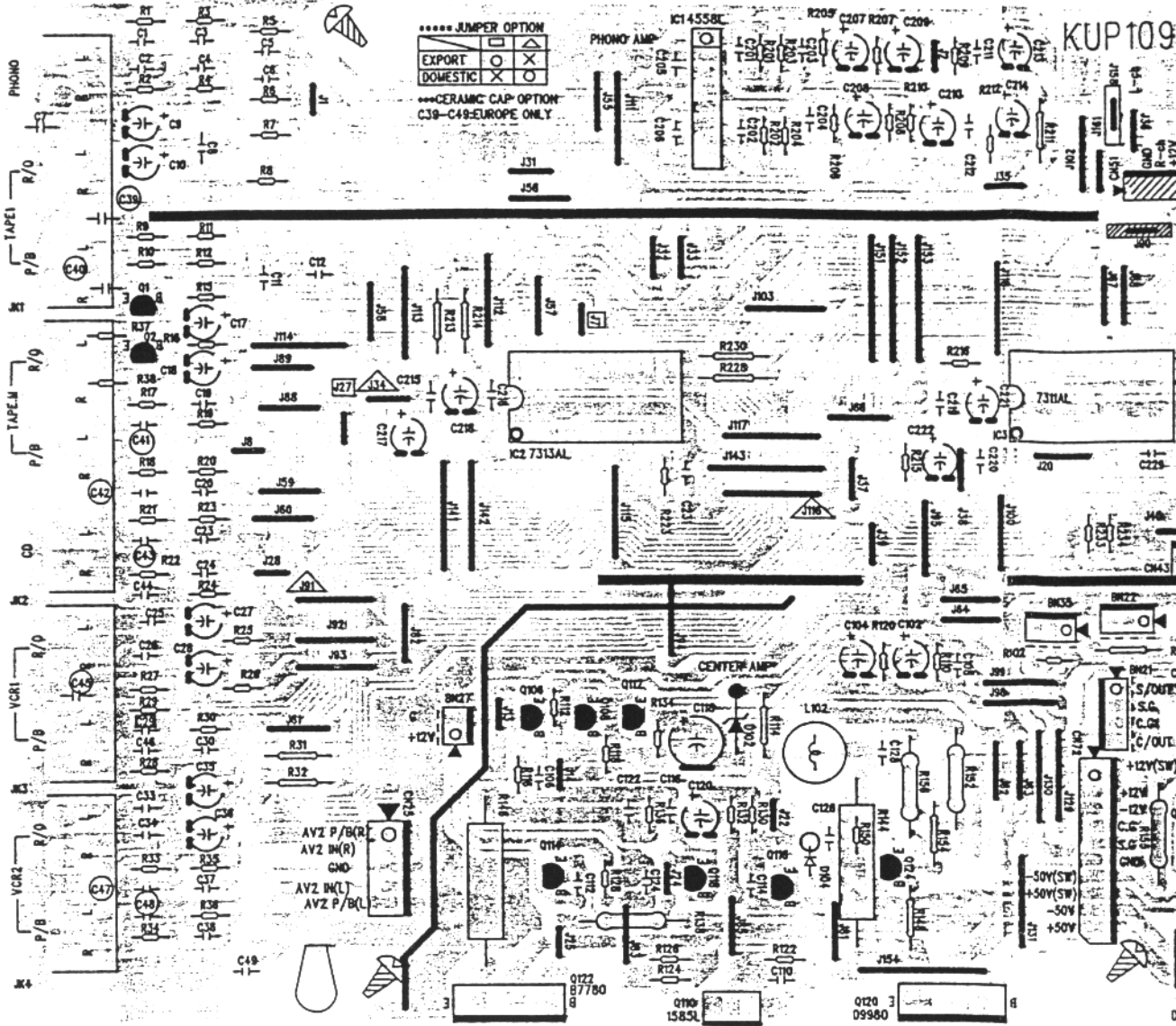


IC	ICT	ADJ1	ADJ2	RP



KUP11018Z

INPUT PCB



..... JUMPER OPTION

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DOMESTIC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

..... CERAMIC CAP- OPTION
C39-C49-EUROPE ONLY

KUP109

AVZ P/B(R)
AVZ IN(R)
GND
AVZ IN(L)
AVZ P/B(L)

CENTER AMP

09560
E 0210

15851
0110

08778
B

C49

K4

VCR2

VCR1

CD

TAPE2

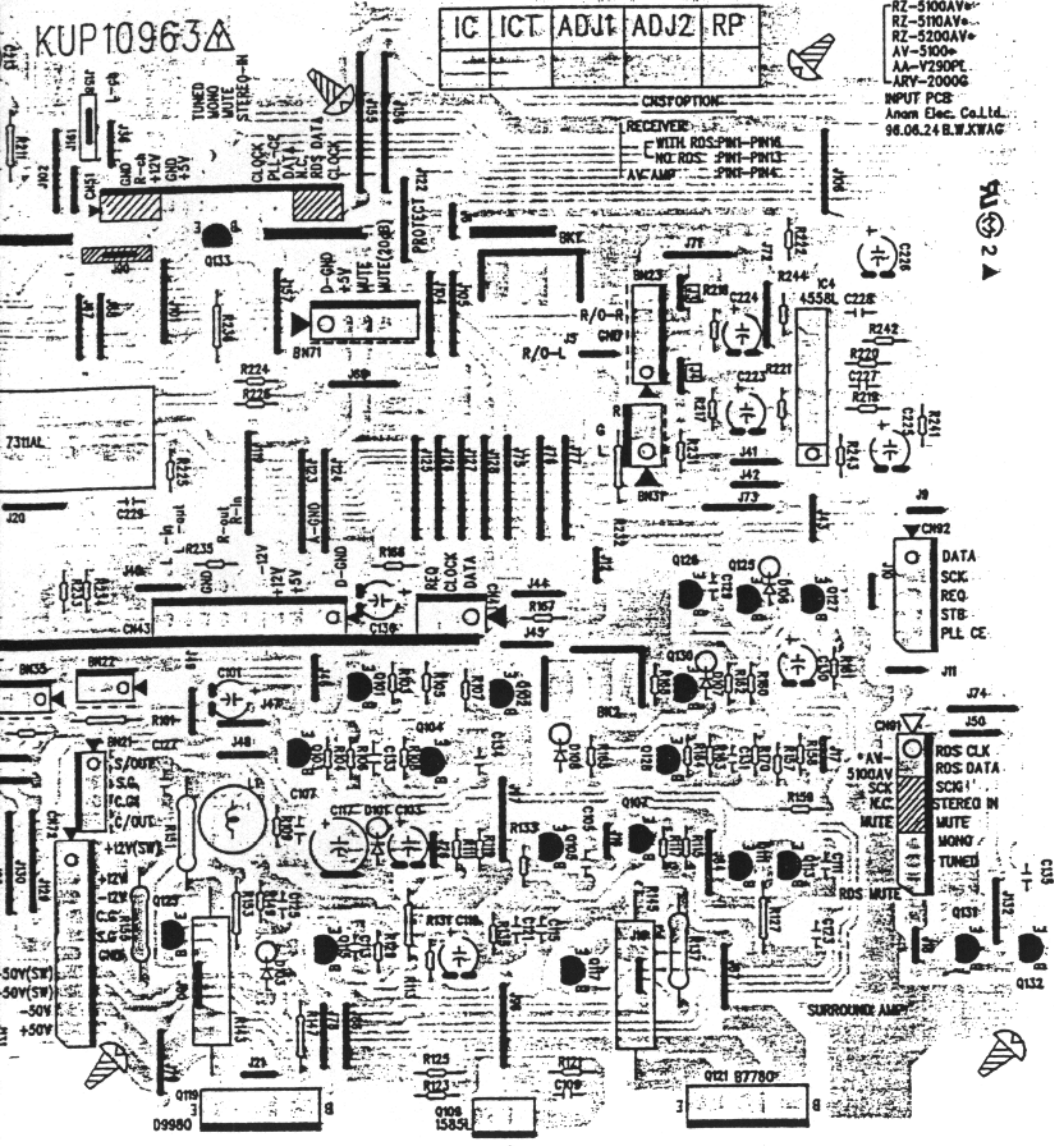
TAPE1

PHONO

KUP10963A

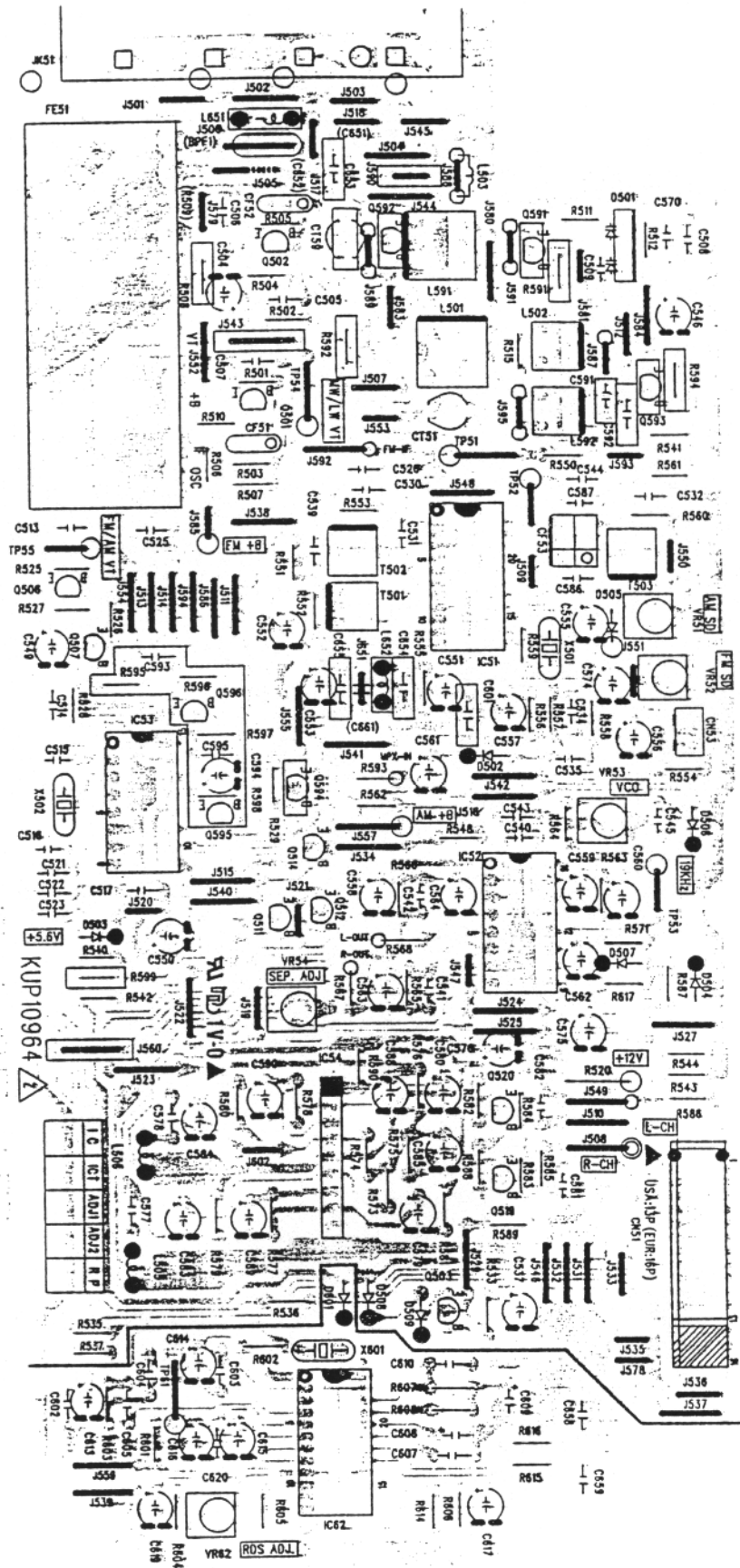
IC ICT ADJ1 ADJ2 RP

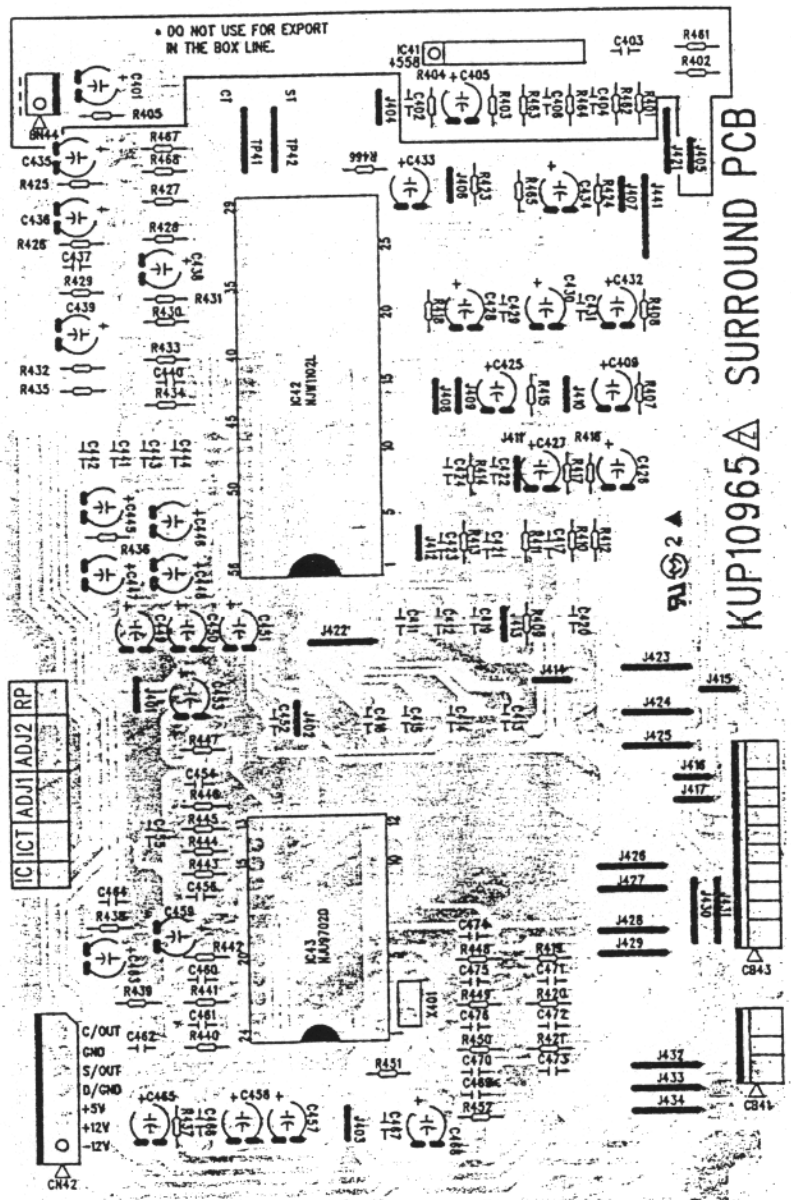
RZ-5100AV
RZ-5100AV
RZ-5200AV
AV-5100
AA-V290PT
ARY-2000G
INPUT PCB
Anom Elec. Co.Ltd.
98.06.24 B.W.XWAG



2 A

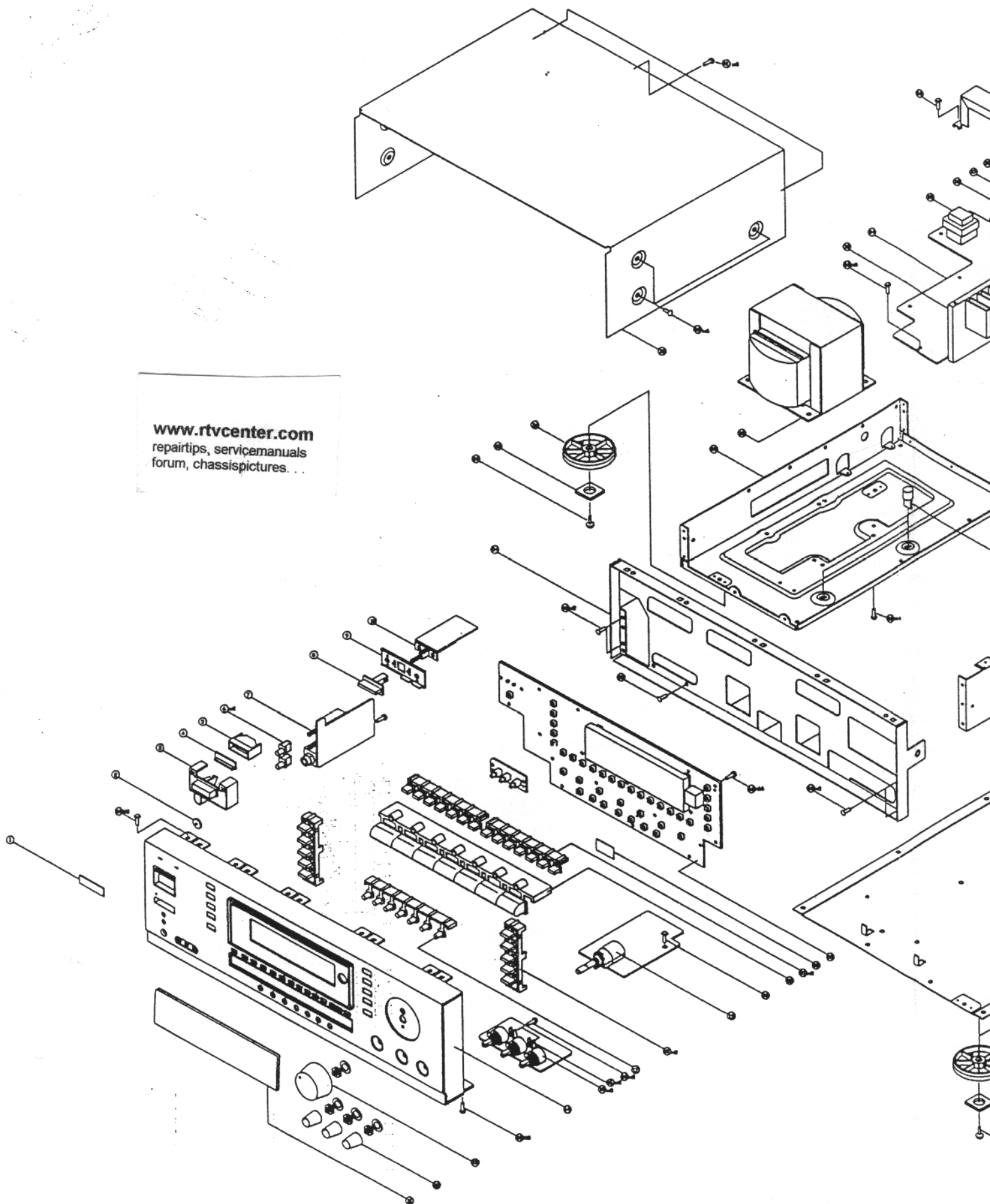
TUNER PCB

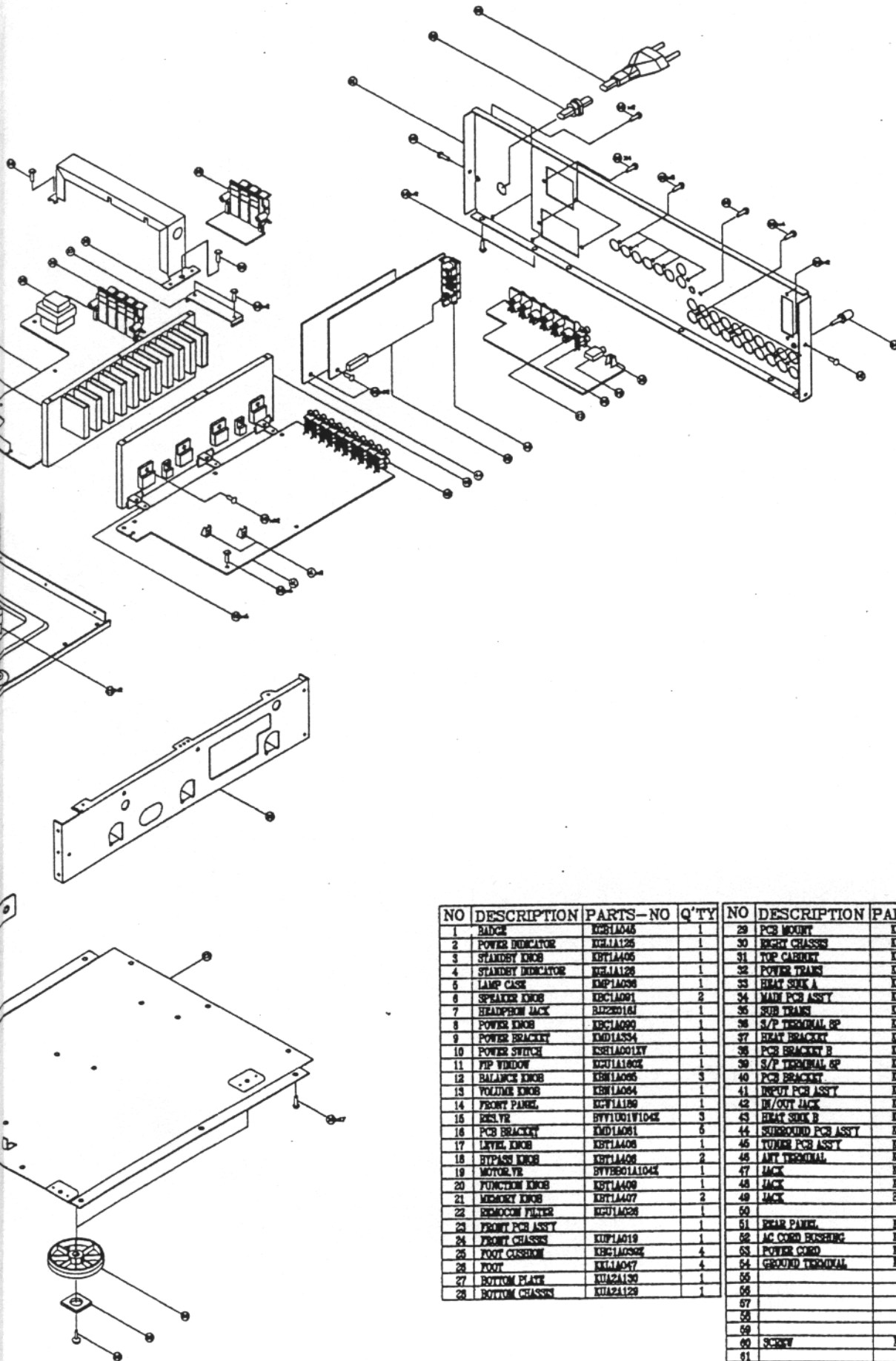




EXPLODED VIEW

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NO	DESCRIPTION	PARTS-NO	Q'TY	NO	DESCRIPTION	PARTS-NO	Q'TY
1	BADGE	ECB1A045	1	29	PCB MOUNT	EBE1A023	2
2	POWER INDICATOR	EBL1A126	1	30	RIGHT CHASSIS	EDC1A028	1
3	STANDBY KNOB	EBT1A026	1	31	TOP CABINET	ECB1B074E	1
4	STANDBY INDICATOR	EBL1A128	1	32	POWER TRANS	ELYS0006SU	1
5	LAMP CASE	EBP1A036	1	33	HEAT SINK A	EDT1A107	1
6	SPEAKER KNOB	EBE1A091	2	34	MAIN PCB ASSY	EDP10967B	1
7	HEADPHONE JACK	B022016J	1	35	SUB TRANS	ELYS0022SU	1
8	POWER KNOB	EBE1A090	1	36	S/P TERMINAL SP	ELG20012-C	1
9	POWER BRACKET	EDM1A334	1	37	HEAT BRACKET	EDM1A319	3
10	POWER SWITCH	ESB1A001XY	1	38	PCB BRACKET B	EDM1A320	1
11	PIP WINDOW	EBU1A102E	1	39	S/P TERMINAL SP	ELG20032	1
12	BALANCE KNOB	EBN1A026	3	40	PCB BRACKET	EDM1A318	8
13	VOLUME KNOB	EBN1A024	1	41	INPUT PCB ASSY	EDP10963B	1
14	FRONT PANEL	EBV1A189	1	42	IN/OUT JACK	ELI4P0022-K	1
15	ENL.YE	BVY1001V104E	3	43	HEAT SINK B	EDT1A016	1
16	PCB BRACKET	EDM1A061	6	44	SURROUND PCB ASSY	EDP10966B	1
17	LEVEL KNOB	EBN1A028	1	45	TUNER PCB ASSY	KDP10964	1
18	BYPASS KNOB	EBT1A028	2	46	ANT TERMINAL	ELNS0006E	1
19	MOTOR.YE	BVYB001A104E	1	47	JACK	ELI4S006E	1
20	FUNCTION KNOB	EBT1A029	1	48	JACK	ELI4G010E	1
21	MEMORY KNOB	EBT1A027	2	49	JACK	B022003E	1
22	REDWOOD FILTER	EBU1A029	1	50			
23	FRONT PCB ASSY		1	51	REAR PANEL	EDT1A122	1
24	FRONT CHASSIS	KUP1A019	1	52	AC CORD BUSHING	EBR1129	1
25	FOOT CUSHION	EBE1A032E	4	53	POWER CORD	ELI2A013E	1
26	FOOT	EBL1A047	4	54	GROUND TERMINAL	EMR1001	1
27	BOTTOM PLATE	KU2A129	1	55			
28	BOTTOM CHASSIS	KU2A128	1	56			
				57			
				58			
				59			
				60	SCREW	KYBS+102	60
				61			

PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering.
If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
3. How to read the Parts List.

■ Resistor and Capacitor

Notes : Part numbers are indicated for most mechanical parts.
Please use this part number for parts order.

IMPORTANT SAFETY NOTICE.

Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

- The unit of resistance is OHM(Ω) .
K=1000(Ω), M=1000(K Ω)
- The unit of capacitance is MICROFARAD(μ F).
- P=10⁻⁶ μ F

■ Numbering System of Resistor

Example

$\frac{KRD}{\text{Type}} \quad \frac{25}{\text{Wattage}} \quad \frac{F}{\text{Shape}} \quad \frac{J}{\text{Tolerance}} \quad \frac{101}{\text{Value}}$

Resistor Type	Wattage	Tolerance
KRD:Carbon	20:1/5W	F: $\pm 1\%$
KRG:Metal Oxide	25:1/4W	J: $\pm 5\%$
	50:1/2W	K: $\pm 10\%$
	1:1W	
KRF:Metal Cement	2:2W	
	3:3W	

■ Numbering System of Capacitor

Example

$\frac{KCKR}{\text{Type}} \quad \frac{1H}{\text{Voltage}} \quad \frac{101}{\text{Value}} \quad \frac{K}{\text{Tolerance}} \quad \frac{B}{\text{Peculiarity}}$

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
KCB: Ceramic	OJ:6.3V	1H:50V DC	C: $\pm 0.25\mu$ F
KCC: Ceramic	1A:10V	1:125V DC	G: $\pm 2\%$
KCK: Ceramic	1C:16V	KC:400V AC	J: $\pm 5\%$
KCFR: Semiconductor	1E:25V		K: $\pm 10\%$
KCQI: Polyester	1H:50V		Z: +80%, -20%
KCQP: Polypropylene	1V:35V		
KCQS: Polystyrol			

WARNING

Δ (+) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

Δ (+) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

ELECTRICAL PARTS LIST

REF.No.	PART No.	DESCRIPTION	REF.No.	PART No.	DESCRIPTION
P.C BOARD BLOCK PART No.			BN24	KWZRZ5100AV24	WIRE ASS'Y
	PART No.	DESCRIPTION	BN25	KWZRZ5100AV25	WIRE ASS'Y
	1. KOP11018	FRONT PCB ASS'Y	BN26	KWZRZ5100AV26	WIRE ASS'Y
	2. KOP10963	INPUT PCB ASS'Y	BN32	KWZRZ5100AV32	WIRE ASS'Y
	3. KOP10964	TUNER PCB ASS'Y	BN34	KWZRZ5100AV34	WIRE ASS'Y
	4. KOP10965	SURROUND PCB ASS'Y	BN36	KWZRZ5100AV36	WIRE ASS'Y
	5. KOP10967	MAIN PCB ASS'Y	BN37	KWZRZ5100AV37	WIRE ASS'Y
FRONT PCB BLOCK CONSISTS FOLLOWING P.C.B.			BN42	KWZRZ5100AV42	WIRE ASS'Y
· u-COM P.C. BOARD			BN81	KWZRZ5100AV81	WIRE ASS'Y
· SP SWITCH P.C. BOARD			BN89	KWZAAV29DPL01	WIRE ASS'Y
· TONE CONTROL P.C. BOARD			BN91	KWZRZ5100AV91	WIRE ASS'Y
· MASTER VR P.C. BOARD			BN92	KWZRZ5100AV92	WIRE ASS'Y
· AV 2 INPUT P.C. BOARD			BN93	KWZRZ5100AV93	WIRE ASS'Y
· POWER SWITCH P.C. BOARD			BN94	KWZRZ5100AV94	WIRE ASS'Y
INPUT PCB BLOCK CONSISTS FOLLOWING P.C.B.			CN31	KJP03GA09ZG	WAFER
· INPUT & C/S AMP P.C. BOARD			CN32	KJP07GA01ZM	WAFER
TUNER PCB BLOCK CONSISTS FOLLOWING P.C.B.			CN35	KJP03GA01ZM	WAFER
· TUNER AMP P.C. BOARD			CN36	KJP04GA01ZM	WAFER
SURROUND PCB BLOCK CONSISTS FOLLOWING P.C.B.			CN37	KJP02GA01ZM	WAFER
· SURROUND P.C. BOARD			CN82	KJP04GA01ZM	WAFER
MAIN PCB BLOCK CONSISTS FOLLOWING P.C.B.			CN87	KJP02KA060ZY	WAFER
· POWER & L/R AMP P.C. BOARD			C901	BCES5R5V104	CAP , GOLD
· VIDEO CONTROL P.C. BOARD			C902	KCEA0JH102B	CAP , ELECT
· POWER SUPPLY P.C. BOARD			C925	BCKWKC472MF	CAP , CERAMIC
· C/S SPEAKER P.C. BOARD			FIP1	KFLSVA15MM03	F.I.P.
	1. FRONT PCB		JB21	KJJ4M017Z	JACK , VCR
IC31,IC32	BVINJM4558L	I.C , OP AMP	JB22	KJJ4M018Z	JACK , VCR
IC35	KVIKIA6259S	I.C , OP AMP	JB23	KJJ4M019Z	JACK , VCR
IC91	BVIANAM1174M	I.C , u-COM	JK71	BJJ2E019Z	JACK , HEADPHONE
IC92	BRVPIC12043	I.C , SENSOR	L901	KLQ02C100KT	COIL
IC93	BVIRE5VA30CC	I.C , RESET	S901~S939	BST1A014ZT	SW , TACT
Q341,Q342	KVTKSD1021YT	T.R	SW71,SW72	KSH2B017Z	SW , PUSH
Q343,Q344	KVTKSB811YT	T.R	SW81	KSH1A001ZV	SW , PUSH
Q901	KVTKSB811YT	T.R	VR31,VR32	BVV2W01C104Z	RES , VARIABLE
Q902	KVT2SC1740SRT	T.R	VR33	BVV1T01W104Z	RES , VARIABLE
Q904,Q905	KVTDTA114YST	T.R	VR34	BVVBB01A104Z	RES , VARIABLE
Q908	KVTDTA114YST	T.R	X901	KOX08000E160C	CRYSTAL
Q909,Q910	KVTDTC114YST	T.R	Z901	KRGSN7X104J	RES , NETWORK
Q911,Q912	KVTDTC114YST	T.R	Z902	KRGSN6X104J	RES , NETWORK
D301	KVDDL22VR	L.E.D , RED	2. INPUT PCB		
D901~D905	KVD1N4148MT	DIODE	IC1	BVINJM4558L	I.C , OP AMP
D906	KVD342VCF02T085	L.E.D , RED	IC2	BVINJU7313L	I.C , FUNC. SEL.
D907,D908	BVDLJ301MPUJA	L.E.D , GREEN	IC3	BVINJU7311L	I.C , FUNC. SEL.
D909	KVD1N4148T	DIODE	IC4	BVINJM4558L	I.C , OP AMP
			Q1,Q2	KVTKTC2878BT	T.R
			Q101,Q102	KVTKTC2878BT	T.R
			Q103,Q104	KVTKTC2878BT	T.R
			Q105,Q106	KVTKSA992FT	T.R

