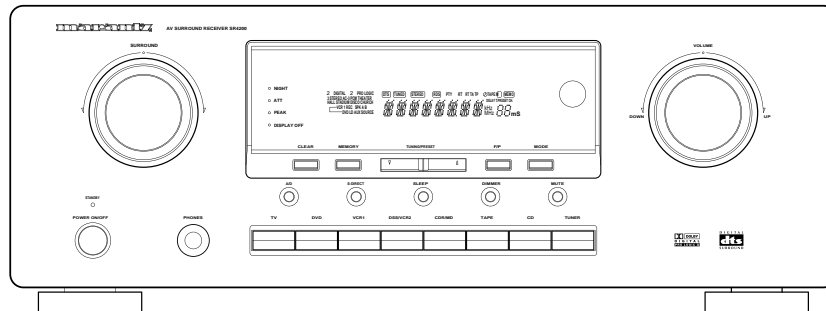


Service Manual

SR4200/N1B,/N1G,/F1N,/K1G,/L1G,/U1B

AV Surround Receiver



DIGITAL
dts
SURROUND

DOLBY
DIGITAL
PRO LOGIC II

TABLE OF CONTENTS

1.	TECHNICAL SPECIFICATIONS	1
2.	REMARK	2
3.	BLOCK DIAGRAM	3
4.	WIRING DIAGRAM	5
5.	SCHEMATIC DIAGRAM AND PARTS LOCATION (Parts side)	7
6.	MICROPROCESSOR AND IC DATA	21
7.	MEASUREMENTS AND ADJUSTMENTS	31
8.	EXPLODED VIEW AND PARTS LIST	34
9.	ELECTRICAL PARTS LIST	37

Please use this service manual with referring to the user guide (D.F.U) without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行って下さい。

marantz®

SR4200

319W855010 AO
3120 785 22690
First Issue:2001.08

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC.
1100 MAPLEWOOD DRIVE
ITASCA, IL. 60143
USA
PHONE : 630 - 741 - 0300
FAX : 630 - 741 - 0301

EUROPE / TRADING

MARANTZ EUROPE B.V.
P.O.BOX 80002, BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2732241
FAX : +31 - 40 - 2735578

BRAZIL

PHILIPS DA AMAZONIA IND. ELET. ITDA
CENTRO DE INFORMACOES AO
CEP 04698-970
SAO PAULO, SP, BRAZIL
PHONE : 0800 - 123123(Discagem Direta Gratuita)
FAX : +55 11 534. 8988

PROFESSIONAL AMERICAS

SUPERSCOPE TECHNOLOGIES, INC.
MARANTZ PROFESSIONAL PRODUCTS
2640 WHITE OAK CIRCLE, SUITE A
AURORA, ILLINOIS 60504 USA
PHONE : 630 - 820 - 4800
FAX : 630 - 820 - 8103

PROFESSIONAL AUSTRALIA

TECHNICAL AUDIO GROUP PTY, LTD
558 DARLING STREET,
BALMAIN, NSW 2041,
AUSTRALIA
PHONE : 61 - 2 - 9810 - 5300
FAX : 61 - 2 - 9810 - 5355

CANADA

LENBROOK INDUSTRIES LIMITED
633 GRANITE COURT,
PICKERING, ONTARIO L1W 3K1
CANADA
PHONE : 905 - 831 - 6333
FAX : 905 - 831 - 6936

AUSTRALIA

QualiFI Pty Ltd,
24 LIONEL ROAD,
MT. WAVERLEY VIC 3149
AUSTRALIA
PHONE : +61 - (0)3 - 9543 - 1522
FAX : +61 - (0)3 - 9543 - 3677

THAILAND

MRZ STANDARD CO.,LTD
746 - 754 MAHACHAI ROAD.,
WANGBURAPAPIROM, PHRANAKORN,
BANGKOK, 10200 THAILAND
PHONE : +66 - 2 - 222 9181
FAX : +66 - 2 - 224 6795

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WO KEE HONG DISTRIBUTION PTE LTD
130 JOO SENG ROAD
#03-02 OLIVINE BUILDING
SINGAPORE 368357
PHONE : +65 858 5535 / +65 381 8621
FAX : +65 858 6078

NEW ZEALAND

WILDASH AUDIO SYSTEMS NZ
14 MALVERN ROAD MT ALBERT
AUCKLAND NEW ZEALAND
PHONE : +64 - 9 - 8451958
FAX : +64 - 9 - 8463554

TAIWAN

PAI- YUING CO., LTD.
6 TH FL NO, 148 SUNG KIANG ROAD,
TAIPEI, 10429, TAIWAN R.O.C.
PHONE : +886 - 2 - 25221304
FAX : +886 - 2 - 25630415

MALAYSIA

WO KEE HONG ELECTRONICS SDN. BHD.
SUITE 8.1, LEVEL 8, MENARA GENESIS,
NO. 33, JALAN SULTAN ISMAIL,
50250 KUALA LUMPUR, MALAYSIA
PHONE : +60 3 - 2457677
FAX : +60 3 - 2458180

JAPAN *Technical*

MARANTZ JAPAN, INC.
35- 1, 7- CHOME, SAGAMIONO
SAGAMIHARA - SHI, KANAGAWA
JAPAN 228-8505
PHONE : +81 42 748 1013
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日本マランツ株式会社

本社 〒228-8505
神奈川県相模原市相模大野7-35-1
営業本部 〒150-0022
東京都渋谷区恵比寿南1-11-9

KOREA

MK ENTERPRISES LTD.
ROOM 604/605, ELECTRO-OFFICETEL, 16-58,
3GA, HANGANG-RO, YONGSAN-KU, SEOUL
KOREA
PHONE : +822 - 3232 - 155
FAX : +822 - 3232 - 154

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 1492.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

FM TUNER SECTION

Frequency Range	76.0 - 90.0 MHz (F) 87.5 - 108.0 MHz (K, /L, /N, /U)
Usable Sensitivity	IHF 1.8 μ V/16.4 dB
Signal to Noise Ratio	Mono/Stereo 70/65 dB
Distortion	Mono/Stereo 0.2/0.3 %
Stereo Separation	1 kHz 45 dB
Alternate Channel Selectivity	\pm 300 kHz 60 dB
Image Rejection	82 MHz 70 dB (F) 98 MHz 70 dB (K, /L, /N, /U)
Tuner Output Level	1 kHz, \pm 40 kHz Dev 600 mV

AM TUNER SECTION

Frequency Range	531 - 1602 kHz (F, /K, /L) LW: 152 - 282 kHz, MW: 531 - 1602 kHz (N) 520 - 1710 kHz (U)
Signal to Noise Ratio	50 dB
Usable Sensitivity	Loop 400 μ V/m
Distortion	400 Hz, 30 % Mod. 0.5 %
Selectivity	\pm 18 kHz 60 dB

AUDIO SECTION

Continuous Power Output (8 ohms / 20 Hz - 20 kHz)	
Front	70W
Center	70W
Surround	70W
THD Front (20 Hz - 20 kHz)	8 ohms 0.09 %
Input Sensitivity/Impedance	
Linear	316 mV/ 47 Kohms
Signal to Noise Ratio	
Linear	99 dB

VIDEO

Input Level/Impedance	1 Vp-p/ 75 ohms
Output Level/Impedance	1 Vp-p/ 75 ohms

GENERAL

Power Requirement	AC 100 V 50/60 Hz (F) AC 220 V 50 Hz (K) AC 110 V 60 Hz (L) AC 230 V 50 Hz (N) AC 120 V 60 Hz (U)
Power Consumption	170W (F) 280W (K, /N) 320W (L) 2.7A (U)
Dimension (MAX)	
Width	17-3/8 inches (440 mm)
Height	6-1/2 inches (164 mm)
Depth	14-3/8 inches (365 mm)
Weight	21.4 lbs (9.7 Kg)

ACCESSORIES

Remote Control Unit RC5200SR	1
AAA-size batteries	2
FM Lead Type Antenna (N, /K, /L)	1
FM Feeder Antenna (U, /F)	1
FM Antenna Converter (U, /F)	1
AM Loop Antenna	1
Warranty Card (U, /F)	1
Registration Card (N)	1
User Guide	1
AC Power Cord (N)	1
Post Card (F)	1

Specifications subject to change without prior notice.

2. REMARK

The relation between the selected surround mode and the input signal

The surround mode is selected with the surround mode buttons of the SR4200 or the remote control unit. However, the sound from the speakers depend upon the relationship between the selected surround mode and the input signal. They are as follows;

SURROUND MODE	INPUT SIGNAL	OUTPUT				FLUORESCENT INDICATOR	
		L/R	LS/RS	C	SW	FORMAT STATUS & SURROUND MODE	TEMPORARY DISPLAY STATUS
AUTO	DOLBY DIGITAL(5.1CH)	○	○	○	○	□ DIGITAL, AUTO	>AUTO>
	DOLBY DIGITAL(2CH)	○	—	—	○	□ DIGITAL, AUTO	>AUTO>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	○	○	○	□ DIGITAL, MOVIE, AUTO	>AUTO>
	96KHZ PCM	○	—	—	—	PCM, STEREO, AUTO	>AUTO>
	PCM(AUDIO)	○	—	—	○	PCM, STEREO, AUTO	>AUTO>
	ANALOG	○	—	—	○	STEREO, AUTO	>AUTO>
	DTS(5.1CH)	○	○	○	○	dts, AUTO	>AUTO>
STEREO	DOLBY DIGITAL(5.1CH)	○	—	—	○	□ DIGITAL, STEREO	>STEREO>
	DOLBY DIGITAL(2CH)	○	—	—	○	□ DIGITAL, STEREO	>STEREO>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	—	—	○	□ DIGITAL, STEREO	>STEREO>
	96KHZ PCM	○	—	—	—	PCM, STEREO	>STEREO>
	PCM(AUDIO)	○	—	—	○	PCM, STEREO	>STEREO>
	ANALOG	○	—	—	○	STEREO	>STEREO>
	DTS(5.1CH)	○	—	—	○	dts, STEREO	>STEREO>
□ MOVIE	DOLBY DIGITAL(5.1CH)	○	○	○	○	□ DIGITAL	>DOLBY D>
	DOLBY DIGITAL(2CH)	○	○	○	○	□ DIGITAL, MOVIE	>DOLBY PLII>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	○	○	○	□ DIGITAL, MOVIE	>DOLBY PLII>
	96KHZ PCM	—	—	—	—	(PCM), □, MOVIE	>DOLBY PLII>
	PCM(AUDIO)	○	○	○	○	PCM, □, MOVIE	>DOLBY PLII>
	ANALOG	○	○	○	○	□, MOVIE	>DOLBY PLII>
	DTS(5.1CH)	—	—	—	—	(dts), □, MOVIE	>DOLBY PLII>
□ MUSIC	DOLBY DIGITAL(5.1CH)	○	○	○	○	□ DIGITAL	>DOLBY D>
	DOLBY DIGITAL(2CH)	○	○	○	○	□ DIGITAL, MUSIC	>DOLBY PLII>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	○	○	○	□ DIGITAL, MUSIC	>DOLBY PLII>
	96KHZ PCM	—	—	—	—	(PCM), □, MUSIC	>DOLBY PLII>
	PCM(AUDIO)	○	○	○	○	PCM, □, MUSIC	>DOLBY PLII>
	ANALOG	○	○	○	○	□, MUSIC	>DOLBY PLII>
	DTS(5.1CH)	—	—	—	—	(dts), □, MUSIC	>DOLBY PLII>
□ PROLOGIC	DOLBY DIGITAL(5.1CH)	○	○	○	○	□ DIGITAL	>DOLBY D>
	DOLBY DIGITAL(2CH)	○	○	○	○	□ DIGITAL, □ PROLOGIC	>DOLBY PL>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	○	○	○	□ DIGITAL, □ PROLOGIC	>DOLBY PL>
	96KHZ PCM	—	—	—	—	(PCM), □ PROLOGIC	>DOLBY PL>
	PCM(AUDIO)	○	○	○	○	PCM, □ PROLOGIC	>DOLBY PL>
	ANALOG	○	○	○	○	□ PROLOGIC	>DOLBY PL>
	DTS(5.1CH)	—	—	—	—	(dts), □ PROLOGIC	>DOLBY PL>
DTS	DOLBY DIGITAL(5.1CH)	—	—	—	—	(□), dts	>DTS>
	DOLBY DIGITAL(2CH)	—	—	—	—	(□), dts	>DTS>
	DOLBY DIGITAL(2CH:Lt/Rt)	—	—	—	—	(□), dts	>DTS>
	96KHZ PCM	—	—	—	—	(PCM), dts	>DTS>
	PCM(AUDIO)	—	—	—	—	(PCM), dts	>DTS>
	DTS(5.1CH)	○	○	○	○	dts	>DTS>
MOVIE HALL MATRIX GAME	DOLBY DIGITAL(5.1CH)	—	—	—	—	(□), DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	DOLBY DIGITAL(2CH)	—	—	—	—	(□), DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	DOLBY DIGITAL(2CH:Lt/Rt)	—	—	—	—	(□), DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	96KHZ PCM	—	—	—	—	(PCM), DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	PCM(AUDIO)	○	○	○	○	PCM, DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	ANALOG	○	○	○	○	DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
	DTS(5.1CH)	—	—	—	—	(dts), DSP, MOVIE/ HALL/ MATRIX/ GAME	>MOVIE/ HALL/ MATRIX/ GAME>
VIRTUAL	DOLBY DIGITAL(5.1CH)	—	—	—	—	(□), DSP, VIRTUAL	>VIRTUAL>
	DOLBY DIGITAL(2CH)	—	—	—	—	(□), DSP, VIRTUAL	>VIRTUAL>
	DOLBY DIGITAL(2CH:Lt/Rt)	—	—	—	—	(□), DSP, VIRTUAL	>VIRTUAL>
	96KHZ PCM	—	—	—	—	(PCM), DSP, VIRTUAL	>VIRTUAL>
	PCM(AUDIO)	○	—	—	○	PCM, DSP, VIRTUAL	>VIRTUAL>
	ANALOG	○	—	—	○	DSP, VIRTUAL	>VIRTUAL>
	DTS(5.1CH)	—	—	—	—	(dts), DSP, VIRTUAL	>VIRTUAL>
5-STEREO	DOLBY DIGITAL(5.1CH)	○	○	○	○	□	>5-STEREO>
	DOLBY DIGITAL(2CH)	○	○	○	○	□	>5-STEREO>
	DOLBY DIGITAL(2CH:Lt/Rt)	○	○	○	○	□	>5-STEREO>
	96KHZ PCM	—	—	—	—	(PCM)	>5-STEREO>
	PCM(AUDIO)	○	○	○	○	PCM	>5-STEREO>
	ANALOG	○	○	○	○		>5-STEREO>
	DTS(5.1CH)	○	○	○	○	dts	>5-STEREO>

Note:

- Dolby Digital (2 ch: Lt/Rt): signal with Dolby Surround flag. Speakers are full set.
- When □, dts or PCM is blinking, the selected surround mode is unavailable for input signal. Select the other appropriate surround mode to playback.
- No sound outputs from the surround speaker, center speaker and subwoofer if the DVD disc has no surround data.

L/R : Front speaker

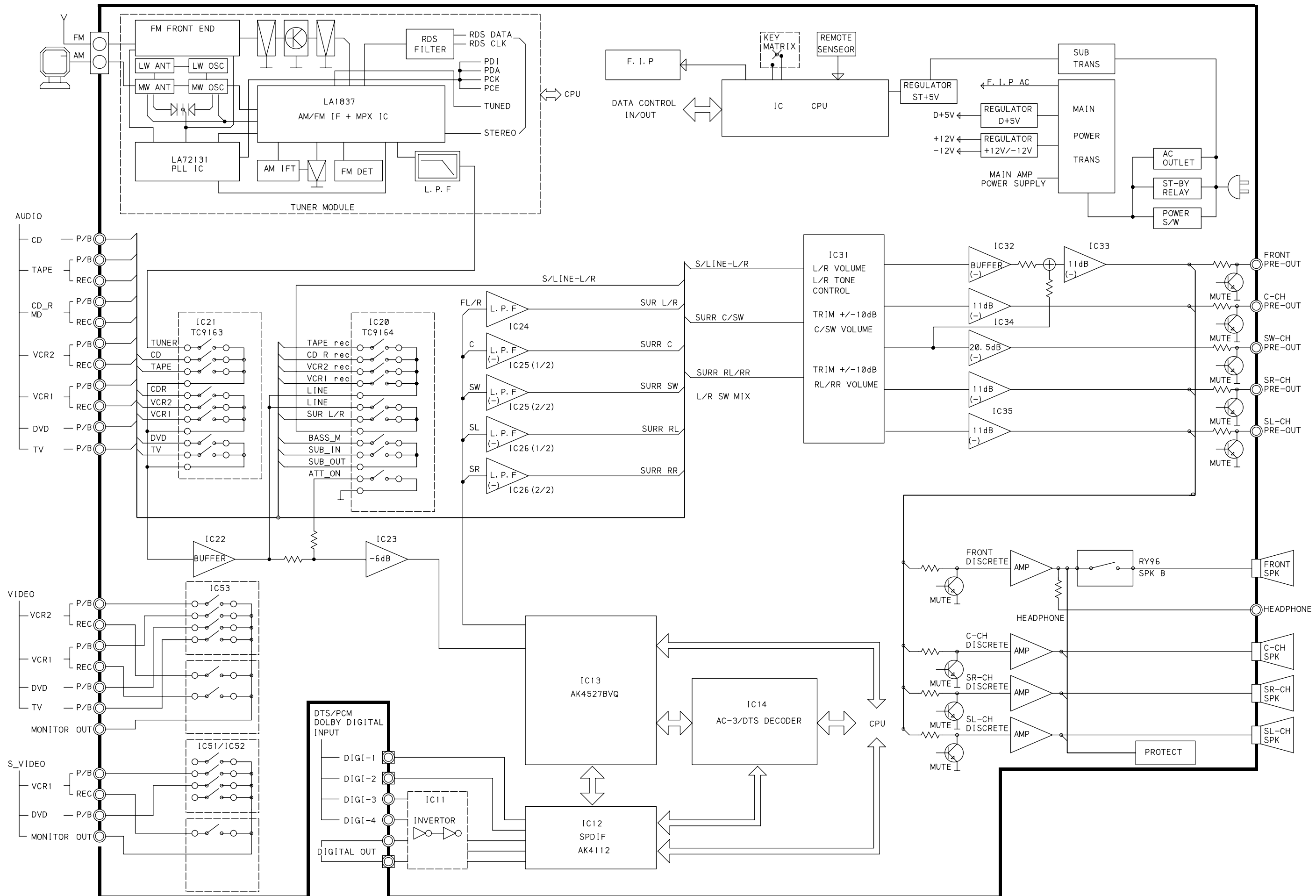
LS/RS : Surround speaker

C : Center speaker

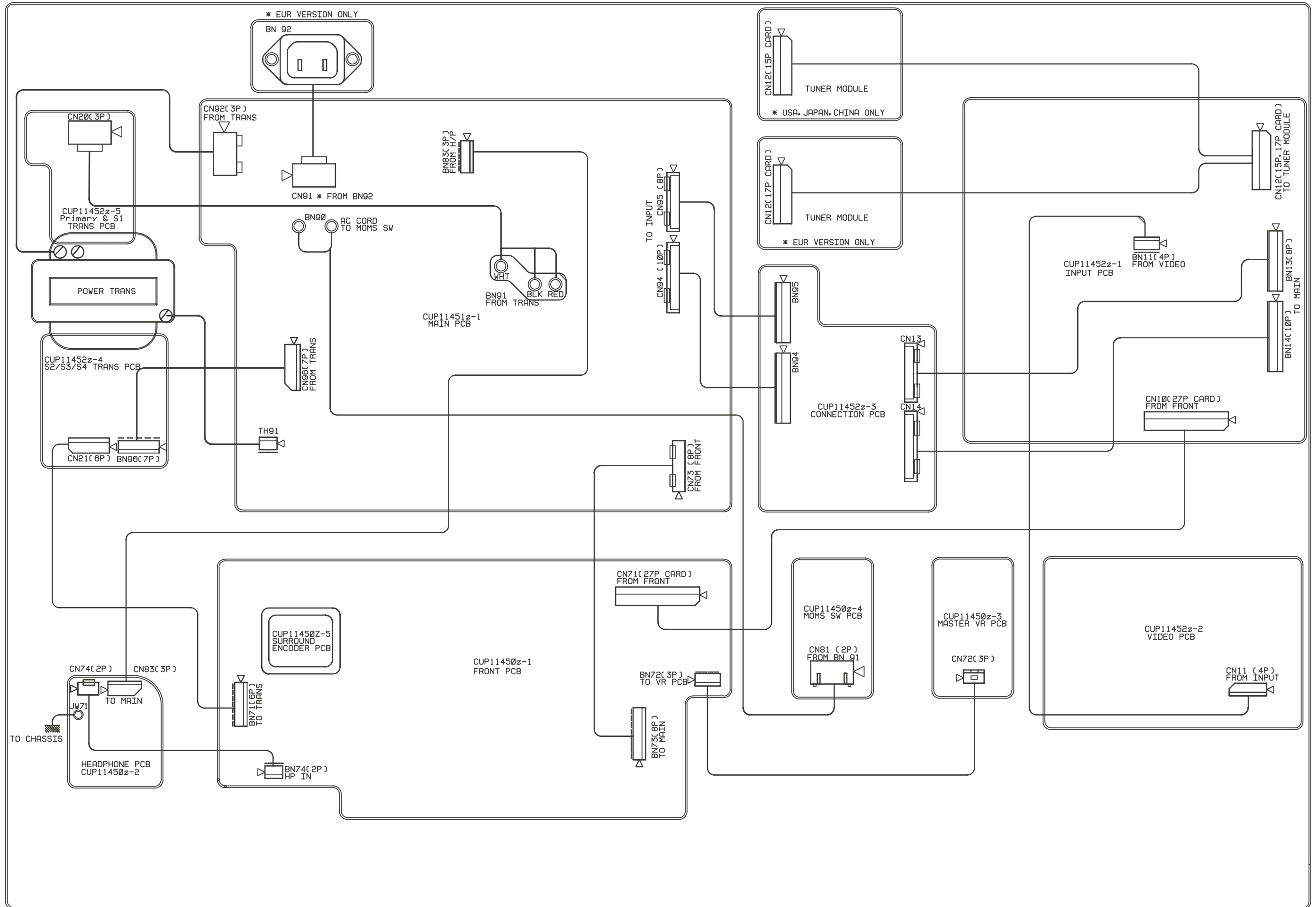
SW : Sub woofer speaker

() : The indicator blinks

3. BLOCK DIAGRAM

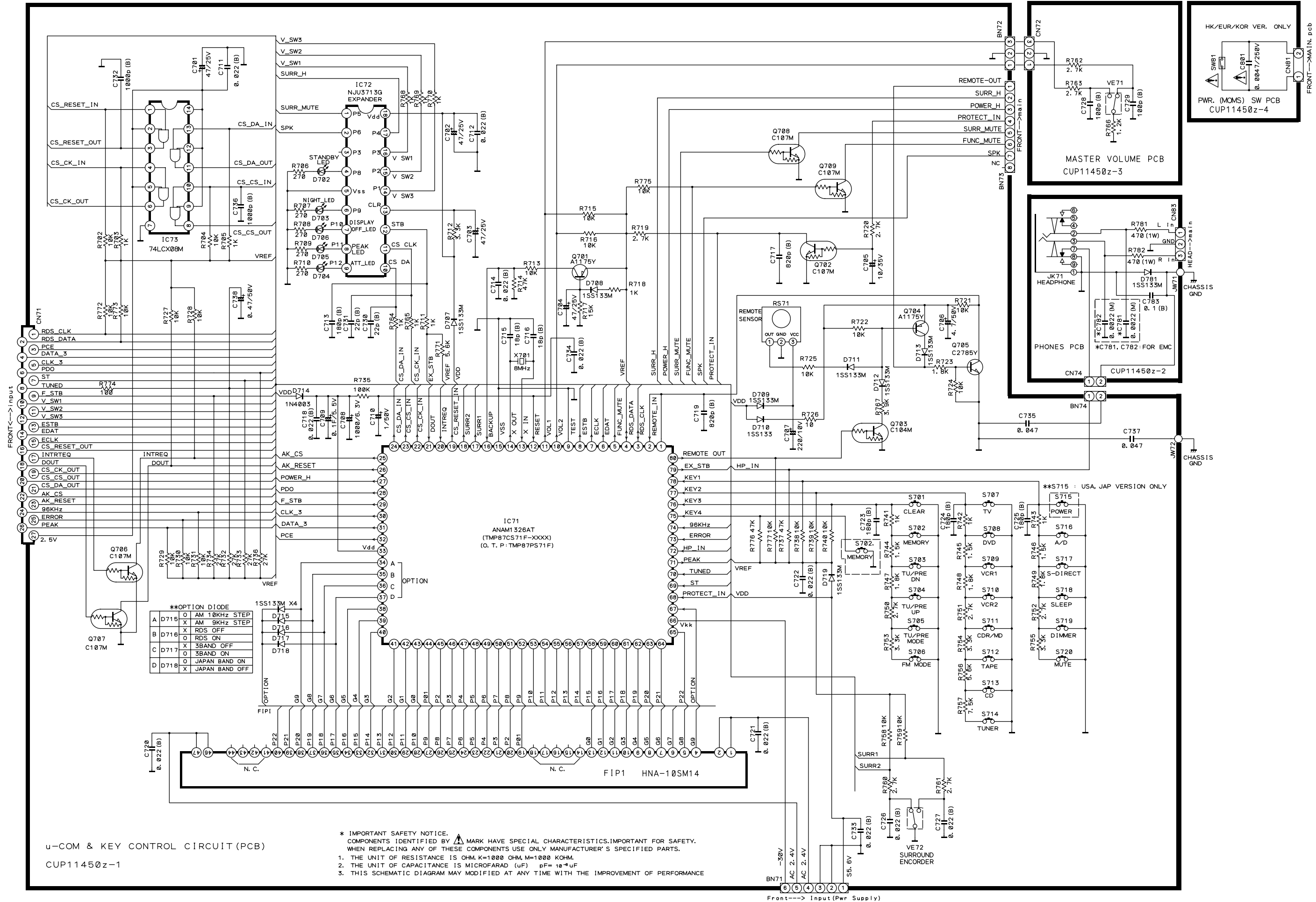


4. WIRING DIAGRAM

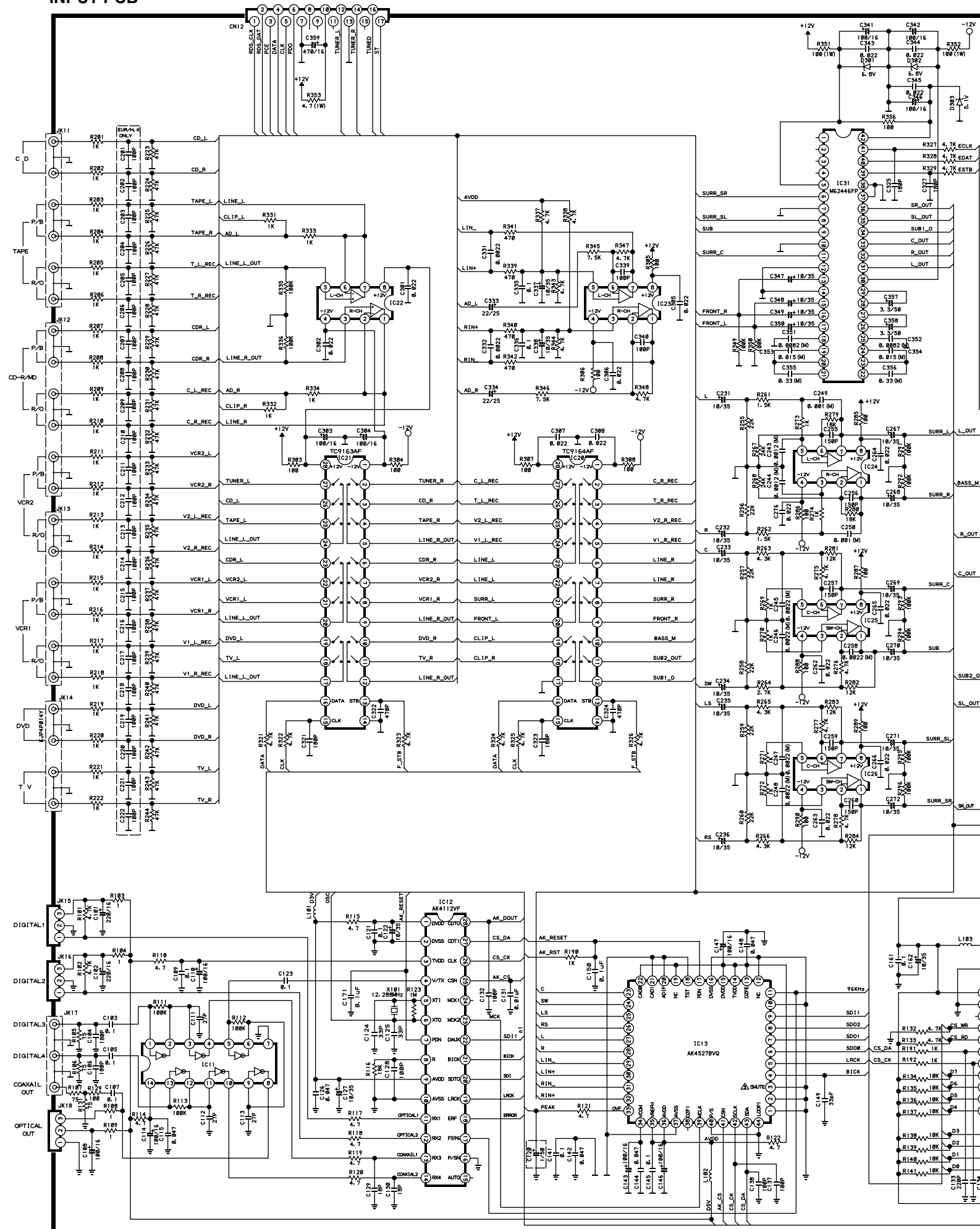


5. SCHEMATIC DIAGRAM AND PARTS LOCATIONS (Parts Side)

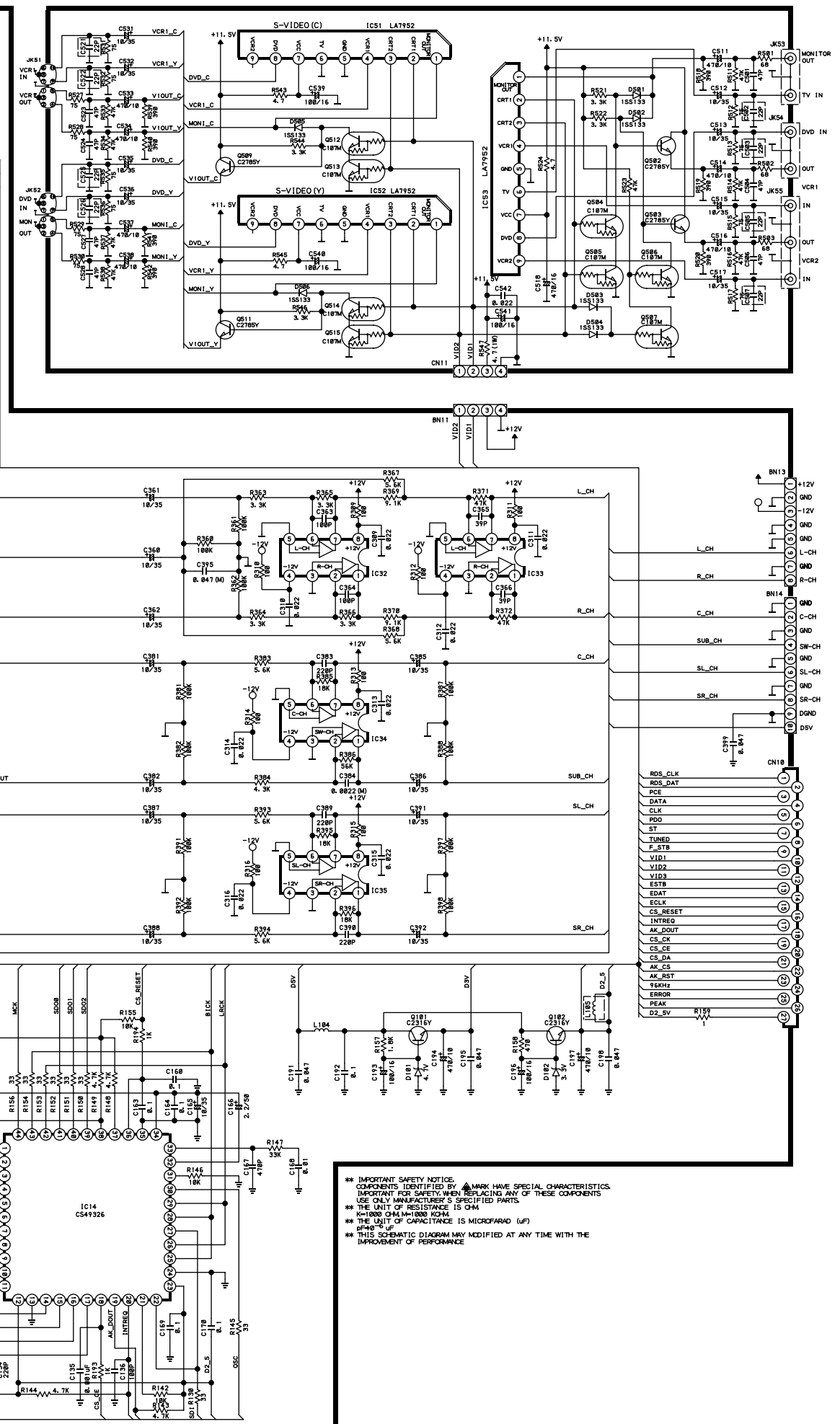
FRONT PCB



INPUT PCB

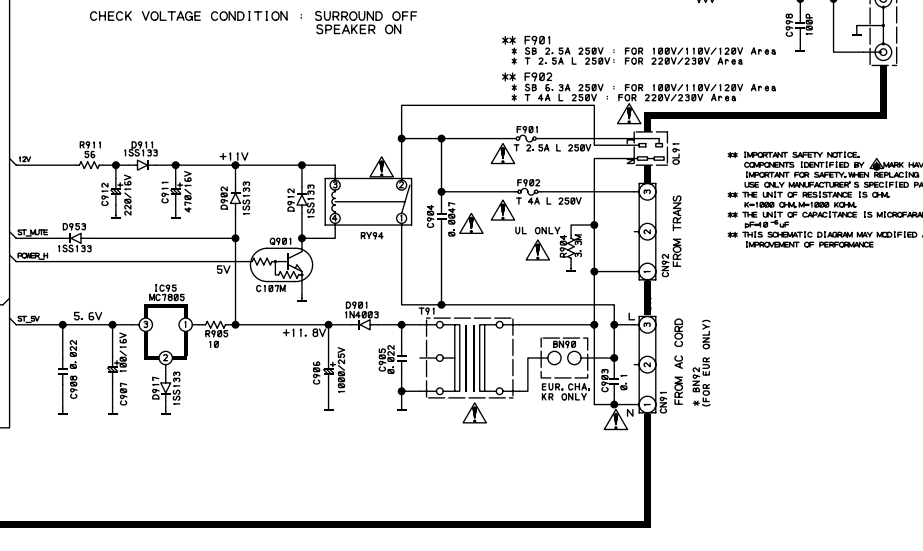
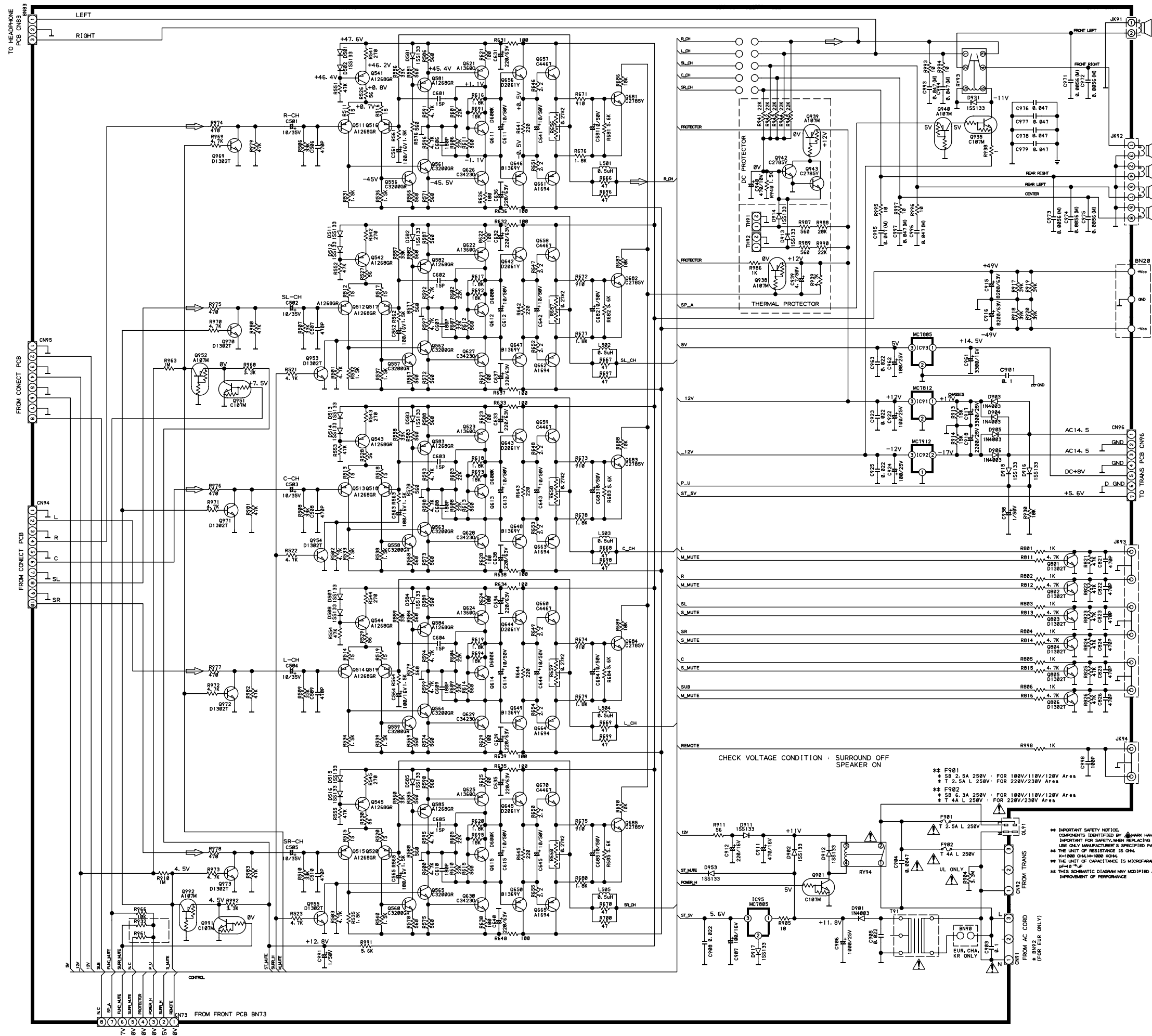


VIDEO PCB



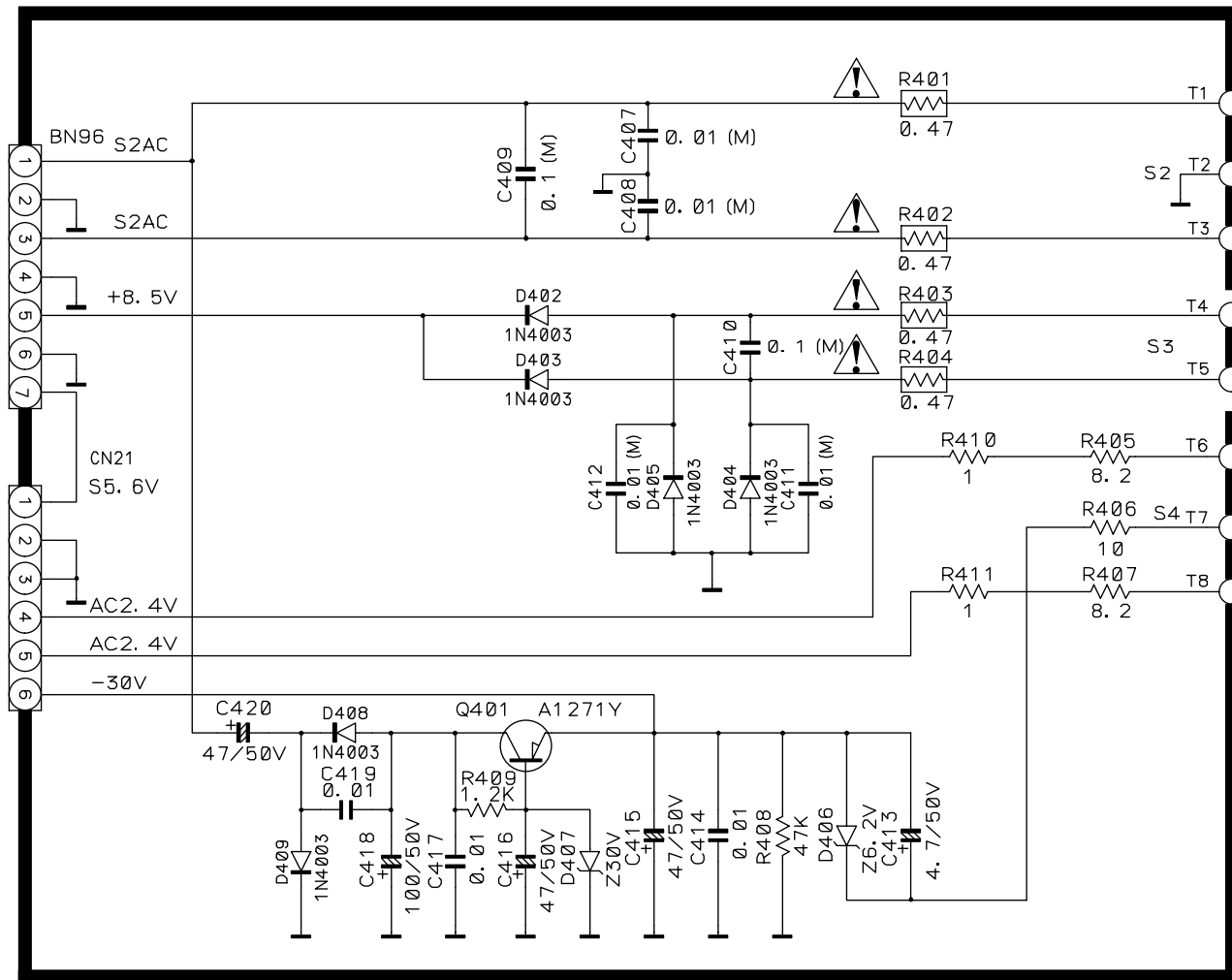
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY, WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PARTS.
** THE UNIT OF RESISTANCE IS OHM
** THE UNIT OF CAPACITANCE IS MICROFARAD (UF)
** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE
IMPROVEMENT OF PERFORMANCE

MAIN PCB



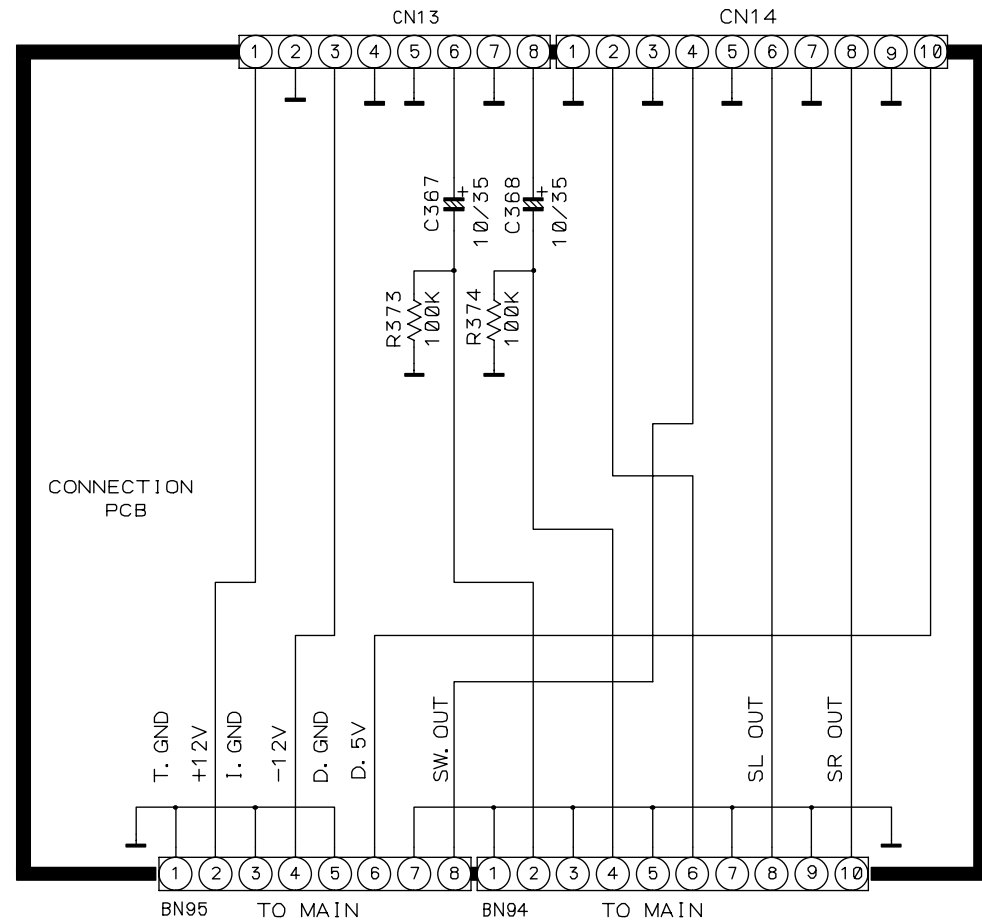
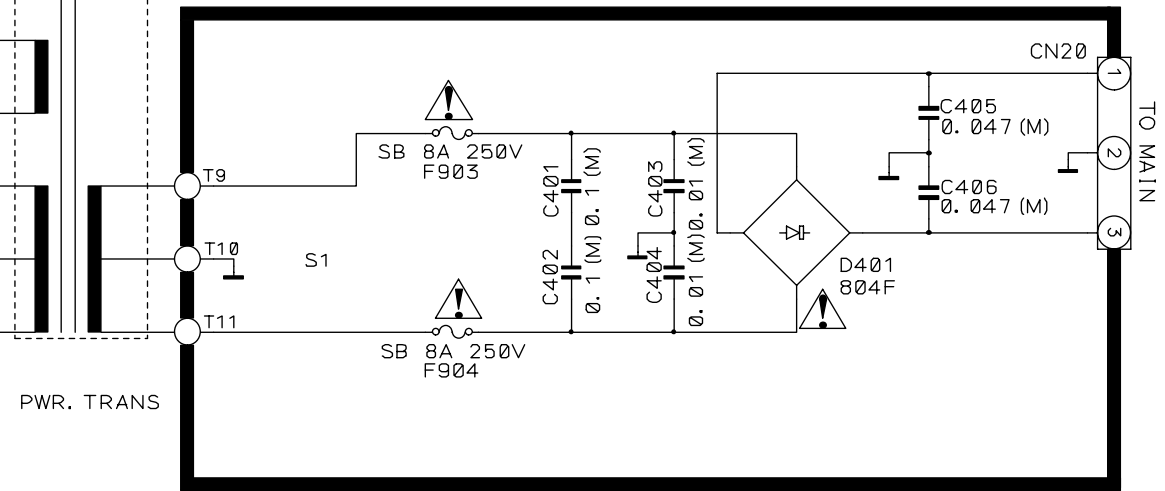
** IMPORTANT SAFETY NOTICE:
 COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS.
 IMPORTANT FOR SAFETY, WHEN REPLACING ANY OF THESE COMPONENTS
 USE ONLY MANUFACTURER'S SPECIFIED PARTS.
 * THE UNIT OF RESISTANCE IS OHM.
 * THE UNIT OF CAPACITANCE IS MICROFARAD (UF)
 * P=10% TOLERANCE
 ** THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE
 IMPROVEMENT OF PERFORMANCE

POWER-2 PCB



TRANS AC IN
(PRIMARY)
EUR, HK, CHI : 230V/50Hz
KOR : 220V/60Hz
USA : 120V/60Hz
JPN : 100V/50, 60Hz
TAIWAN : 110V/60Hz

POWER-1 PCB



CONNECTION PCB

FRONT PCB

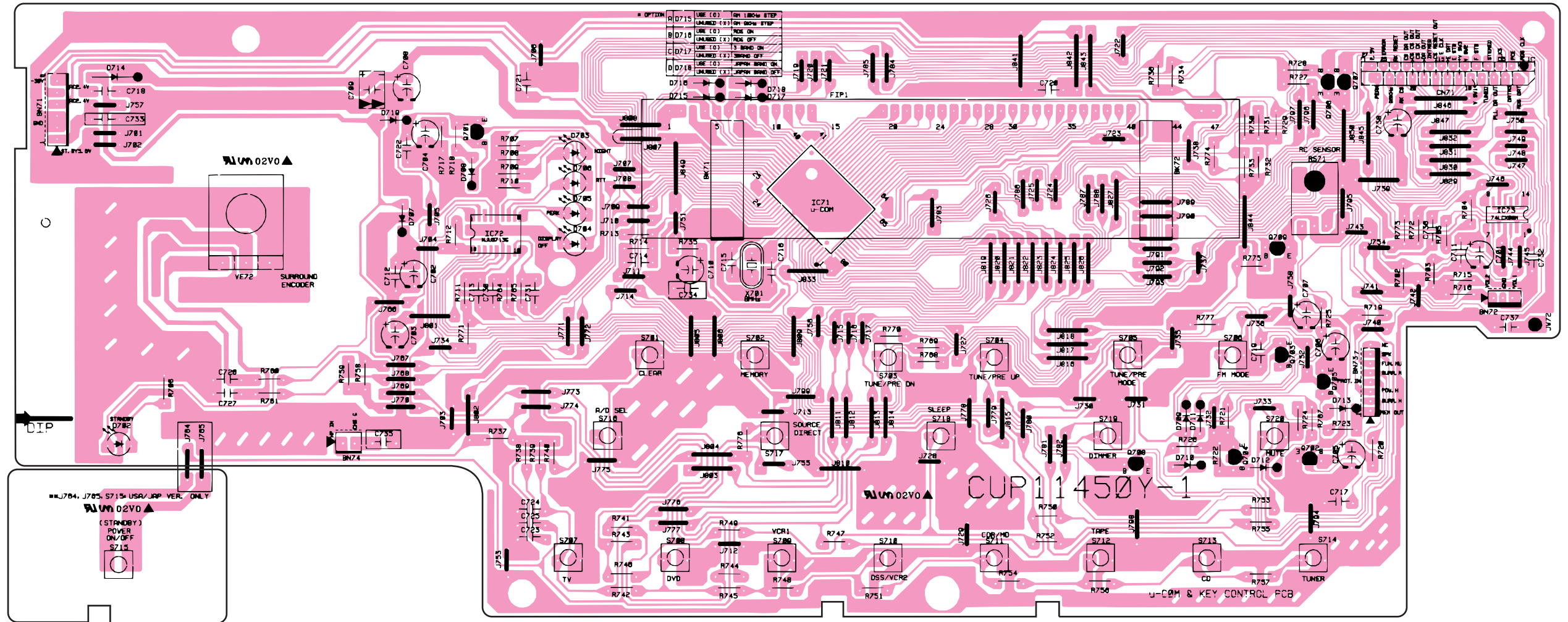
Q701 IC72

IC71

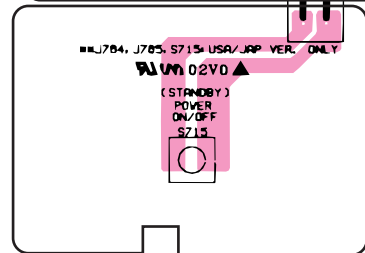
Q708

Q704

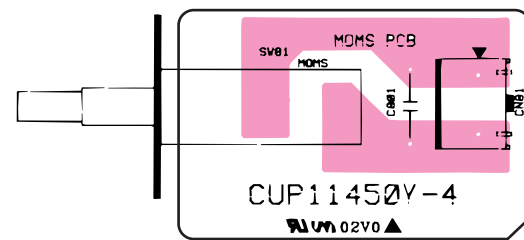
Q709 Q705 Q707
Q703 Q702 Q706



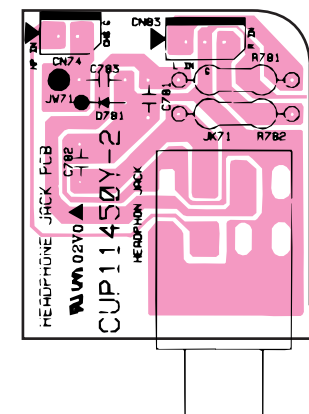
POWER PCB (F, U)



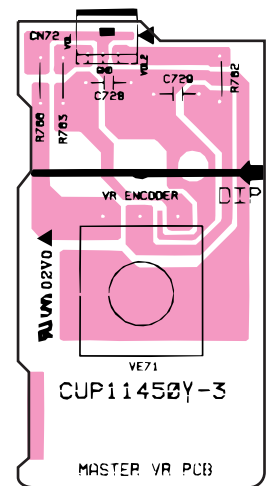
MOMS PCB (K, L, N)

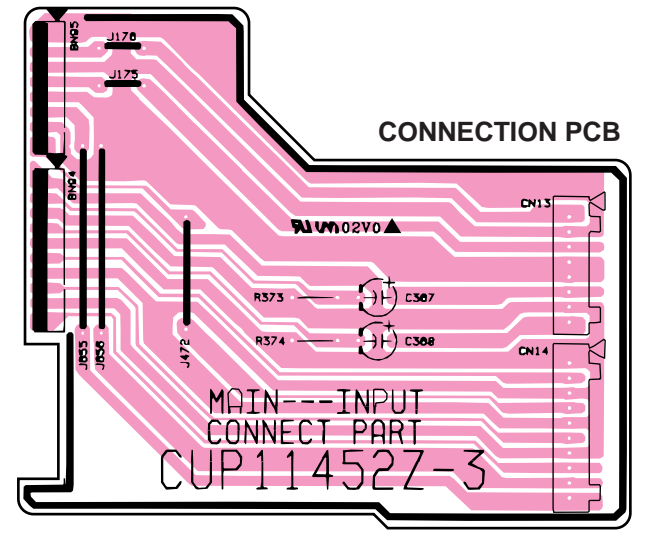
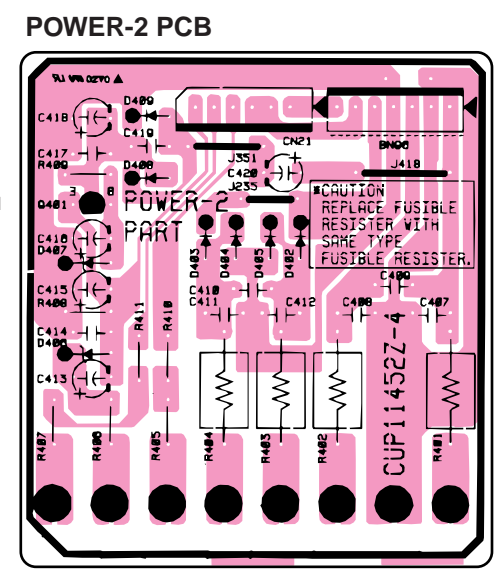
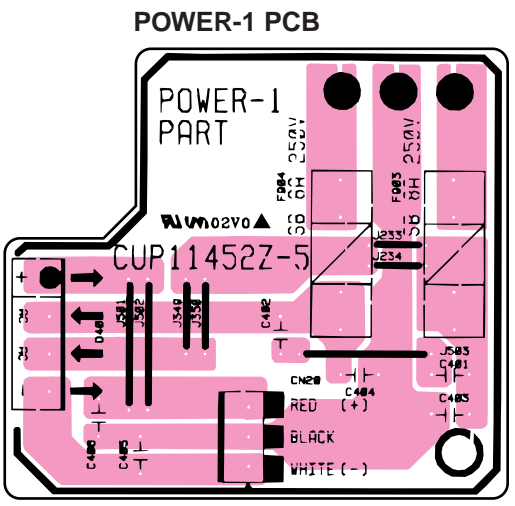
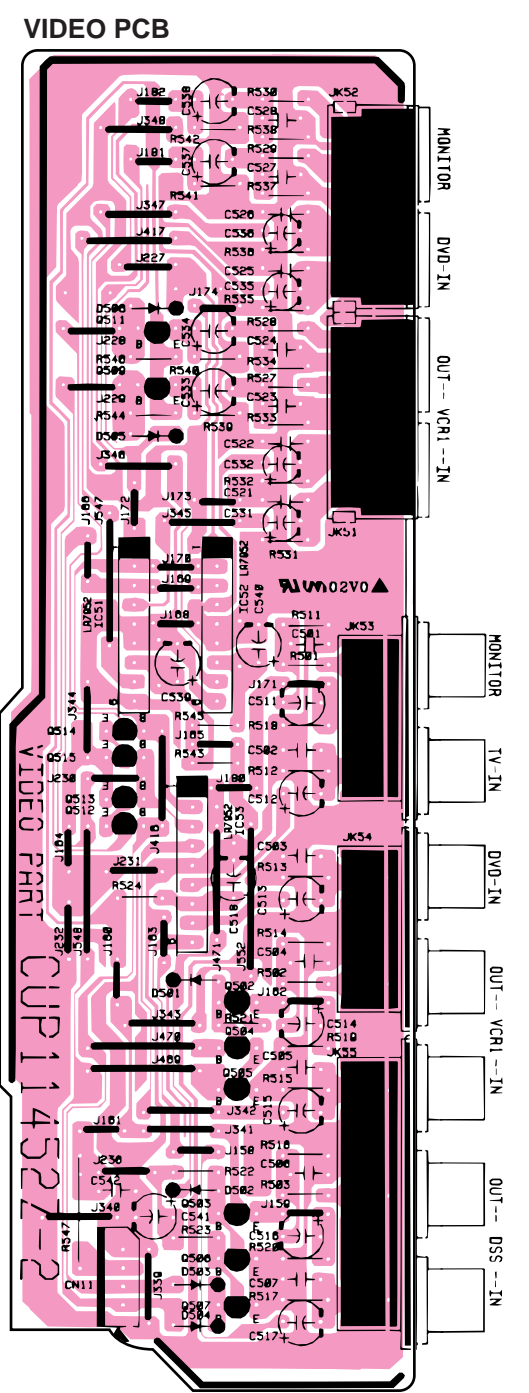
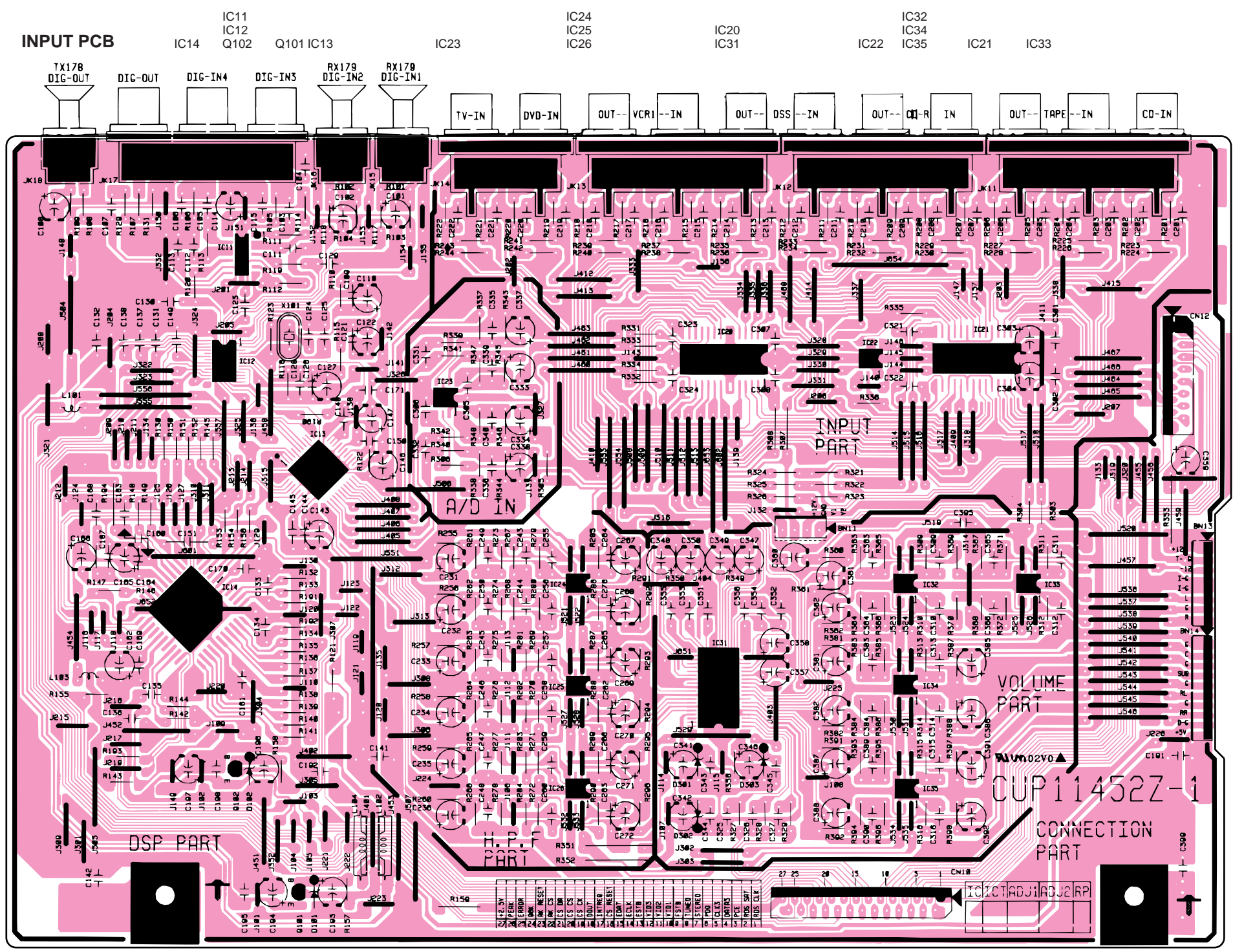


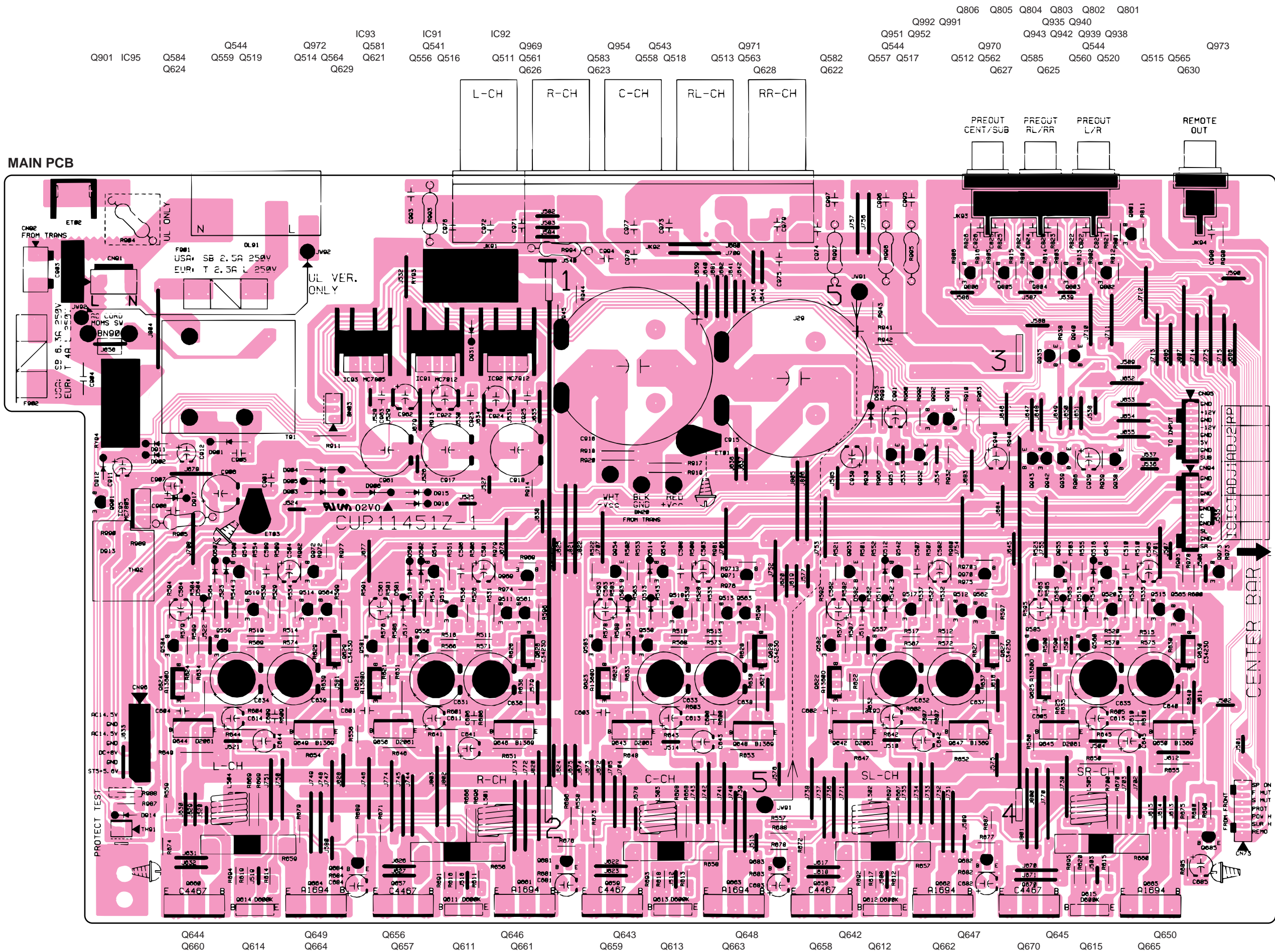
HEADPHONE JACK PCB



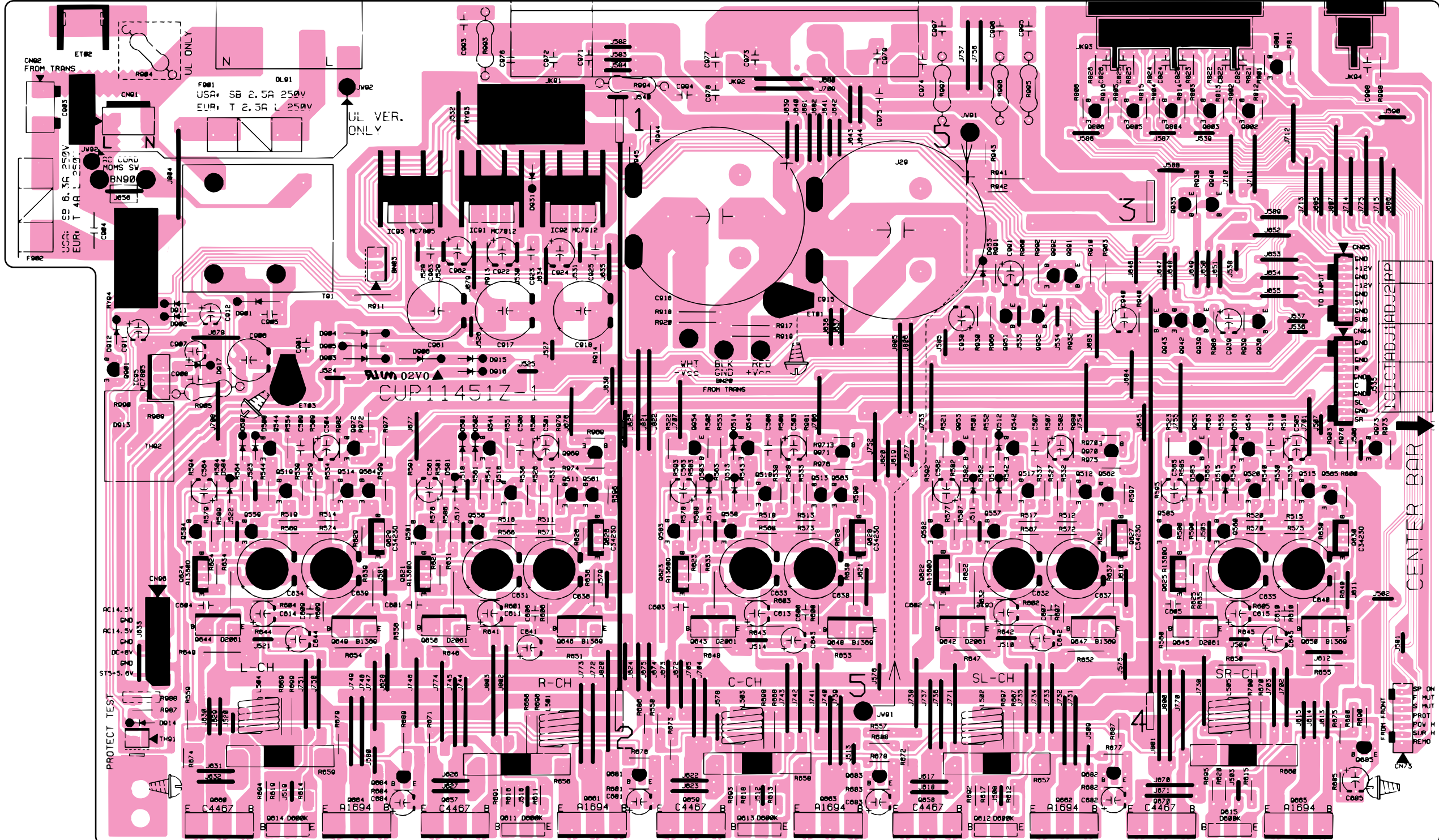
MASTER VR PCB







MAIN PCB

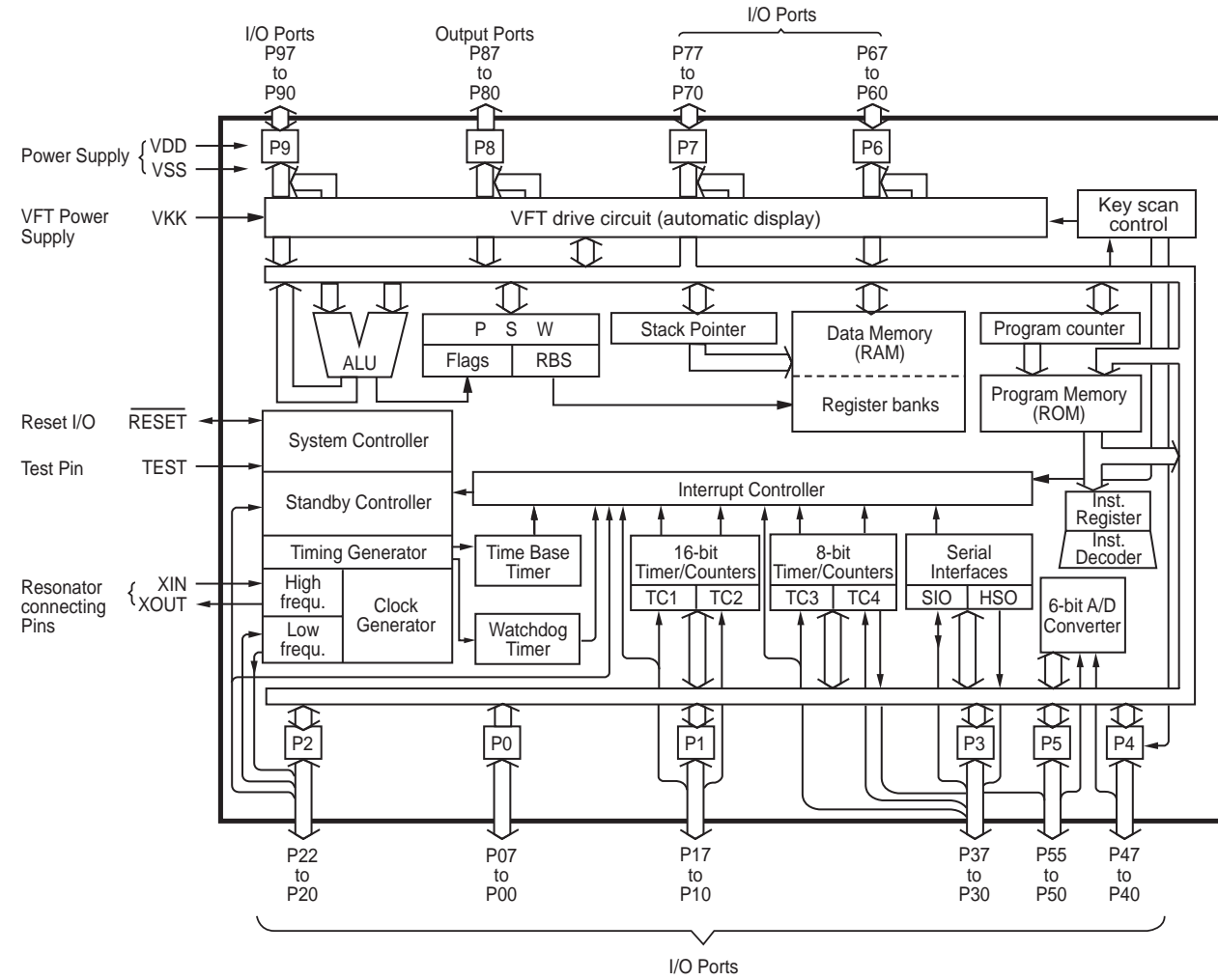


- Q644 Q660 Q614 Q614 Q664 Q649 Q664 Q656 Q657 Q611 Q661 Q643 Q659 Q613 Q663 Q648 Q658 Q642 Q612 Q662 Q647 Q670 Q645 Q615 Q650 Q665

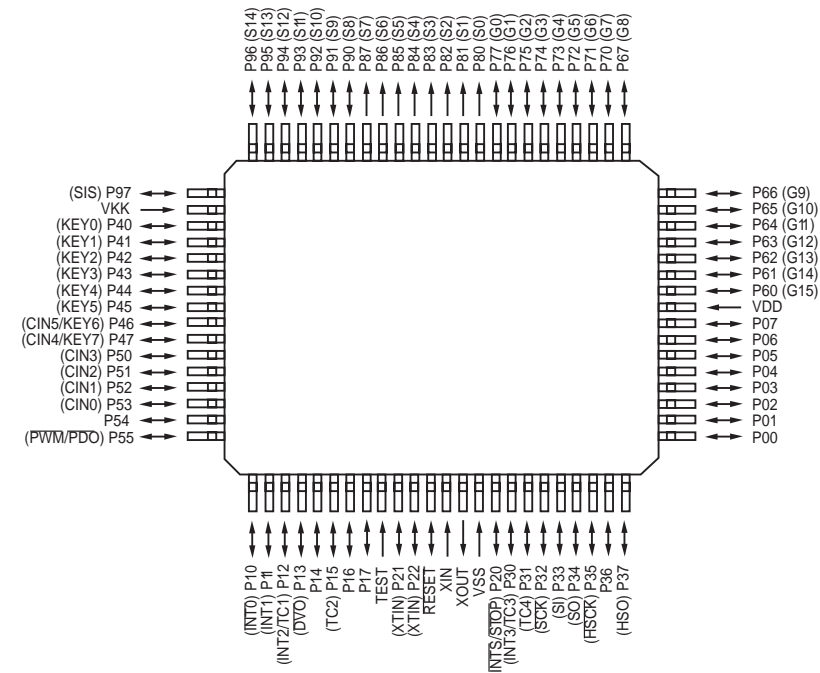
6. MICROPROCESSOR AND IC DATA

IC71 : ANAM1328AT

BLOCK DIAGRAM



PIN CONFIGURATION

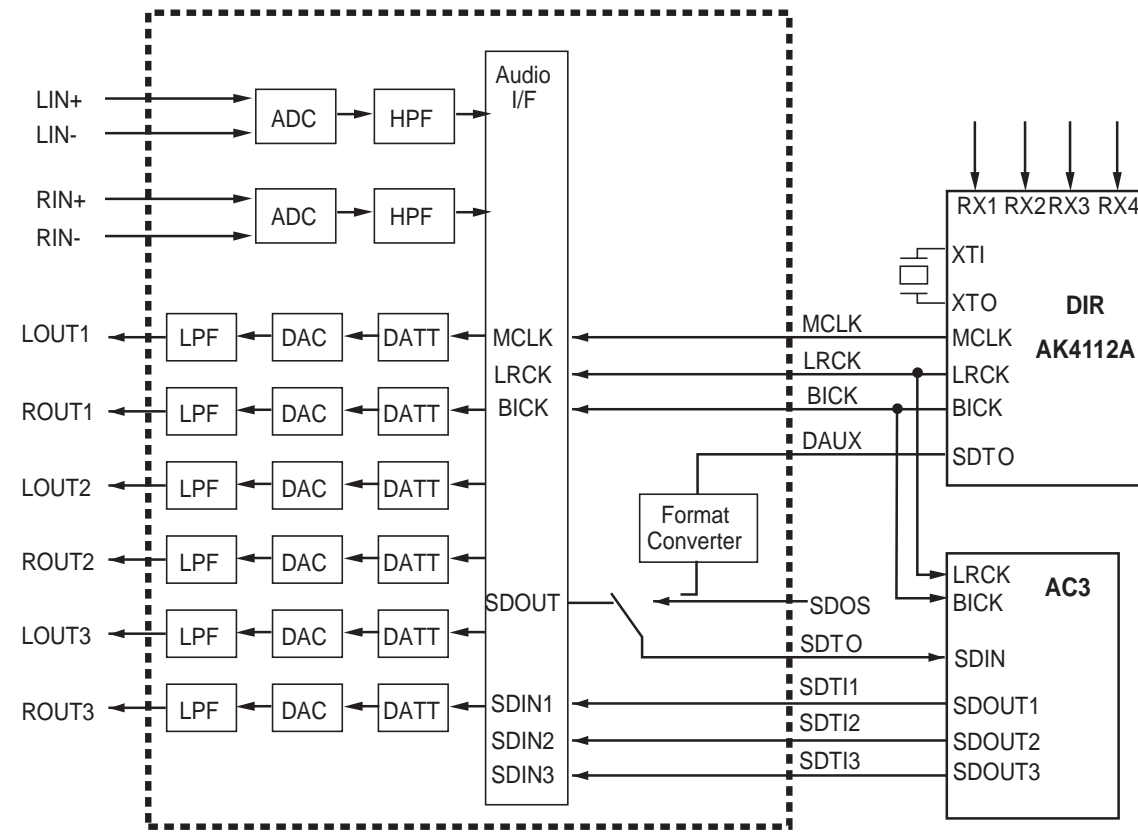


PIN FUNCTIONS

PIN No.	SYMBOL	I/O	DESCRIPTION
1,2	REMOTE IN	I	Remote Control Sensor Data Input
3	RDS CLK	I/O	RDS IC (on the Tuner Module) CLK/Data Port
4	RDS DATA	I/O	
5	Function Mute	O	Function Mute Control Output Port(Active "H")
6	E. VOL. Data	O	
7	E. VOL. CLK	O	Electronic Vol.IC (M62446FP) Data/CLK/STB Port
8	E. VOL. CE(STB)	O	
9	Vpp(Test)	-	Program Supply Voltage (GND Connection)
10	Volume Up(Encoder)	I	Master Volume Up/Down Control Port
11	Volume Down(Encoder)	I	
12	RESET	I	Reset Input Port("L")
13	XIN	I	8MHz Crystal Connection Port
14	X OUT	O	
15	Vss(GND)	I	Device GND Port
16	Back Up	I	Back Up Mode Control Port ("L")
17	SURROUND SW	I	Surround mode (ENCODER) Control Port
18	SURROUND SW	I	
19	CS RESET IN	O	Reset (Initial Clear) Control Port for CS493263
20	INTREQ	I	Interrupt Request Input Port for CS493263
21	D OUT	I	Data Input Port for CS493263/AK4112VF
22	CS CLK IN	O	CLK Output Port for NJU3713G/CS493263/AK4527BVQ
23	CS CS IN	O	Chip Selector Port for CS493263
24	CS DA IN	O	Data Output Port for NJU3713G/CS493263/AK4527BVQ
25	AK CS	O	Chip Selector Port for AK4527BVQ
26	AK RESET	O	Reset Port for AK4527BVQ/AK4112VF
27	POWER " H "	O	Power Relay On/Off Control Port(Active"H")
28	PDO	I	PLL IC(LC72131)Data Input Port
29	FUNC.STB	O	Function IC(TC9163/64) Strobe Control Port
30	CLK3	O	Function/PLL IC CLK Control Port
31	DATA3	O	Function/PLL IC Data Control Port
32	PCE	O	PLL IC(LC72131:on the Tuner Module) Chip Enable Control Port
33	VDD/VCC	-	Power Supply Port (+5V)
34~37	Option	O	Option Control Output Port
34~43	FIP Grid	O	FIP Grid Control Port
44~65	FIP Segment	O	FIP Segment Control Port
66	Vkk	-	FIP Power Supply Port (-30V)
67	Option	I	Option Control Input Port
68	Protect IN	I	Protect Input Port(Active " L ")
69	Stereo IN	I	Stereo Display Control Port
70	Tuned IN	I	Tuned Display Control Port
71	PEAK	O	Peak Level Control Input Port
72	HP IN	I	Headphon Detective Input Port(Active " H ")
73	ERROR	I	Error Detection Input Port
74	96KHz	I	96KHz Detection Input Port
75~78	KEY Matrix	I	Key Control Input Port
79	EX STB	O	Expanded IC(NJU3713G) Strobe Control Port
80	Bus Out	O	Remote Control Data Output Port

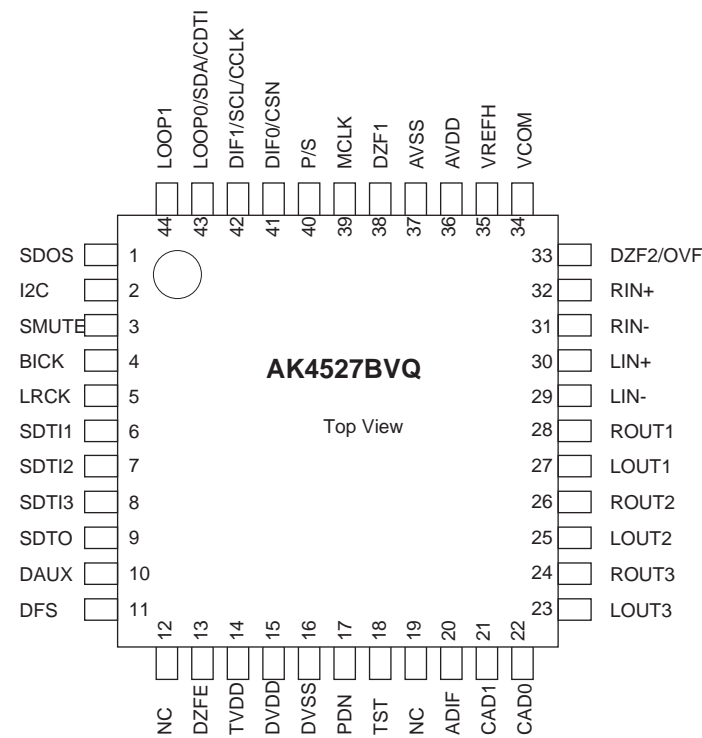
IC13 : AK4527BVQ

BLOCK DIAGRAM



[Serial Control Mode]

PIN CONFIGURATION



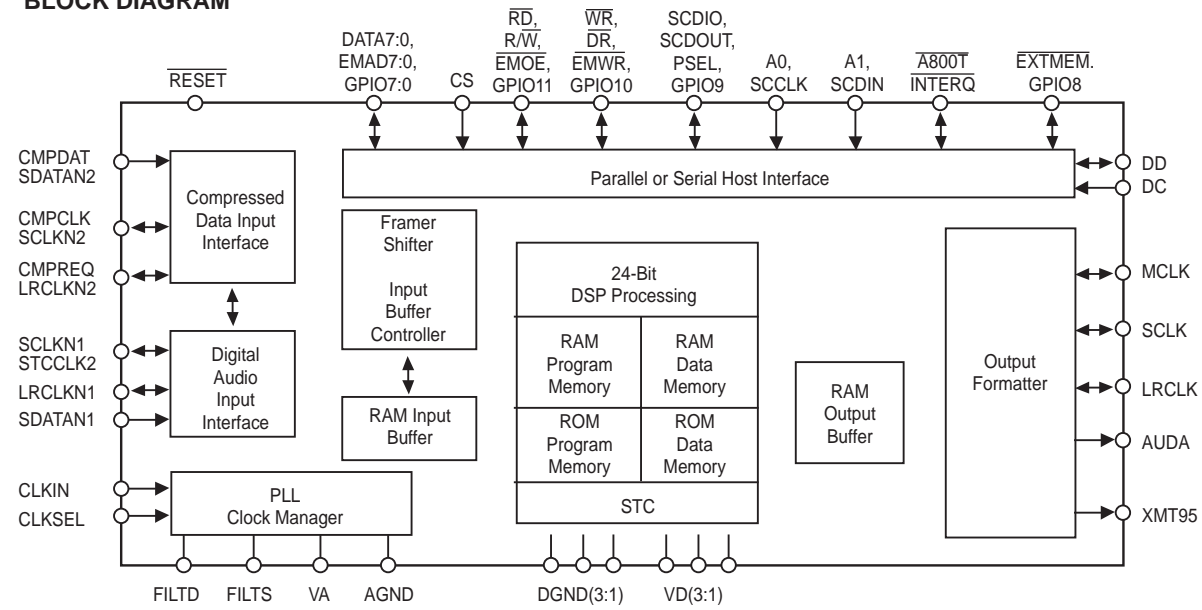
PIN FUNCTIONS

PIN No.	Pin Name	I/O	Function
1	SDOS	I	SDTO Source Select Pin (Note 1) L : Internal ADC output, H : DAUX input
2	I2C	I	Control Mode Select Pin L : 3-wire Serial, H : I ² C Bus
3	SMUTE	I	Soft Mute Pin (Note 1) When this pin goes to H, soft mute cycle is initialized. When returning to L, the output mute releases.
4	BICK	I	Audio Serial Data Clock Pin
5	LRCK	I	Input Channel Clock Pin
6	SDTI1	I	DAC1 Audio Serial Data Input Pin
7	SDTI2	I	DAC2 Audio Serial Data Input Pin
8	SDTI3	I	DAC3 Audio Serial Data Input Pin
9	SDTO	O	Audio Serial Data Output Pin
10	DAUX	I	AUX Audio Serial Data Input Pin
11	DFS	I	Double Speed Sampling Mode Pin (Note 1) L : Normal Speed, H : Double Speed
12	NC	-	No Connect No internal bonding.
13	DZFE	I	Zero Input Detect Enable Pin L : mode 7(disable) at parallel mode, zero detect mode is selectable by DZFM2-0 bits at aerial mode H : mode 0(DZF1 is AND of all six channels)
14	TVDD	-	Output Buffer Power Supply Pin, 2.7V~5.5V
15	DVDD	-	Digital Power Supply Pin, 4.5V~5.5V
16	DVSS	-	Digital ground Pin, 0V
17	PDN	I	Power-Down & Reset Pin When L, the AK4527B is powered-down and the control registers are reset to default state. If the state of P/S or CAD0-1 changes, then the AK4527B must be reset by PDN.
18	TST	I	Test Pin This Pin should be connected to DVSS.
19	NC	-	No Connect No internal bonding.
20	ADIF	I	Analog Input Format Select Pin H : Full-differential input, L : Single-ended input
21	CAD1	I	Chip Address 1 Pin
22	CAD0	I	Chip Address 0 Pin
23	LOUT3	O	DAC3 Lch Analog Output Pin
24	ROUT3	O	DAC3 Rch Analog Output Pin
25	LOUT2	O	DAC2 Lch Analog Output Pin
26	ROUT2	O	DAC2 Rch Analog Output Pin
27	LOUT1	O	DAC1 Lch Analog Output Pin
28	ROUT1	O	DAC1 Rch Analog Output Pin
29	LIN-	I	Lch Analog Negative Input Pin
30	LIN+	I	Lch Analog Positive Input Pin
31	RIN-	I	Rch Analog Negative Input Pin
32	RIN+	I	Rch Analog Positive Input Pin
33	DZF2	O	Zero Input Detect 2 Pin (Note2) When the input data of the group 1 follow total 8192 LRCK cycles with 0 input data, this pin goes to H.
	OVF	O	Analog Input Overflow Detect Pin (Note 3) This pin goes to H if the analog input of Lch or Rch is overflows.
34	VCOM	O	Common Voltage Output Pin, AVDD/2 Large external capacitor around 2.2 F is used to reduce power-supply noise.
35	VREFH	I	Positive Voltage Reference Input Pin, AVDD
36	AVDD	-	Analog Power Supply Pin, 4.5V~5.5V
37	AVSS	-	Analog Ground Pin, 0V
38	DZF1	O	Zero Input Detect 1 Pin (Note 2) When the input data of the group 1 follow total 8192 LRCK cycles with 0 input data, this pin goes to H
39	MCLK	I	Master Clock Input Pin
40	P/S	I	Parallel/serial Select Pin L : Serial control mode, H : Parallel control mode
41	DIF0	I	Audio Data Interface Format 0 Pin in parallel control mode
	CSN	I	Chip Select Pin in 3-wire serial control mode This Pin should be connected to DVDD at I ² C bus control mode
42	DIF1	I	Audio Data Interface Format 1 Pin in parallel control mode
	SCL/CCLK	I	Control Data Clock Pin in serial control mode 12C = L : CCLK (3-wire Serial), 12C = H : SDA (I ² C Bus)
43	LOOP0	I	Loopback Mode 0 Pin in parallel control mode Enables digital loop-back from ADC to 3 DACs.
	SDA/CDTI	I/O	Control Data Input Pin in serial control mode 12C= L : CDT1 (3-wire Serial), 12C = H : SDA (I ² C Bus)
44	Loop1	I	Loopback Mode 1 Pin (Note 1) Enables all 3 DAC channels to be input from SDTI1.

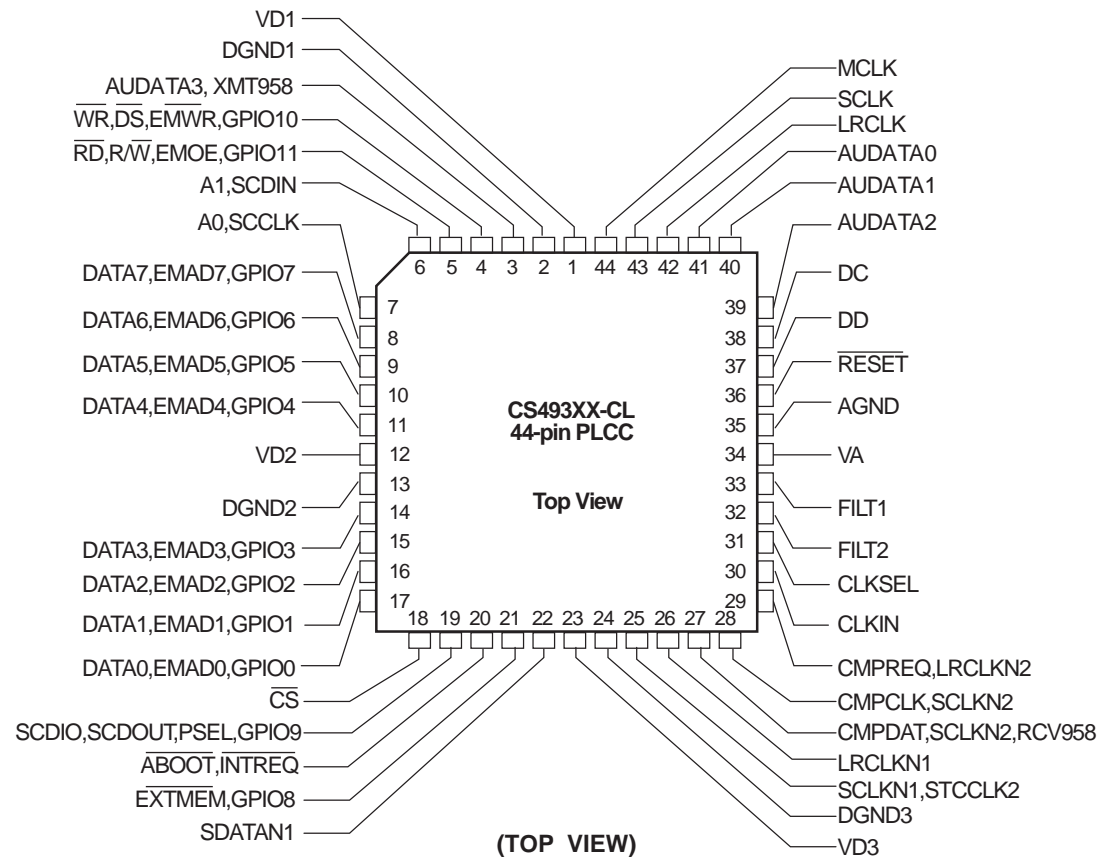
- Notes:**
1. SDOS, SMUTE, DFS, and LOOP pins are ORed with register data if P/S = L
 2. The group 1 and 2 can be selected by DZFM2-0 bits if P/S = L and DZFE = L.
 3. This pin becomes OVF pin if OVFE bit is set to 1 at serial control mode.
 4. All input pins should not be left floating.

IC14 : CS493263

BLOCK DIAGRAM



PIN CONFIGURATION

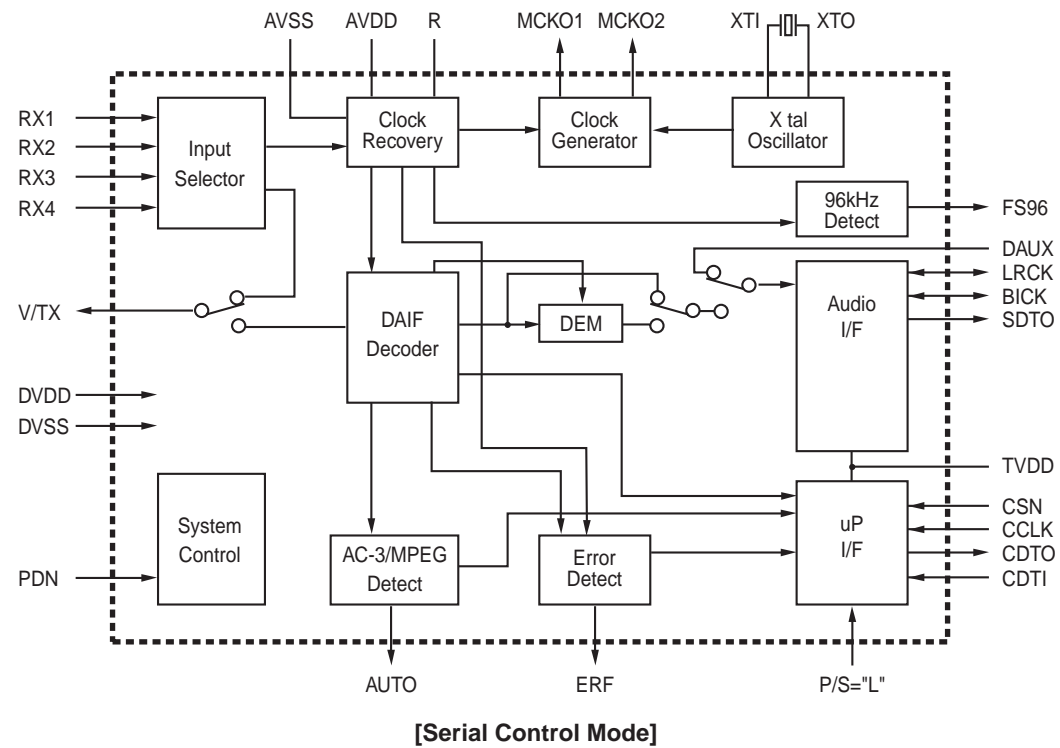


(TOP VIEW)

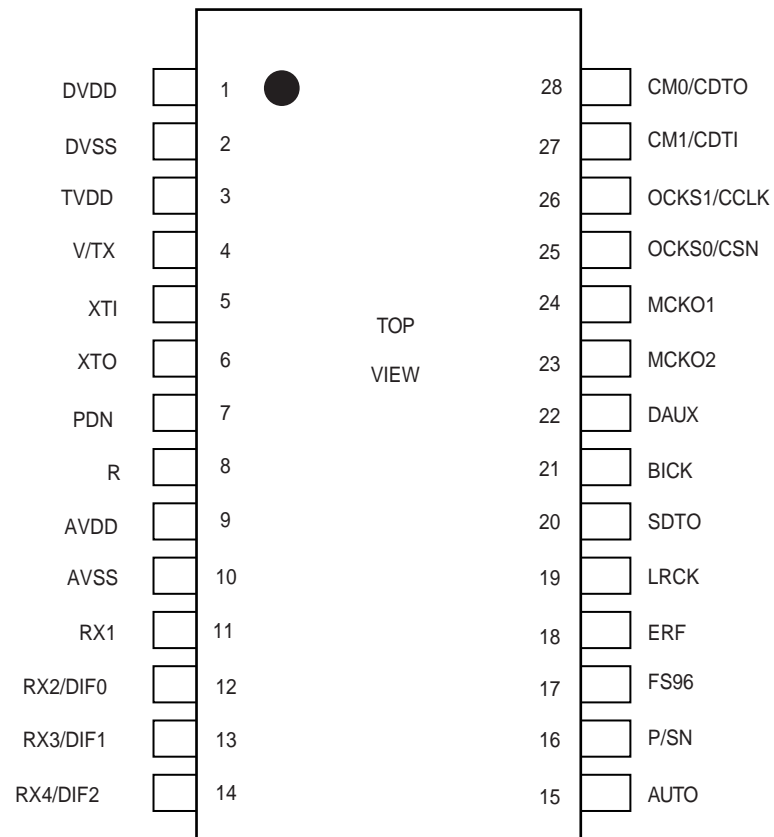
PIN FUNCTIONS

PIN No.	Name	I/O	FUNCTION
1,12,23	VD1/2/3	-	Digital positive supplies. Nominally + 2.5V
2,13,24	DGND1/2/3	-	Digital ground
3	AUDATA 3/XMT958	O	SPDIF transmitter output/Digital audio output (unused)
4	WR	I	Host write strobe pin
5	RD	I	Host parallel output enable pin
6	SCDIN	I	SPI Serial data input pin
7	SCCLK	I	Serial control clock input pin
8	DATA 7	I/O	Serial data in/output pins
9	DATA 6	I/O	
10	DATA 5	I/O	
11	DATA 4	I/O	
14	DATA 3	I/O	
15	DATA 2	I/O	
16	DATA 1	I/O	
17	DATA 0	I/O	
18	CS	I	Host parallel chip select pin
19	SCDOUT	O	Serial control port data output pin
20	INTREQ	O	Control port interrupt request output pin
21	GPIO 8	I/O	General purpose in/output number 8 pin
22	SDATAN1	I	PCM audio data input number 1 pin
25	SCLKN1	I	PCM audio input bit clock pin
26	LRCLKN1	I	PCM audio input sample rate clock pin
27	SDATAN1	I	PCM audio data input number 2 pin
28	SCLKN2	I	PCM audio input bit clock pin
29	LRCLKN2	I	PCM audio input sample rate clock pin
30	CLKIN	I	Master clock input(used external clock)
31	CLKSEL	I	DSP clock mode select pin: connect the GND
32	FILT1		Connects to an external filter for the on-chip phase-locked loop
33	FILT1		Connects to an external filter for the on-chip phase-locked loop
34	VA	-	Analog positive supply for clock generator. Nominally + 2.5V
35	AGND	-	Analog ground supply for clock generator PLL.
36	RESET	I	Master reset input pin
37	DD	-	Reserved pin and should be pulled up with an external resistor.
38	DC	-	Reserved pin and should be pulled up with an external resistor.
39	AUDATA 2	O	PCM multi-format digital-audio data output2 pin
40	AUDATA 1	O	PCM multi-format digital-audio data output1 pin
41	AUDATA 0	O	PCM multi-format digital-audio data output0 pin
42	LRCLK	I	Audio output sample rate clock pin
43	SCLK	I	Audio output bit clock pin
44	MCLK	I	Audio master clock output pin

IC12 : AK4112AVF
BLOCK DIAGRAM



PIN CONFIGURATION



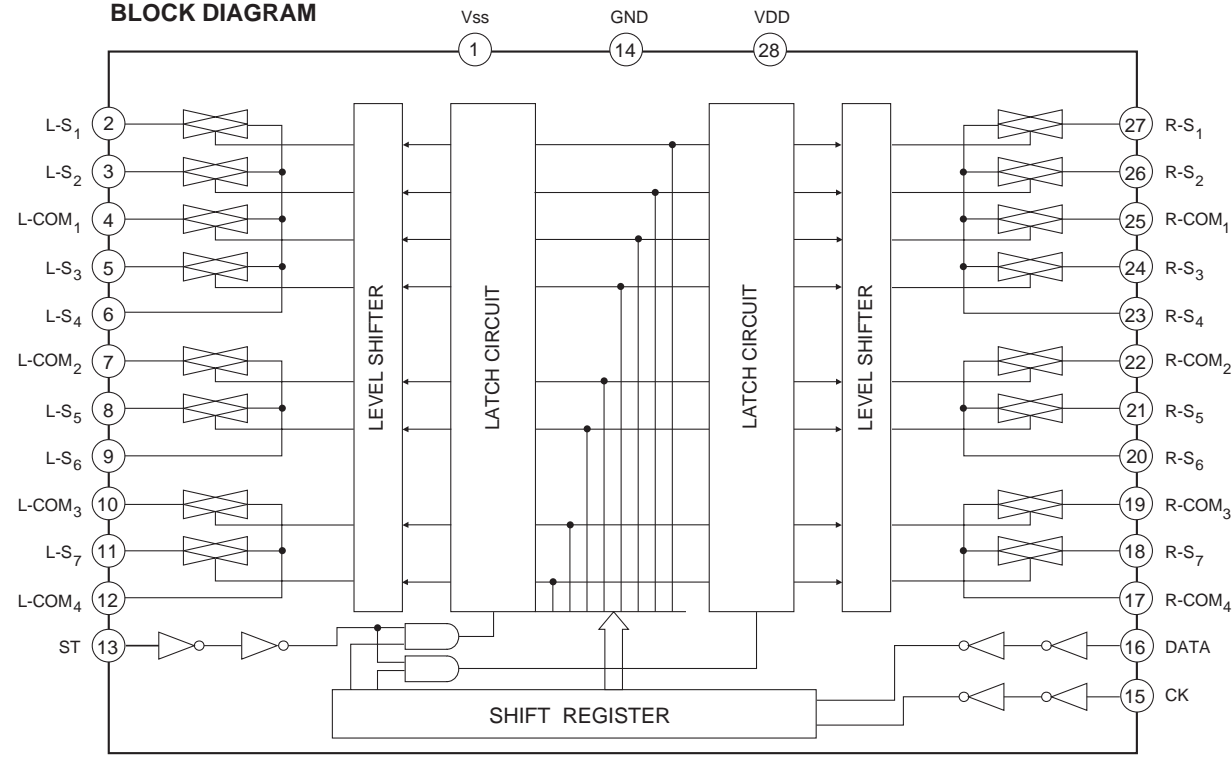
PIN FUNCTIONS

PIN No.	Pin Name	I/O	Function
1	DVDD	-	Digital Power Supply Pin, 3.3V
2	DVSS	-	Digital Ground Pin
3	TVDD	-	Input Buffer Power Supply Pin, 3.3V or 5V
4	V	O	Validity Flag Output Pin in Parallel Mode
	TX	O	Transmit channel (through data) Output Pin in Serial Mode
5	XTI	I	X tal Input Pin
6	XTO	O	X tal Output Pin
7	PDN	I	Power-Down Mode Pin When L, the Ak4112A is powered-down and reset.
8	R	-	External Resistor Pin 18k +/-1% resistor and 100pF or less capacitor to AVSS externally.
9	AVDD	-	Analog Power Supply Pin
10	AVSS	-	Analog Ground Pin
11	RX1	I	Receiver Channel 1 This channel is selected in Parallel Mode or default of Serial Mode.
12	DIF0	I	Audio Data Interface Format 0 Pin in Parallel Mode
	RX2	I	Receiver Channel 2 in Serial Mode
13	DIF1	I	Audio Data Interface Format 1 Pin in Parallel Mode
	RX3	I	Receiver Channel 3 in Serial Mode
14	DIF2	I	Audio Data Interface Format 2 Pin in Parallel Mode
	RX4	I	Receiver Channel 4 in Serial Mode
15	AUTO	O	Non-PCM Detect Pin L : No detect, H : Detect
16	P/S	I	Parallel/Serial Select Pin L : Serial Mode, H : Parallel Mode
17	FS96	O	96kHz Sampling Detect Pin (RX Mode) H :fs=88.2kHz or more, L :fs=54kHz or less. (X tal Mode) H : XFS96=1, L : SF96=0.
18	ERF	O	Unlock & Parity Error output Pin L : NO Error, H : Error
19	LRCK	I/O	Output Channel Clock Pin
20	SDTO	O	Audio Serial Data Output Pin
21	BICK	I/O	Audio Serial Data Clock Pin
22	DAUX	I	Auxiliary Audio Data Input Pin
23	MCKO2	O	Master Clock #2 Output Pin
24	MCKO1	O	Master Clock #1 Output Pin
25	OCKS0	I	Output Clock Select 0 Pin in Parallel Mode
	CSN	I	Chip Select Pin in Serial Mode
26	OCKS1	I	Output Clock Select 1 Pin in Parallel Mode
	CCLK	I	Control Data Clock Pin in Serial Mode
27	CM1	I	Master Clock Operation Mode Pin0 in Parallel Mode
	CDTI	I	Control Data Input Pin in Serial Mode
28	CM0	I	Master Clock Operation Mode Pin1 in Parallel Mode
	CDTO	O	Control Data Output Pin in serial Mode

Note 1: All input pins except internal pull-down pins should not be left floating.

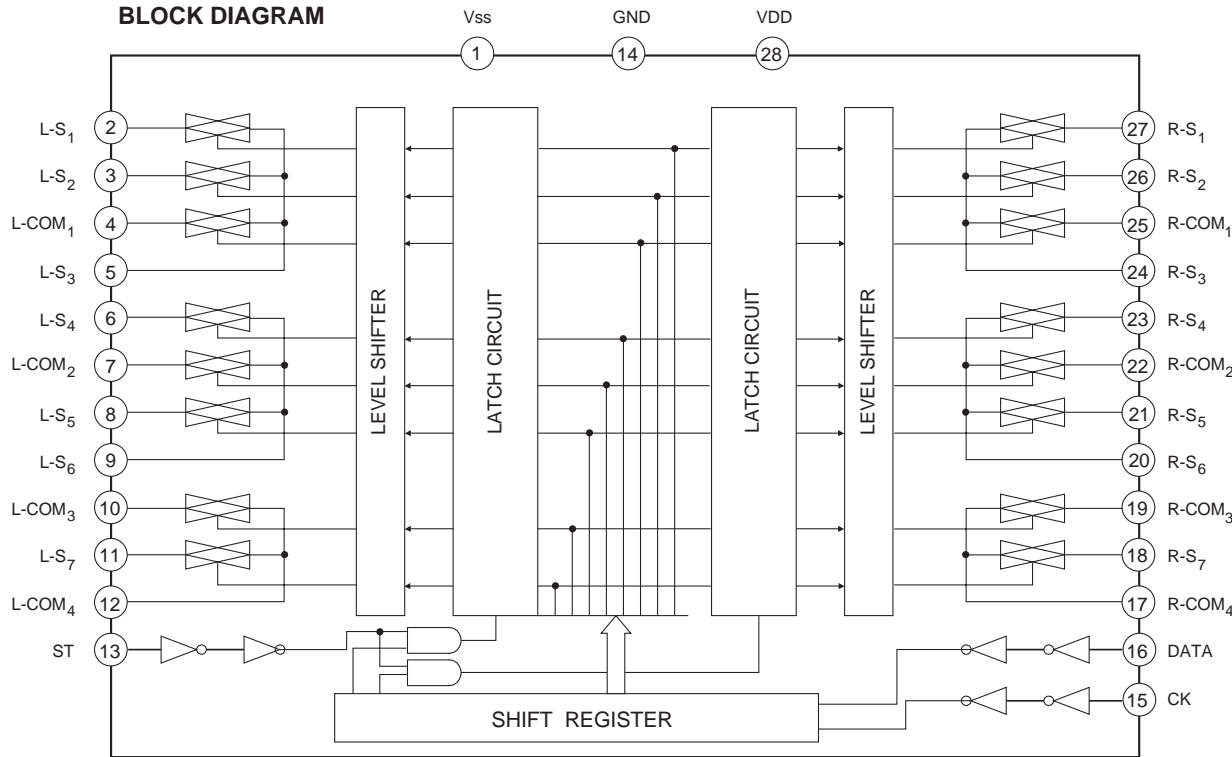
IC20 : TC9164AF

BLOCK DIAGRAM

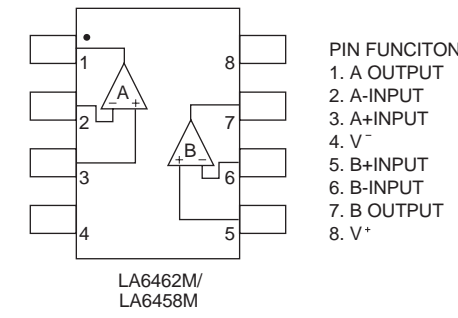


IC21 : TC9163AF

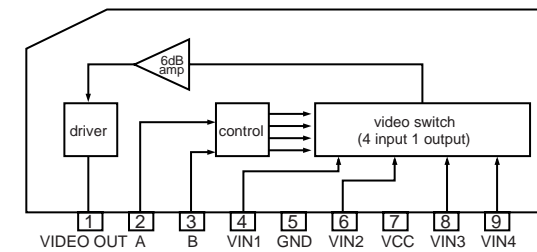
BLOCK DIAGRAM



IC22~26, 32~35 : LA6462

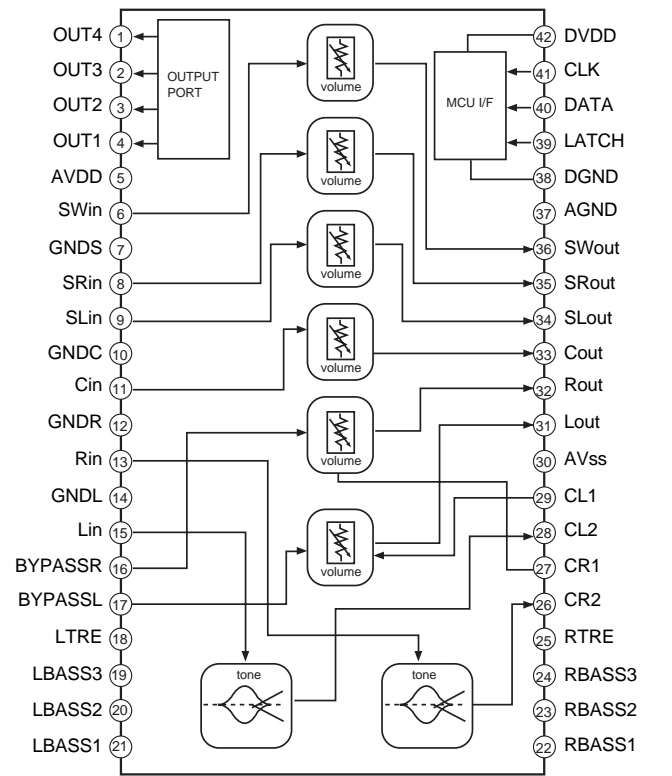


IC51~53 : LA7952

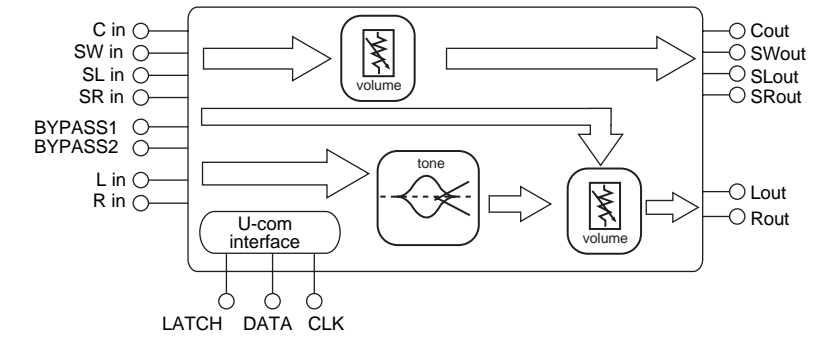


IC31 : M62446FP

BLOCK DIAGRAM

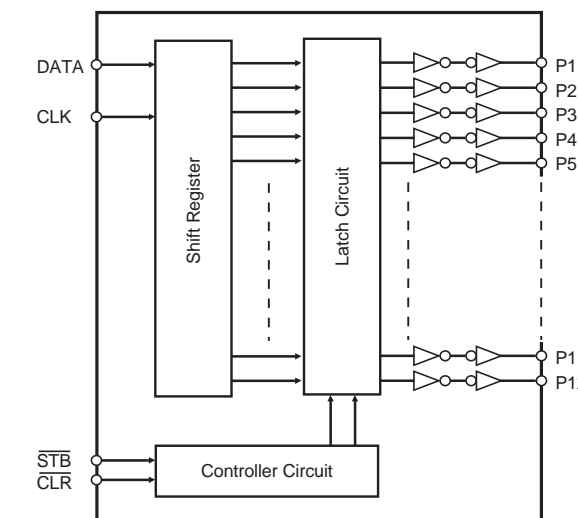


IC31 : PIN CONFIGURATION

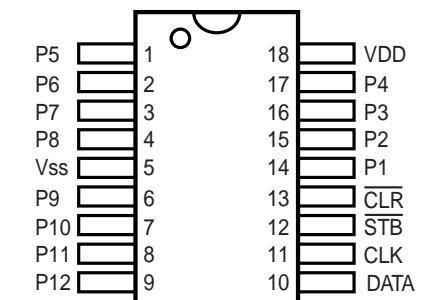


IC72 : NJU3713

BLOCK DIAGRAM



IC72 : PIN CONFIGURATION



7. 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)
 Distortion analyser

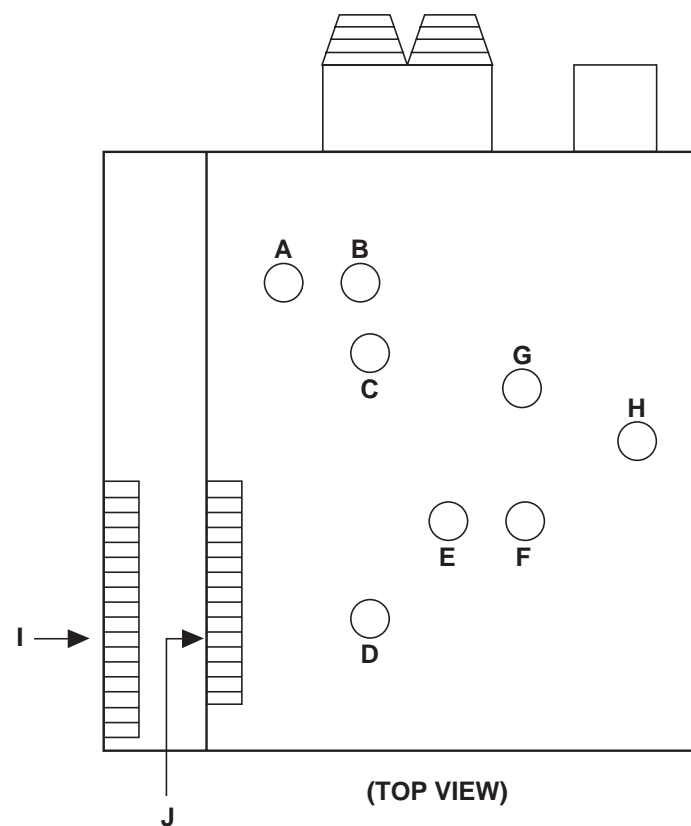
IMPORTANT

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% (40 kHz Dev.) [N]	400Hz
		100% (75 kHz Dev.) [U/F/L/K]	

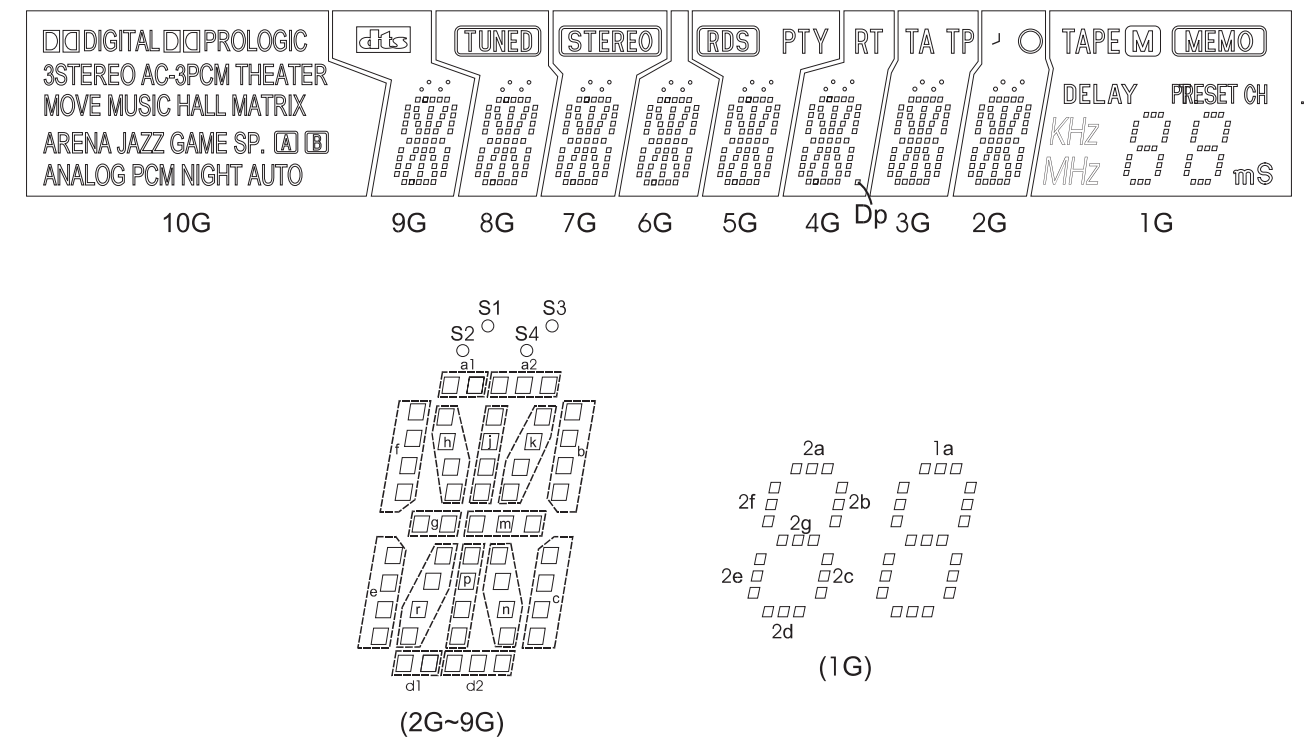
ADJUSTMENT POINT (Reference Schematic Diagram Tuner section)

TUNER MODULE



- A : MW ANT COIL
 B : LW ANT COIL (N Version)
 C : FM Stereo Separation Adj
 D : AM Tuned LED Level Adj
 E : FD
 F : AM IF
 G : FM Tuned LED Level Adj
 H : Unused
 I : FOR EUR
 J : Others

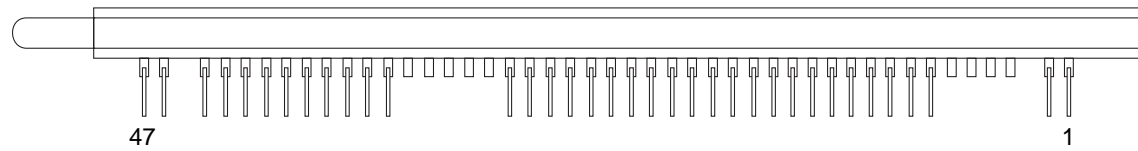
FIP DISPLAY



ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	AUTO	d2	d2	d2	d2	d2	d2	d2	d2	kHz
P2	NIGHT	d1	d1	d1	d1	d1	d1	d1	d1	1d
P3	PCM	e	e	e	e	e	e	e	e	1e
P4	ANALOG	r	r	r	r	r	r	r	r	1c
P5	JAZZ	p	p	p	p	p	p	p	p	1g
P6	GAME	n	n	n	n	n	n	n	n	1f
P7	ARENA	c	c	c	c	c	c	c	c	1b
P8	SP.	f	f	f	f	f	f	f	f	1a
P9	[A]	g	g	g	g	g	g	g	g	[M]
P10	[B]	m	m	m	m	m	m	m	m	2d
P11	MATRIX	h	h	h	h	h	h	h	h	2e
P12	HALL	j	j	j	j	j	j	j	j	2c
P13	MUSIC	k	k	k	k	k	k	k	k	2g
P14	MUVIE	b	b	b	b	b	b	b	b	2f
P15	VIRTUAL	a2	a2	a2	a2	a2	a2	a2	a2	2b
P16	COS	a1	a1	a1	a1	a1	a1	a1	a1	2a
P17	DSP	S1	S1	S1	S1	S1	S1	S1	S1	DIGITAL
P18	STEREO	S2	S2	S2	S2	S2	S2	S2	S2	PRESET CH.
P19	3	S3	S3	S3	S3	S3	S3	S3	S3	[MEMO]
P20	[D]	S4	S4	S4	S4	S4	S4	S4	S4	TAPE
P21	DIGITAL	/	/	/	/	[RDS]	Dp	TA	[Clock]	MHz
P22	[D] PRO LOGIC	[dts]	[TUNED]	[STEREO]	/	PTY	RT	TP	/	mS

PIN CONNECTION



Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Connection	F2	F2	NP	NX	NX	NX	NX	P22	P21	P20	P19	P18	P17	P16	P15

Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Connection	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NX

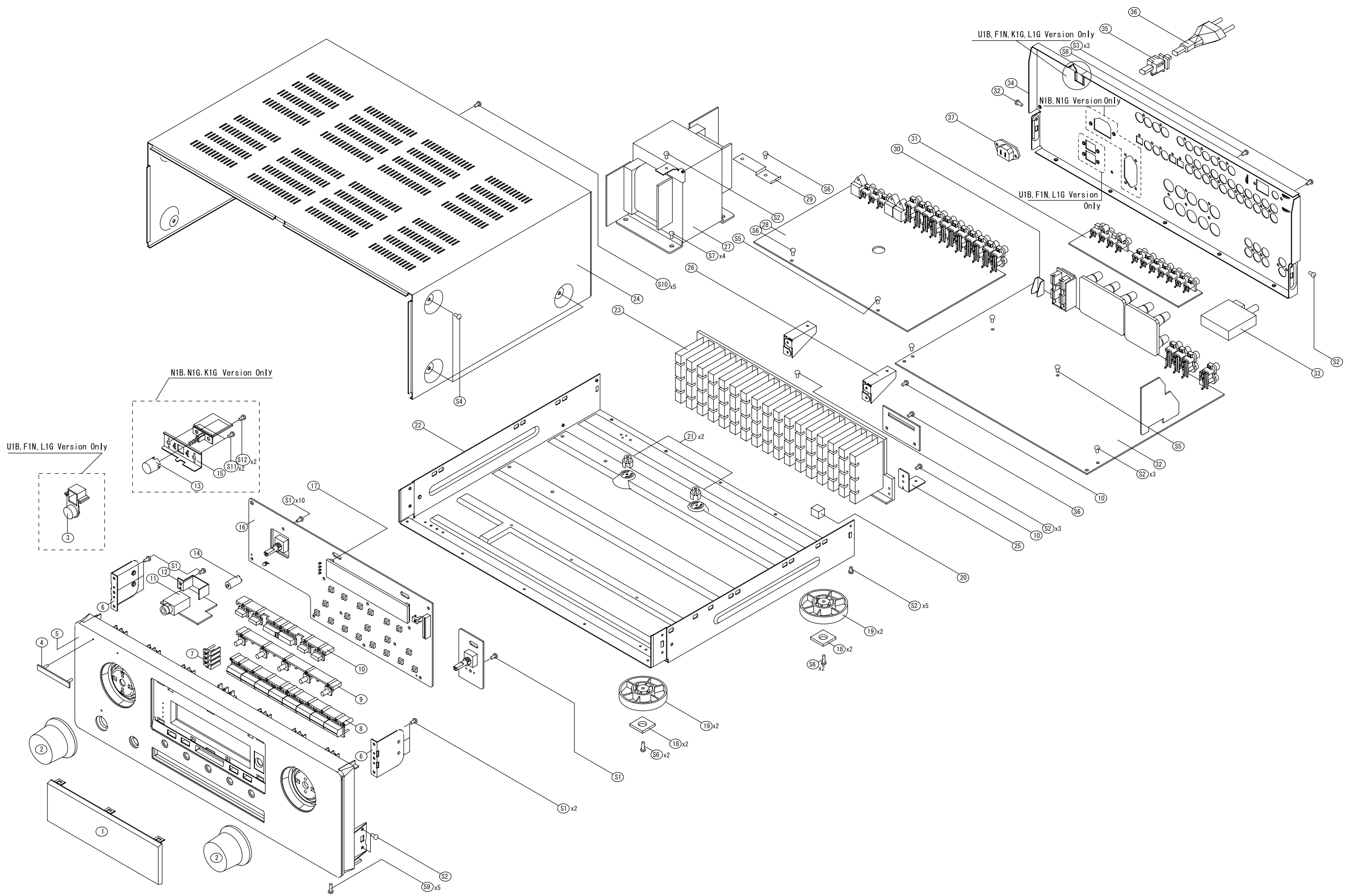
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Connection	NX	NX	NX	NX	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	NP

Pin No.	46	47
Connection	F1	F1

8. EXPLODED VIEW AND PARTS LIST

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
1		9965 000 10558	WINDOW.FIP	319W158010	35		nsp	BUSHING FOR AC CORD	nsp
2	BLACK	9965 000 09311	VOLUME KNOB ASS'Y (B)	313W154500	▲36	N1B/N1G	9965 000 10570	MAINS CORD (N)	*YC000540R
2	GOLD	9965 000 10608	VOLUME KNOB ASS'Y (G)	313W154510	▲36	U1B/L1G	nsp	MAINS CORD (U / L)	*YC000380R
3	U1B	nsp	POWER KNOB (B)	281W270010	▲36	F1N	nsp	MAINS CORD (F)	*YC000550R
3	F1N/L1G	nsp	POWER KNOB (G)	281W270110	▲36	K1G	nsp	MAINS CORD (K)	*YC000400R
4		4822 454 11825	MARANTZ BADGE	185J251010	▲37	N1B/N1G	9965 000 10571	AC RECEPTACLE (N)	*YT002400R
5	N1B	9965 000 10559	FRONT PANEL	319W248010	▲37	F1N/L1G	nsp	AC OUTLET (F / L / U)	*YT002410R
5	N1G/K1G	9965 000 10609	FRONT PANEL	319W248020		U1B			
5	U1B	nsp	FRONT PANEL	319W248110	S1		nsp	SCREW	nsp
5	F1N/L1G	nsp	FRONT PANEL	319W248120	S2		nsp	SCREW	nsp
6		nsp	SIDE BRACKET	nsp	S3		nsp	SCREW	nsp
7		9965 000 10563	OPTICAL INDICATOR	319W355010	S4	BLACK	nsp	SCREW	nsp
8	BLACK	9965 000 10564	FUNCTION KNOB (B)	319W270010	S4	GOLD	nsp	SCREW	nsp
8	GOLD	9965 000 10610	FUNCTION KNOB (G)	319W270110	S5		nsp	SCREW	nsp
9	BLACK	9965 000 10565	SURROUND KNOB (B)	319W270030	S6		nsp	SCREW	nsp
9	GOLD	9965 000 10611	SURROUND KNOB (G)	319W270130	S7		nsp	SCREW FOR TRANSF.	nsp
10	BLACK	9965 000 10566	TUNING KNOB (B)	319W270020	S8		nsp	SCREW	nsp
10	GOLD	9965 000 10612	TUNING KNOB (G)	319W270120	S9	BLACK	nsp	SCREW	nsp
11		9965 000 10567	JACK FOR HEADPHONE	*YT002350R	S9	GOLD	nsp	SCREW	nsp
12		nsp	PCB BRACKET	nsp	S10	BLACK	nsp	SCREW	nsp
13	N1B	9965 000 01291	POWER PUSH KNOB (B)	285W270010	S10	GOLD	nsp	SCREW	nsp
13	N1G/K1G	9965 000 10458	POWER PUSH KNOB (G)	285W270110	S11	N1B/N1G	nsp	SCREW	nsp
14		9965 000 01244	INDICATOR	285W355010	S12	K1G	nsp	SCREW	nsp
15	N1B/N1G	nsp	POWER BRACKET	nsp		N1B/N1G	nsp	SCREW	nsp
16	N1B/N1G	nsp	FRONT PCB ASS'Y	nsp		K1G			
16	U1B	nsp	FRONT PCB ASS'Y	nsp		L1G			
16	F1N	nsp	FRONT PCB ASS'Y	nsp					
16	K1G	nsp	FRONT PCB ASS'Y	nsp					
16	L1G	nsp	FRONT PCB ASS'Y	nsp					
17		nsp	FIP SUPPORT	nsp					
18		nsp	RUBBER CUSHION	nsp					
19		4822 462 11013	FOOT	243W057010					
20		nsp	SUPPORT CUSHION	nsp					
21		nsp	PCB HOLDER	nsp					
22		nsp	BOTTOM CHASSIS	nsp	001Z		9965 000 10582	PACKING REMOTE CONTROLLER (RC5200SR)	ZK320W0010
23		nsp	HEATSINK	nsp	001T	N1B/N1G	9965 000 10581	USER GUIDE (N)	319W851310
24	BLACK	nsp	TOP CABINET (B)	nsp	001T	U1B	nsp	USER GUIDE (U)	319W851250
24	GOLD	nsp	TOP CABINET (G)	nsp	001T	K1G/L1G	nsp	USER GUIDE (K / L)	319W851350
25		nsp	PCB BRACKET	nsp	001T	F1N	nsp	USER GUIDE (F)	319W851110
26		nsp	BRACKET PCB(H/T)	nsp					
▲27	N1B/N1G	9965 000 10569	MAINS TRANSF. (N / K)	*TS001420R					
▲27	K1G	nsp	MAINS TRANSF. (U / L)	*TS001430R					
▲27	F1N	nsp	MAINS TRANSF. (F)	*TS001440R					
28	N1B/N1G	nsp	INPUT PCB ASS'Y	nsp					
28	U1B	nsp	INPUT PCB ASS'Y	nsp					
28	F1N	nsp	INPUT PCB ASS'Y	nsp					
28	K1G	nsp	INPUT PCB ASS'Y	nsp					
28	L1G	nsp	INPUT PCB ASS'Y	nsp					
29		nsp	TR BRACKET	nsp					
30		nsp	PCB BRACKET	nsp					
31		nsp	VIDEO PCB	nsp					
32	N1B/N1G	nsp	MAIN PCB ASS'Y	nsp		F1N/U1B	nsp	NOT STANDARD SPARE PARTS ANT FM.T (LUG TYPE)	nsp
32	U1B	nsp	MAIN PCB ASS'Y	nsp			nsp	AM LOOP ANTENNA ASS'Y	nsp
32	F1N	nsp	MAIN PCB ASS'Y	nsp			nsp	BATTERY	nsp
32	K1G	nsp	MAIN PCB ASS'Y	nsp		F1N/U1B	nsp	ANT. ADAPTOR 75-300 (NTSC)	nsp
32	L1G	nsp	MAIN PCB ASS'Y	nsp		K1G/L1G	nsp	FM ANT. WIRE	nsp
33	F1N/K1G	nsp	TUNER MODULE (F / K)	*AV000100R		N1B/N1G			
33	L1G/U1N	nsp	TUNER MODULE (L / U)	*AV000110R					
33	N1B/N1G	9965 000 10568	TUNER MODULE (N)	*AV000120R					
34	N1B	nsp	REAR PANEL (N1B)	nsp					
34	N1G	nsp	REAR PANEL (N1G)	nsp					
34	U1B	nsp	REAR PANEL (U1B)	nsp					
34	F1N	nsp	REAR PANEL (F1N)	nsp					
34	L1G	nsp	REAR PANEL (L1G)	nsp					
34	K1G	nsp	REAR PANEL (K1G)	nsp					

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.



POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
Q701		4822 130 11611	TRS. KSA1175Y	*HT100390R	C681				
Q702		9965 000 10444	TRS. KRC107M	*BA001070R	∫	nsp	ELECT 10μF 50V	nsp	
Q703		9965 000 10603	TRS. KRC104M	*HT300830R	C685				
Q704		4822 130 11611	TRS. KSA1175Y	*HT100390R	C821				
Q705		4822 130 11609	TRS. KSC2785Y	*HT300590R	∫	nsp	CER. 470pF 50V K	nsp	
Q706					C825				
∫		9965 000 10444	TRS. KRC107M	*BA001070R	C826		CER. 470pF 50V K	nsp	
Q709					C901		nsp SEMI 0.1μF 50V Z	nsp	
BK71		nsp	MISCELLANEOUS		▲ C903	9965 000 04979	LINE ACROSS 0.1μF 250V KD	DF17104630	
BK72		nsp	BRACKET FLT	nsp	▲ C904	nsp	CER. 0.0047μF 2.5KV	nsp	
BN71			BRACKET FLT	nsp	C905		CER. 0.022μF 50V Z	nsp	
∫		nsp	WIRE ASS'Y	nsp	C906	4822 124 40214	ELECT 1000μF 25V	EA10802510	
BN74					C907		ELECT 100μF 16V	nsp	
CN71		9965 000 10584	CABLE CARD	*YU000920R	C908		CER. 0.022μF 50V Z	nsp	
CN71		nsp	WAFER CARD CABLE	nsp	C911		ELECT 470μF 16V	nsp	
CN72		nsp	GF120-27S-TS	nsp	C912		ELECT 100μF 35V	nsp	
CN74		nsp	WAFER MOLEX53015-0310	nsp	C915	9965 000 10572	ELECT 8200μF 63V FHS	*EA001050R	
CN74		nsp	WAFER MOLEX 5267-02A	nsp	C916	9965 000 10572	ELECT 8200μF 63V FHS	*EA001050R	
CN81	K / N	nsp	WAFER MOLEX35328-02	nsp	C917		ELECT 3300μF 25V	nsp	
CN83		nsp	WAFER MOLEX 5267-03A	nsp	C918	4822 124 12412	ELECT 2200μF 25V	*EA000830R	
FIP1		9965 000 10574	F.I.P HNA-10SM14	*HQ300490R	C922		ELECT 100μF 35V	nsp	
JK71		9965 000 10567	JACK	*YT002350R	C923		CER. 0.022μF 50V Z	nsp	
JW71		nsp	WIRE ASS'Y	nsp	C924		ELECT 100μF 35V	nsp	
JW92		nsp	WIRE ASS'Y	nsp	C925		CER. 0.022μF 50V Z	nsp	
RS71		9965 000 06833	SENSOR REMOCON RPM6936-H4	HW10008210	C938		ELECT 1μF 50V	nsp	
S701					C939		ELECT 4.7μF 50V	nsp	
∫		9965 000 01263	SW TACT SKHV10910G	*SP000890R	C940		ELECT 470μF 10V	nsp	
S714					C961	9965 000 02033	ELECT 3300μF 16V	*EA000930R	
S715	F / L / U	9965 000 01263	SW TACT SKHV10910G	*SP000890R	C962		ELECT 100μF 16V	nsp	
S716					C963		CER. 0.022μF 50V Z	nsp	
∫		9965 000 01263	SW TACT SKHV10910G	*SP000890R	C971				
S720					∫	K / N	nsp MYLAR 0.0056μF 50V J	nsp	
▲ SW81	K / N	4822 276 14105	SW PUSH (MOMS) JPP1197-1	*SP000850R	C975				
VE71		9965 000 02022	VR ENCODER EC16B243040HB	*SR000130R	C976				
VE72		9965 000 10605	ENCODER EC16B12S00D4ZZZ	*SR000180R	∫	K / N	nsp CER. 0.047μF 50V Z	nsp	
X701		4822 242 10855	CRYSTAL 8MHz	*JX000410R	C991		ELECT 1μF 50V	nsp	
			MAIN CIRCUIT BOARD CAPACITORS		C993				
C501					∫	nsp	MYLAR 0.047μF 50V J	nsp	
∫		nsp	ELECT 10μF 35V	nsp	C997				
C505					C998		CER. 100pF 50V K	nsp	
C506					R501		nsp 4.7k Ω 1/5W J	nsp	
∫		nsp	CER. 470pF 50V K	nsp	R502		nsp 4.7k Ω 1/5W J	nsp	
C510					R503		nsp 4.7k Ω 1/5W J	nsp	
C561					R506				
∫		nsp		nsp	∫	nsp	33k Ω 1/5W J	nsp	
C565					R510				
C601					R511				
∫		nsp	CER. 15pF 50V J	nsp	∫	nsp	15 Ω 1/5W J	nsp	
C605					R520				
C606					R521		nsp 4.7k Ω 1/5W J	nsp	
∫		nsp	CER. 180pF 50V J	nsp	R522		nsp 4.7k Ω 1/5W J	nsp	
C610					R523		nsp 4.7k Ω 1/5W J	nsp	
C611					R526				
∫		nsp	ELECT 10μF 50V	nsp	∫	nsp	56 Ω 1/5W J	nsp	
C615					R530				
C631					R531				
∫		nsp	ELECT 10μF 50V	nsp	∫	nsp	1.5k Ω 1/5W J	nsp	
C640					R540				
C641					R541				
∫		nsp	ELECT 220μF 63V	nsp	∫	nsp	270 Ω 1/5W J	nsp	
C645					R545				
					R551				
					∫	nsp	47k Ω 1/5W J	nsp	
					R555				
							RESISTORS		

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
R556					R911		nsp	56 Ω 1/4W J	nsp
∫		nsp	33k Ω 1/5W J	nsp	R913		nsp	1.5k Ω 1/5W J	nsp
R560					R914		nsp	1.5k Ω 1/5W J	nsp
R561					R917				
∫		nsp	1.5k Ω 1/5W J	nsp	∫		nsp	3.9k Ω 1/5W J	nsp
R565					R920				
R566					R930		nsp	10k Ω 1/5W J	nsp
∫		nsp	560 Ω 1/5W J	nsp	R932		nsp	10k Ω 1/5W J	nsp
R590					R938		nsp	1 Ω 1/5W J	nsp
R591					R939		nsp	4.7k Ω 1/5W J	nsp
∫		nsp	4.7k Ω 1/5W J	nsp	R940		nsp	1.5k Ω 1/5W J	nsp
R600					R941				
R601					∫		nsp	22k Ω 1/5W J	nsp
∫		nsp	22k Ω 1/5W J	nsp	R945				
R610					R960		nsp	3.3k Ω 1/5W J	nsp
R611					R963		nsp	1M Ω 1/5W J	nsp
∫		nsp	560 Ω 1/5W J	nsp	R966		nsp	10k Ω 1/5W J	nsp
R615					R969				
R616					∫		nsp	4.7k Ω 1/5W J	nsp
∫		nsp	1.8k Ω 1/5W J	nsp	R973				
R620					R974				
R621					∫		nsp	470 Ω 1/5W J	nsp
∫		nsp	100 Ω 1/5W J	nsp	R978				
R630					R979				
▲ R631					∫		nsp	47k Ω 1/5W J	nsp
∫		nsp	100 Ω 1/4W FJ	nsp	R983				
▲ R640					R986		nsp	1k Ω 1/5W J	nsp
▲ R641					R987		nsp	560 Ω 1/5W J	nsp
∫		nsp	220 Ω 1/4W FJ	nsp	R988		nsp	20k Ω 1/5W J	nsp
▲ R645					R991		nsp	5.6k Ω 1/5W J	nsp
▲ R646					R992		nsp	3.3k Ω 1/5W J	nsp
∫		nsp	2.2 Ω 1/4W FJ	nsp	▲ R993				
▲ R655					∫		4822 053 10109	METAL 10 Ω 1W J	GA05100010
▲ R656					▲ R997				
∫		9965 000 10579	CEMENT(*2) 0.27/5W *2	*GO000008R	▲ R998		nsp	1k Ω 1/5W J	nsp
▲ R660								SEMICONDUCTORS	
R666					D501		4822 130 32778	DIODE 1SS133T-77	HD20015210
∫		nsp	47 Ω 1/4W J	nsp	D502		4822 130 32778	DIODE 1SS133T-77	HD20015210
R670					D507		4822 130 32778	DIODE 1SS133T-77	HD20015210
R671					D508		4822 130 32778	DIODE 1SS133T-77	HD20015210
∫		nsp	9.1k Ω 1/5W J	nsp	D511				
R675					∫		4822 130 32778	DIODE 1SS133T-77	HD20015210
R676					D516				
∫		nsp	1.8k Ω 1/5W J	nsp	D581				
R680					∫		4822 130 32778	DIODE 1SS133T-77	HD20015210
R681					D585				
∫		nsp	5.6k Ω 1/5W J	nsp	D901		4822 130 31878	DIODE 1N4003	HD200010AR
R685					D902		4822 130 32778	DIODE 1SS133T-77	HD20015210
R686					D903				
∫		nsp	10k Ω 1/5W J	nsp	∫		4822 130 31878	DIODE 1N4003	HD200010AR
R690					D906				
R691					D911		4822 130 32778	DIODE 1SS133T-77	HD20015210
∫		nsp	18k Ω 1/5W J	nsp	D912		4822 130 32778	DIODE 1SS133T-77	HD20015210
R695					D914				
R696					∫		4822 130 32778	DIODE 1SS133T-77	HD20015210
∫		nsp	47 Ω 1/4W J	nsp	D917				
R700					D931		4822 130 32778	DIODE 1SS133T-77	HD20015210
R801					D953		4822 130 32778	DIODE 1SS133T-77	HD20015210
∫		nsp	1k Ω 1/5W J	nsp					
R806					IC91		nsp	HEAT SINK ASSY	nsp
R811					▲ IC91		4822 209 90087	IC REGULATOR KA7812-ABTU	*HC700200R
∫		nsp	4.7k Ω 1/5W J	nsp	▲ IC92		9965 000 10576	IC REGULATOR KA7912-ABTU	*HC700210R
R816					▲ IC93		4822 209 90086	IC REGULATOR KA7805-ABTU	*HC300210R
R821					▲ IC95		4822 209 90086	IC REGULATOR KA7805-ABTU	*HC300210R
∫		nsp	47k Ω 1/5W J	nsp					
R826									
R904	U				Q511				
▲ R905					∫		4822 130 11615	TRS. KTA1268GR	*HT100400R
R910					Q520				
		4822 053 10109	METAL 10 Ω 1W J	GA05100010					
		nsp	1M Ω 1/5W J	nsp					

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
Q541 }		4822 130 11615	TRS. KTA1268GR	*HT100400R	ET03		nsp	PLATE EARTH	nsp
Q545 Q556 }		4822 130 11616	TRS. KTC3200GR	*HT300610R	▲ F901	F / L / U	nsp	FUSE SB 2.5A 250V	*FS000870R
Q565 Q581 }		4822 130 11615	TRS. KTA1268GR	*HT100400R	▲ F901	K / N	4822 070 12502	FUSE T 2.5A L 250V	*FS000560R
Q585 ▲ Q611 }		4822 130 11615	TRS. KTA1268GR	*HT100400R	▲ F902	F / L / U	nsp	FUSE SB 6.3A 250V	*FS000880R
▲ Q615 Q621 }		9965 000 10578	TRS. BIAS KTD600KGR	*HT400460R	▲ F902	K / N	4822 252 11379	FUSE T 4A L 250V	*FS000670R
Q625 Q626 }		5322 130 61728	TRS. PRE DRIVE KTA1360Y	*HT100540R	JK91		4822 265 11602	TERMINAL SP (RRRR/BBBB) SH0810361P	*YT001590R
Q630 Q642 }		5322 130 61737	TRS. PRE DRIVE KTC3423Y	*HT300820R	JK92		4822 265 11603	TERMINAL SP (R/B) SH0210381P	*YT001580R
Q645 Q646 }		9965 000 10601	TRS. DRIVE KTD2061Y	*HT400470R	JK93		9965 000 10600	JACK BOARD	*YT002370R
Q650 Q656 ▲ Q657 }		9965 000 10602	TRS. DRIVE KTB1369Y	*HT200400R	JK94		9965 000 00207	JACK IN/OUT	*YT001750R
▲ Q664 ▲ Q665 ▲ Q670 Q681 }		4822 130 63433	TRS. POWER 2SC4467	HT344673A0	JW91		nsp	WIRE ASS'Y	nsp
Q685 Q801 }		4822 130 63433	TRS. POWER 2SA1694	HT116943A0	JW92	F / L / U	nsp	WIRE ASS'Y	nsp
Q806 Q901 Q935 Q938 Q939 Q940 Q942 Q943 Q951 Q952 Q953 Q954 Q955 Q969 }		4822 130 11609	TRS. KSC2785Y	*HT300590R	L501 }		4822 157 11872	COIL SPEAKER 0.5μH K	*LC107210R
Q969 Q973 Q991 Q992		9965 000 10604	TRS. KTD1302	*HT400450R	L505		4822 280 10386	RELAY OSA-SS-212DM3	*LY000180R
		9965 000 10444	TRS. KRC107M	*BA001070R	▲ RY93		9965 000 02031	RELAY SDT-S-112DMR	*LY000230R
		9965 000 10443	TRS. KRA107M	*BA001060R	▲ RY94		9965 000 10580	TRANS SUB (K / N)	*TS000980R
		9965 000 10443	TRS. KRA107M	*BA001060R	▲ T901	K / N	nsp	TRANS SUB (L / U)	*TS000990R
		9965 000 10604	TRS. KTD1302	*HT400450R	▲ T901	L / U	nsp	TRANS SUB (F)	*TS001410R
		9965 000 10604	TRS. KTD1302	*HT400450R	▲ T901	F	nsp	THERMAL SENSOR	*HP000060R
		9965 000 10604	TRS. KTD1302	*HT400450R	▲ TH91		9965 000 02037	THERMAL SENSOR	*HP000060R
		9965 000 10444	TRS. KRC107M	*BA001070R				POSISTOR P42T7D330BW20	
		9965 000 10443	TRS. KRA107M	*BA001060R					
BN20	nsp		MISCELLANEOUS					INPUT CIRCUIT BOARD	
BN83	nsp		WIRE ASS'Y	nsp				CAPACITORS	
BN90	nsp		WIRE ASS'Y	nsp	C101		nsp	ELECT 220μF 16V	nsp
BN91	nsp		WIRE ASS'Y (W/FERRITE)	nsp	C102		nsp	ELECT 220μF 16V	nsp
CN73	nsp		WAFER MOLEX53014-0710	nsp	C103		nsp	SEMI 0.1μF 50V Z	nsp
CN91	nsp		WAFER 7.92MM(YUNHO)	nsp	C104		nsp	CER. 180pF 50V K	nsp
CN92	nsp		WAFER MOLEX35328-02	nsp	C105		nsp	SEMI 0.1μF 50V Z	nsp
CN94	nsp		WAFER MOLEX35336-1010	nsp	C106		nsp	CER. 180pF 50V K	nsp
CN95	nsp		WAFER MOLEX35336-0810	nsp	C107		nsp	SEMI 0.1μF 50V Z	nsp
CN96	nsp		WAFER MOLEX 5267-07A	nsp	C108		nsp	ELECT 100μF 16V	nsp
ET01	nsp		PLATE EARTH	nsp	C109		nsp	CER. 0.1μF 50V Z	nsp
ET02	nsp		BRACKET PCB	nsp	C110		nsp	ELECT 100μF 16V	nsp
					C111		nsp	CER. 27pF 50V J	nsp
					C112		nsp	CER. 27pF 50V J	nsp
					C113		nsp	CER. 27pF 50V J	nsp
					C114		nsp	ELECT 100μF 16V	nsp
					C115		nsp	CER. 0.047μF 50V z	nsp
					C121		nsp	CER. 0.1μF 50V Z	nsp
					C122		nsp	ELECT 10μF 35V	nsp
					C123		nsp	CER. 0.1μF 50V Z	nsp
					C124		nsp	CER. 33pF 50V J	nsp
					C125		nsp	CER. 33pF 50V J	nsp
					C126		nsp	CER. 0.047μF 50V Z	nsp
					C127		nsp	ELECT 10μF 35V	nsp
					C128		nsp	CER. 100pF 50V K	nsp
					C129		nsp	CER. 18pF 50V J	nsp
					C130		nsp	CER. 18pF 50V J	nsp
					C131		nsp	CER. 0.01μF 50V Z	nsp
					C132		nsp	CER. 100pF 50V K	nsp
					C133		nsp	CER. 220pF 50V J	nsp
					C134		nsp	CER. 220pF 50V J	nsp
					C135		nsp	CER. 1000pF 50V J	nsp
					C136		nsp	CER. 100pF 50V K	nsp
					C137		nsp	CER. 100pF 50V K	nsp
					C138		nsp	CER. 100pF 50V K	nsp
					C141		nsp	SEMI 0.1μF 50V Z	nsp
					C142		nsp	CER. 0.047μF 50V Z	nsp
					C143		nsp	ELECT 100μF 16V	nsp
					C144		nsp	CER. 0.047μF 50V Z	nsp
					C145		nsp	CER. 0.1μF 50V Z	nsp
					C146		nsp	ELECT 100μF 16V	nsp
					C147		nsp	ELECT 100μF 16V	nsp

NOTE : *nsp* PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
C148		nsp	CER. 0.047µF 50V Z	nsp	C336		nsp	SEMI 0.1µF 50V Z	nsp
C149		nsp	CER. 33pF 50V Z	nsp	C337		nsp	ELECT 10µF 35V	nsp
C150		nsp	CER. 0.1µF 50V Z	nsp	C338		nsp	ELECT 10µF 35V	nsp
C151		nsp	CER. 0.1µF 50V Z	nsp	C339		nsp	CER. 100pF 50V K	nsp
C160		nsp	CER. 0.1µF 50V Z	nsp	C340		nsp	CER. 100pF 50V K	nsp
C161		nsp	SEMI 0.1µF 50V Z	nsp	C341		nsp	ELECT 100µF 16V	nsp
C162		nsp	ELECT 10µF 35V	nsp	C342		nsp	ELECT 100µF 16V	nsp
C163		nsp	CER. 0.1µF 50V Z	nsp	C343		nsp	CER. 0.022µF 50V Z	nsp
C164		nsp	CER. 0.1µF 50V Z	nsp	C344		nsp	CER. 0.022µF 50V Z	nsp
C165		nsp	ELECT 10µF 35V	nsp	C345		nsp	CER. 0.022µF 50V Z	nsp
C166		nsp	ELECT 2.2µF 50V	nsp	C346		nsp	ELECT 100µF 16V	nsp
C167		nsp	CER. 470pF 50V K	nsp	C347		nsp		
C168		nsp	CER. 0.01µF 50V Z	nsp	}	nsp		ELECT 10µF 35V	nsp
C169		nsp	SEMI 0.1µF 50V Z	nsp	C350		nsp		
C170		nsp	SEMI 0.1µF 50V Z	nsp	C351		nsp	MYLAR 8200pF 50V J	nsp
C171		nsp	SEMI 0.1µF 50V Z	nsp	C352		nsp	MYLAR 8200pF 50V J	nsp
C191		nsp	CER. 0.047µF 50V Z	nsp	C353		nsp	MYLAR 0.015µF 50V J	nsp
C192		nsp	SEMI 0.1µF 50V Z	nsp	C354		nsp	MYLAR 0.015µF 50V J	nsp
C193		nsp	ELECT 100µF 16V	nsp	C355		nsp	FILM 0.33µF 63V J	nsp
C194		nsp	ELECT 470µF 10V	nsp	C356		nsp	FILM 0.33µF 63V J	nsp
C195		nsp	CER. 0.047µF 50V Z	nsp	C357		nsp	ELECT 0.33µF 50V	nsp
C196		nsp	ELECT 100µF 16V	nsp	C358		nsp	ELECT 0.33µF 50V	nsp
C197		nsp	ELECT 470µF 10V	nsp	C359		nsp	ELECT 470µF 16V	nsp
C198		nsp	CER. 0.047µF 50V Z	nsp	C360		nsp	ELECT 10µF 35V	nsp
C201		nsp			C361		nsp	ELECT 10µF 35V	nsp
}	K/N	nsp	CER. 100pF 50V K	nsp	C362		nsp	ELECT 10µF 35V	nsp
C222		nsp			C363		nsp	CER. 100pF 50V K	nsp
C231		nsp	ELECT 10µF 35V	nsp	C364		nsp	CER. 100pF 50V K	nsp
}		nsp			C365		nsp	CER. 39pF 50V J	nsp
C236		nsp	MYLAR 1200pF 50V J	nsp	C366		nsp	CER. 39pF 50V J	nsp
C243		nsp	MYLAR 1200pF 50V J	nsp	C367		nsp	ELECT 10µF 35V	nsp
C244		nsp			C368		nsp	ELECT 10µF 35V	nsp
C245		nsp	MYLAR 2200pF 50V J	nsp	C381		nsp	ELECT 10µF 35V	nsp
}		nsp			C382		nsp	ELECT 10µF 35V	nsp
C248		nsp	MYLAR 1000pF 50V J	nsp	C383		nsp	CER. 220pF 50V K	nsp
C249		nsp	MYLAR 1000pF 50V J	nsp	C384		nsp	MYLAR 2200pF 50V J	nsp
C250		nsp	MYLAR 1000pF 50V J	nsp	C385		nsp		
C255		nsp	CER. 150pF 50V K	nsp	}	nsp		ELECT 10µF 35V	nsp
C256		nsp	CER. 150pF 50V K	nsp	C388		nsp		
C257		nsp	CER. 150pF 50V K	nsp	C389		nsp	CER. 220pF 50V K	nsp
C258		nsp	MYLAR 2200pF 50V J	nsp	C390		nsp	CER. 220pF 50V K	nsp
C259		nsp	CER. 150pF 50V K	nsp	C391		nsp	ELECT 10µF 35V	nsp
C260		nsp	CER. 150pF 50V K	nsp	C392		nsp	ELECT 10µF 35V	nsp
C262		nsp	CER. 0.022µF 50V Z	nsp	C395		nsp	MYLAR 0.047µF 50V J	nsp
}		nsp			C399		nsp	CER. 0.047µF 50V Z	nsp
C266		nsp			C401		nsp	MYLAR 0.1µF 50V J	nsp
C267		nsp	ELECT 10µF 35V	nsp	C402		nsp	MYLAR 0.1µF 50V J	nsp
}		nsp			C403		nsp	MYLAR 0.01µF 50V J	nsp
C272		nsp	CER. 0.022µF 50V Z	nsp	C404		nsp	MYLAR 0.01µF 50V J	nsp
C276		nsp	CER. 0.022µF 50V Z	nsp	C405		nsp	MYLAR 0.047µF 50V J	nsp
C301		nsp	CER. 0.022µF 50V Z	nsp	C406		nsp	MYLAR 0.047µF 50V J	nsp
C302		nsp	CER. 0.022µF 50V Z	nsp	C407		nsp	MYLAR 0.01µF 50V J	nsp
C303		nsp	ELECT 100µF 16V	nsp	C408	F/K/L/N	nsp	MYLAR 0.01µF 50V J	nsp
C304		nsp	ELECT 100µF 16V	nsp	C409		nsp	MYLAR 0.1µF 50V J	nsp
C305		nsp	CER. 0.022µF 50V Z	nsp	C410		nsp	MYLAR 0.1µF 50V J	nsp
}		nsp			C411		nsp	MYLAR 0.01µF 50V J	nsp
C316		nsp	CER. 180pF 50V K	nsp	C412		nsp	MYLAR 0.01µF 50V J	nsp
C321		nsp	CER. 470pF 50V K	nsp	C413		nsp	ELECT 4.7µF 50V	nsp
C322		nsp	CER. 180pF 50V K	nsp	C414		nsp	CER. 0.01µF 50V Z	nsp
C323		nsp	CER. 180pF 50V K	nsp	C415		nsp	ELECT 47µF 50V	nsp
C324		nsp	CER. 470pF 50V K	nsp	C416		nsp	ELECT 47µF 50V	nsp
C325		nsp	CER. 180pF 50V K	nsp	C417		nsp	CER. 0.01µF 50V Z	nsp
C326		nsp	CER. 470pF 50V K	nsp	C418		nsp	ELECT 100µF 50V	nsp
C327		nsp	CER. 180pF 50V K	nsp	C419		nsp	CER. 0.01µF 50V Z	nsp
C331		nsp	MYLAR 2200pF 50V J	nsp	C420		nsp	ELECT 47µF 50V	nsp
C332		nsp	MYLAR 2200pF 50V J	nsp	C501		nsp	CER. 47pF 50V J	nsp
C333		nsp	ELECT 22µF 50V	nsp	C504		nsp	CER. 47pF 50V J	nsp
C334		nsp	ELECT 22µF 50V	nsp	C506		nsp	CER. 47pF 50V J	nsp
C335		nsp	SEMI 0.1µF 50V Z	nsp	C511		nsp	ELECT 470µF 10V	nsp

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
C512		nsp	ELECT 10μF 35V	nsp	R159		nsp	1 Ω 1/5W J	nsp
C513		nsp	ELECT 10μF 35V	nsp	R190				
C514		nsp	ELECT 470μF 10V	nsp	}		nsp	1k Ω 1/5W J	nsp
C515		nsp	ELECT 10μF 35V	nsp	R194				
C516		nsp	ELECT 470μF 10V	nsp	R201				
C517		nsp	ELECT 10μF 35V	nsp	}		nsp	1k Ω 1/5W J	nsp
C518		nsp	ELECT 470μF 16V	nsp	R222				
C523		nsp	CER. 47pF 50V J	nsp	R223				
C524		nsp	CER. 47pF 50V J	nsp	}		nsp	47k Ω 1/5W J	nsp
C527		nsp	CER. 47pF 50V J	nsp	R244				
					R255				
C528		nsp	CER. 47pF 50V J	nsp	}		nsp	22k Ω 1/5W J	nsp
C531		nsp	ELECT 10μF 35V	nsp	R260				
C532		nsp	ELECT 10μF 35V	nsp	R261		nsp	1.5k Ω 1/5W J	nsp
C533		nsp	ELECT 470μF 10V	nsp	R262		nsp	1.5k Ω 1/5W J	nsp
C534		nsp	ELECT 470μF 10V	nsp	R263		nsp	4.3k Ω 1/5W J	nsp
C535		nsp	ELECT 10μF 35V	nsp	R264		nsp	2.7k Ω 1/5W J	nsp
C536		nsp	ELECT 10μF 35V	nsp	R265		nsp	4.3k Ω 1/5W J	nsp
C537		nsp	ELECT 470μF 10V	nsp	R266		nsp	4.3k Ω 1/5W J	nsp
C538		nsp	ELECT 470μF 10V	nsp	R267		nsp	2.4k Ω 1/5W J	nsp
C539		nsp	ELECT 220μF 16V	nsp	R268		nsp	2.4k Ω 1/5W J	nsp
C540		nsp	ELECT 220μF 16V	nsp	R269				
C541		nsp	ELECT 100μF 16V	nsp	}		nsp	1k Ω 1/5W J	nsp
C542		nsp	CER. 0.022μF 50V Z	nsp	R274				
					R275				
			RESISTORS		}		nsp	4.7k Ω 1/5W J	nsp
R101		nsp	4.7k Ω 1/5W J	nsp	R279				
R102		nsp	4.7k Ω 1/5W J	nsp	R280		nsp	18k Ω 1/5W J	nsp
R103		nsp	1 Ω 1/5W J	nsp	R281				
R104		nsp	1 Ω 1/5W J	nsp	}		nsp	12k Ω 1/5W J	nsp
R105		nsp	75 Ω 1/5W J	nsp	R284				
R106		nsp	75 Ω 1/5W J	nsp	R285				
R107		nsp	75 Ω 1/5W J	nsp	}		nsp	100 Ω 1/5W J	nsp
R108		nsp	1 Ω 1/5W J	nsp	R290				
R109		nsp	1 Ω 1/5W J	nsp	R291				
R110		nsp	4.7 Ω 1/5W J	nsp	}		nsp	100k Ω 1/5W J	nsp
					R296				
R111		nsp	100k Ω 1/5W J	nsp	R303				
R112		nsp	100k Ω 1/5W J	nsp	}		nsp	100 Ω 1/5W J	nsp
R113		nsp	100k Ω 1/5W J	nsp	R316				
R114		nsp	4.7 Ω 1/5W J	nsp	R321				
R115		nsp	4.7 Ω 1/5W J	nsp	}		nsp	4.7k Ω 1/5W J	nsp
R116		nsp	18k Ω 1/5W J	nsp	R329				
R117					R331				
}		nsp	4.7 Ω 1/5W J	nsp	}		nsp	1k Ω 1/5W J	nsp
R122					R334				
R123		nsp	1M Ω 1/5W J	nsp	R335		nsp	100k Ω 1/5W J	nsp
R129		nsp	100 Ω 1/5W J	nsp	R336		nsp	100k Ω 1/5W J	nsp
R130		nsp	33 Ω 1/5W J	nsp	R337		nsp	4.7k Ω 1/5W J	nsp
R131		nsp	75 Ω 1/5W J	nsp	R338		nsp	4.7k Ω 1/5W J	nsp
R132		nsp	4.7k Ω 1/5W J	nsp	R339				
R133		nsp	4.7k Ω 1/5W J	nsp	}		nsp	470 Ω 1/5W J	nsp
R134					R342				
}		nsp	10k Ω 1/5W J	nsp	R343		nsp	4.7k Ω 1/5W J	nsp
R142					R344		nsp	4.7k Ω 1/5W J	nsp
R143		nsp	4.7k Ω 1/5W J	nsp	R345		nsp	7.5k Ω 1/5W J	nsp
R144		nsp	4.7k Ω 1/5W J	nsp	R346		nsp	7.5k Ω 1/5W J	nsp
R145		nsp	33 Ω 1/5W J	nsp	R347		nsp	4.7k Ω 1/5W J	nsp
R146		nsp	10k Ω 1/5W J	nsp	R348		nsp	4.7k Ω 1/5W J	nsp
R147		nsp	33k Ω 1/5W J	nsp	R349		nsp	100k Ω 1/5W J	nsp
R148		nsp	4.7k Ω 1/5W J	nsp			nsp	100k Ω 1/5W J	nsp
R149		nsp	4.7k Ω 1/5W J	nsp	▲ R351	4822 053 10101	METAL 100 Ω 1W J		GA05101010
R150					▲ R352	4822 053 10101	METAL 100 Ω 1W J		GA05101010
}		nsp	33 Ω 1/5W J	nsp	▲ R353	4822 053 10478	METAL 4.7 Ω 1W J		GA05047010
R154									
R155		nsp	10k Ω 1/5W J	nsp	R356		nsp	100 Ω 1/5W J	nsp
R156		nsp	33 Ω 1/5W J	nsp	R360		nsp	100k Ω 1/5W J	nsp
R157		nsp	1.8k Ω 1/5W J	nsp	R361		nsp	100k Ω 1/5W J	nsp
R158		nsp	470 Ω 1/5W J	nsp	R362		nsp	100k Ω 1/5W J	nsp

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POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
R363					R545		nsp	4.7 Ω 1/5W J	nsp
∫		nsp	3.3k Ω 1/5W J	nsp	R546		nsp	3.3k Ω 1/5W J	nsp
R366					▲ R547		4822 053 10478	METAL 4.7 Ω 1W J	GA05047010
R367		nsp	5.6k Ω 1/5W J	nsp				SEMICONDUCTORS	
R368		nsp	5.6k Ω 1/5W J	nsp	D101		4822 130 10667	DIODE ZENER MTZJ4.7BT (4.7V 1/2W)	HD30471000
R369		nsp	9.1k Ω 1/5W J	nsp	D102		9965 000 10585	DIODE ZENER MTZJ3.3BT (3.3V 1/2W)	*HD301940R
R370		nsp	9.1k Ω 1/5W J	nsp	D301		4822 130 11629	DIODE ZENER MTZJ6.8BT (6.8V 1/2W)	*HD301620R
R371		nsp	47k Ω 1/5W J	nsp	D302		4822 130 11629	DIODE ZENER MTZJ6.8BT (6.8V 1/2W)	*HD301620R
R372		nsp	47k Ω 1/5W J	nsp	D303		4822 130 80317	DIODE ZENER MTZJ5.1BT (5.1V 1/2W)	HD30511000
R373		nsp	100k Ω 1/5W J	nsp	▲ D401		4822 130 11628	DIODE BRIDGE KBU804	*HE200190R
R374		nsp	100k Ω 1/5W J	nsp	▲ D402				
R381		nsp	100k Ω 1/5W J	nsp	∫		4822 130 31878	DIODE 1N4003	HD200010AR
R382		nsp	100k Ω 1/5W J	nsp	▲ D405				
R383		nsp	5.6k Ω 1/5W J	nsp	D406		9965 000 01304	DIODE ZENER MTZJ6.2BT (6.2V 1/2W)	*HD301710R
R384		nsp	4.3k Ω 1/5W J	nsp	D407		4822 130 11676	DIODE ZENER MTZJ30BT (30V 1/2W)	*HD3011670R
R385		nsp	18k Ω 1/5W J	nsp	D408		4822 130 31878	DIODE 1N4003	HD200010AR
R386		nsp	56k Ω 1/5W J	nsp	D409		4822 130 31878	DIODE 1N4003	HD200010AR
R387		nsp	100k Ω 1/5W J	nsp	D501				
R388		nsp	100k Ω 1/5W J	nsp	∫		4822 130 32778	DIODE 1SS133T-77	HD20015210
R391		nsp	100k Ω 1/5W J	nsp	D506				
R392		nsp	100k Ω 1/5W J	nsp	IC11		4822 209 31568	IC INVERTER TC74HCU04AFN	HC700400Z0
R393		nsp	5.6k Ω 1/5W J	nsp	IC12		9965 000 10587	IC DIR AK4112A-VF-E2	*HC106950R
R394		nsp	5.6k Ω 1/5W J	nsp	IC13		9965 000 10588	IC CODEC (AKM) AK4527B-VQ	*HC106940R
R395		nsp	18k Ω 1/5W J	nsp	IC14		9965 000 10589	IC DSP CS493263-CL	*HC106960R
R396		nsp	18k Ω 1/5W J	nsp	IC20		9965 000 10590	IC FUNCTION TC9164AF	*HC107020R
R397		nsp	100k Ω 1/5W J	nsp	IC21		9965 000 10591	IC FUNCTION TC9163AF	*HC107010R
R398		nsp	100k Ω 1/5W J	nsp	IC22				
▲ R401					∫		9965 000 10592	IC OP AMP LA6462M	*HC106990R
∫		4822 117 13673	FUSE 0.47 Ω 1W J	*NH000090R	IC26				
▲ R404					IC31		9965 000 09272	IC VOLUME M62446FP	*HC106980R
R405		nsp	8.2 Ω 1/5W J	nsp	IC32				
R406		nsp	10 Ω 1/5W J	nsp	∫		9965 000 10592	IC OP AMP LA6462M	*HC106990R
R407		nsp	8.2 Ω 1/5W J	nsp	IC35				
R408		nsp	47k Ω 1/5W J	nsp	IC51		9965 000 10593	IC VCR FUNC LA7952	*HC106930R
R409		nsp	1.2k Ω 1/5W J	nsp	IC52		9965 000 10593	IC VCR FUNC LA7952	*HC106930R
R410		nsp	1 Ω 1/5W J	nsp	IC53		9965 000 10593	IC VCR FUNC LA7952	*HC106930R
R411		nsp	1 Ω 1/5W J	nsp	Q101		4822 130 11617	TRS. KSC2316Y	*HT300580R
					Q102		4822 130 11617	TRS. KSC2316Y	*HT300580R
R501		nsp	68 Ω 1/5W J	nsp	Q401		4822 130 11621	TRS. KTA1271Y	*BA000760R
R502		nsp	68 Ω 1/5W J	nsp	Q502		4822 130 11609	TRS. KSC2785Y	*HT300590R
R503		nsp	68 Ω 1/5W J	nsp	Q503		4822 130 11609	TRS. KSC2785Y	*HT300590R
R511		nsp	47k Ω 1/5W J	nsp	Q504				
R512		nsp	75 Ω 1/5W J	nsp	∫		9965 000 10444	TRS. KRC107M	*BA001070R
R513		nsp	75 Ω 1/5W J	nsp	Q507				
R514		nsp	47k Ω 1/5W J	nsp	Q509		4822 130 11609	TRS. KSC2785Y	*HT300590R
R515		nsp	75 Ω 1/5W J	nsp	Q511		4822 130 11609	TRS. KSC2785Y	*HT300590R
R516		nsp	47k Ω 1/5W J	nsp	Q512				
R517		nsp	75 Ω 1/5W J	nsp	∫		9965 000 10444	TRS. KRC107M	*BA001070R
R518		nsp	390 Ω 1/5W J	nsp	Q515				
R519		nsp	390 Ω 1/5W J	nsp				MISCELLANEOUS	
R520		nsp	390 Ω 1/5W J	nsp	BN11		nsp	WIRE ASSY	nsp
R521		nsp	3.3k Ω 1/5W J	nsp	BN13		nsp	CONNECTOR HOUSING MOLEX35237-0810	nsp
R522		nsp	3.3k Ω 1/5W J	nsp	BN14		nsp	WAFER MOLEX35237-1010	nsp
R523		nsp	47k Ω 1/5W J	nsp	BN94		nsp	WAFER MOLEX35237-1010	nsp
R524		nsp	4.7 Ω 1/5W J	nsp	BN95		nsp	CONNECTOR HOUSING MOLEX35237-0810	nsp
R527		nsp	75 Ω 1/5W J	nsp	BN96		nsp	WIRE ASSY	nsp
∫		nsp			CN10		nsp	WAFER CARD CABLE GF120-27S-TS	nsp
R532		nsp	47k Ω 1/5W J	nsp					
R533		nsp	47k Ω 1/5W J	nsp					
R534		nsp	47k Ω 1/5W J	nsp					
R535		nsp	75 Ω 1/5W J	nsp					
R536		nsp	75 Ω 1/5W J	nsp					
R537		nsp	47k Ω 1/5W J	nsp					
R538		nsp	47k Ω 1/5W J	nsp					
R539		nsp	390 Ω 1/5W J	nsp					
∫		nsp							
R542		nsp	4.7 Ω 1/5W J	nsp					
R543		nsp	4.7 Ω 1/5W J	nsp					
R544		nsp	3.3k Ω 1/5W J	nsp					

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POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
CN11		nsp	WAFER MOLEX 5267-04A	nsp
CN12		nsp	WAFER CARD CABLE GF120-17S-TS	nsp
CN12		9965 000 10583	CABLE CARD	*YU000910R
CN13		nsp	WAFER MOLEX35336-0810	nsp
CN14		nsp	WAFER MOLEX35336-1010	nsp
CN20		nsp	WAFER MOLEX35313-0310	nsp
CN21		nsp	WAFER	nsp
▲ F903	K /N	9965 000 10573	FUSE SB 8A 250V	*FS000710R
▲ F904		9965 000 10573	FUSE SB 8A 250V	*FS000710R
JK11		9965 000 00206	TERMINAL IN/OUT	*YT001770R
JK12		9965 000 00206	TERMINAL IN/OUT	*YT001770R
JK13		9965 000 00206	TERMINAL IN/OUT	*YT001770R
JK14		9965 000 00205	JACK IN/OUT	*YT001760R
JK15		9965 000 10596	MODULE OPTICAL (RECEIVE) TORX179	*YJ002360R
JK16		9965 000 10596	MODULE OPTICAL (RECEIVE) TORX179	*YJ002360R
JK17		9965 000 10597	JACK IN/OUT(B/B/B N-PLATE)	*YT002380R
JK18		4822 265 30993	MODULE OPTICAL TOTX178	YJ15000110
JK51		9965 000 10598	JACK S-VIDEO (2P/H) JY-5036-040	*YT002390R
JK52		9965 000 10598	JACK S-VIDEO (2P/H) JY-5036-040	*YT002390R
JK53		9965 000 10599	JACK BOARD	*YT002360R
JK54		9965 000 10599	JACK BOARD	*YT002360R
JK55		4822 265 11646	JACK VCR	*YT001730R
L101		nsp	COIL PEAKING (RADIAL) 10μH J 4X5	nsp
L102		9965 000 00221	BEAD CORE	*FN000090R
L103		nsp	COIL PEAKING (RADIAL) 10μH J 4X5	nsp
L104		9965 000 00221	BEAD CORE	*FN000090R
X101		9965 000 02026	CRYSTAL 12.288MHZ	*JX000630R

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