JVC

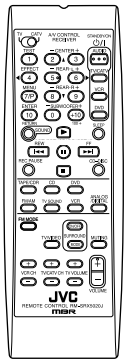
SERVICE MANUAL

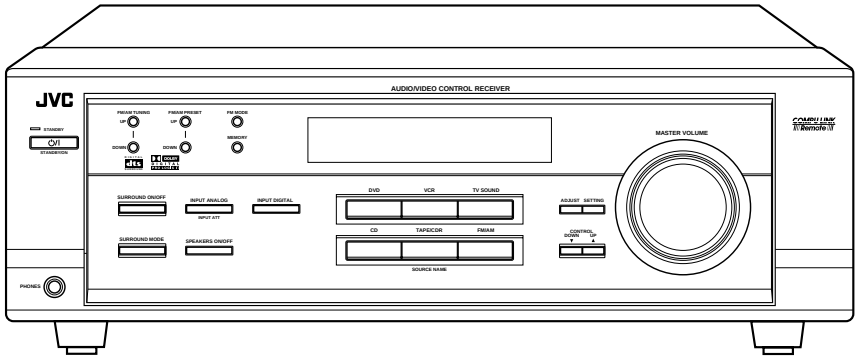
AUDIO/VIDEO CONTROL RECEIVER

RX-5020VBK
RX-5022VSL

Area suffix

J ---------- U.S.A.
C ---------- Canada





COMPU LINK Remote

DIGITAL dts SURROUND

DOLBY DIGITAL PRO LOGIC II

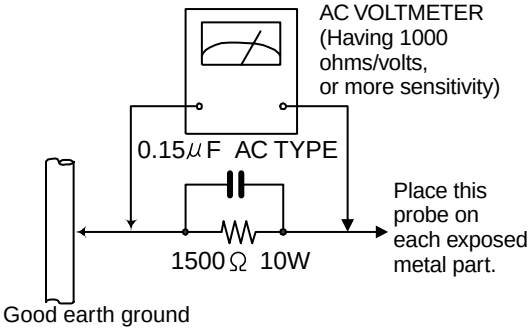
As for RX-5022VSL the body is silver color

Contents

No.21065
Feb. 2002

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer`s warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ CAUTION

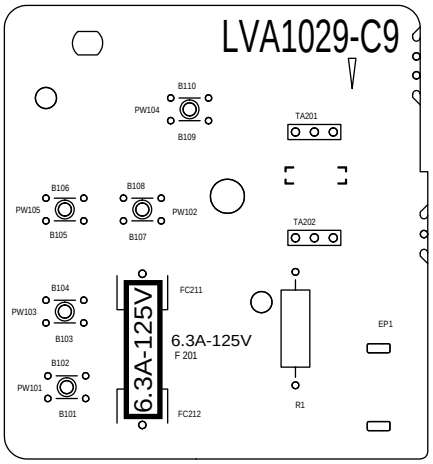
Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.

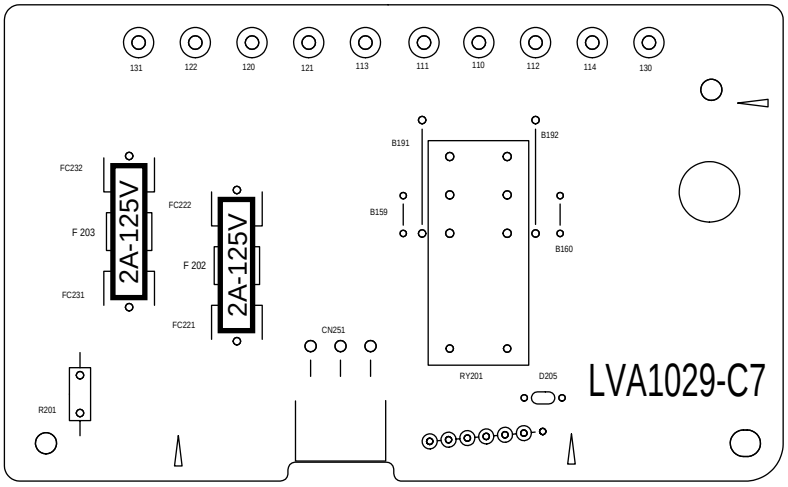
(This regulation does not correspond to J and C version.)

Importance administering point on the safety

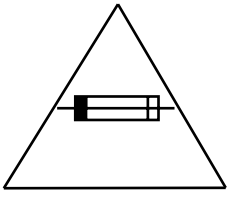
Primary part



Secondary parts



For USA and Canada / pour États - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 6.3A/125V for F201, 2A/125V for F202 and F203.
This symbol specifies type of fast operating fuse.

Précaution: Pour eviter risques de feux, remplacez le fusible de sureté de F201 comme le meme type que 6.3A/125V, et 2A/125V pour F202 et F203.
Ce sont des fusibles sûretes qui functionnes rapide.

Disassembly method

■Removing the top cover (See Fig.1)

1. Remove the four screws A attaching the top cover on both sides of the body.
2. Remove the three screws B on the back of the body.
3. Remove the top cover from behind in the direction of the arrow while pulling both sides outward.

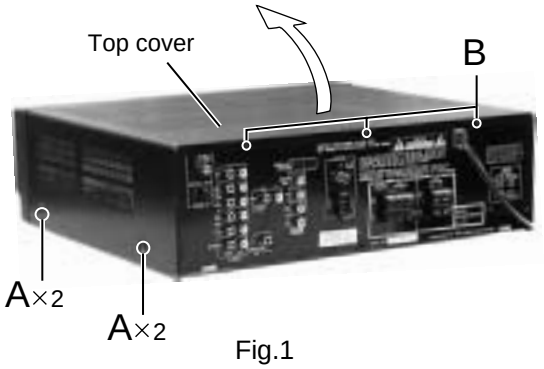


Fig.1

■Removing the front panel assembly (See Fig.2 and 3)

・Prior to performing the following procedure, remove the top cover.

1. Disconnect the card wire from connector CN402 on the audio board and CN201 on the power supply board in the front panel assembly.
2. Cut off the tie band fixing the harness.
3. Remove the three screws C attaching the front panel assembly.
4. Remove the four screws D attaching the front panel assembly on the bottom of the body. Detach the front panel assembly toward the front.

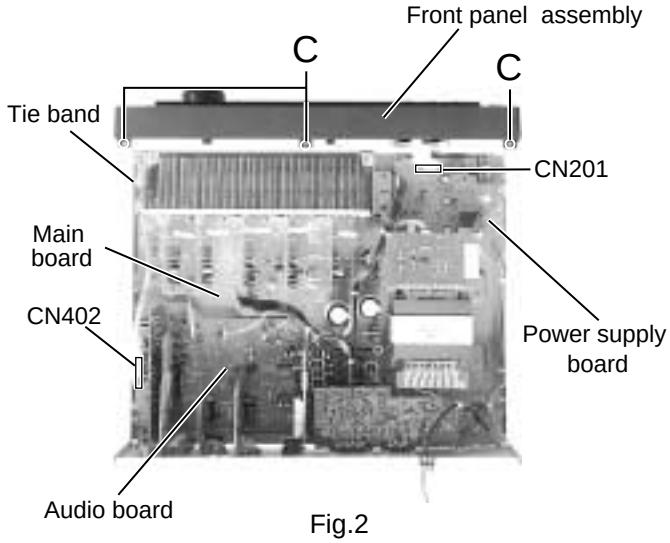


Fig.2

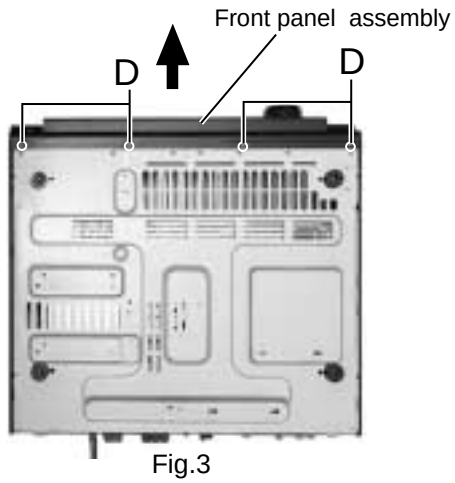


Fig.3

■Removing the rear panel (See Fig.4)

・Prior to performing the following procedure, remove the top cover.

1. Remove the power cord stopper from the rear panel by moving it in the direction of the arrow.
2. Remove the seventeen screws E attaching the audio input board, DVD board, video board and tuner board to the rear panel on the back of the body.
3. Remove the four screws F attaching the rear panel on the back of the body.

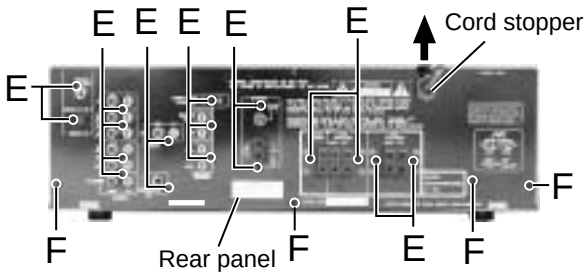


Fig.4

■Removing the digital signal board / audio input board / DVD board / video board and tuner board on the audio board (See Fig.5 to 8)

・ Prior to performing the following procedure, remove the top cover and the rear panel.

1. Cut off the tie band fixing the harness.
2. Disconnect the digital signal board from connector CN481 on the audio board.
3. Disconnect the audio input board, DVD board and the video board from connector CN421, CN431 and CN441 on the audio board.
4. Disconnect the tuner board from connector CN411 on the audio board.

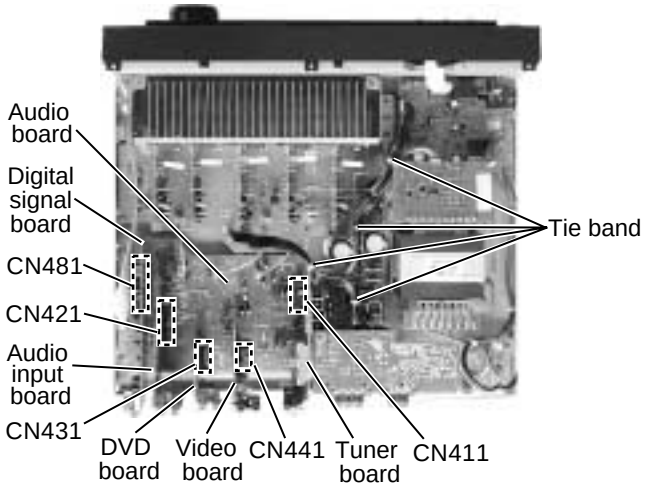


Fig.5

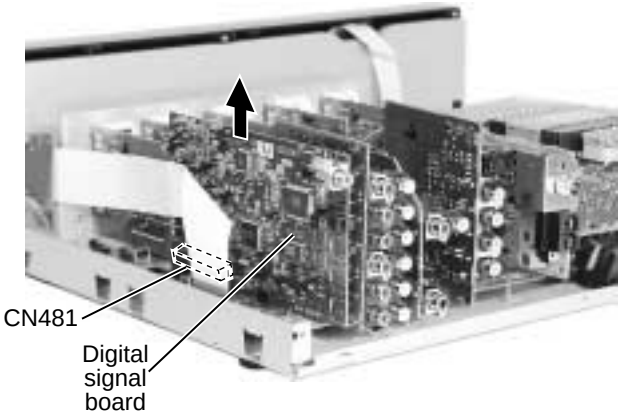


Fig.6

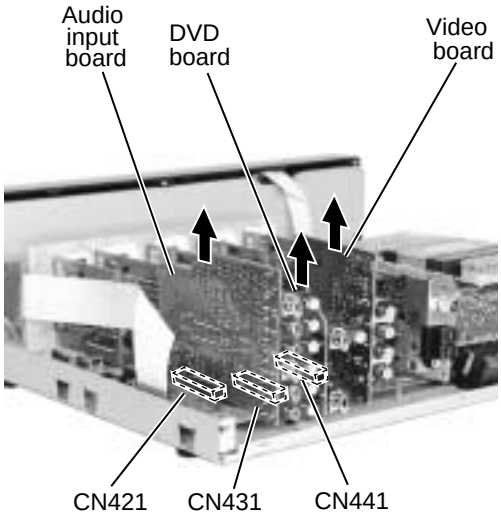


Fig.7

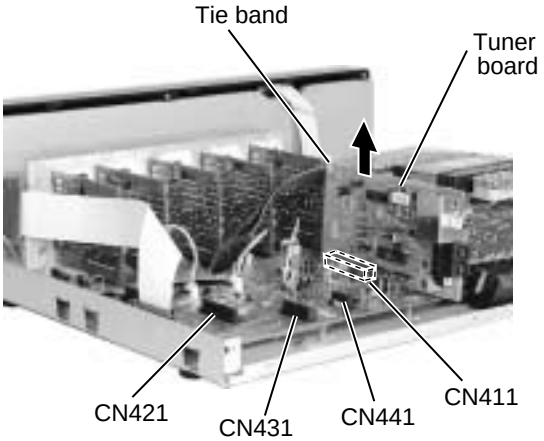


Fig.8

■Removing the audio board (See Fig.9)

・Prior to performing the following procedure, remove the top cover and the rear panel.

1. Disconnect the card wire from connector CN402 on the audio board.
2. Disconnect the relay board from the audio board and the power supply board. (CN291,CN491)
3. Disconnect the harness from connector CN473, CN471, and CN472.
4. Remove the three screws G attaching the audio board assembly.
5. Remove the screw H attaching the audio board and main board.

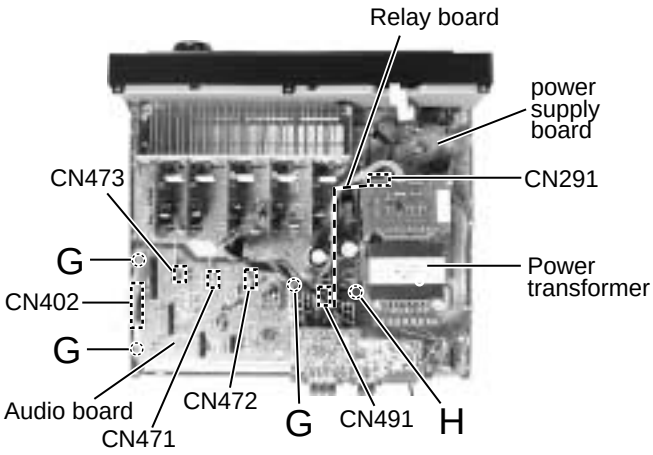


Fig.9

■Removing the main board (See Fig.10)

・Prior to performing the following procedure, remove the top cover, the rear panel and audio board.

1. Disconnect the harness from connector CN241 and CN203 on the power supply board respectively.
2. Disconnect the harness from connector CN251 on the power transformer board .
3. Remove the four screws I and the two screws J attaching the main board.

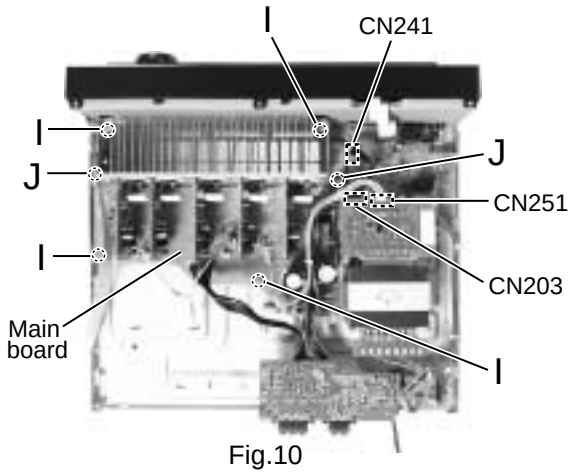


Fig.10

■Removing the Heat sink (See Fig.11 and 12)

1. Remove the ten screws K and four screws L attaching the heat sink.
2. Remove the two screws M attaching the heat sink from the rear side of main board.

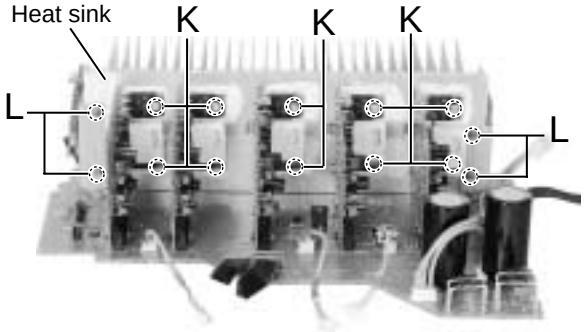


Fig.11

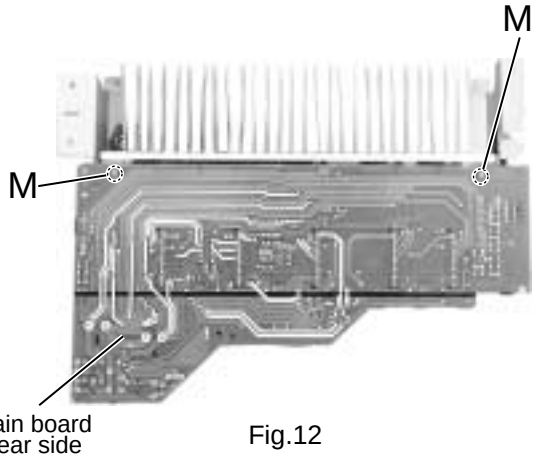


Fig.12

■Removing the power transformer (See Fig.13)

・Prior to performing the following procedures, remove the top cover.

1. Cut off the tie band fixing the harness.
2. Unsolder the two harnesses connected to the power transformer.
3. Unsolder the harness connected to the FW201 on the power transformer board.
4. Remove the four screws N attaching the power transformer.

■Removing the the power / fuse board (See Fig.13)

・Prior to performing the following procedure, remove the top cover and the rear panel.

1. Unsolder the two harnesses connected to the power transformer board.
2. Remove the screw O attaching the power / fuse board.
3. Unsolder the power cord and other harnesses connected to the power / fuse board.

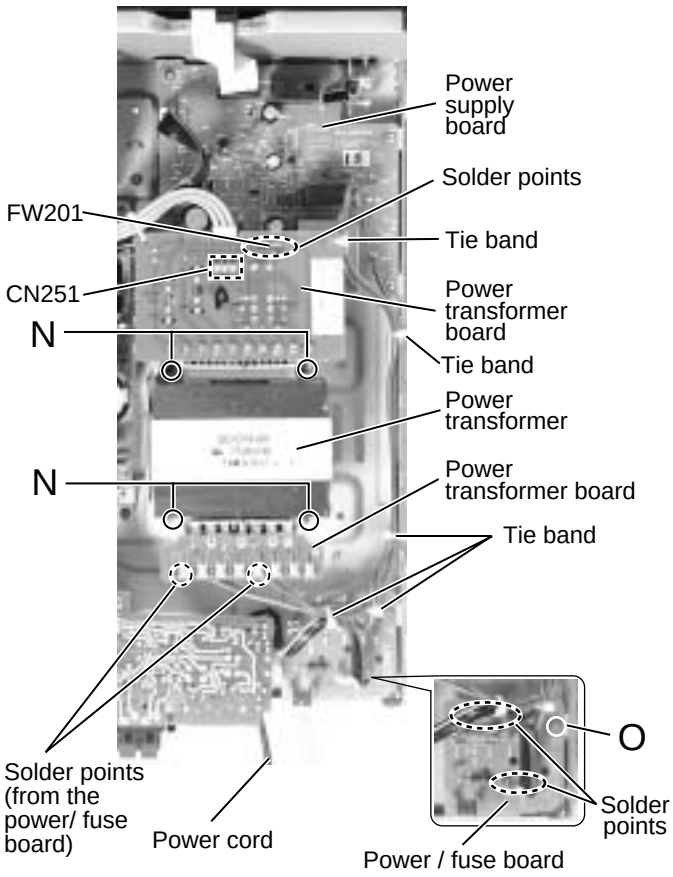


Fig.13

■Removing the power supply board (See Fig.14 and 15)

・Prior to performing the following procedure, remove the top cover and the front panel.

1. Remove the one nut attaching the headphone jack of the power supply board on the front side of the body.
2. Disconnect the harness connected to connector CN241,CN201,CN203 and CN291 on the power transformer board.
3. Remove the three screws P attaching the power supply board and pull out the power supply board from the front bracket backward.
4. Unsolder the three harnesses connected to the power supply board.

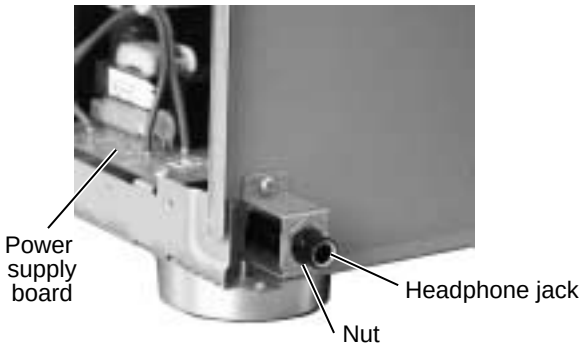


Fig.14

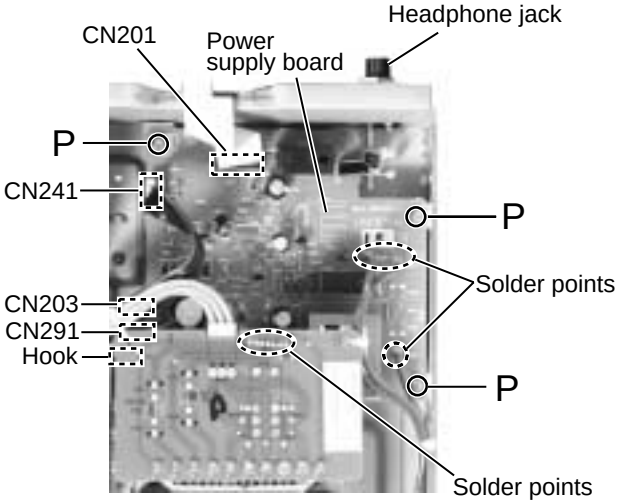


Fig.15

■Removing the system control board / power switch board (See Fig.16 to 18)

- Prior to performing the following procedure, remove the top cover and the front panel assembly.

1. Pull out the volume knob on the front side of the front panel and remove the nut attaching the system control board.
2. Remove the two screws Q attaching the power switch board.
3. Disconnect the harness from connector CN714 on the power switch board.
4. Remove the six screws R attaching the system control board on the back of the front panel.
5. On the back of the front panel, release the six joints by pushing the joint tabs inward.
   Remove the operation switch panel toward the front.
6. Release the two hook attaching the system control board.

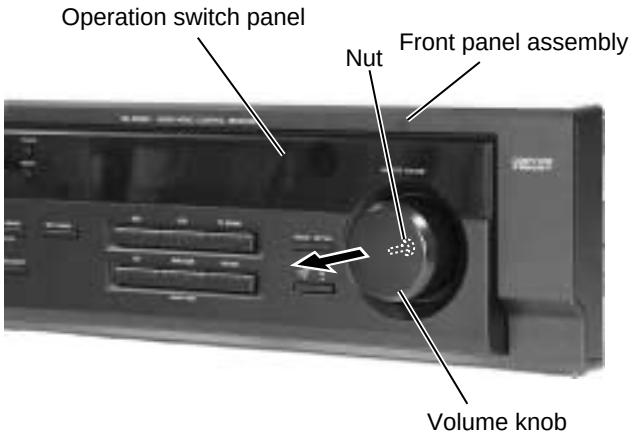


Fig.16

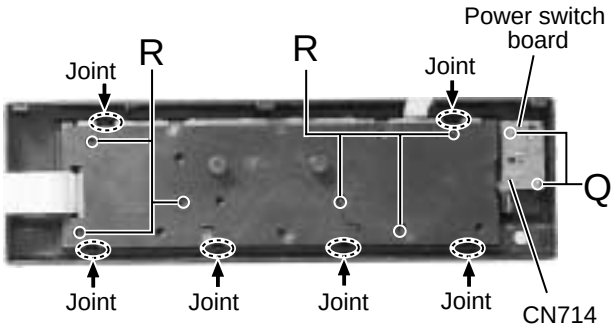


Fig.17

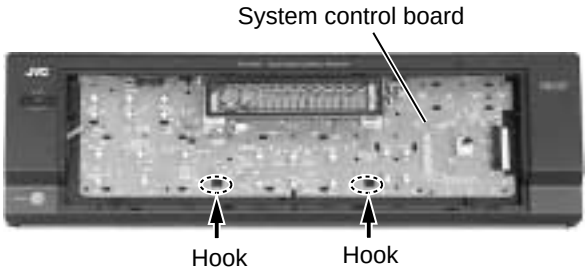


Fig.18

Adjustment method

■ Tuner section

1.Tuner range

FM	87.5MHz~108.0MHz
AM(MW)	530kHz~1710kHz

■ Power amplifier section

Adjustment of idling current

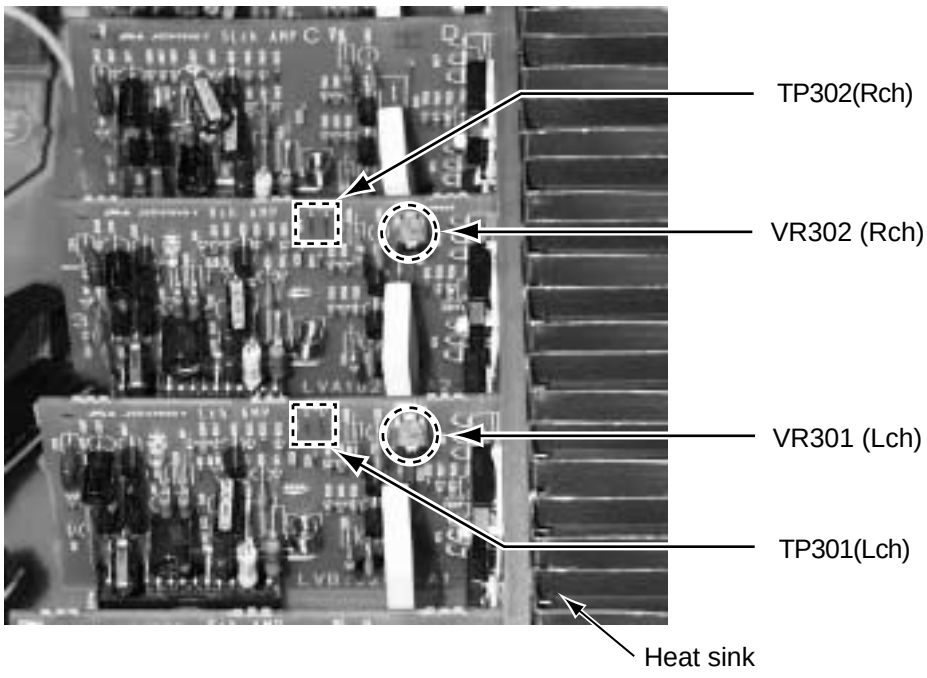
Measurement location	TP301(Lch) , TP302(Rch)
Adjustment part	VR301(Lch) , VR302(Rch)

Attention
This adjustment does not obtain a correct adjustment value immediately after the amplifier is used (state that an internal temperature has risen).
Please adjust immediately after using the amplifier after turning off the power supply of the amplifier and falling an internal temperature.

<Adjustment method>

1.Set the volume control to minimum during this adjustment.(No signal & No load)
2.Set the surround mode OFF.
2.Turn VR301 and VR302 fully counterclockwise to warm up before adjustment.
If the heat sink is already warm from previous use the correct adjustment can not be made.
3.For L-ch,connect a DC voltmeter between TP301's B216 and B217 (Lch)
And,connect it between TP302's B218 and B219(Rch).
4.30 minutes later after power on, adjust VR301 for L-ch, or VR302 for R-ch so that the DC voltmeter value has 1mV~10mV.

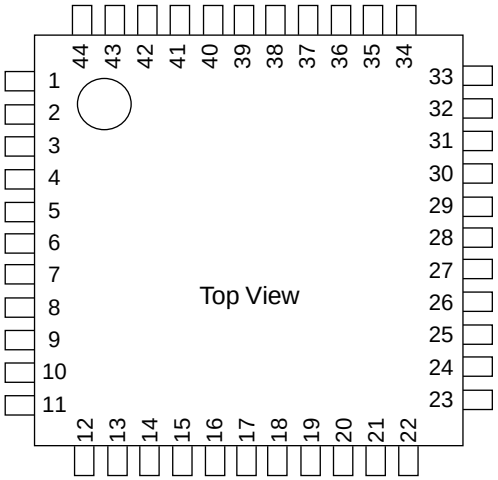
* It is not abnormal though the idling current might not become 0mA even if it is finished to turn variable resistance (VR301,VR302) in the direction of counterclockwise.



Description of major ICs

■ AK4527BVQP (IC601) : A/D,D/A converter

1.Pin layout



2. Pin function (1/2)

No.	Symbol	I/O	Function
1	SDOS	I	SDTO Source Select Pin (Note 1) "L" : Internal ADC output, "H" : DAUX input
2	OSKS	I	Control Mode Select Pin "L" : 3-wire Serial, "H" : I2C Bus
3	MIS	-	Soft Mute Pin (Note 1), Connect to GND 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/O	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	D,AUX	-	Sub Audio Serial Data Input Pin, Connect to GND
11	DFS	-	Double Speed Sampling Mode Pin (Note 1) "L" : Normal Speed, "H" : Double Speed
12	DEMI	-	Connect to GND No internal bonding.
13	DEMO	- - -	Zero Input Detect Enable Pin, Connect to GND "L" : mode 7 (disable) at parallel mode, zero detect mode is selectable by DZFM2-0 bits at serial mode. "H" : mode 0 (DZF is AND of all six channels)
14	MCKO	-	Output Buffer Power supply Pin, 2.7V~5.5V
15	DVDD	I	Digital Power Supply Pin, 4.5V~5.5V
16	DVSS	-	De-emphasis Pin, 0V
17	$\overline{PD}$	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	XTS	-	Test Pin, Connect to GND This pin should be connected to DVSS.

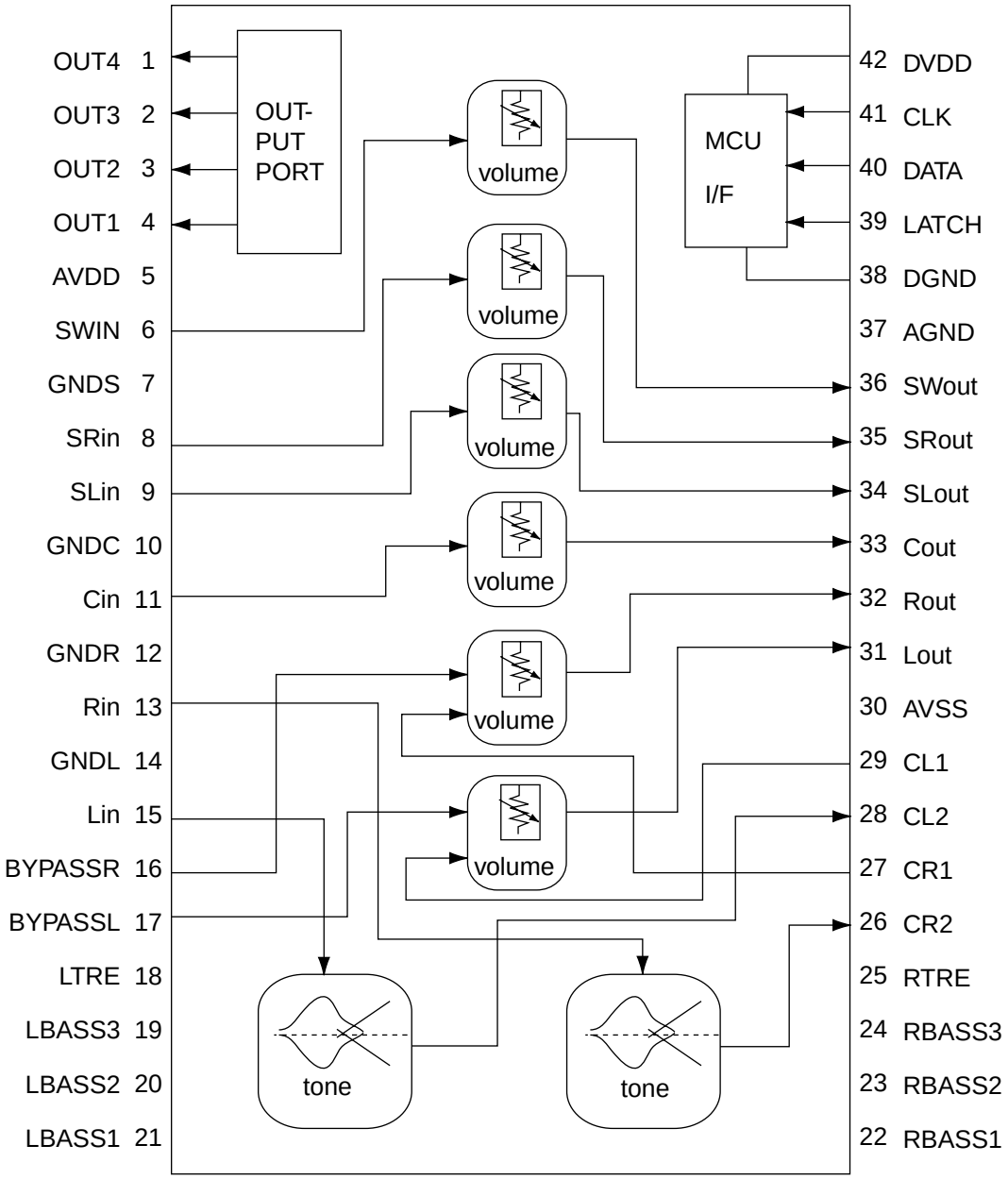
Pin function (2/2) AK4527

No.	Symbol	I/O	Function
19	ICKS	-	Connect to GND No internal bonding.
20	ADIF	-	Analog Input Format Select Pin, Digital Power Supply "H" : Full-differential input, "L" : Single-ended input
21	CAD1	-	Chip Address 1 Pin, Connect to GND
22	CAD0	-	Chip Address 0 Pin, Connect to GND
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	VREFL	-	Zero Input Detect 2 Pin (Note 2), Non Connect When the input data of the group 1 follow total 8192LRCK 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 2.2uF is used to reduce power-supply noise.
35	VREFH	-	Positive Voltage Reference Input Pin,AVDD
36	AVDD	-	Analog Power Supply Pin,4.5V~5.5V
37	AVSS	-	Analog Ground Pin,0V
38	XTI	-	Zero Input Detect 1 Pin (Note 2), Non connect When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H".
39	XTO	I	Master Clock Input Pin
40	P1S	-	Parallel / Serial Select Pin "L" : Serial control mode, "H" : Parallel control mode
41	$\overline{CS}$	I	Audio Data Interface Format 0 Pin in parallel mode
	CSN	I	Chip select pin in 3-wire serial control mode This pin should be connected to DVDD at I2C bus control mode
42	DIF1	I	Audio Data Interface Format 1 Pin in parallel mode
	SCL/CCLK	I	Control Data Clock Pin in serial control mode I2C = "L" : CCLK(3-wire Serial), I2C = "H" : SCL(I2CBus)
43	LOOP0	I	Loopback Mode 0 Pin in parallel control mode Enables digital loop-back from ADC to 3 DACs.
	SAD/CDTI	I/O	Control Data Input Pin in serial control mode I2C = "L" : CDTI(3-wire Serial), I2C = "H" : SDA(I2CBus)
44	CDTD	I	Loopback Mode 1 Pin (Note 1) Enable all 3 DAC channels to be input from SDTII.

Notes : 1. SDOS, SMUTE, DFS, and LOOP1 pins are ORed with register data if P/S = "L".
2. The group 1 and 2 can be selected by DZFM2-0 bit if P/S = "L" and DZFME = "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.

■ M62446FP (IC428) : 6ch master volume

1.Block Diagram



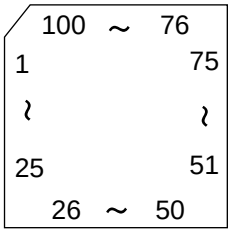
2.Pin Function

M62446FP

Pin No.	Symbol	I/O	Function
1	OUT4	O	BASS BOOST control terminal
2	OUT3	O	SURROUND control terminal
3	OUT2	O	VIDEO 2 control terminal
4	OUT1	O	VIDEO 1 control terminal
5	AVDD	-	Analog positive power supply terminal
6	SW IN	I	SUB Woofer volume signal input terminal
7	A.GND	-	Analog ground terminal
8	RR IN	I	R ch volume signal input terminal for rear speaker
9	RL IN	I	L ch volume signal input terminal for rear speaker
10	A.GND	-	Analog ground terminal
11	C IN	I	Center volume signal input terminal
12	A.GND	-	Analog ground terminal
13	R IN	I	R ch volume signal input terminal
14	A.GND	-	Analog ground terminal
15	L IN	I	L ch volume signal input terminal
16		-	Non connect
17		-	Non connect
18	LTRE	-	Frequency adjustment terminal tone/treble
19	LBASS3	-	Frequency adjustment terminal tone/bass
20	LBASS2	-	Frequency adjustment terminal tone/bass
21	KBASS1	-	Frequency adjustment terminal tone/bass
22	CR2	O	Tone output terminal
23	RBASS2	-	Frequency adjustment terminal tone/bass
24	RBASS3	-	Frequency adjustment terminal tone/bass
25	RTRE	-	Frequency adjustment terminal tone/treble
26	RBASS1	-	Frequency adjustment terminal tone/bass
27	CR1	I	L/R volume input terminal
28	LL2	O	Tone output terminal
29	CL1	I	L/R volume input terminal
30	AVSS	-	Analog negative power supply terminal
31	L OUT	O	L ch output
32	R OUT	O	R ch output
33	C OUT	O	Center volume signal output terminal
34	RL OUT	O	L ch volume signal output terminal for rear speaker
35	RR OUT	O	R ch volume signal output terminal for rear speaker
36	SW OUT	O	SUB Woofer volume signal output terminal
37	A.GND	-	Analog ground terminal
38	D.GND	-	Digital ground terminal
39	VOL LACH	I	Latch input terminal
40	VOL DATA	I	Volume data input terminal
41	VOL CLK	I	Clock input terminal for data transfer
42	DVDD	-	Digital power supply terminal

■ MN101C35DJW (IC701) : System controller

1. Pin layout



2. Pin function (1/2)

Pin No.	Symbol	I/O	Function
1	VOL.JOG IN_1	I	VOL.JOG IN_1
2	VOL.JOG IN_2	I	VOL.JOG IN_2
3	DATA (PLL)	I/O	DATA (PLL)
4	CLK (PLL)	O	CLK (PLL)
5	DE (PLL)	O	DE (PLL)
6	VIDEO S/C DVD	I	VIDEO S/C DVD
7	VIDEO S/C VCR	I	VIDEO S/C VCR
8	VDD	-	Power supply +5V
9	OSC2	I/O	Connecting the crystal oscillator for system clock (8MHz)
10	OSC1	I/O	Connecting the crystal oscillator for system clock (8MHz)
11	VSS	-	Connect to GND
12		-	Connect to GND
13	NC	-	Non connect
14		-	Connect to GND
15		-	Connect to GND
16	KEY IN 1	I	KEY INPUT 1
17	KEY IN 2	I	KEY INPUT 2
18	KEY IN 3	I	KEY INPUT 3
19	KEY IN 4	I	KEY INPUT 4
20	KEY IN 5	I	KEY INPUT 5
21	INH IN	I	INH IN
22	CS 1	I	CHIP SELECT 1
23	CS 2	I	CHIP SELECT 2
24	VREF+	-	Power supply +5V
25	VIDEO S/C DBS	I	VIDEO S/C DBS
26	RESET	I	RESET INPUT
27	CLK (RDS)	O	RDS CLK OUT (RDS)
28	DCS IN	I	DCS INPUT
29	DCS OUT	O	DCS OUTPUT
30	VCR IN	I	AVLINK VCR IN
31	VCR OUT	O	AVLINK VCR OUT
32	DATA (RDS)	I/O	RDS DATA (RDS)
33	PROTECTOR IN	I	PROTECTOR IN
34	RM IN	I	REMOCON INPUT
35	TUNED IN	I	TUNED IN (TUNER)
36	STEREO IN	I	STEREO IN (TUNER)
37	DAVN (RDS)	I	RDS DAVN (RDS)
38	SELF DET	I	SELF DET INPUT
39	COMMAND (DSP)	O	COMMAND (DSP)
40	STATUS (DSP)	I	STATUS (DSP)

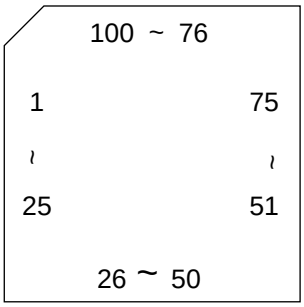
Pin function (2/2)

MN101C35DJW

Pin No.	Symbol	I/O	Function
41	CLK DSP	O	CLK (DSP)
42	READY	O	READY (DSP)
43	RESET	O	RESET (DSP)
44	RY S	O	RELAY SURRUND
45	RY C	O	RELAY CENTER
46	RY L/R1	O	RELAY FRONT 1
47	RY L/R2	O	RELAY FRONT 2
48	RY HP	O	RELAY HEADPHONE
49 ~ 64	GRID16~GRID1	O	FL GRID SIGNAL CONTROL OUT
65 ~ 80	SEG1~SEG16	O	FL SEGMENT SIGNAL CONTROL OUT
81	NC	-	Non connect
82	NC	-	Non connect
83	NC	-	Non connect
84	NC	-	Non connect
85	NC	-	Non connect
86	NC	-	Non connect
87	NC	-	Non connect
88	POWER	-	POWER ON Relay Control
89	S MUTE	O	SOUSE MUTE
90	SW MUTE	O	SUBWOOFER MUTE
91	TU MUTE	O	TUNER MUTE
92	STB LED	O	STANDBY LED
93	SURROUND	O	SURROUND
94	DATA	O	AUDIO SW DATA
95	CLK	O	CLK (AUDIO SW)
96	STB	O	STB (AUDIO SW)
97	LATCH	O	LATCH (VOLUME)
98	DATA	O	VOLUME DATA
99	CLK	O	CLK (VOLUME)
100	VPP	-	VPP

■ UPD784215AGC167 (IC671) : Dital signal controller

1.Pin layout



2.Pin function (1/2)

Pin No.	Symbol	I/O	Function
1~8		-	Non connect
9	VDD	-	Power supply terminal
10	X2	O	Connecting the crystal oscillator for system main clock
11	X1	I	Connecting the crystal oscillator for system main clock
12	VSS	-	Connect to GND
13	XT2	O	Connecting the crystal oscillator for system sub clock
14	XT1	I	Connecting the crystal oscillator for system sub clock
15	$\overline{\text{RESET}}$	I	System reset signal input
16	$\overline{\text{AUTODATA}}$	I	Output of DSP to general-purpose port
17	LOCK	I	Output of DSP to general-purpose port
18	DIGITAL0	I	Output of DSP to general-purpose port
19	FORMAT	I	Output of DSP to general-purpose port
20	CHANNEL	I	Output of DSP to general-purpose port
21	ERR	I	Output of DSP to general-purpose port
22	$\overline{\text{REST IN}}$	I	Reset signal input
23	AVDD	-	Power supply terminal
24	AVREF0	-	Connect to GND
25		-	Connect to GND
26		-	Connect to GND
27		-	Connect to GND
28		-	Connect to GND
29		-	Connect to GND
30		-	Connect to GND
31		-	Connect to GND
32		-	Connect to GND
33	AVSS	-	Connect to GND
34,35		-	Non connect
36	AV REF1	-	Power supply terminal
37	RX	-	Not use
38	TX	-	Not use
39		-	Non connect
40	$\overline{\text{DSPCOM}}$	I	Communication port from IC701
41	DSPSTS	O	Status communication port to IC701
42	$\overline{\text{DSPCLK}}$	I	Clock input from IC701
43	DSPRDY	I	Ready signal input from IC701
44		-	Non connect
45	MIDIO IN	I/O	Interface I/O terminal with microcomputer
46	MIDIO OUT	I/O	Interface I/O terminal with microcomputer
47	$\overline{\text{MICK}}$	O	Interface I/O terminal with microcomputer of clock signal
48	$\overline{\text{MICS}}$	O	Interface I/O terminal with microcomputer of chip select

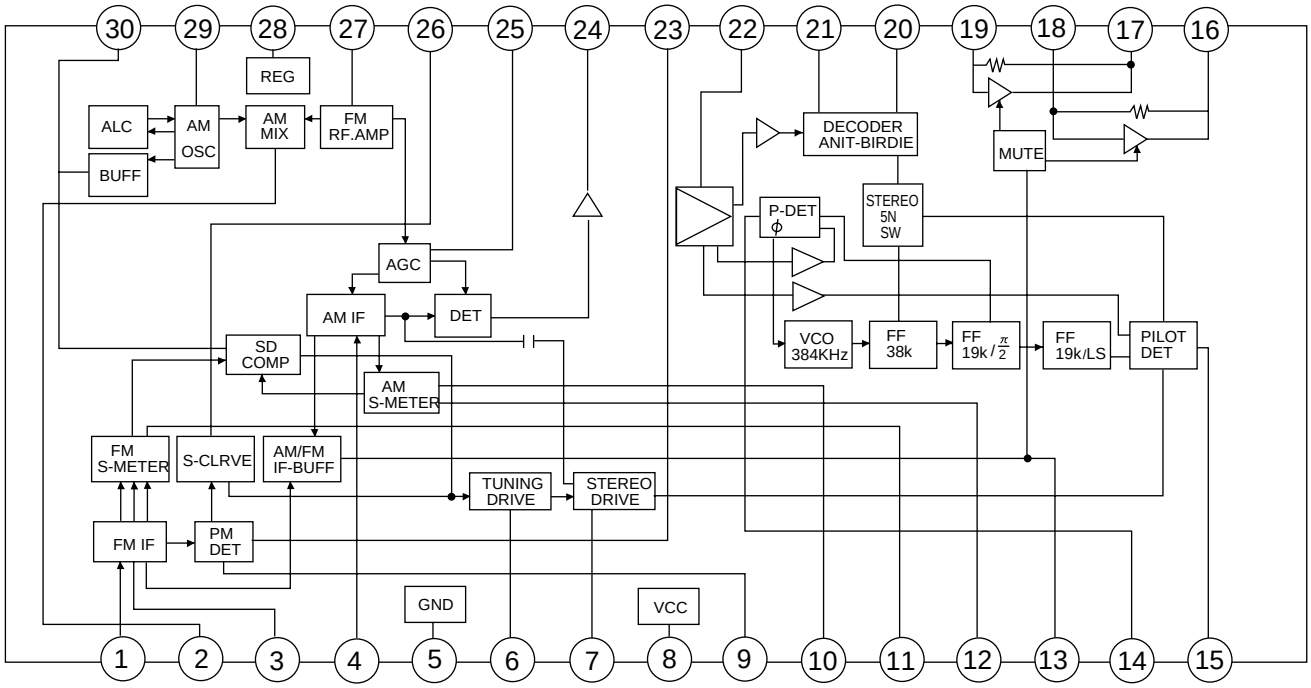
Pin function (2/2)

UPD784215AGC167

Pin No.	Symbol	I/O	Function
49	$\overline{\text{MILP}}$	O	Interface I/O terminal with microcomputer
50	$\overline{\text{MIACK}}$	O	Interface I/O terminal with microcomputer
51		-	Non connect
52		-	Non connect
53	$\overline{\text{DSPRST}}$	O	Reset signal output of DSP
54~63		-	Non connect
64	CODEC OUT	I/O	Interface I/O terminal with microcomputer
65	CODEC IN	I/O	Interface I/O terminal with microcomputer
66	$\overline{\text{CODEC CLK}}$	O	Interface I/O terminal with microcomputer of clock signal
67	$\overline{\text{CODEC CS}}$	O	Interface I/O terminal with microcomputer of chip select
68	CODEC XTS	-	Non connect
69		-	Non connect
70		-	Non connect
71	$\overline{\text{PD}}$	O	Reset signal output
72	GND	-	Connect to GND
73		-	Non connect
74		-	Non connect
75		-	Non connect
76		-	Non connect
77		-	Non connect
78		-	Non connect
79		-	Non connect
80		-	Non connect
81	VDD	-	Power supply
82		-	Non connect
83		-	Non connect
84	ANA/T-TONE	O	Test tone control
85	LEF-MIX	O	Control at output destination of LFE channel
86		-	Non connect
87	D.MUTE	O	Mute of the digital out terminal is controlled
88	$\overline{\text{S.MUTE}}$	O	Mute of the audio signal is controlled
89		-	Non connect
90	ASW1	O	Selection of digital input selector
91	ASW2	O	Selection of digital input selector
92	ASW3	O	Selection of digital input selector
93	ASW4	O	Selection of digital input selector
94	TEST	-	Test terminal
95		-	Non connect
96		-	Non connect
97		-	Non connect
98		-	Non connect
99		-	Non connect
100		-	Non connect

■ LA1838 (IC102) : FM AM IF amp. & Detector, FM MPX decoder

1. Block Diagram

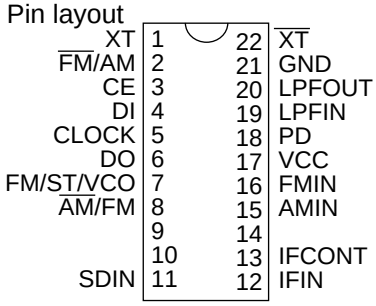


2. Pin Function

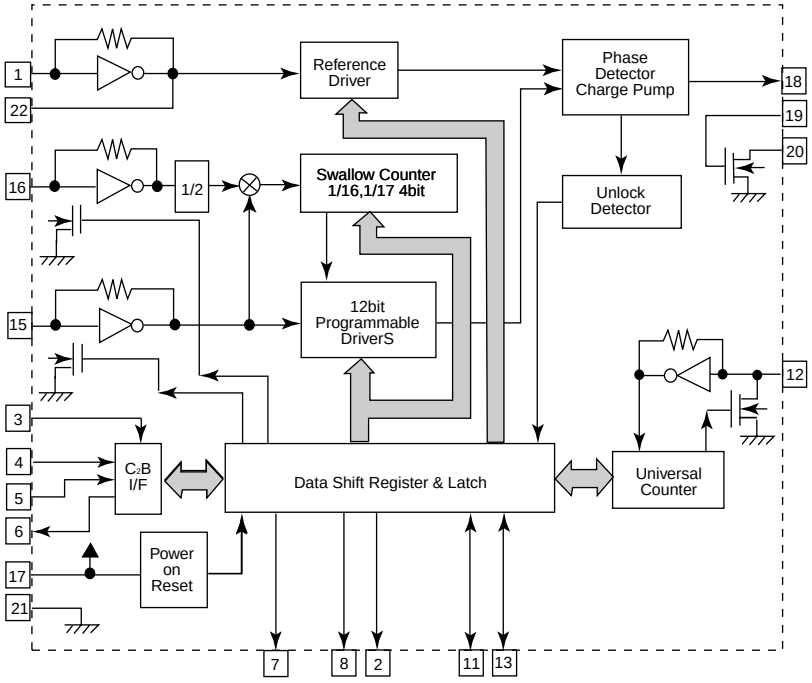
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.	16	L OUT	O	Left channel signal output.
2	AM MIX	O	This is an out put terminal for AM mixer.	17	R OUT	O	Right channel signal output.
3	FM IF	I	Bypass of FM IF	18	L IN	I	Input terminal of the Left channel post AMP.
4	AM IF	I	Input of AM IF Signal.	19	R IN	I	Input terminal of the Right channel post AMP.
5	GND	–	This is the device ground terminal.	20	RO	O	Mpx Right channel signal output.
6	$\overline{\text{TUNED}}$	O	When the set is tunning,this terminal becomes "L".	21	LO	O	Mpx Left channel signal output.
7	$\overline{\text{STEREO}}$	O	Stereo indicator output. Stereo "L", Mono: "H"	22	MPX IN	I	Mpx input terminal
8	VCC	–	This is the power supply terminal.	23	FM OUT	O	FM detection output.
9	FM DET	–	FM detect transformer.	24	AM DET	O	AM detection output.
10	AM SD	–	This is a terminal of AM ceramic filter.	25	AM AGC	I	This is an AGC voltage input terminal for AM
11	FM VSM	O	Adjust FM SD sensitivity.	26	AFC	–	This is an output terminal of voltage for FM-AFC.
12	AM VSM	O	Adjust AM SD sensitivity.	27	AM RF	I	AM RF signal input.
13	MUTE	I/O	When the signal of IF REQ of IC121(LC72131) appear, the signal of FM/AM IF output. //Muting control input.	28	REG	O	Register value between pin 26 and pin28 besides the frequency width of the input signal.
14	FM/$\overline{\text{AM}}$	I	Change over the FM/AM input. "H" :FM, "L" : AM	29	AM OSC	–	This is a terminal of AM Local oscillation circuit.
15	$\overline{\text{MONO}}$/ST	O	Stereo : "H", Mono: "L"	30	OSC BUFFER	O	AM Local oscillation Signal output.

■ LC72136N (IC121) : PLL frequency synthesizer

1. Pin layout



2. Block diagram

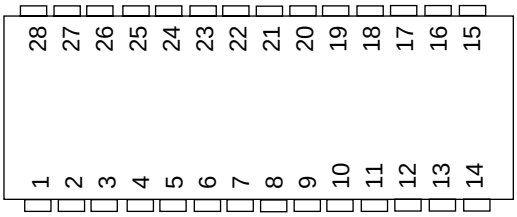


3. Pin function

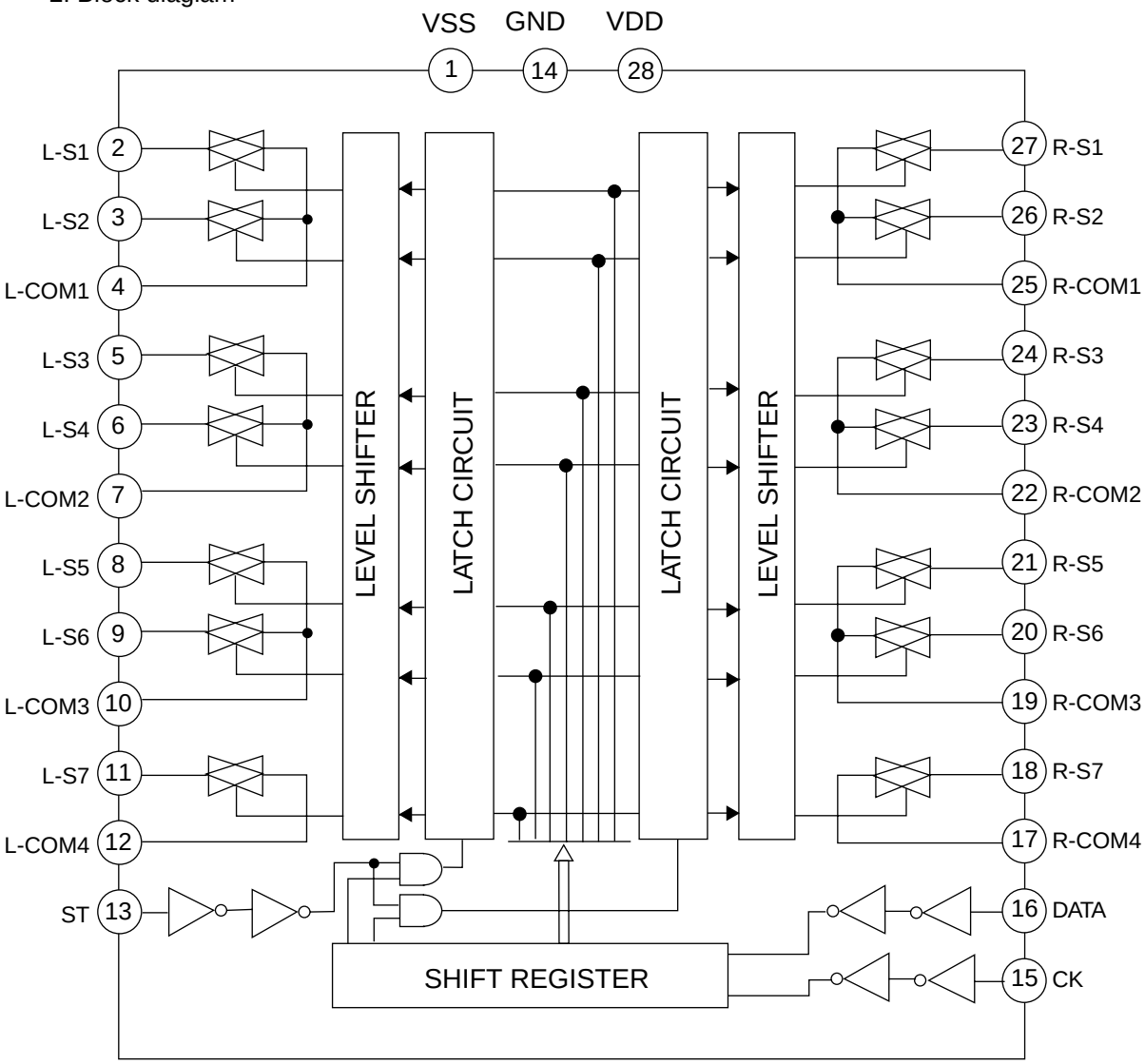
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	$\overline{FM}$/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power suplly(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	$\overline{AM}$/FM	O	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	O	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	$\overline{XT}$	I	X'tal oscillator(75KHz)

■ TC9162AF (IC423) : Analog switch

1. Pin layout



2. Block diaglam



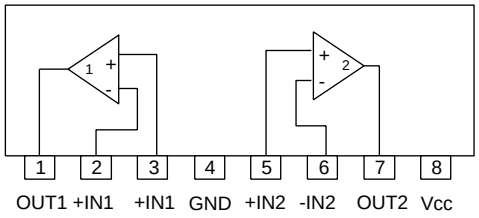
■ TC9446F-025 (IC631) : Digital signal processor for dolby digital (AC-3) / DTS audio decode

Pin No.	Symbol	I/O	Function
1	$\overline{RST}$	I	Reset signal input terminal (L:reset H: normal operation)
2	MIMD	I	Microcomputer interface mode selection input terminal (L:serial H:IC bus)
3	$\overline{MICS}$	I	Microcomputer interface chip select input terminal
4	$\overline{MILP}$	I	Microcomputer interface latch pulse input
5	MIDIO	I/O	Microcomputer interface data I/O terminal
6	$\overline{MICK}$	I	Microcomputer interface clock input terminal
7	MIACK	O	Microcomputer interface acknowledge output terminal
8~11	FI0~3	I	Flag input terminal 0~3
12	IRQ	I	Interrupt input terminal
13	VSS	-	Digital ground terminal
14	LRCKA	I	Audio interface LR clock input terminal A
15	BCKA	I	Audio interface bit clock input terminal A
16~18	SDO0~2	O	Audio interface data output terminal 0
19	SD03	-	Non connect
20	LRCKB	I	Audio interface LR clock input terminal B
21	BCKB	I	Audio interface bit clock input terminal B
22	SDT0	I	Audio interface data input terminal 0
23	SDT1	I	Audio interface data input terminal 1
24	VDD	-	Power supply for digital circuit
25	LRCKOA	O	Audio interface LR clock output terminal A
26	BCKOA	O	Audio interface bit clock output terminal A
27,28	$\overline{TEST0,1}$	I	Test input terminal 0/1 (L:test H: normal operation)
29~30	LRCKOB,BCKOB	-	Non connect
31	TXO	O	SPDIF Output
32,33	$\overline{TEST2,3}$	I	Test input terminal (L:test H: normal operation)
34	RX	I	SPDIF input terminal
35	VSS	-	Ground terminal for digital circuit
36	$\overline{TSTSUB0}$	I	Test sub input terminal 0 (L:test H: normal operation)
37	FCONT	O	VCO Frequency control output terminal
38,39	$\overline{TSTSUB1,TSTSUB2}$	I	Test sub input terminal 1,2 (L:test H: normal operation)
40	PDO	O	Phase detect signal output terminal
41	VDDA	-	Power supply for analog circuit
42	PLON	I	Clock selection input terminal (L:external clock H:VCO clock)
43	AMPI	I	amplifier input terminal for LPF
44	AMPO	O	amplifier output terminal for LPF
45	CKI	I	External clock input terminal
46	VSSA	-	Ground terminal for analog circuit
47	CKO	O	DIR Clock output terminal
48	LOCK	O	VCO Lock output terminal
49	$\overline{VSS}$	-	Ground terminal for digital circuit
50	$\overline{WR}$	O	External SRAM writing signal output terminal
51	$\overline{OE}$	O	External SRAM output enable signal output terminal
52	CE	O	External SRAM chip enable signal output terminal
53	VDD	-	Power supply terminal for digital circuit
54~61	IO7~0	I/O	External SRAM data I/O terminal 7~0
62	VSS	-	Ground terminal for digital circuit
63~70	AD0~7	O	External SRAM address output terminal 0~7
71	VDD	-	Power supply terminal for digital circuit
72~80	AD8~16	O	External SRAM address output terminal 8~16
81	VSS	-	Ground terminal for digital circuit
82~89	PO0~7	O	General purpose output terminal 0~7
90	VDDDL	-	Power supply terminal for DLL
91	LPFO	O	LPF output terminal for DLL
92,93	DLON,DLCKS	I	Refer to the undermentioned table
94	SCKO	-	Non connect
95	VSSDL	-	Ground terminal for DLL
96	SCKI	I	External system clock input terminal
97	VSSX	-	Ground termonal for oscillation circuit
98,99	XO,XI	I/O	Oscillation I/O terminal
100	VDDX	-	Power supply terminal for oscillation circuit

DLCKS terminal	DLONterminal	DLL clock setting
L	L	SCKI input (DLL circuit OFF)
L	H	Four times XI clock
H	L	Three times XI clock
H	H	Six times XI clock

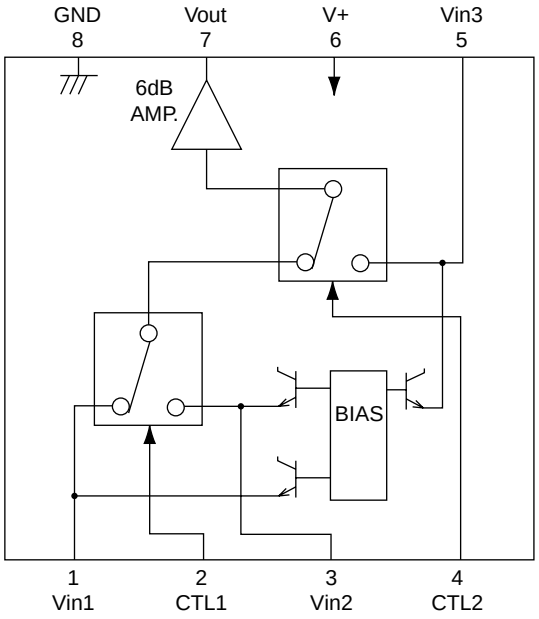
■ BA15218N (IC403) : Dual ope. amp.

1. Pin layout / Block diaglam



■ NJM2246D (IC501) : Video switch

1. Pin layout / Block diaglam

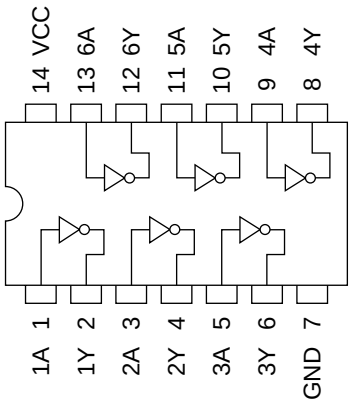


Control input - output signal

CTL 1	CTL 2	Output
L	L	VIN 1
H	L	VIN 2
L/H	H	VIN 3

■ TC74HCU04AF (IC621) : Inverter

1. Pin layout

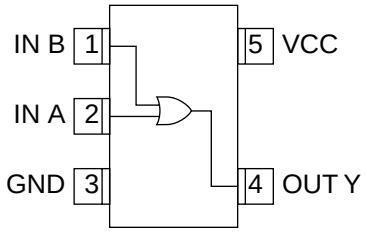


2. Truth value

A	Y
L	H
H	L

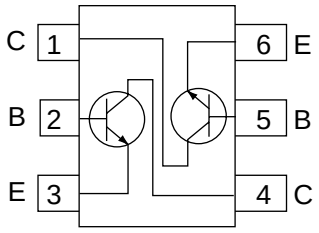
■ TC7SET32FU (IC672) : Z-Input or gate

1. Pin layout / Block diagram



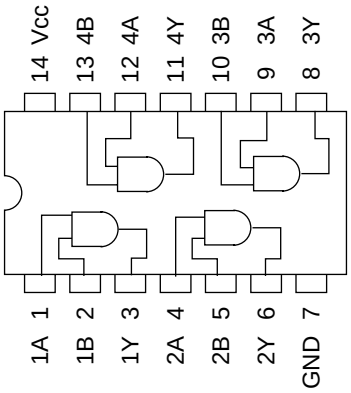
■ IMX9-W (IC652, IC662, IC682) : Driver

1. Pin layout / Block diagram



■ TC74HCU08AF (IC611) : Inverter

1. Pin layout / Block diagram

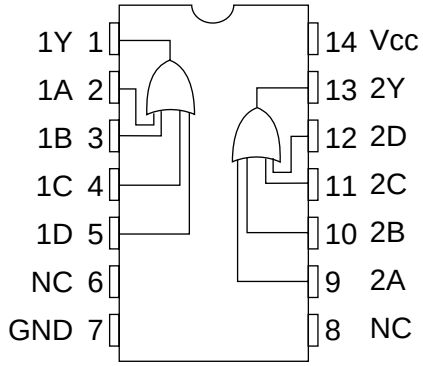


2.The truth value table

A	B	Y
L	L	L
L	H	L
H	L	L
H	H	H

■ TC74HC4072AF (IC612) : 4-Input gate

1.Pin layout & block diagram

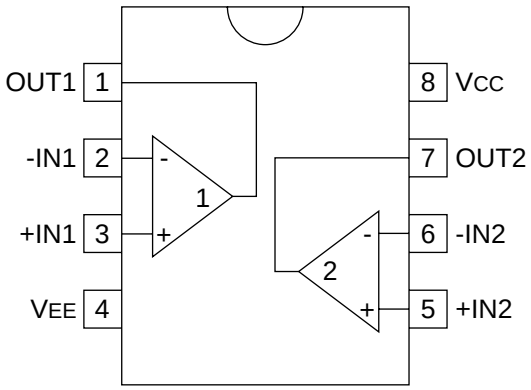


2. Truth table

A	B	C	D	Y
H	X	X	X	H
X	H	X	X	H
X	X	H	X	H
X	X	X	H	H
L	L	L	L	L

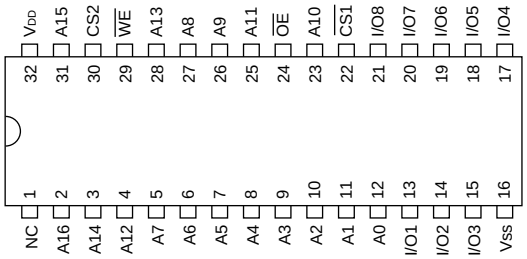
■ BA15218F (IC427, 609, 610, 650, 651, 661, 690, 691) : Op amp.

1. Pin layout / Block diagram

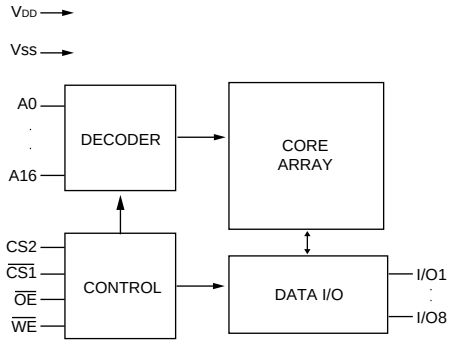


■W24L010AJ-12 (IC641) : SRAM

1. Pin layout



2. Block diaglam



3. Pin function

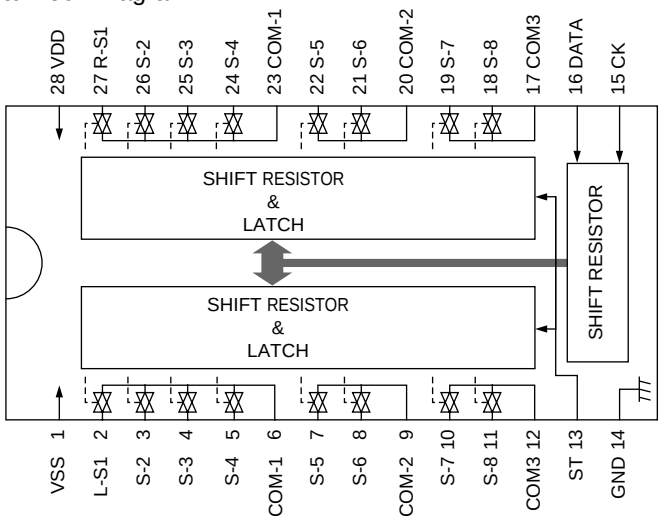
Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	NC	No Connection	17	I/O4	Data Input/Output
2	A16	Address Input	18	I/O5	Data Input/Output
3	A14	Address Input	19	I/O6	Data Input/Output
4	A12	Address Input	20	I/O7	Data Input/Output
5	A7	Address Input	21	I/O8	Data Input/Output
6	A6	Address Input	22	$\overline{CS1}$	Chip Select Inputs
7	A5	Address Input	23	A10	Address Input
8	A4	Address Input	24	$\overline{OE}$	Output Enable Input
9	A3	Address Input	25	A11	Address Input
10	A2	Address Input	26	A9	Address Input
11	A1	Address Input	27	A8	Address Input
12	A0	Address Input	28	A13	Address Input
13	I/O1	Data Input/Output	29	$\overline{WE}$	Write Enable Input
14	I/O2	Data Input/Output	30	CS2	Chip Select Inputs
15	I/O3	Data Input/Output	31	A15	Address Input
16	Vss	Ground	32	VDD	Power Supply

■ TC9164AN (IC402) : Analog switch

1.Function

Switch to On/Off of S1 to S8 by control of LSI.

2. Pin layout & Block Diagram



< MEMO >

RX-5020VBK/RX-5022VSL

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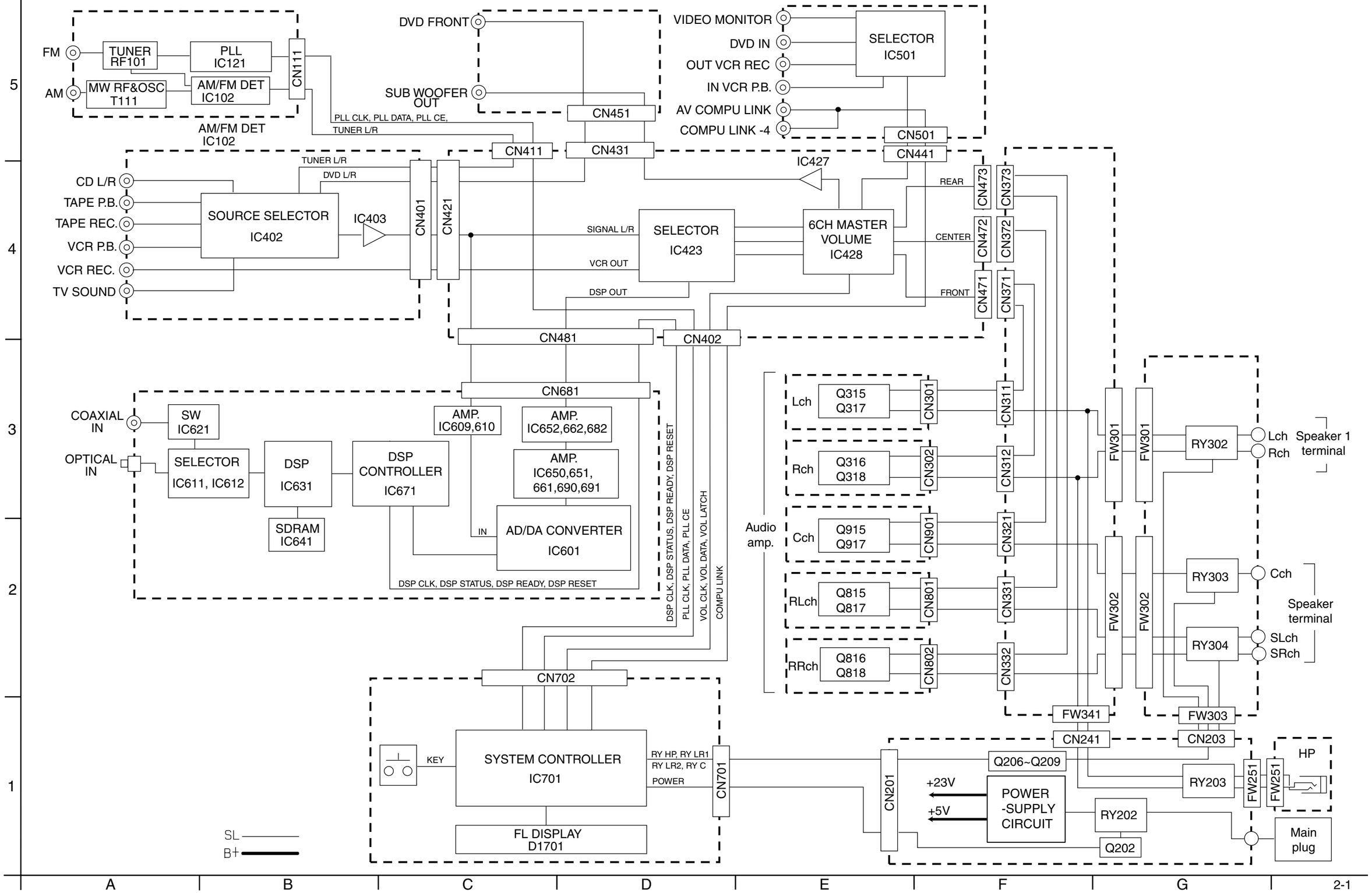
(No.21065)

200202(V)

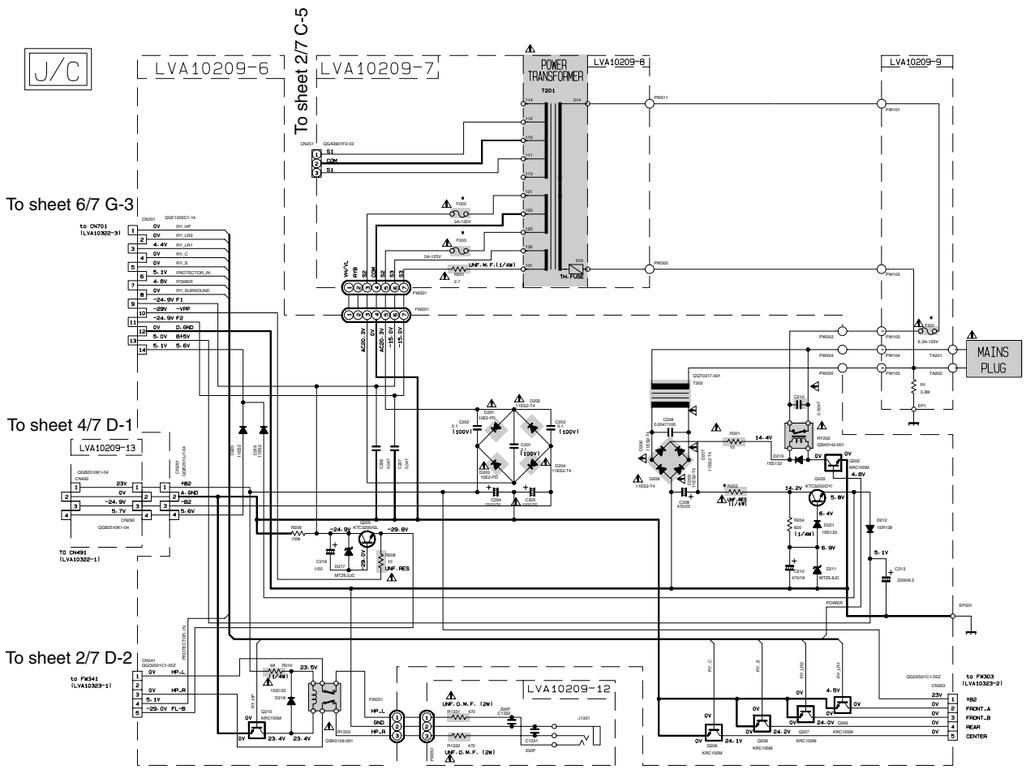
Block diagram



RX-5020VBK/RX-5022VSL

Standard schematic diagrams

■ Power supply section

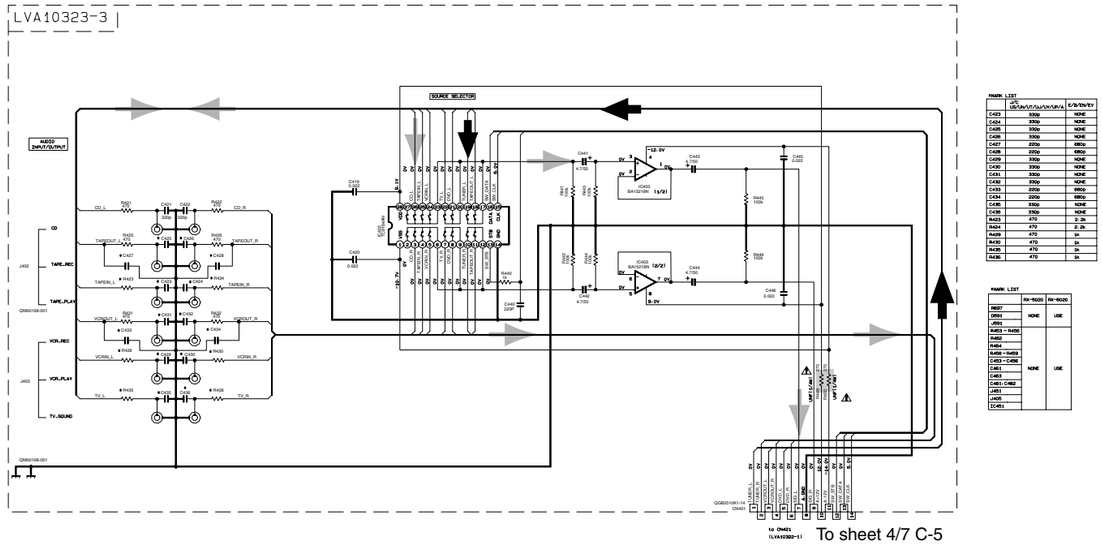


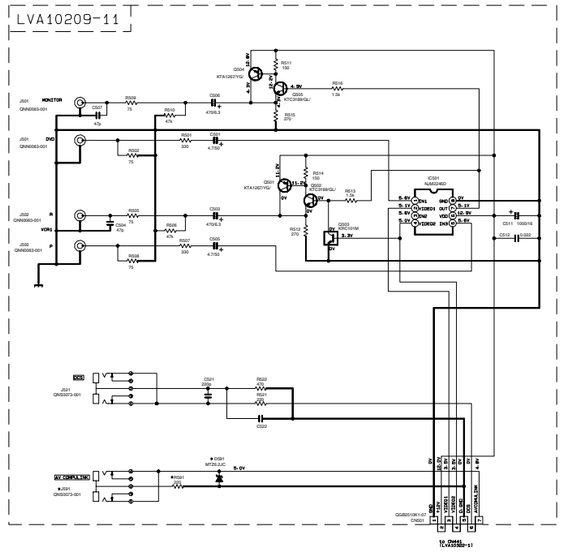
	J/C	B/E/EN/EV/UP/A	US/UK/UT/LU/LV
F201	QMF51U1-6R3-JB (6.3A-125V)	QMF51H2-2R5-JB (2.5A-250V)	QMF51H2-5R0-JB (5A-250V)
F202•F203	QMF51U1-2R0-JB (2A-125V)	QMF51H2-2R0-JB (2A-250V)	QMF51H2-2R0-JB (2A-250V)
F204	NONE	NONE	QMF31H2-2R0-JB (2.0A-250V)
F205	NONE	QMF51E2-R10-J1 (100mA-250V)	QMF51E2-R10-J1 (100mA-250V)
B170	USE	NONE	NONE
VS201	NONE	NONE	USE

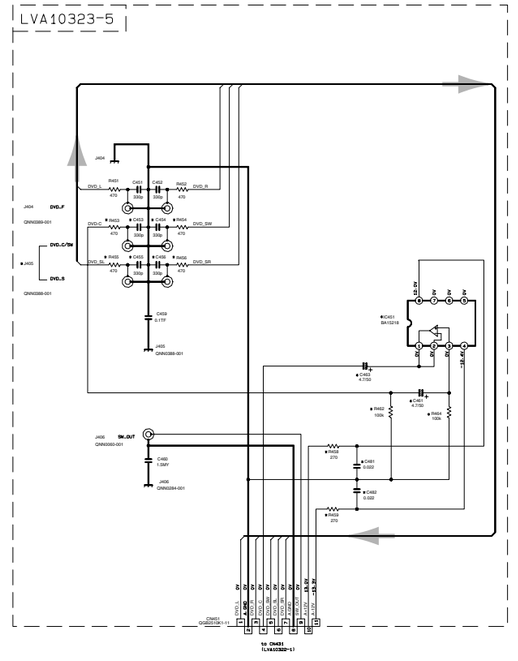
	J/C	B/E/EN/EV	US/UK/UT/LU/LV	UP/A
R1•EP1	USE	NONE	NONE	NONE
R211•R212 D203•D203 Q211•Q145	NONE	NONE	NONE	USE
R201•R146	USE	USE	NONE	NONE
R203	10	10	3.9	3.9
T202	GQT0317-001	GQT0281-002	GQT0281-004	GQT0281-004
C209	470/25	470/25	470/63	470/63
R201	2.7	4.7	5.6	5.6
C1331	330P	0.001	330P	330P
C1332	330P	0.001	330P	330P
C221	NONE	USE	NONE	NONE

SHEET No.	CIRCUIT DESCRIPTION
1 / 7	POWER SUPPLY / AUDIO VIDEO SIGNAL INPUT TERMINAL
2 / 7	SPEAKER TERMINAL
3 / 7	AUDIO AMP
4 / 7	VOLUME / REGULATOR / SOURCE SELECT IC
5 / 7	SURROUND IC / DIGITAL SIGNAL INPUT TERMINAL
6 / 7	USER CONTROL KEY / SYSTEM CONTROL LSI / FL DISPLAY
7 / 7	TUNER

■ Audio / Video signal input terminal section







MARK LIST		
	J/C	EA/EN/EV
C423	330p	NONE
C424	330p	NONE
C425	330p	NONE
C426	330p	NONE
C427	220p	680p
C428	220p	680p
C429	330p	NONE
C430	330p	NONE
C431	330p	NONE
C432	330p	NONE
C433	220p	680p
C434	220p	680p
C435	330p	NONE
C436	330p	NONE
R423	470	2.2k
R424	470	2.2k
R429	470	1k
R430	470	1k
R435	470	1k
R436	470	1k

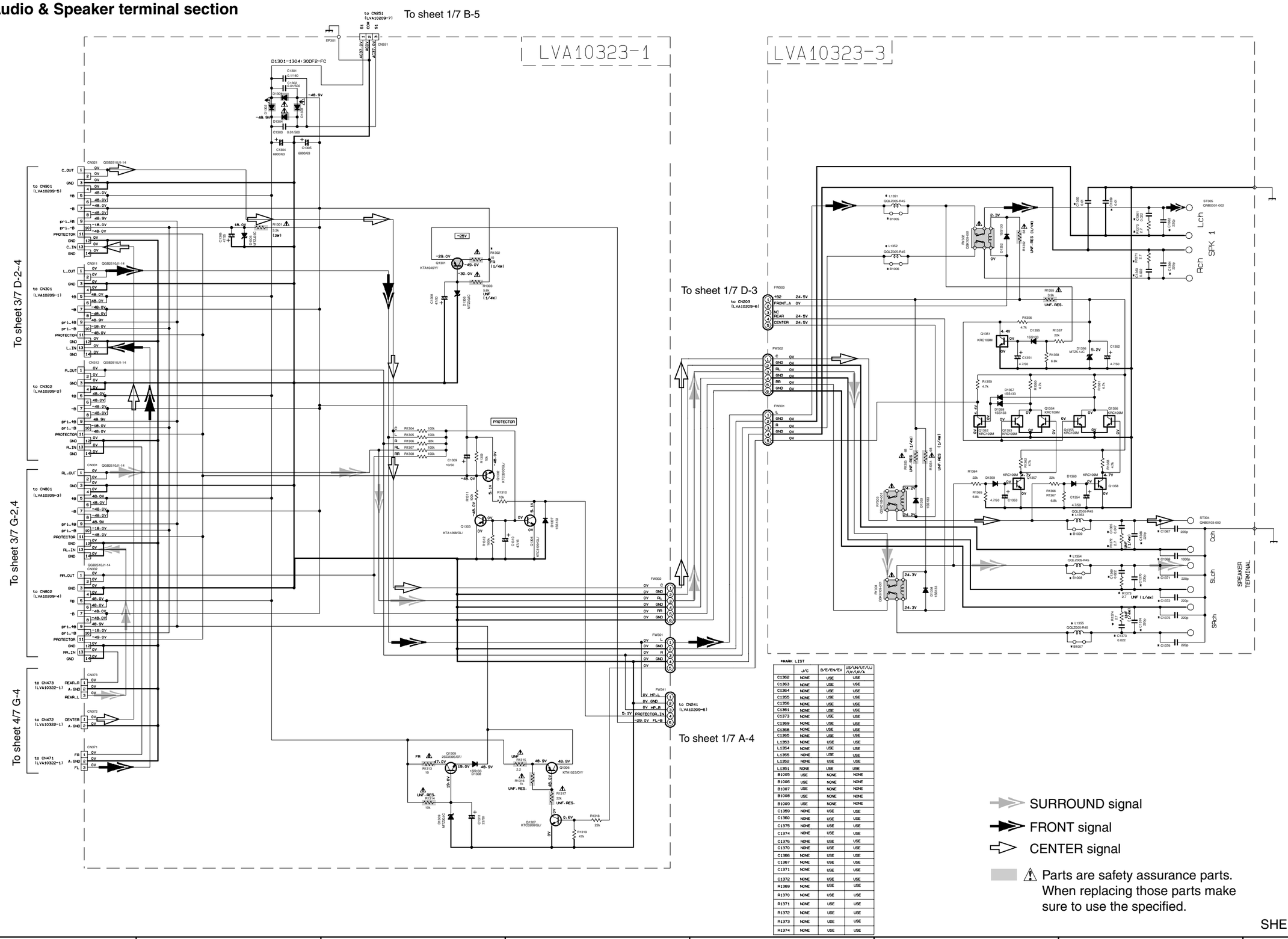
MARK LIST		
	RX-5020	RX-5022
D507	NONE	USE
J501		
R453 ~ R458		
R462		
R464		
R466 ~ R469		
C453 ~ C456	NONE	USE
C461		
C463		
C481 ~ C482		
J451		
J405		
EC451		

AUDIO signal

TUNER signal

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified.

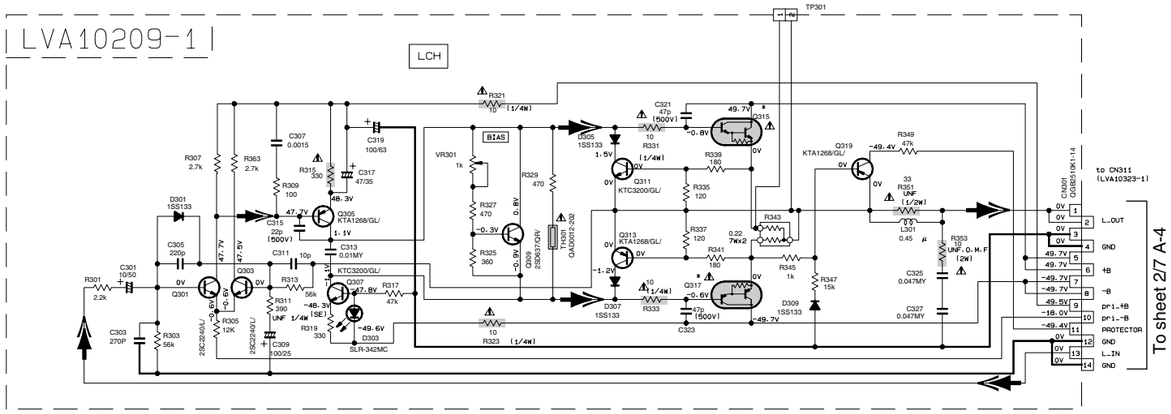
■ Audio & Speaker terminal section

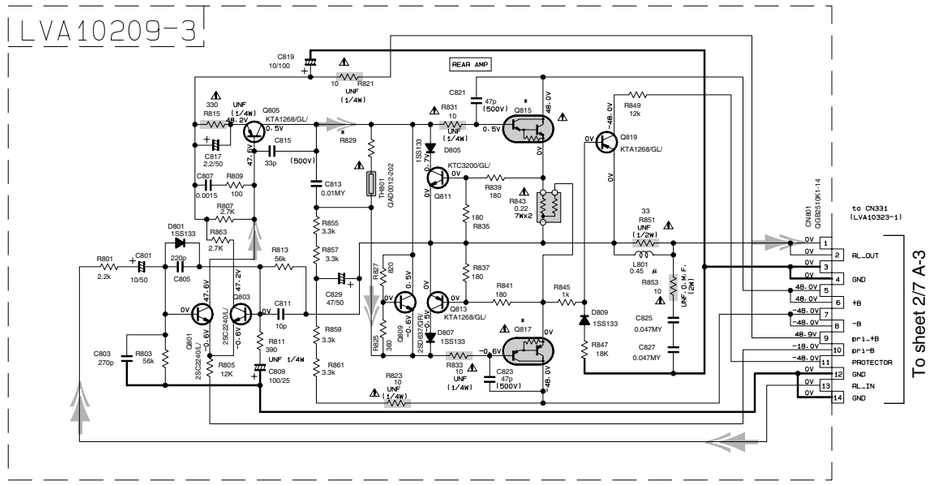


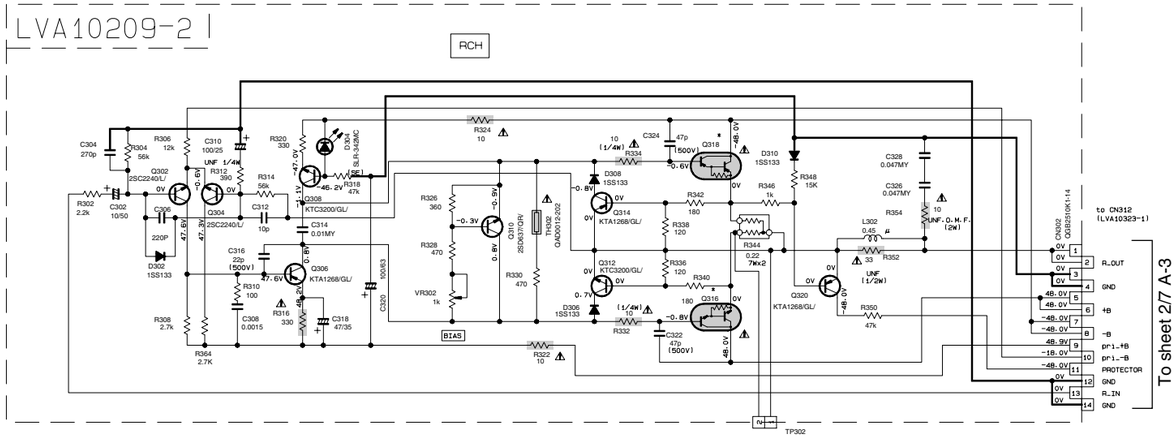
*MARK LIST

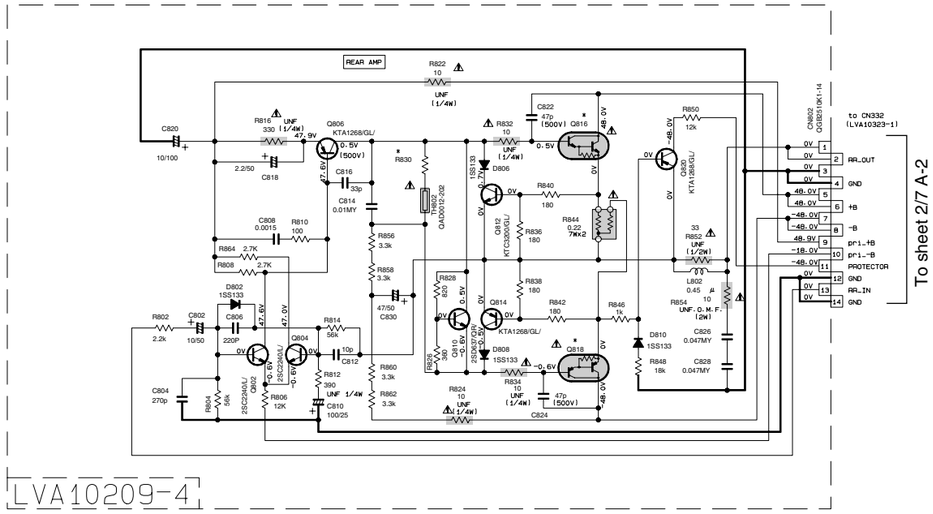
	J/C	B/E/EN/EV	US/UN/UT/UJ /UY/UP/A
C1352	NONE	USE	USE
C1363	NONE	USE	USE
C1364	NONE	USE	USE
C1355	NONE	USE	USE
C1356	NONE	USE	USE
C1361	NONE	USE	USE
C1373	NONE	USE	USE
C1369	NONE	USE	USE
C1368	NONE	USE	USE
C1365	NONE	USE	USE
L1353	NONE	USE	USE
L1354	NONE	USE	USE
L1355	NONE	USE	USE
L1352	NONE	USE	USE
L1351	NONE	USE	USE
B1005	USE	NONE	NONE
B1006	USE	NONE	NONE
B1007	USE	NONE	NONE
B1008	USE	NONE	NONE
B1009	USE	NONE	NONE
C1359	NONE	USE	USE
C1360	NONE	USE	USE
C1375	NONE	USE	USE
C1374	NONE	USE	USE
C1376	NONE	USE	USE
C1370	NONE	USE	USE
C1366	NONE	USE	USE
C1367	NONE	USE	USE
C1371	NONE	USE	USE
C1372	NONE	USE	USE
R1369	NONE	USE	USE
R1370	NONE	USE	USE
R1371	NONE	USE	USE
R1372	NONE	USE	USE
R1373	NONE	USE	USE
R1374	NONE	USE	USE

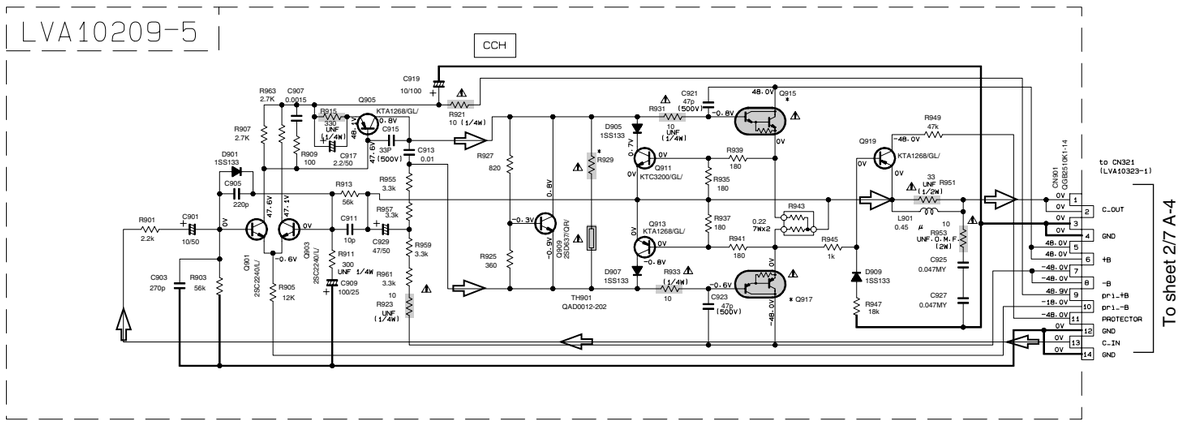
■ Audio amplirier section











*MARK LIST

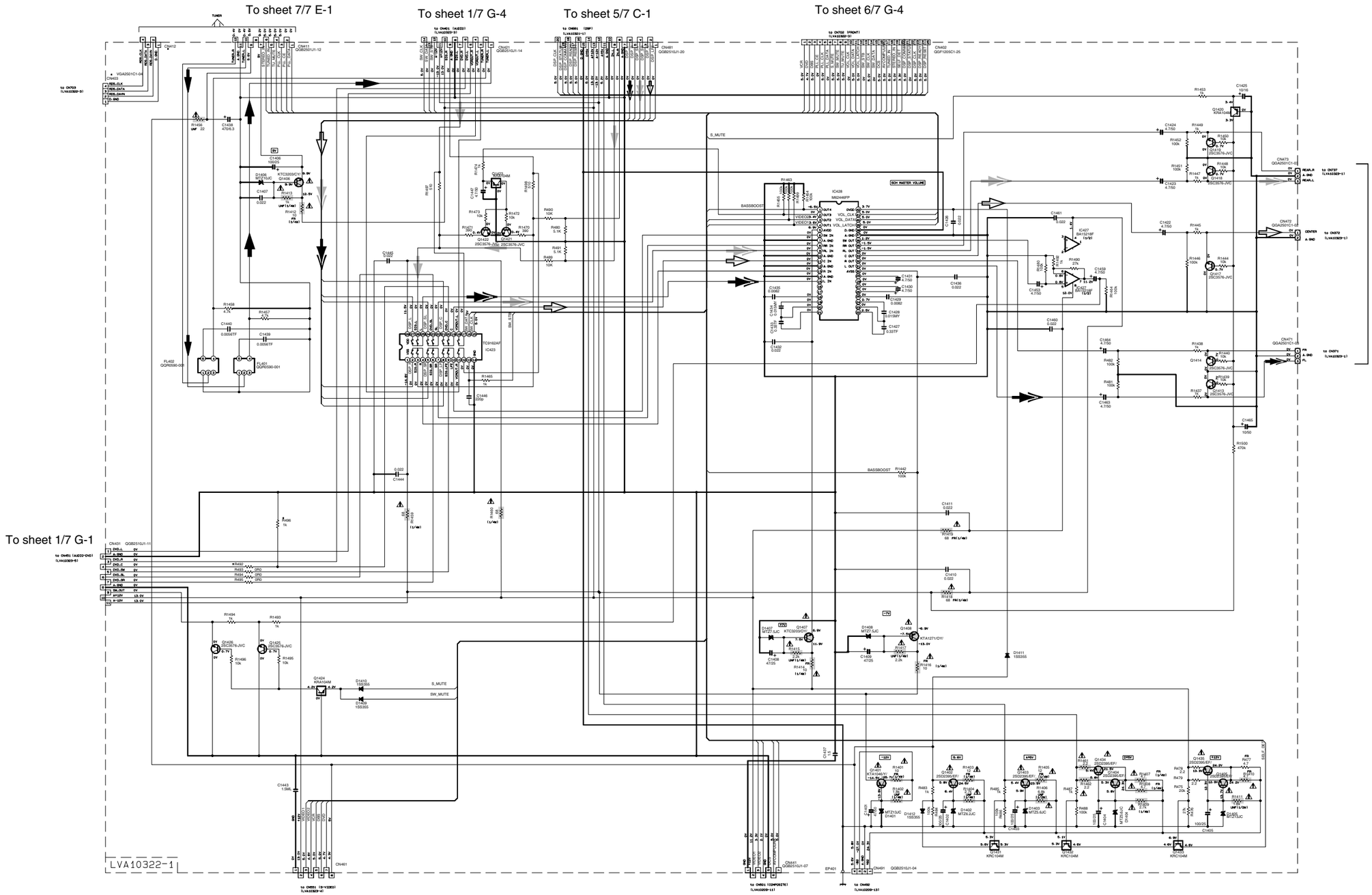
	J/C	B/E/EN/EV	US/UN/UT/UJ/UY/UP/A
Q315, Q316 Q815, Q816 Q915	2SD2389/OPY/-F6	2SD2390/OPY/-F6	2SD2390/OPY/-F6
Q317, Q318 Q817, Q818 Q917	2SB1559/OPY/-F6	2SB1560/OPY/-F6	2SB1560/OPY/-F6
R829, R830 R929	470	470	220

SURROUND signal
FRONT signal
CENTER signal

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified.

■ Main section

(Volume / Regulator / Source select)



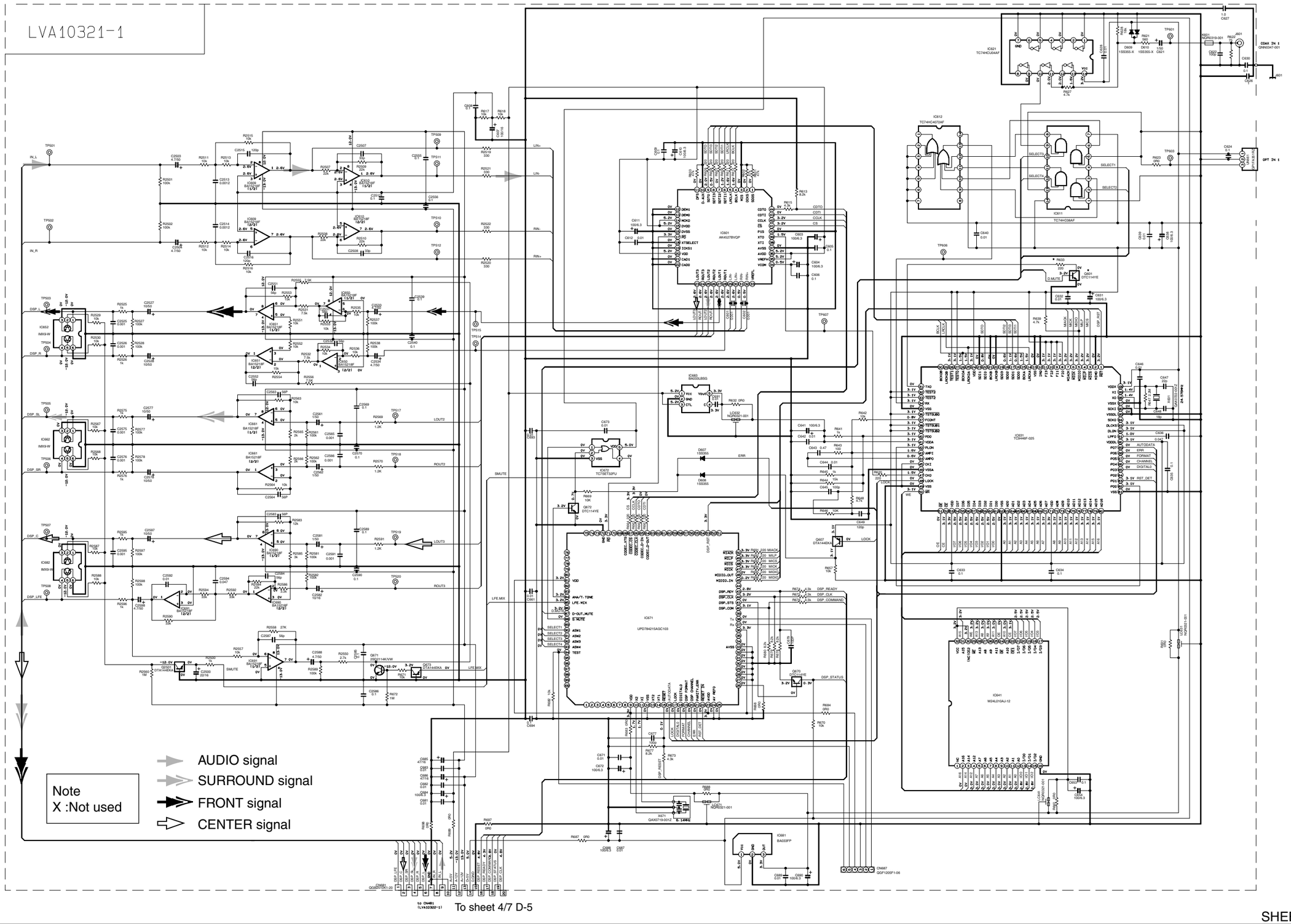
	J/C/US/UN/UT/LU/UY/UP/A	B/E/EN/EV
CN412, CN403	NONE	USE

	RX-5020	RX-5022
R492	0	3W
R495	NONE	USE

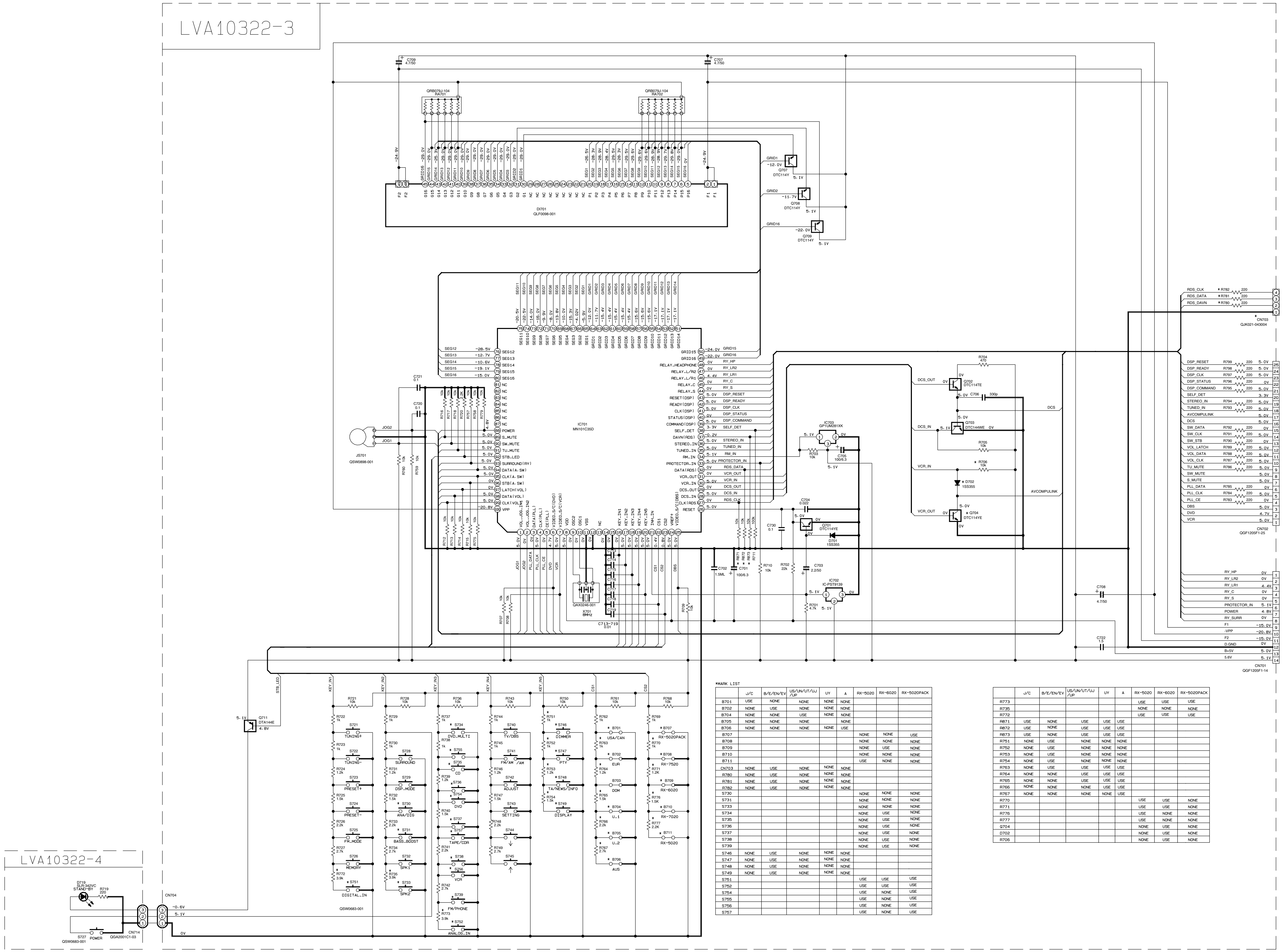
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified.

SHEET 4/7

■ Digital signal input terminal / Surround section



■ User control / System control / FL displaying section

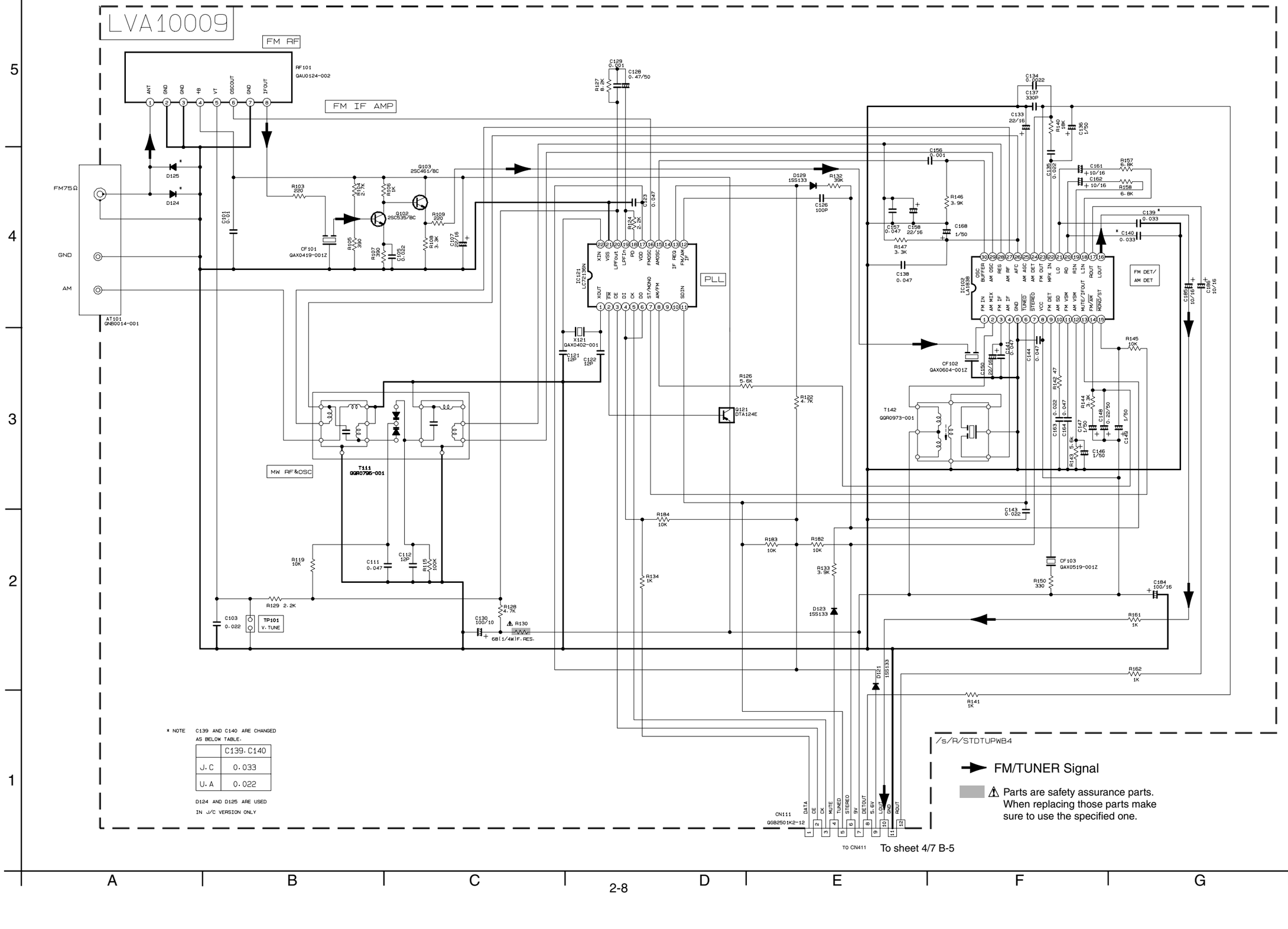


*MARK LIST

	J/C	B/E/EN/EV	US/UN/UT/UJ /UP	UY	A	RX-5020	RX-6020	RX-5020PACK
B701	USE	NONE	NONE	NONE	NONE			
B702	NONE	USE	NONE	NONE	NONE			
B704	NONE	NONE	USE	NONE	NONE			
B705	NONE	NONE	NONE		NONE			
B706	NONE	NONE	NONE	NONE	USE			
B707						NONE	NONE	USE
B708						NONE	NONE	NONE
B709						NONE	USE	NONE
B710						NONE	NONE	NONE
B711						USE	NONE	NONE
CN703	NONE	USE	NONE	NONE	NONE			
R780	NONE	USE	NONE	NONE	NONE			
R781	NONE	USE	NONE	NONE	NONE			
R782	NONE	USE	NONE	NONE	NONE			
S730						NONE	NONE	NONE
S731						NONE	NONE	NONE
S733						NONE	NONE	NONE
S734						NONE	USE	NONE
S735						NONE	USE	NONE
S736						NONE	USE	NONE
S737						NONE	USE	NONE
S738						NONE	USE	NONE
S739						NONE	USE	NONE
S746	NONE	USE	NONE	NONE	NONE			
S747	NONE	USE	NONE	NONE	NONE			
S748	NONE	USE	NONE	NONE	NONE			
S749	NONE	USE	NONE	NONE	NONE			
S751						USE	USE	USE
S752						USE	USE	USE
S754						USE	NONE	USE
S755						USE	NONE	USE
S756						USE	NONE	USE
S757						USE	NONE	USE

	J/C	B/E/EN/EV	US/UN/UT/UJ /UP	UY	A	RX-5020	RX-6020	RX-5020PACK
R773						USE	USE	USE
R735						NONE	NONE	NONE
R772						USE	USE	USE
R871	USE	NONE	USE	USE	USE			
R872	USE	NONE	USE	USE	USE			
R873	USE	NONE	USE	USE	USE			
R751	NONE	USE	NONE	NONE	NONE			
R752	NONE	USE	NONE	NONE	NONE			
R753	NONE	USE	NONE	NONE	NONE			
R754	NONE	USE	NONE	NONE	NONE			
R763	NONE	USE	USE	USE	USE			
R764	NONE	NONE	USE	USE	USE			
R765	NONE	NONE	USE	USE	USE			
R766	NONE	NONE	NONE	USE	USE			
R767	NONE	NONE	NONE	NONE	USE			
R770						USE	USE	NONE
R771						USE	USE	NONE
R776						USE	NONE	NONE
R777						USE	NONE	NONE
Q704						NONE	USE	NONE
D702						NONE	USE	NONE
R706						NONE	USE	NONE

■ Tuner section



SHEET 7/7

Printed circuit boards

■ Main board

Wire protection board

Speaker terminal board

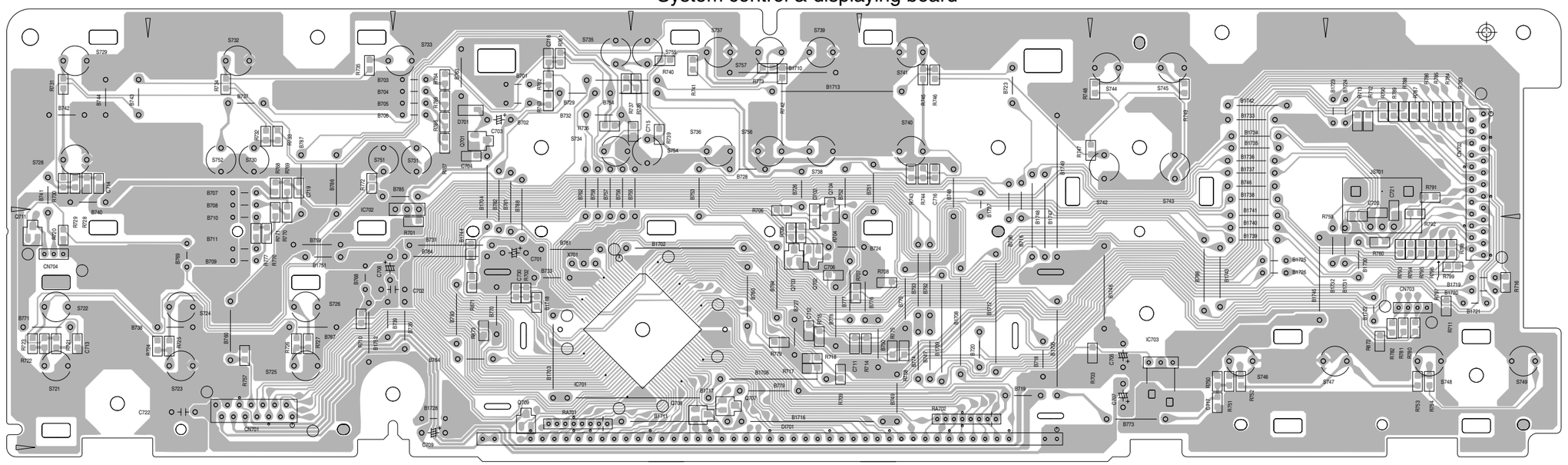
DVD board

Audio input board

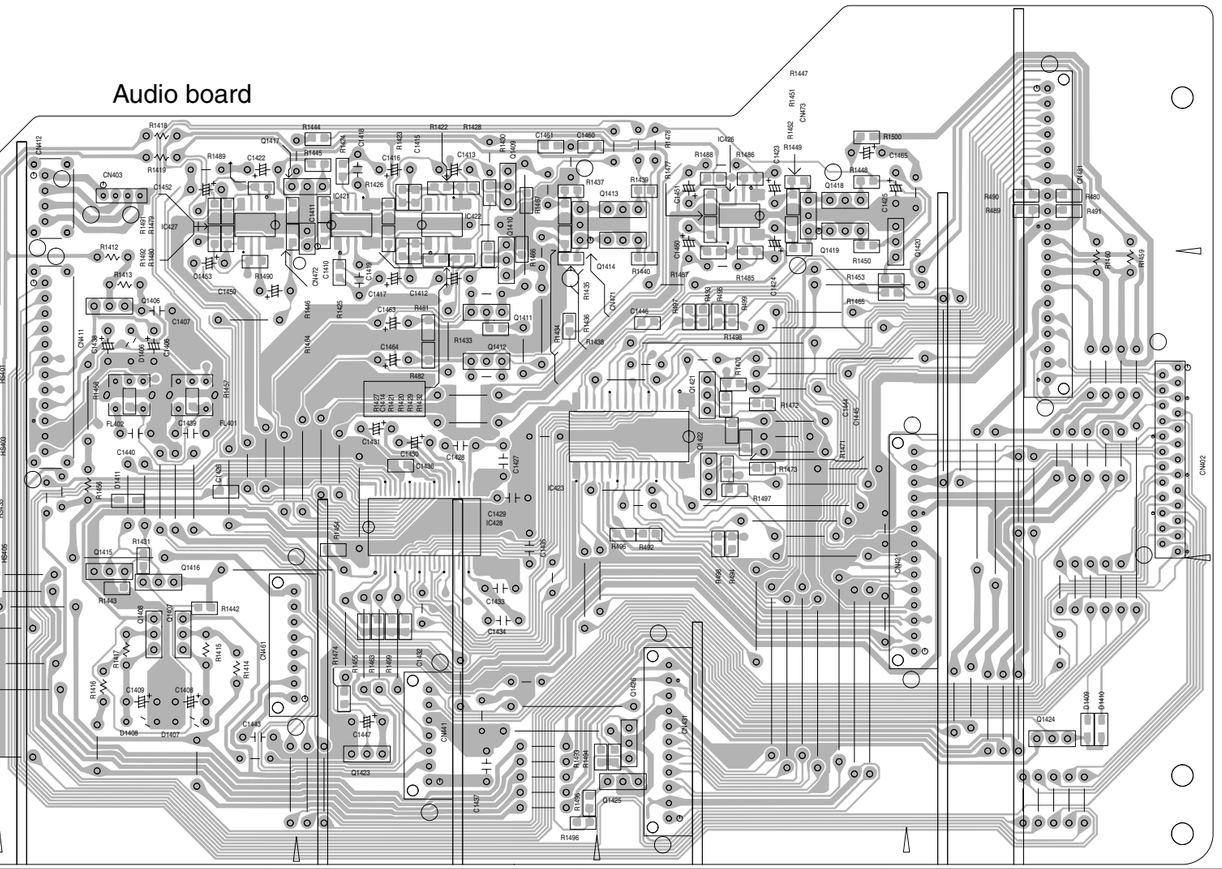
Main board

■ System control & Audio board

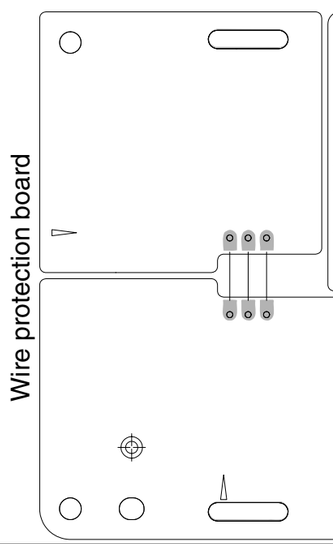
System control & displaying board



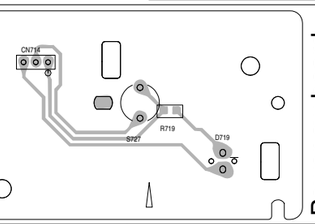
Audio board



Wire protection board



Power sw board



■ Power amp. board

Power / fuse board

H.P. jack board

Power supply board

Power transformer board

Power transformer board

Amplifier board

Amplifier board

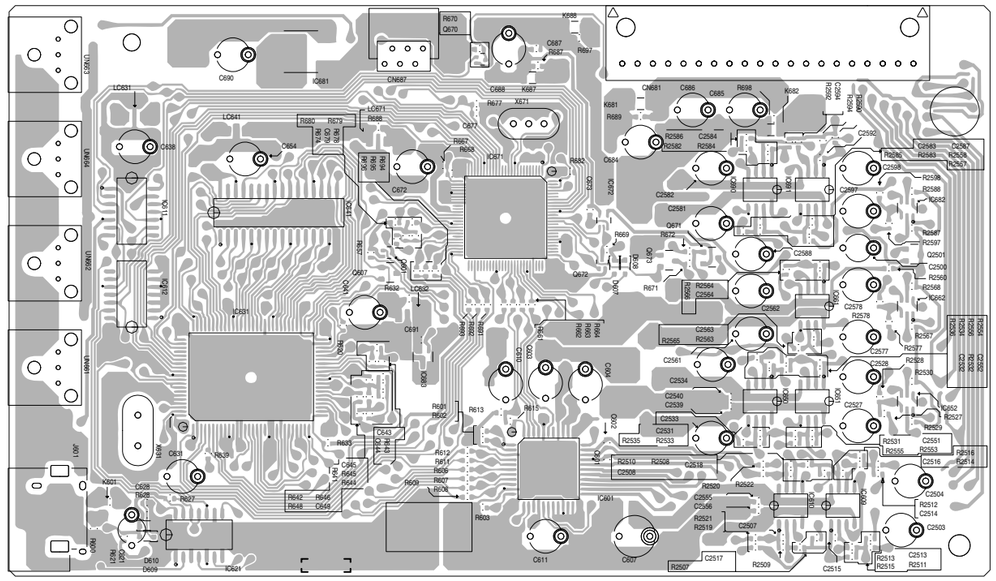
Video board

Relay board

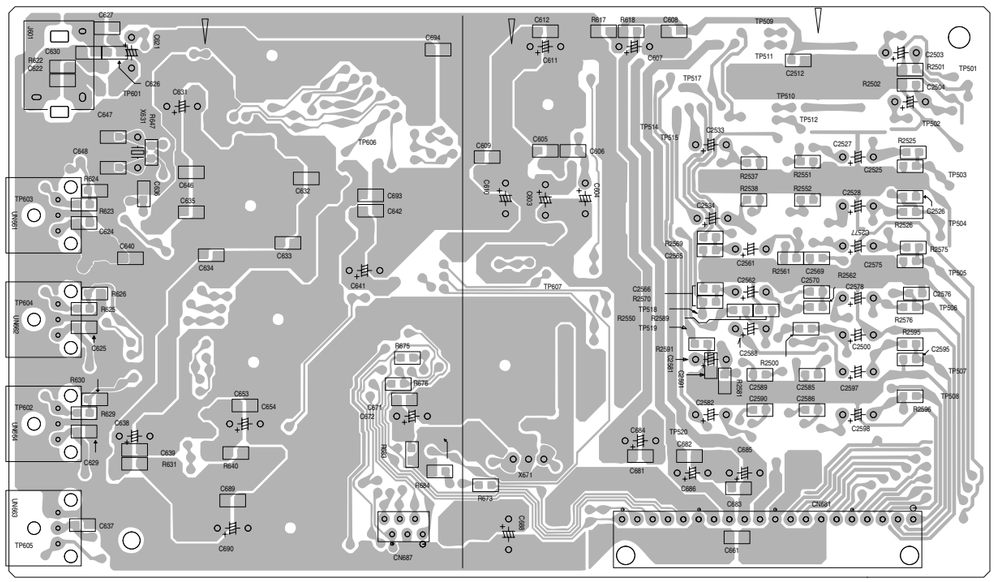
RX-5020VBK/RX-5022VSL

■ Digital signal input terminal board

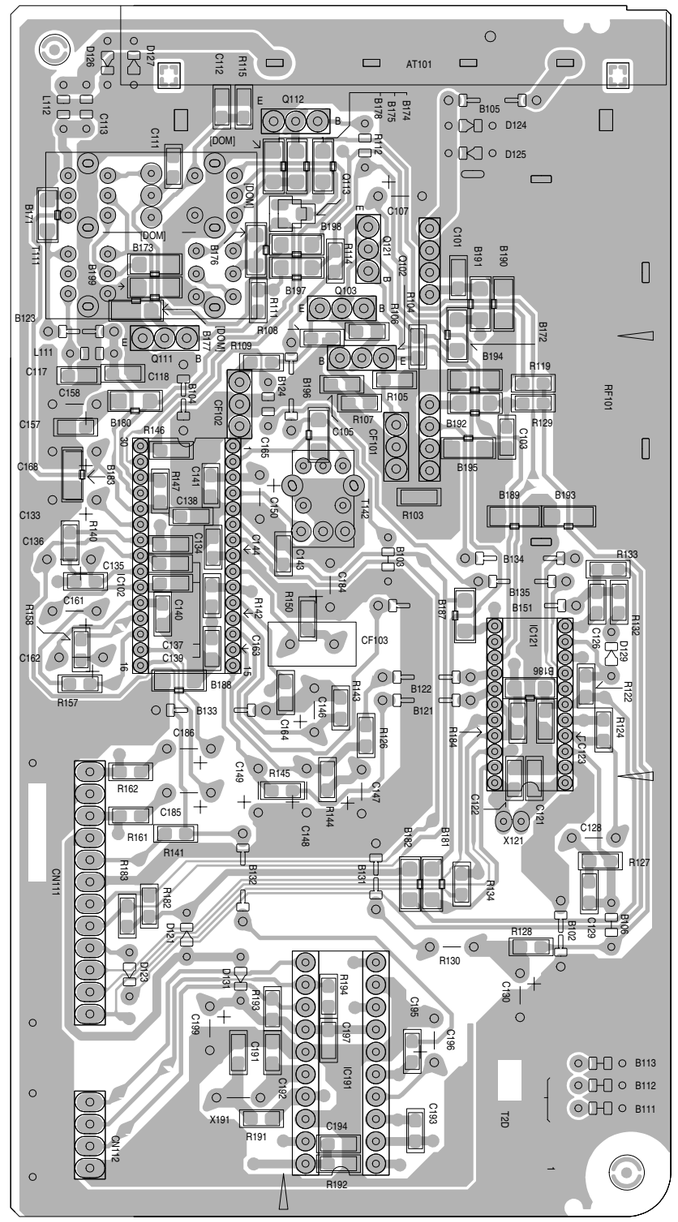
Forweard side



Reverse side



■ Tuner board



PARTS LIST

[RX-5020VBK]
[RX-5022VSL]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

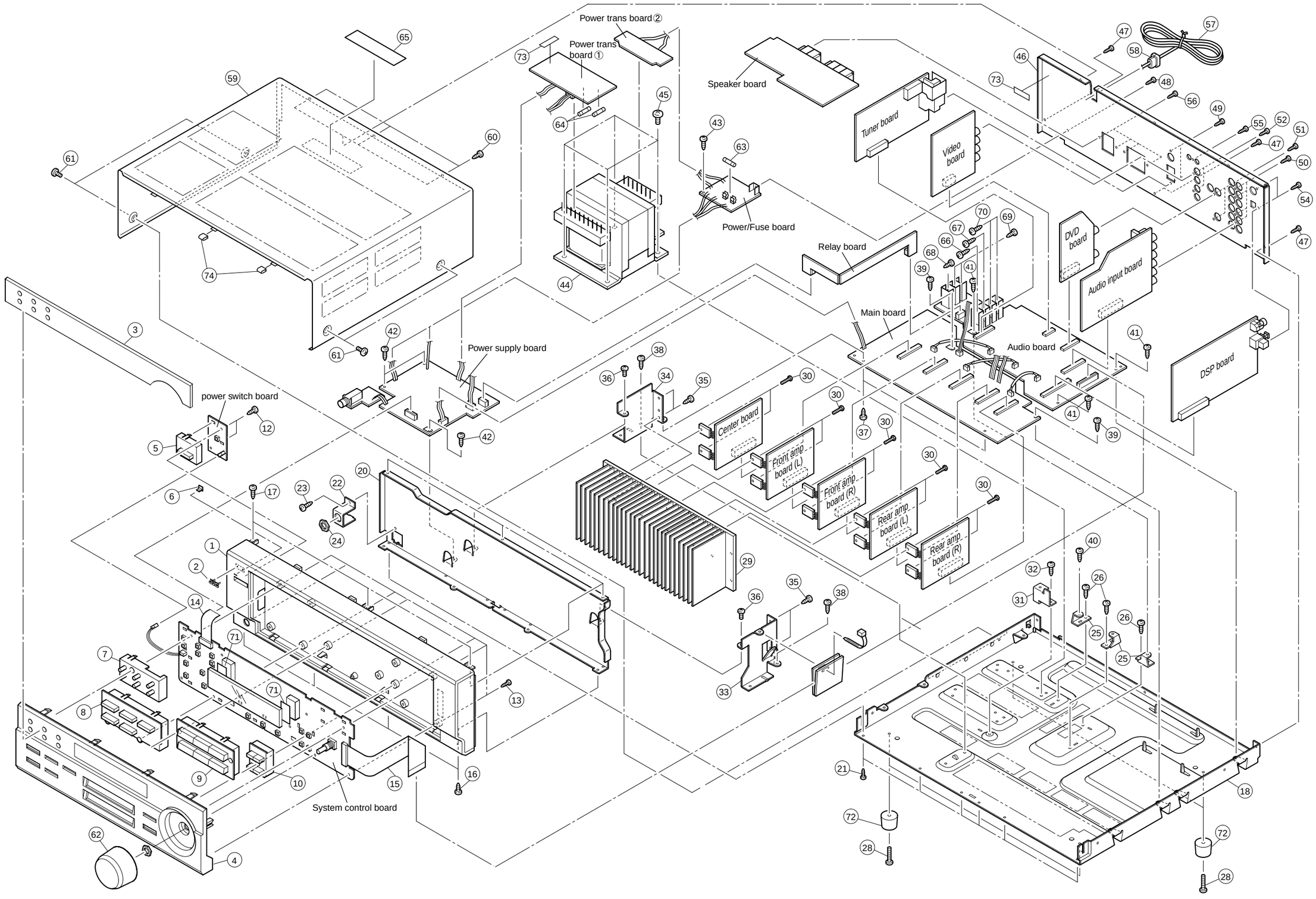
J ---------- U.S.A.
C ---------- Canada

- Contents -

< MEMO >

Exploded view of general assembly and parts list

Block No. M 1 M M



RX-5020VBK/5022VSL

■ Parts list (General assembiy)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10457-020A	FRONT PANEL	1	RX-5020VBK	
		LV10457-026A	FRONT PANEL	1	RX-5022VSL	
	2	VJD5429-002SS	JVC MARK	1	RX-5022VSL	
		VJD5429-001SS	JVC MARK	1	RX-5020VBK	
	3	LV20949-009A	LENS	1		
	4	LV10459-022A	SUB PANEL	1	RX-5022VSL	
		LV10459-021A	SUB PANEL	1	RX-5020VBK	
	5	LV32431-004A	POWER BUTTON	1	RX-5020VBK	
		LV32431-002A	POWER BUTTON	1	RX-5022VSL	
	6	LV42096-001A	INDICATOR	1	POWER	
	7	LV20951-002A	PUSH BUTTON	1	TUNER	
	8	LV20919-003A	PUSH BUTTON(C)	1	RX-5020VBK	
		LV20919-004A	PUSH BUTTON(C)	1	RX-5022VSL	
	9	LV20918-005A	PUSH BUTTON(E)	1	RX-5022VSL	
		LV20918-004A	PUSH BUTTON(E)	1	RX-5020VBK	
	10	LV32430-003A	PUSH BUTTON(F)	1	RX-5020VBK	
		LV32430-004A	PUSH BUTTON(F)	1	RX-5022VSL	
	12	QYSBSF2610Z	SCREW	2	FRONT C.B	
	13	QYSBSF2610Z	SCREW	6	FRONT C.B FL	
	14	QUQ412-1415CJ	FFC WIRE	1		
	15	QUQ412-2538CJ	FFC WIRE	1		
	16	QYSDSG3006Z	SCREW	4	FRONT D	
	17	QYSBSG3006Z	T.SCREW	3	FRONT U	
	18	LV10019-003A	CHASSIS BASE	1		
	20	LV10458-002A	FRONT BRACKET	1		
	21	QYSDSG3006Z	SCREW	7	C.B-F.B	
	22	LV42094-003A	H.P BKT	1		
	23	QYSBSG3006Z	T.SCREW	1	H.P BKT-F.B	
	24	VKZ4150-001	SPECIAL NUT	1		
	25	E68587-223SM	CB BKT	3		
	26	QYSBST3006Z	T.SCREW	3	C.B-BKT	
	28	QYSBST3010Z	T.SCREW	4	FOOT	
	29	LV21213-001A	HEAT SINK	1	NEW TYPE	
	30	QYSBSG3012E	SCREW	10	TR	
	31	LV42098-001A	C.B BKT	1	PRI/SEC C.B	
	32	QYSBST3006Z	T.SCREW	1	C.B BKT	
	33	LV32433-001A	H.S BRACKET(R)	1		
	34	LV32434-001A	H.S BRACKET(L)	1		
	35	QYSBSG3008Z	T.SCREW	4	H.S-BKT	
	36	QYSBST3006Z	T.SCREW	2	H.S BKT-F.BKT	
	37	QYSBSG3006Z	T.SCREW	2	H.S BKT	
	38	QYSBST3006Z	T.SCREW	2	H.S BKT-CHASSIS	
	39	QYSBSG3006Z	T.SCREW	2	M.C.B	
	40	E65923-003	TAPPING SCREW	1	M.C.B	
	41	QYSBSG3006Z	T.SCREW	3	H.S-C.B	
	42	QYSBSG3006Z	T.SCREW	3	P.C.B	
	43	QYSBSG3006Z	T.SCREW	1	C.B-CHASSIS	
⚠	44	QQT0318-001	POWER TRANSF	1		

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	45	QYSDSTL4008Z	SPECIAL SCREW	4	P.TRANS	
	46	LV20915-047A	REAR PANEL	1	RX-5022VSL	
		LV20915-036A	REAR PANEL	1	RX-5020VBK	
	47	QYSBSGY3008M	SPECIAL SCREW	3	R.P-C.BASE	
	48	QYSBSGY3008M	SPECIAL SCREW	1		
	49	QYSBSGY3008M	SPECIAL SCREW	2	TUNER	
	50	QYSBSGY3008M	SPECIAL SCREW	4	INPUT	
	51	QYSBSGY3008M	SPECIAL SCREW	2	DVD/SUB WOOFER	
	52	QYSBSGY3008M	SPECIAL SCREW	2	VIDEO	
	54	QYSBSGY3008M	SPECIAL SCREW	2	DIGITAL	
	55	QYSBSGY3008M	SPECIAL SCREW	1	COMP C.B	
	56	QYSBSGY3008M	SPECIAL SCREW	4	SPK C.B	
⚠	57	QMPD420-200-JV	POWER CORD	1		
⚠	58	QZW0033-001	STRAIN RELIEF	1		
	59	LE20131-010A/S/	METAL COVER	1	RX-5022VSL	
		LE20131-008A/S/	METAL COVER	1	RX-5020VBK	
	60	QYSBSGY3008M	SPECIAL SCREW	3		
	61	E406308-003	SPECIAL SCREW	4	RX-5020VBK	
		E406308-004	SPECIAL SCREW	4	RX-5022VSL	
	62	LV32435-003A	VOL KNOB	1	RX-5020VBK	
		LV32435-005A	VOL KNOB	1	RX-5022VSL	
⚠	63	QMF51U1-6R3-J8	FUSE	1	F 201	
⚠	64	QMF51U1-2R0-J8	FUSE	2	F 202 F 203	
	65	E409396-002	CAUTION LABEL	1	C	
	66	QYSBSG3008E	T.SCREW	1		
	67	QYSBSG3008E	T.SCREW	1		
	68	QYSBSG3008E	T.SCREW	1		
	69	QYSBSG3008E	T.SCREW	2		
	70	QYSBSG3008E	T.SCREW	2		
	71	LV30225-097A	SPACER	2		
	72	E47227-036	FOOT	4		
	73	LV42388-001A	FUSE CAUTION	2		
	74	LV30225-0E5A	SPACER	2	FOR METAL COVER	

■ **Electrical parts list (Power amp board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 201	QFLC2AJ-104Z	M CAPACITOR	.10MF 5% 100V	
	C 202	QFLC2AJ-104Z	M CAPACITOR	.10MF 5% 100V	
	C 203	QFLC2AJ-104Z	M CAPACITOR	.10MF 5% 100V	
	C 204	QETM1VM-228	E.CAPACITOR	2200MF 20% 35V	
	C 205	QETM1VM-108	E.CAPACITOR	1000MF 20% 35V	
	C 206	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 207	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 208	QFLC2AJ-472Z	M CAPACITOR	4700PF 5% 100V	
	C 209	QETN1EM-477Z	E CAPACITOR	470MF 20% 25V	
⚠	C 210	QCZ9104-472	C CAPACITOR	4700PF	
	C 212	QETN1CM-477Z	E CAPACITOR	470MF 20% 16V	
	C 213	QETM0JM-228	E CAPACITOR	2200MF 20% 6.3V	
	C 218	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 301	QEHR1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 302	QEHR1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 303	QCS31HJ-271Z	C CAPACITOR	270PF 5% 50V	
	C 304	QCS31HJ-271Z	C CAPACITOR	270PF 5% 50V	
	C 305	QCS31HJ-221Z	C CAPACITOR	220PF 5% 50V	
	C 306	QCS31HJ-221Z	C CAPACITOR	220PF 5% 50V	
	C 307	QCB31HK-152Z	C CAPACITOR	1500PF 10% 50V	
	C 308	QCB31HK-152Z	C CAPACITOR	1500PF 10% 50V	
	C 309	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 310	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 311	QCS31HJ-100Z	C CAPACITOR	10PF 5% 50V	
	C 312	QCS31HJ-100Z	C CAPACITOR	10PF 5% 50V	
	C 313	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 314	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 315	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V	
	C 316	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V	
	C 317	QEHR1VM-476Z	E CAPACITOR	47MF 20% 35V	
	C 318	QEHR1VM-476Z	E CAPACITOR	47MF 20% 35V	
	C 319	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V	
	C 320	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V	
	C 321	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 322	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 323	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 324	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 325	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 326	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 327	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 328	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 501	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 503	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 504	QCS31HJ-470Z	C CAPACITOR	47PF 5% 50V	
	C 505	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 506	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 507	QCS31HJ-470Z	C CAPACITOR	47PF 5% 50V	
	C 511	QETN1CM-108Z	E CAPACITOR	1000MF 20% 16V	
	C 512	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 521	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 522	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 801	QEHR1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 802	QEHR1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 803	QCS31HJ-271Z	C CAPACITOR	270PF 5% 50V	
	C 804	QCS31HJ-271Z	C CAPACITOR	270PF 5% 50V	
	C 805	QCS31HJ-221Z	C CAPACITOR	220PF 5% 50V	
	C 806	QCS31HJ-221Z	C CAPACITOR	220PF 5% 50V	
	C 807	QCB31HK-152Z	C CAPACITOR	1500PF 10% 50V	
	C 808	QCB31HK-152Z	C CAPACITOR	1500PF 10% 50V	
	C 809	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 810	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 811	QCS31HJ-100Z	C CAPACITOR	10PF 5% 50V	
	C 812	QCS31HJ-100Z	C CAPACITOR	10PF 5% 50V	

⚠	Item	Parts number	Parts name	Remarks	Area
	C 813	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 814	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 815	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 816	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 817	QEHR1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 818	QEHR1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 819	QEHR2AM-106Z	E CAPACITOR	10MF 20% 100V	
	C 820	QEHR2AM-106Z	E CAPACITOR	10MF 20% 100V	
	C 821	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 822	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 823	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 824	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 825	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 826	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 827	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 828	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 829	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 830	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 901	QEHR1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 903	QCS31HJ-271Z	C CAPACITOR	270PF 5% 50V	
	C 905	QCS31HJ-221Z	C CAPACITOR	220PF 5% 50V	
	C 907	QCB31HK-152Z	C CAPACITOR	1500PF 10% 50V	
	C 909	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C 911	QCS31HJ-100Z	C CAPACITOR	10PF 5% 50V	
	C 913	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 915	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 917	QEHR1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 919	QEHR2AM-106Z	E CAPACITOR	10MF 20% 100V	
	C 921	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 923	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 925	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 927	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 929	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	CN201	QGF1205C1-14	CONNECTOR		
	CN203	QGD2501C1-05Z	SOCKET I.M		
	CN241	QGD2501C1-05Z	SOCKET I.M		
	CN251	QGA3901F2-03	CONNECTOR		
	CN291	QGB2510J1-04	CONNECTOR		
	CN292	QGB2510K1-04	CONNECTOR		
	CN301	QGB2510K1-14	CONNECTOR		
	CN302	QGB2510K1-14	CONNECTOR		
	CN492	QGB2510K1-04	CONNECTOR		
	CN501	QGB2510K1-07	CONNECTOR		
	CN801	QGB2510K1-14	CONNECTOR		
	CN802	QGB2510K1-14	CONNECTOR		
	CN901	QGB2510K1-14	CONNECTOR		
	C1331	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C1332	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
⚠	D 201	10E2-FD	DIODE		
⚠	D 202	11ES2-T4	DIODE I.M		
⚠	D 203	10E2-FD	DIODE		
⚠	D 204	11ES2-T4	DIODE I.M		
⚠	D 206	11ES2-T4	DIODE I.M		
⚠	D 207	11ES2-T4	DIODE I.M		
⚠	D 208	11ES2-T4	DIODE I.M		
⚠	D 209	11ES2-T4	DIODE I.M		
	D 210	1SS133-T2	SI DIODE IM		
	D 211	MTZJ6.8C-T2	Z DIODE I/M		
	D 212	11ES2-T4	DIODE I.M		
	D 217	MTZJ6.2C-T2	Z DIODE I/M		
	D 218	1SS133-T2	SI DIODE IM		
	D 219	11ES2-T4	DIODE I.M		
	D 220	11ES2-T4	DIODE I.M		

■ **Electrical parts list (Power amp board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	D 221	1SS133-T2	SI DIODE IM		
	D 301	1SS133-T2	SI DIODE IM		
	D 302	1SS133-T2	SI DIODE IM		
	D 303	SLR-342MC-T	LED		
	D 304	SLR-342MC-T	LED		
	D 305	1SS133-T2	SI DIODE IM		
	D 306	1SS133-T2	SI DIODE IM		
	D 307	1SS133-T2	SI DIODE IM		
	D 308	1SS133-T2	SI DIODE IM		
	D 309	1SS133-T2	SI DIODE IM		
	D 310	1SS133-T2	SI DIODE IM		
	D 801	1SS133-T2	SI DIODE IM		
	D 802	1SS133-T2	SI DIODE IM		
	D 805	1SS133-T2	SI DIODE IM		
	D 806	1SS133-T2	SI DIODE IM		
	D 807	1SS133-T2	SI DIODE IM		
	D 808	1SS133-T2	SI DIODE IM		
	D 809	1SS133-T2	SI DIODE IM		
	D 810	1SS133-T2	SI DIODE IM		
	D 901	1SS133-T2	SI DIODE IM		
	D 905	1SS133-T2	SI DIODE IM		
	D 907	1SS133-T2	SI DIODE IM		
	D 909	1SS133-T2	SI DIODE IM		
	EP 1	E409182-001SM	GRAND TERMINAL		
	EP201	QNZ0136-001Z	EARTH PLATE		
	FC211	QNG0020-001Z	FUSE CLIP	F201	
	FC212	QNG0020-001Z	FUSE CLIP	F201	
	FC221	QNG0020-001Z	FUSE CLIP	F202	
	FC222	QNG0020-001Z	FUSE CLIP	F202	
	FC231	QNG0020-001Z	FUSE CLIP	F203	
	FC232	QNG0020-001Z	FUSE CLIP	F203	
	FW201	QUM137-14Z4Z4	PARA RIBON WIRE		
	FW251	QUM133-08Z4Z4	PARA RIBON WIRE		
	IC501	NJM2246D	IC		
	J 501	QNN0063-001	PIN JACK		
	J 502	QNN0063-001	PIN JACK	VCR(R/P)	
	J 521	QNS0073-001	JACK		
	J1331	QNS0022-001	JACK		
	L 301	QQLZ005-R45	INDUCTOR		
	L 302	QQLZ005-R45	INDUCTOR		
	L 801	QQLZ005-R45	INDUCTOR		
	L 802	QQLZ005-R45	INDUCTOR		
	L 901	QQLZ005-R45	INDUCTOR		
	O 202	KRC105M-T	D.TR.I.M.		
	O 203	KTC3203/OY/-T	TRANSISTOR		
	O 205	KTC3200/GL/-T	TRANSISTOR		
	O 206	KRC105M-T	D.TR.I.M.		
	O 207	KRC105M-T	D.TR.I.M.		
	O 208	KRC105M-T	D.TR.I.M.		
	O 209	KRC105M-T	D.TR.I.M.		
	O 210	KRC105M-T	D.TR.I.M.		
	O 301	2SC2240/L/-T	TR.I/M		
	O 302	2SC2240/L/-T	TR.I/M		
	O 303	2SC2240/L/-T	TR.I/M		
	O 304	2SC2240/L/-T	TR.I/M		
	O 305	KTA1268/GL/-T	TRANSISTOR		
	O 306	KTA1268/GL/-T	TRANSISTOR		
	O 307	KTC3200/GL/-T	TRANSISTOR		
	O 308	KTC3200/GL/-T	TRANSISTOR		
	O 309	2SD637/QR/	TRANSISTOR		
	O 310	2SD637/QR/	TRANSISTOR		
	O 311	KTC3200/GL/-T	TRANSISTOR		
	O 312	KTC3200/GL/-T	TRANSISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	O 313	KTA1268/GL/-T	TRANSISTOR		
	O 314	KTA1268/GL/-T	TRANSISTOR		
⚠	Q 315	2SD2389/OPY/-F6	TRANSISTOR		
⚠	O 316	2SD2389/OPY/-F6	TRANSISTOR		
⚠	Q 317	2SB1559/OPY/-F6	TRANSISTOR		
⚠	O 318	2SB1559/OPY/-F6	TRANSISTOR		
	Q 319	KTA1268/GL/-T	TRANSISTOR		
	O 320	KTA1268/GL/-T	TRANSISTOR		
	Q 501	KTA1267/YG/-T	TRANSISTOR		
	O 502	KTC3199/GL/-T	TRANSISTOR		
	O 503	KRC101M-T	TR I/M		
	O 504	KTA1267/YG/-T	TRANSISTOR		
	O 505	KTC3199/GL/-T	TRANSISTOR		
	O 801	2SC2240/L/-T	TR.I/M		
	O 802	2SC2240/L/-T	TR.I/M		
	O 803	2SC2240/L/-T	TR.I/M		
	O 804	2SC2240/L/-T	TR.I/M		
	O 805	KTA1268/GL/-T	TRANSISTOR		
	O 806	KTA1268/GL/-T	TRANSISTOR		
	O 809	2SD637/QR/	TRANSISTOR		
	O 810	2SD637/QR/	TRANSISTOR		
	O 811	KTC3200/GL/-T	TRANSISTOR		
	O 812	KTC3200/GL/-T	TRANSISTOR		
	O 813	KTA1268/GL/-T	TRANSISTOR		
	O 814	KTA1268/GL/-T	TRANSISTOR		
⚠	O 815	2SD2389/OPY/-F6	TRANSISTOR		
⚠	O 816	2SD2389/OPY/-F6	TRANSISTOR		
⚠	O 817	2SB1559/OPY/-F6	TRANSISTOR		
⚠	O 818	2SB1559/OPY/-F6	TRANSISTOR		
	Q 819	KTA1268/GL/-T	TRANSISTOR		
	O 820	KTA1268/GL/-T	TRANSISTOR		
	Q 901	2SC2240/L/-T	TR.I/M		
	O 903	2SC2240/L/-T	TR.I/M		
	Q 905	KTA1268/GL/-T	TRANSISTOR		
	O 909	2SD637/QR/	TRANSISTOR		
	Q 911	KTC3200/GL/-T	TRANSISTOR		
	Q 913	KTA1268/GL/-T	TRANSISTOR		
⚠	O 915	2SD2389/OPY/-F6	TRANSISTOR		
⚠	Q 917	2SB1559/OPY/-F6	TRANSISTOR		
	O 919	KTA1268/GL/-T	TRANSISTOR		
⚠	R 1	QRZ9044-335	F RESISTOR	3.3M 1/4W	
⚠	R 201	QRJ146J-2R7X	UNF C RESISTOR	2.7 5% 1/4W	
⚠	R 203	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 204	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
⚠	R 208	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 209	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R 210	QRJ146J-680X	UNF C RESISTOR	68 5% 1/4W	
⚠	R 221	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 302	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 303	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 304	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 305	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 306	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 307	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 308	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 309	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 310	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 311	QRJ146J-391X	UNF C RESISTOR	390 5% 1/4W	
	R 312	QRJ146J-391X	UNF C RESISTOR	390 5% 1/4W	
	R 313	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 314	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
⚠	R 315	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	

■ **Electrical parts list (Power amp board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	R 316	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
	R 317	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 318	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 319	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
	R 320	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
⚠	R 321	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 322	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 323	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 324	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 325	QRE141J-361Y	C RESISTOR	360 5% 1/4W	
	R 326	QRE141J-361Y	C RESISTOR	360 5% 1/4W	
	R 327	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 328	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 329	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 330	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
⚠	R 331	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 332	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 333	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 334	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 335	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R 336	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R 337	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R 338	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R 339	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 340	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 341	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 342	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 343	QRZ0218-R22	C RESISTOR	1/2W	
	R 344	QRZ0218-R22	C RESISTOR	1/2W	
	R 345	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 346	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 347	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R 348	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R 349	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 350	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
⚠	R 351	QRJ125J-330	UNF OMF RESISTO	33 5% 1/2W	
⚠	R 352	QRJ125J-330	UNF OMF RESISTO	33 5% 1/2W	
⚠	R 353	QRL027J-100	UNF OMF RESISTO	10 5% 1/2W	
⚠	R 354	QRL027J-100	UNF OMF RESISTO	10 5% 1/2W	
	R 363	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 364	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 501	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 502	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 505	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 506	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 507	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 508	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 509	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 510	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 511	QRE141J-151Y	C RESISTOR	150 5% 1/4W	
	R 512	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R 513	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 514	QRE141J-151Y	C RESISTOR	150 5% 1/4W	
	R 515	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R 516	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 521	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 522	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 801	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 802	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 803	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 804	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 805	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 806	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R 807	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 808	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 809	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 810	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 811	QRJ146J-391X	UNF C RESISTOR	390 5% 1/4W	
	R 812	QRJ146J-391X	UNF C RESISTOR	390 5% 1/4W	
	R 813	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 814	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
⚠	R 815	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
⚠	R 816	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
⚠	R 821	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 822	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 823	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 824	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 825	QRE141J-361Y	C RESISTOR	360 5% 1/4W	
	R 826	QRE141J-361Y	C RESISTOR	360 5% 1/4W	
	R 827	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R 828	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R 829	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 830	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
⚠	R 831	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 832	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 833	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 834	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 835	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 836	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 837	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 838	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 839	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 840	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 841	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 842	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 843	QRZ0218-R22	C RESISTOR	1/2W	
	R 844	QRZ0218-R22	C RESISTOR	1/2W	
	R 845	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 846	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 847	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 848	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 849	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 850	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
⚠	R 851	QRJ125J-330	UNF OMF RESISTO	33 5% 1/2W	
⚠	R 852	QRJ125J-330	UNF OMF RESISTO	33 5% 1/2W	
⚠	R 853	QRL027J-100	UNF OMF RESISTO	10 5% 1/2W	
⚠	R 854	QRL027J-100	UNF OMF RESISTO	10 5% 1/2W	
	R 855	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 856	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 857	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 858	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 859	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 860	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 861	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 862	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 863	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 864	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 901	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 903	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 905	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 907	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 909	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 911	QRJ146J-301X	UNF C RESISTOR	300 5% 1/4W	
	R 913	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
⚠	R 915	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
⚠	R 921	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	

■ **Electrical parts list (Power amp board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	R 923	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 925	QRE141J-361Y	C RESISTOR	360 5% 1/4W	
	R 927	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R 929	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
⚠	R 931	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R 933	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 935	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 937	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 939	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 941	QRE141J-181Y	C RESISTOR	180 5% 1/4W	
	R 943	QRZ0218-R22	C RESISTOR	1/2W	
	R 945	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 947	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 949	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
⚠	R 951	QRJ125J-330	UNF OMF RESISTO	33 5% 1/2W	
⚠	R 953	QRL027J-100	UNF OMF RESISTO	10 5% 1/2W	
	R 955	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 957	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 959	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 961	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 963	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
⚠	RY202	QSK0142-001	RELAY		
⚠	RY203	QSK0109-001	RELAY		
⚠	R1331	QRL027J-471	UNF OMF RESISTO	470 5% 1/2W	
⚠	R1332	QRL027J-471	UNF OMF RESISTO	470 5% 1/2W	
⚠	T 202	QQT0317-001	POWER TRANSF		
	TA201	QNZ0079-001Z	TAB IM		
	TA202	QNZ0079-001Z	TAB IM		
⚠	TH301	QAD0012-202	BATTERY PACK		
⚠	TH302	QAD0012-202	BATTERY PACK		
⚠	TH801	QAD0012-202	BATTERY PACK		
⚠	TH802	QAD0012-202	BATTERY PACK		
⚠	TH901	QAD0012-202	BATTERY PACK		
	VR301	QVP0008-102Z	SEMI V RESISTOR		
	VR302	QVP0008-102Z	SEMI V RESISTOR		

■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 400	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 419	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 420	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 421	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 422	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 423	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 424	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 425	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 426	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 427	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 428	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 429	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 430	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 431	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 432	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 433	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 434	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 435	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 436	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 440	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 441	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 442	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 443	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 444	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 445	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 446	QCBB1HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 451	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 452	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 459	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C 460	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	CN311	QGB2510J1-14	CONNECTOR		
	CN312	QGB2510J1-14	CONNECTOR		
	CN321	QGB2510J1-14	CONNECTOR		
	CN331	QGB2510J1-14	CONNECTOR		
	CN332	QGB2510J1-14	CONNECTOR		
	CN351	QJK012-032403	SKT WIRE ASSY		
	CN371	QJP001-031201	SHI CR C-B WIRE		
	CN372	QJP002-021201	SHI CR C-B WIRE		
	CN373	QJP001-031201	SHI CR C-B WIRE		
	CN401	QGB2510K1-14	CONNECTOR		
	CN451	QGB2510K1-11	CONNECTOR		
	C1301	QFZ9076-104Z	MM CAPACITOR	.10MF	
	C1302	QCE22HP-103	C CAPACITOR	.010MF +100:-0%	
	C1303	QCE22HP-103	C CAPACITOR	.010MF +100:-0%	
	C1304	QEZ0341-688	E CAPACITER	6800MF	
	C1305	QEZ0341-688	E CAPACITER	6800MF	
	C1306	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1308	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C1309	QEKC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C1310	QEKC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C1311	QEKC1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C1351	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1352	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1353	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1354	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
⚠	D1301	30DF2-FC	DIODE		
⚠	D1302	30DF2-FC	DIODE		
⚠	D1303	30DF2-FC	DIODE		
⚠	D1304	30DF2-FC	DIODE		
	D1305	MTZJ18C-T2	Z.DIODE I.M		
	D1306	MTZJ30C-T2	ZENER DIODE		
	D1307	1SS133-T2	SI DIODE IM		
	D1308	1SS133-T2	SI DIODE IM		

⚠	Item	Parts number	Parts name	Remarks	Area
	D1309	MTZJ20C-T2	Z.DIODE I.M		
	D1352	1SS133-T2	SI DIODE IM		
	D1353	1SS133-T2	SI DIODE IM		
	D1354	1SS133-T2	SI DIODE IM		
	D1355	1SS133-T2	SI DIODE IM		
	D1356	MTZJ5.1C-T2	ZENER DIODE		
	D1357	1SS133-T2	SI DIODE IM		
	D1358	1SS133-T2	SI DIODE IM		
	D1359	1SS133-T2	SI DIODE IM		
	D1360	1SS133-T2	SI DIODE IM		
	EP301	QNZ0136-001Z	EARTH PLATE		
	FW301	QUM135-25Z4Z4	PARA RIBON WIRE		
	FW302	QUM136-25Z4Z4	PARA RIBON WIRE		
	FW303	QUM135-28DGZ4	PARA RIBON WIRE		
	FW341	QUM135-20DGZ4	PARA RIBON WIRE		
	IC402	TC9164AN	IC		
	IC403	BA15218N	IC		
	J 402	QNN0168-001	PIN JACK		
	J 403	QNN0168-001	PIN JACK		
	J 404	QNN0389-001	PIN JACK	DVD FL/FR	
	J 406	QNN0060-001	PIN JACK		
⚠	O1301	KTA1046/Y/	TRANSISTOR		
	O1302	KTC3200/GL/-T	TRANSISTOR		
	O1303	KTA1268/GL/-T	TRANSISTOR		
	O1304	KTC3199/GL/-T	TRANSISTOR		
	O1305	2SD2395/EF/	TRANSISTOR		
	O1306	KTA1023/OY/-T	TRANSISTOR		
	Q1307	KTC3200/GL/-T	TRANSISTOR		
	O1351	KRC109M-T	D.TR.I.M.		
	Q1352	KRC109M-T	D.TR.I.M.		
	O1353	KRC109M-T	D.TR.I.M.		
	Q1354	KRC109M-T	D.TR.I.M.		
	O1355	KRC109M-T	D.TR.I.M.		
	O1356	KRC109M-T	D.TR.I.M.		
	O1357	KRC109M-T	D.TR.I.M.		
	O1358	KRC109M-T	D.TR.I.M.		
	R 421	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 422	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 423	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 424	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 425	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 426	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 429	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 430	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 431	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 432	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 435	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 436	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 440	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 441	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 442	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 443	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 444	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 445	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 446	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R 449	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W	
⚠	R 450	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W	
	R 451	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 452	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 458	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W	
	R 459	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W	
⚠	RY302	QSK0109-001	RELAY		
⚠	RY303	QSK0109-001	RELAY		

■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	RY304	QSK0109-001	RELAY		
⚠	R1301	QRL027J-332	UNF OMF RESISTO	3.3K 5% 1/2W	
⚠	R1302	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1303	QRJ146J-562X	UNF C RESISTOR	5.6K 5% 1/4W	
	R1304	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1305	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1306	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R1307	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1308	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1309	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1310	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1311	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1312	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R1313	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1314	QRJ146J-103X	UNF C RESISTOR	10K 5% 1/4W	
⚠	R1315	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
⚠	R1316	QRJ146J-102X	UNF C RESISTOR	1.0K 5% 1/4W	
⚠	R1317	QRJ146J-223X	UNF C RESISTOR	22K 5% 1/4W	
	R1318	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1319	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
⚠	R1352	QRJ146J-680X	UNF C RESISTOR	68 5% 1/4W	
⚠	R1353	QRJ146J-680X	UNF C RESISTOR	68 5% 1/4W	
⚠	R1354	QRJ146J-680X	UNF C RESISTOR	68 5% 1/4W	
⚠	R1355	QRJ146J-392X	UNF C RESISTOR	3.9K 5% 1/4W	
	R1356	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1357	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1358	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R1359	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1360	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1361	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1362	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1363	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1364	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1365	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R1366	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R1367	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	ST304	QNB0103-002	SPK TERMINAL	6010 CENT/REAR	
	ST305	QNB0001-002	SPK TERMINAL	5020/6020 FRONT	

■ **Electrical parts list (System control & Audio board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	BK701	LV42093-001A	FL HOLDER(L)		
	BK702	LV42092-001A	FL HOLDER(R)		
	C 701	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 702	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 703	QEKC1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 704	NCB31CK-223X	C CAPACITOR		
	C 705	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 706	NCB21HK-331X	C.CAPA. C.M		
	C 707	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 708	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 709	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 713	NCB21HK-103X	C CAPACITOR		
	C 714	NCB21HK-103X	C CAPACITOR		
	C 715	NCB21HK-103X	C CAPACITOR		
	C 716	NCB21HK-103X	C CAPACITOR		
	C 717	NCB21HK-103X	C CAPACITOR		
	C 718	NCB21HK-103X	C CAPACITOR		
	C 719	NCB21HK-103X	C CAPACITOR		
	C 720	NCB31CK-104X	C CAPACITOR		
	C 721	NCB31CK-104X	C CAPACITOR		
	C 722	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 730	NCB31CK-104X	C CAPACITOR		
	CN402	QGF1205C1-25	CONNECTOR		
	CN411	QGB2501J1-12	CONNECTOR		
	CN421	QGB2510J1-14	CONNECTOR		
	CN431	QGB2510J1-11	CONNECTOR		
	CN441	QGB2510J1-07	CONNECTOR		
	CN471	QGA2501C1-03	3P CONNECTOR		
	CN472	QGA2501C1-02	2P CONNECTOR		
	CN473	QGA2501C1-03	3P CONNECTOR		
	CN481	QGB2510J1-20	CONNECTOR		
	CN491	QGB2510J1-04	CONNECTOR		
	CN701	QGF1205F1-14	CONNECTOR		
	CN702	QGF1205F1-25	CONNECTOR		
	CN704	WJS0020-001A	SKT.WIRE ASS'Y		
	CN714	QGA2001C1-03	3P PLUG ASSY		
	C1401	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C1402	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C1403	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C1404	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C1405	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C1406	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C1407	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C1408	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1409	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1410	NCB31CK-223X	C CAPACITOR		
	C1411	NCB31CK-223X	C CAPACITOR		
	C1422	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1423	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1424	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1425	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C1426	NCB31CK-223X	C CAPACITOR		
	C1427	QFVF1HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
	C1428	QFLC1HJ-153Z	M CAPACITOR	.015MF 5% 50V	
	C1429	QCB31HK-822Z	C CAPACITOR	8200PF 10% 50V	
	C1430	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1431	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1432	NCB31CK-223X	C CAPACITOR		
	C1433	QFVF1HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
	C1434	QFLC1HJ-153Z	M CAPACITOR	.015MF 5% 50V	
	C1435	QCB31HK-822Z	C CAPACITOR	8200PF 10% 50V	
	C1436	NCB31CK-223X	C CAPACITOR		
	C1437	QCZ0202-155Z	ML C CAPA I/M	1.5MF	

⚠	Item	Parts number	Parts name	Remarks	Area
	C1438	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C1439	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C1440	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C1443	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C1444	NCB31CK-223X	C CAPACITOR		
	C1445	NCB31CK-223X	C CAPACITOR		
	C1446	NCB31HK-221X	C CAPACITOR		
	C1447	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1453	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1459	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1460	NCB31CK-223X	C CAPACITOR		
	C1461	NCB31CK-223X	C CAPACITOR		
	C1463	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1464	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C1465	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	D 701	1SS355-X	DIODE C.M		
	D 702	1SS355-X	DIODE C.M		
	D 719	SLR-342VC-T	LED		
	DI701	QLF0098-001	FL TUBE		
	D1401	MTZJ13C-T2	ZENER DIODE		
	D1402	MTZJ6.2C-T2	Z DIODE I/M		
	D1403	MTZJ5.6C-T2	ZENER DIODE		
	D1404	MTZJ5.6C-T2	ZENER DIODE		
	D1405	MTZJ13C-T2	ZENER DIODE		
	D1406	MTZJ10C-T2	Z.DIODE I.M		
	D1407	MTZJ7.5C-T2	ZENER DIODE		
	D1408	MTZJ7.5C-T2	ZENER DIODE		
	D1409	1SS355-X	DIODE C.M		
	D1410	1SS355-X	DIODE C.M		
	D1411	1SS355-X	DIODE C.M		
	D1412	1SS355-X	DIODE C.M		
	EP401	QNZ0136-001Z	EARTH PLATE		
	FL401	QQR0590-001	FILTER		
	FL402	QQR0590-001	FILTER		
	HS401	E70306-001	HEAT SINK		
	HS402	E70306-001	HEAT SINK		
	HS403	E70306-001	HEAT SINK		
	HS404	E70306-001	HEAT SINK		
	HS405	E70306-001	HEAT SINK		
	HS434	E70306-001	HEAT SINK		
	HS435	E70306-001	HEAT SINK		
	IC423	TC9162AF-X	IC		
	IC427	BA15218F-XE	IC		
	IC428	M62446FP-X	IC		
	IC701	MN101C35DJW	IC		
	IC702	IC-PST9139-T	IC I.M		
	IC703	GP1UM281XK	IR DETECT UNIT		
	JS701	QSW0898-001	JOG VOLUME		
	O 701	DTC114YKA-X	CHIP D.TRANSIST		
	O 702	DTC114TKA-X	TRANSISTOR		
	O 703	DTC144WKA-X	TRANSISTOR		
	O 704	DTC114YKA-X	CHIP D.TRANSIST		
	O 707	DTC114YKA-X	CHIP D.TRANSIST		
	O 708	DTC114YKA-X	CHIP D.TRANSIST		
	O 709	DTC114YKA-X	CHIP D.TRANSIST		
	O 711	DTA144EKA-X	TRANSISTOR		
⚠	O1401	KTA1046/Y/	TRANSISTOR		
⚠	O1402	2SD2395/EF/	TRANSISTOR		
⚠	O1403	2SD2395/EF/	TRANSISTOR		
⚠	O1404	2SD2395/EF/	TRANSISTOR		
⚠	O1405	2SD2395/EF/	TRANSISTOR		
⚠	O1406	KTC3203/OY/-T	TRANSISTOR		
⚠	O1407	KTC3203/OY/-T	TRANSISTOR		

■ **Electrical parts list (System control & Audio board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	O1408	KTA1271/OY/-T	TRANSISTOR		
	O1413	2SC3576-JVC-T	TRANSISTOR I/M		
	O1414	2SC3576-JVC-T	TRANSISTOR I/M		
	O1417	2SC3576-JVC-T	TRANSISTOR I/M		
	O1418	2SC3576-JVC-T	TRANSISTOR I/M		
	O1419	2SC3576-JVC-T	TRANSISTOR I/M		
	O1420	KRA104M-T	D.TR.I.M		
	O1421	2SC3576-JVC-T	TRANSISTOR I/M		
	O1422	2SC3576-JVC-T	TRANSISTOR I/M		
	Q1423	KRA104M-T	D.TR.I.M		
	O1424	KRA104M-T	D.TR.I.M		
	Q1425	2SC3576-JVC-T	TRANSISTOR I/M		
	O1426	2SC3576-JVC-T	TRANSISTOR I/M		
	Q1431	KRC104M-T	D.TR.I.M		
	O1432	KRC104M-T	D.TR.I.M		
	O1433	KRC104M-T	D.TR.I.M		
⚠	O1434	2SD2395/EF/	TRANSISTOR		
⚠	O1435	2SD2395/EF/	TRANSISTOR		
	R 475	NRSA63J-203X	MG RESISTOR		
	R 476	NRSA63J-273X	MG RESISTOR		
	R 477	QRZ9006-4R7X	F RESISTOR	4.7 1/4W	
	R 478	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	R 479	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	R 480	NRSA63J-512X	MG RESISTOR		
	R 481	NRSA63J-104X	MG RESISTOR		
	R 482	NRSA63J-104X	MG RESISTOR		
	R 483	NRSA63J-102X	MG RESISTOR		
	R 484	NRSA63J-104X	MG RESISTOR		
	R 485	NRSA63J-102X	MG RESISTOR		
	R 486	NRSA63J-104X	MG RESISTOR		
	R 487	NRSA63J-102X	MG RESISTOR		
	R 488	NRSA63J-104X	MG RESISTOR		
	R 489	NRSA63J-103X	MG RESISTOR		
	R 490	NRSA63J-103X	MG RESISTOR		
	R 491	NRSA63J-512X	MG RESISTOR		
	R 492	NRSA63J-0R0X	MG RESISTOR		
	R 493	NRSA63J-0R0X	MG RESISTOR		
	R 494	NRSA63J-0R0X	MG RESISTOR		
	R 495	NRSA63J-0R0X	MG RESISTOR		
	R 701	NRSA63J-472X	MG RESISTOR		
	R 702	NRSA63J-223X	MG RESISTOR		
	R 703	NRSA63J-103X	MG RESISTOR		
	R 704	NRSA63J-471X	MG RESISTOR		
	R 705	NRSA63J-103X	MG RESISTOR		
	R 706	NRSA63J-103X	MG RESISTOR		
	R 707	NRSA63J-103X	MG RESISTOR		
	R 708	NRSA63J-103X	MG RESISTOR		
	R 709	NRSA63J-103X	MG RESISTOR		
	R 710	NRSA63J-103X	MG RESISTOR		
	R 711	NRSA63J-104X	MG RESISTOR		
	R 712	NRSA63J-103X	MG RESISTOR		
	R 713	NRSA63J-103X	MG RESISTOR		
	R 714	NRSA63J-103X	MG RESISTOR		
	R 715	NRSA63J-103X	MG RESISTOR		
	R 716	NRSA63J-103X	MG RESISTOR		
	R 717	NRSA63J-103X	MG RESISTOR		
	R 718	NRSA63J-103X	MG RESISTOR		
	R 719	NRSA63J-221X	MG RESISTOR		
	R 720	NRSA63J-222X	MG RESISTOR		
	R 721	NRSA63J-103X	MG RESISTOR		
	R 722	NRSA63J-102X	MG RESISTOR		
	R 723	NRSA63J-102X	MG RESISTOR		
	R 724	NRSA63J-122X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 725	NRSA63J-152X	MG RESISTOR		
	R 726	NRSA63J-222X	MG RESISTOR		
	R 727	NRSA63J-272X	MG RESISTOR		
	R 728	NRSA63J-103X	MG RESISTOR		
	R 729	NRSA63J-102X	MG RESISTOR		
	R 730	NRSA63J-102X	MG RESISTOR		
	R 731	NRSA63J-122X	MG RESISTOR		
	R 732	NRSA63J-152X	MG RESISTOR		
	R 733	NRSA63J-222X	MG RESISTOR		
	R 734	NRSA63J-272X	MG RESISTOR		
	R 736	NRSA63J-103X	MG RESISTOR		
	R 737	NRSA63J-102X	MG RESISTOR		
	R 738	NRSA63J-102X	MG RESISTOR		
	R 739	NRSA63J-122X	MG RESISTOR		
	R 740	NRSA63J-152X	MG RESISTOR		
	R 741	NRSA63J-222X	MG RESISTOR		
	R 742	NRSA63J-272X	MG RESISTOR		
	R 743	NRSA63J-103X	MG RESISTOR		
	R 744	NRSA63J-102X	MG RESISTOR		
	R 745	NRSA63J-102X	MG RESISTOR		
	R 746	NRSA63J-122X	MG RESISTOR		
	R 747	NRSA63J-152X	MG RESISTOR		
	R 748	NRSA63J-222X	MG RESISTOR		
	R 749	NRSA63J-272X	MG RESISTOR		
	R 750	NRSA63J-103X	MG RESISTOR		
	R 757	NRSA63J-103X	MG RESISTOR		
	R 758	NRSA63J-103X	MG RESISTOR		
	R 759	NRSA63J-103X	MG RESISTOR		
	R 760	NRSA63J-103X	MG RESISTOR		
	R 761	NRSA63J-103X	MG RESISTOR		
	R 762	NRSA63J-102X	MG RESISTOR		
	R 768	NRSA63J-103X	MG RESISTOR		
	R 769	NRSA63J-102X	MG RESISTOR		
	R 772	NRSA63J-392X	MG RESISTOR		
	R 773	NRSA63J-392X	MG RESISTOR		
	R 775	NRSA63J-103X	MG RESISTOR		
	R 779	NRSA63J-103X	MG RESISTOR		
	R 783	NRSA63J-221X	MG RESISTOR		
	R 784	NRSA63J-221X	MG RESISTOR		
	R 785	NRSA63J-221X	MG RESISTOR		
	R 786	NRSA63J-221X	MG RESISTOR		
	R 787	NRSA63J-221X	MG RESISTOR		
	R 788	NRSA63J-221X	MG RESISTOR		
	R 789	NRSA63J-221X	MG RESISTOR		
	R 790	NRSA63J-221X	MG RESISTOR		
	R 791	NRSA63J-221X	MG RESISTOR		
	R 792	NRSA63J-221X	MG RESISTOR		
	R 793	NRSA63J-221X	MG RESISTOR		
	R 794	NRSA63J-221X	MG RESISTOR		
	R 795	NRSA63J-221X	MG RESISTOR		
	R 796	NRSA63J-221X	MG RESISTOR		
	R 797	NRSA63J-221X	MG RESISTOR		
	R 798	NRSA63J-221X	MG RESISTOR		
	R 799	NRSA63J-221X	MG RESISTOR		
	R 871	NRSA63J-103X	MG RESISTOR		
	R 872	NRSA63J-103X	MG RESISTOR		
	R 873	NRSA63J-103X	MG RESISTOR		
⚠	R1401	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1402	QRJ146J-182X	UNF C RESISTOR	1.8K 5% 1/4W	
⚠	R1403	QRZ9005-120X	F RESISTOR	12 1/4W	
⚠	R1404	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W	
⚠	R1405	QRZ9005-120X	F RESISTOR	12 1/4W	
⚠	R1406	QRK126J-682X	C RESISTOR	6.8K 5% 1/2W	

■ **Electrical parts list (System control & Audio board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	R1407	QRZ9006-4R7X	F RESISTOR	4.7 1/4W	
⚠	R1408	QRZ9006-4R7X	F RESISTOR	4.7 1/4W	
⚠	R1409	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W	
⚠	R1410	QRZ9006-4R7X	F RESISTOR	4.7 1/4W	
⚠	R1411	QRJ146J-182X	UNF C RESISTOR	1.8K 5% 1/4W	
⚠	R1412	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1413	QRJ146J-102X	UNF C RESISTOR	1.0K 5% 1/4W	
⚠	R1414	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1415	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W	
⚠	R1416	QRZ9005-100X	F RESISTOR	10 1/4W	
⚠	R1417	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W	
⚠	R1418	QRZ9005-680X	F RESISTOR	68 1/4W	
⚠	R1419	QRZ9005-680X	F RESISTOR	68 1/4W	
	R1437	NRSA63J-102X	MG RESISTOR		
	R1438	NRSA63J-102X	MG RESISTOR		
	R1439	NRSA63J-103X	MG RESISTOR		
	R1440	NRSA63J-103X	MG RESISTOR		
	R1442	NRSA63J-104X	MG RESISTOR		
	R1444	NRSA63J-103X	MG RESISTOR		
	R1445	NRSA63J-102X	MG RESISTOR		
	R1446	NRSA63J-104X	MG RESISTOR		
	R1447	NRSA63J-102X	MG RESISTOR		
	R1448	NRSA63J-103X	MG RESISTOR		
	R1449	NRSA63J-102X	MG RESISTOR		
	R1450	NRSA63J-103X	MG RESISTOR		
	R1451	NRSA63J-104X	MG RESISTOR		
	R1452	NRSA63J-104X	MG RESISTOR		
	R1453	NRSA63J-102X	MG RESISTOR		
	R1454	NRSA63J-104X	MG RESISTOR		
	R1455	NRSA63J-104X	MG RESISTOR		
⚠	R1456	QRJ146J-220X	UNF C RESISTOR	22 5% 1/4W	
	R1457	NRSA63J-472X	MG RESISTOR		
	R1458	NRSA63J-472X	MG RESISTOR		
⚠	R1459	QRZ9005-680X	F RESISTOR	68 1/4W	
⚠	R1460	QRZ9005-680X	F RESISTOR	68 1/4W	
	R1461	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	R1462	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	R1463	NRSA63J-104X	MG RESISTOR		
	R1464	NRSA63J-104X	MG RESISTOR		
	R1465	NRSA63J-102X	MG RESISTOR		
	R1470	NRSA63J-391X	MG RESISTOR		
	R1471	NRSA63J-391X	MG RESISTOR		
	R1472	NRSA63J-103X	MG RESISTOR		
	R1473	NRSA63J-103X	MG RESISTOR		
	R1474	NRSA63J-102X	MG RESISTOR		
	R1480	NRSA63J-104X	MG RESISTOR		
	R1490	NRSA63J-273X	MG RESISTOR		
	R1492	NRSA63J-102X	MG RESISTOR		
	R1493	NRSA63J-102X	MG RESISTOR		
	R1494	NRSA63J-102X	MG RESISTOR		
	R1495	NRSA63J-103X	MG RESISTOR		
	R1496	NRSA63J-103X	MG RESISTOR		
	R1497	NRSA63J-511X	MG RESISTOR		
	R1498	NRSA63J-511X	MG RESISTOR		
	R1499	NRSA63J-104X	MG RESISTOR		
	R1500	NRSA63J-474X	MG RESISTOR		
	S 721	QSW0683-001Z	PUSH SWITCH	TUNING+	
	S 722	QSW0683-001Z	PUSH SWITCH	TUNING-	
	S 723	QSW0683-001Z	PUSH SWITCH	PRESET+	
	S 724	QSW0683-001Z	PUSH SWITCH	PRESET-	
	S 725	QSW0683-001Z	PUSH SWITCH	FM MODE	
	S 726	QSW0683-001Z	PUSH SWITCH	MEMORY	
	S 727	QSW0683-001Z	PUSH SWITCH	POWER	

⚠	Item	Parts number	Parts name	Remarks	Area
	S 728	QSW0683-001Z	PUSH SWITCH	SURROUND	
	S 729	QSW0683-001Z	PUSH SWITCH	SURR MODE	
	S 732	QSW0683-001Z	PUSH SWITCH	SPK1	
	S 740	QSW0683-001Z	PUSH SWITCH	TV/DBS(COM)	
	S 741	QSW0683-001Z	PUSH SWITCH	FM/AM(COM)	
	S 742	QSW0683-001Z	PUSH SWITCH	ADJUST	
	S 743	QSW0683-001Z	PUSH SWITCH	SETTING	
	S 744	QSW0683-001Z	PUSH SWITCH	+	
	S 745	QSW0683-001Z	PUSH SWITCH	-	
	S 751	QSW0683-001Z	PUSH SWITCH	DIGITAL	
	S 752	QSW0683-001Z	PUSH SWITCH	ANALOG	
	S 754	QSW0683-001Z	PUSH SWITCH	DVD	
	S 755	QSW0683-001Z	PUSH SWITCH	CD	
	S 756	QSW0683-001Z	PUSH SWITCH	VCR	
	S 757	QSW0683-001Z	PUSH SWITCH	TAPE/CDR	
	X 701	QAX0246-001Z	C RESONATOR		

■ **Electrical parts list (DSP board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 601	NCB31HK-102X	C CAPACITOR		
	C 602	NCB31HK-102X	C CAPACITOR		
	C 603	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 604	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 605	NCF31CZ-104X	C CAPACITOR		
	C 606	NCF31CZ-104X	C CAPACITOR		
	C 607	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 608	NCF31CZ-104X	C CAPACITOR		
	C 609	NCF31CZ-104X	C CAPACITOR		
	C 610	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 611	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 612	NCB31CK-103X	C CAPACITOR		
	C 621	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 622	NCS31HJ-101X	C.CAPA. C.M		
	C 624	NCF31CZ-104X	C CAPACITOR		
	C 626	NCF31AZ-105X	C CAPACITOR		
	C 627	NCF31AZ-105X	C CAPACITOR		
	C 628	NCB31CK-103X	C CAPACITOR		
	C 631	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 632	NCB31CK-103X	C CAPACITOR		
	C 633	NCF31CZ-104X	C CAPACITOR		
	C 634	NCF31CZ-104X	C CAPACITOR		
	C 635	NCF31CZ-104X	C CAPACITOR		
	C 636	NCB31CK-473X	C CAPACITOR		
	C 638	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 639	NCB31CK-103X	C CAPACITOR		
	C 640	NCB31CK-103X	C CAPACITOR		
	C 641	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 642	NCB31CK-103X	C CAPACITOR		
	C 643	NCB31AK-474X	C CAPACITOR		
	C 644	NCB31CK-103X	C CAPACITOR		
	C 645	NCS31HJ-101X	C.CAPA. C.M		
	C 646	NCB31CK-103X	C CAPACITOR		
	C 647	NCS31HJ-220X	C CAPACITOR		
	C 648	NCS31HJ-180X	C CAPACITOR		
	C 649	NCS31HJ-121X	C CAPACITOR		
	C 653	NCB31CK-104X	C CAPACITOR		
	C 654	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 661	NCB31CK-103X	C CAPACITOR		
	C 671	NCB31CK-103X	C CAPACITOR		
	C 672	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 673	NCB31CK-103X	C CAPACITOR		
	C 677	NCS31HJ-101X	C.CAPA. C.M		
	C 679	NCS31HJ-101X	C.CAPA. C.M		
	C 681	NCB31CK-103X	C CAPACITOR		
	C 682	NCB31CK-103X	C CAPACITOR		
	C 683	NCB31CK-103X	C CAPACITOR		
	C 684	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 685	QEKC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 686	QEKC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 687	NCB31CK-103X	C CAPACITOR		
	C 688	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 689	NCB31CK-103X	C CAPACITOR		
	C 690	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 691	NCB31HK-103X	C CAPACITOR		
	C 693	NCB31CK-103X	C CAPACITOR		
	C 694	NCF31CZ-104X	C CAPACITOR		
	CN681	QGB2510K1-20	B TO B CONNE		
	CN687	QGF1205F1-06	CONNECTOR		
	C2500	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C2503	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2504	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2507	NCS31HJ-330X	C CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C2508	NCS31HJ-330X	C CAPACITOR		
	C2512	NCF31CZ-104X	C CAPACITOR		
	C2513	NCB31HK-122X	C CAPACITOR		
	C2514	NCB31HK-122X	C CAPACITOR		
	C2515	NCS31HJ-121X	C CAPACITOR		
	C2516	NCS31HJ-121X	C CAPACITOR		
	C2525	NCB31HK-102X	C CAPACITOR		
	C2526	NCB31HK-102X	C CAPACITOR		
	C2527	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2528	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2531	NCS31HJ-560X	C CAPACITOR		
	C2532	NCS31HJ-560X	C CAPACITOR		
	C2533	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2534	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2539	NCF31CZ-104X	C CAPACITOR		
	C2540	NCF31CZ-104X	C CAPACITOR		
	C2551	NCS31HJ-560X	C CAPACITOR		
	C2552	NCS31HJ-560X	C CAPACITOR		
	C2555	NCF31CZ-104X	C CAPACITOR		
	C2556	NCF31CZ-104X	C CAPACITOR		
	C2561	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C2562	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C2563	NCS31HJ-560X	C CAPACITOR		
	C2564	NCS31HJ-560X	C CAPACITOR		
	C2565	NCB31HK-102X	C CAPACITOR		
	C2566	NCB31HK-102X	C CAPACITOR		
	C2569	NCF31CZ-104X	C CAPACITOR		
	C2570	NCF31CZ-104X	C CAPACITOR		
	C2575	NCB31HK-102X	C CAPACITOR		
	C2576	NCB31HK-102X	C CAPACITOR		
	C2577	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2578	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2581	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C2582	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C2583	NCS31HJ-560X	C CAPACITOR		
	C2584	NCS31HJ-560X	C CAPACITOR		
	C2585	NCF31CZ-104X	C CAPACITOR		
	C2586	NCF31CZ-104X	C CAPACITOR		
	C2587	NCS31HJ-560X	C CAPACITOR		
	C2588	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2589	NCF31CZ-104X	C CAPACITOR		
	C2590	NCF31CZ-104X	C CAPACITOR		
	C2591	NCB31HK-102X	C CAPACITOR		
	C2592	NCB31HK-103X	C CAPACITOR		
	C2594	NCB31CK-473X	C CAPACITOR		
	C2595	NCB31HK-102X	C CAPACITOR		
	C2597	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2598	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	D 607	1SS355-X	DIODE C.M		
	D 608	1SS355-X	DIODE C.M		
	D 609	1SS355-X	DIODE C.M		
	D 610	1SS355-X	DIODE C.M		
	IC601	AK4527BVQP	IC		
	IC609	BA15218F-XE	IC		
	IC610	BA15218F-XE	IC		
	IC611	TC74HC08AF-X	IC		
	IC612	TC74HC4072AF-X	IC		
	IC621	TC74HCU04AF-W	IC		
	IC631	TC9446F-025	IC		
	IC641	W24L010AJ-12-X	IC		
	IC650	BA15218F-XE	IC		
	IC651	BA15218F-XE	IC		
	IC652	IMX9-W	IC		

■ **Electrical parts list (DSP board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	IC661	BA15218F-XE	IC		
	IC662	IMX9-W	IC		
	IC671	UPD784215AGC167	IC(MICRO C ROM)		
	IC672	TC7SET32FU-X	IC		
	IC681	BA033FP-X	I.C.		
	IC682	IMX9-W	IC		
	IC683	BA033LBSG-W	IC		
	IC690	BA15218F-XE	IC		
	IC691	BA15218F-XE	IC		
	J 601	QNN0347-001	PIN JACK		
	K 601	NQR0269-004X	FERRITE BEADS		
	O 607	DTA144EKA-X	TRANSISTOR		
	O 670	DTC114YE-X	TRANSISTOR		
	O 671	2SD2114K/VW/-X	CHIP TRANSISTOR		
	O 672	DTC114YE-X	TRANSISTOR		
	O 673	DTA144EKA-X	TRANSISTOR		
	O2501	DTA144EKA-X	TRANSISTOR		
	R 600	NRSA63J-0R0X	MG RESISTOR		
	R 601	NRSA63J-473X	MG RESISTOR		
	R 602	NRSA63J-473X	MG RESISTOR		
	R 603	NRSA63J-473X	MG RESISTOR		
	R 606	NRSA63J-221X	MG RESISTOR		
	R 607	NRSA63J-221X	MG RESISTOR		
	R 608	NRSA63J-221X	MG RESISTOR		
	R 609	NRSA63J-221X	MG RESISTOR		
	R 611	NRSA63J-221X	MG RESISTOR		
	R 612	NRSA63J-221X	MG RESISTOR		
	R 613	NRSA63J-822X	MG RESISTOR		
	R 615	NRSA63J-432X	MG RESISTOR		
	R 617	NRSA63J-103X	MG RESISTOR		
	R 618	NRSA63J-103X	MG RESISTOR		
	R 620	NRSA63J-221X	MG RESISTOR		
	R 621	NRSA63J-561X	MG RESISTOR		
	R 622	NRSA63J-750X	MG RESISTOR		
	R 623	NRSA63J-331X	MG RESISTOR		
	R 624	NRSA63J-222X	MG RESISTOR		
	R 627	NRSA63J-472X	MG RESISTOR		
	R 628	NRSA63J-333X	MG RESISTOR		
	R 631	NRSA63J-0R0X	MG RESISTOR		
	R 632	NRSA63J-0R0X	MG RESISTOR		
	R 639	NRSA63J-472X	MG RESISTOR		
	R 640	NRSA63J-0R0X	MG RESISTOR		
	R 641	NRSA63F-102X	MG RESISTOR		
	R 642	NRSA63J-103X	MG RESISTOR		
	R 643	NRSA63J-101X	MG RESISTOR		
	R 644	NRSA63J-153X	MG RESISTOR		
	R 645	NRSA63F-102X	MG RESISTOR		
	R 646	NRSA63J-103X	MG RESISTOR		
	R 647	NRSA63J-225X	MG RESISTOR		
	R 648	NRSA63J-472X	MG RESISTOR		
	R 657	NRSA63J-103X	MG RESISTOR		
	R 661	NRSA63J-221X	MG RESISTOR		
	R 662	NRSA63J-221X	MG RESISTOR		
	R 663	NRSA63J-221X	MG RESISTOR		
	R 664	NRSA63J-221X	MG RESISTOR		
	R 668	NRSA63J-0R0X	MG RESISTOR		
	R 669	NRSA63J-103X	MG RESISTOR		
	R 670	NRSA63J-103X	MG RESISTOR		
	R 671	NRSA63J-103X	MG RESISTOR		
	R 672	NRSA63J-105X	MG RESISTOR		
	R 673	NRSA63J-432X	MG RESISTOR		
	R 674	NRSA63J-432X	MG RESISTOR		
	R 675	NRSA63J-432X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 676	NRSA63J-432X	MG RESISTOR		
	R 677	NRSA63J-822X	MG RESISTOR		
	R 678	NRSA63J-822X	MG RESISTOR		
	R 679	NRSA63J-822X	MG RESISTOR		
	R 680	NRSA63J-822X	MG RESISTOR		
	R 682	NRSA63J-103X	MG RESISTOR		
	R 683	NRSA63J-0R0X	MG RESISTOR		
	R 684	NRSA63J-0R0X	MG RESISTOR		
	R 687	NRSA63J-0R0X	MG RESISTOR		
	R 688	NRSA63J-0R0X	MG RESISTOR		
	R 689	NRSA63J-0R0X	MG RESISTOR		
	R 691	NRSA63J-221X	MG RESISTOR		
	R 692	NRSA63J-221X	MG RESISTOR		
	R 693	NRSA63J-221X	MG RESISTOR		
	R 694	NRSA63J-221X	MG RESISTOR		
	R 695	NRSA63J-221X	MG RESISTOR		
	R 696	NRSA63J-221X	MG RESISTOR		
	R 697	NRSA63J-0R0X	MG RESISTOR		
	R 698	NRSA63J-0R0X	MG RESISTOR		
	R2500	NRSA63J-102X	MG RESISTOR		
	R2501	NRSA63J-104X	MG RESISTOR		
	R2502	NRSA63J-104X	MG RESISTOR		
	R2507	NRSA63J-223X	MG RESISTOR		
	R2508	NRSA63J-223X	MG RESISTOR		
	R2509	NRSA63J-223X	MG RESISTOR		
	R2510	NRSA63J-223X	MG RESISTOR		
	R2511	NRSA63J-103X	MG RESISTOR		
	R2512	NRSA63J-103X	MG RESISTOR		
	R2513	NRSA63J-103X	MG RESISTOR		
	R2514	NRSA63J-103X	MG RESISTOR		
	R2515	NRSA63J-103X	MG RESISTOR		
	R2516	NRSA63J-103X	MG RESISTOR		
	R2519	NRSA63J-331X	MG RESISTOR		
	R2520	NRSA63J-331X	MG RESISTOR		
	R2521	NRSA63J-331X	MG RESISTOR		
	R2522	NRSA63J-331X	MG RESISTOR		
	R2525	NRSA63J-102X	MG RESISTOR		
	R2526	NRSA63J-102X	MG RESISTOR		
	R2527	NRSA63J-104X	MG RESISTOR		
	R2528	NRSA63J-104X	MG RESISTOR		
	R2529	NRSA63J-103X	MG RESISTOR		
	R2530	NRSA63J-103X	MG RESISTOR		
	R2531	NRSA63J-752X	MG RESISTOR		
	R2532	NRSA63J-752X	MG RESISTOR		
	R2533	NRSA63J-103X	MG RESISTOR		
	R2534	NRSA63J-103X	MG RESISTOR		
	R2535	NRSA63J-103X	MG RESISTOR		
	R2536	NRSA63J-103X	MG RESISTOR		
	R2537	NRSA63J-104X	MG RESISTOR		
	R2538	NRSA63J-104X	MG RESISTOR		
	R2550	NRSA63J-272X	MG RESISTOR		
	R2551	NRSA63J-103X	MG RESISTOR		
	R2552	NRSA63J-103X	MG RESISTOR		
	R2553	NRSA63J-153X	MG RESISTOR		
	R2554	NRSA63J-153X	MG RESISTOR		
	R2555	NRSA63J-752X	MG RESISTOR		
	R2556	NRSA63J-752X	MG RESISTOR		
	R2557	NRSA63J-103X	MG RESISTOR		
	R2558	NRSA63J-273X	MG RESISTOR		
	R2560	NRSA63J-105X	MG RESISTOR		
	R2561	NRSA63J-104X	MG RESISTOR		
	R2562	NRSA63J-104X	MG RESISTOR		
	R2563	NRSA63J-103X	MG RESISTOR		

■ **Electrical parts list (DSP board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	R2564	NRSA63J-103X	MG RESISTOR		
	R2565	NRSA63J-202X	MG RESISTOR		
	R2566	NRSA63J-202X	MG RESISTOR		
	R2567	NRSA63J-103X	MG RESISTOR		
	R2568	NRSA63J-103X	MG RESISTOR		
	R2569	NRSA63J-122X	MG RESISTOR		
	R2570	NRSA63J-122X	MG RESISTOR		
	R2575	NRSA63J-102X	MG RESISTOR		
	R2576	NRSA63J-102X	MG RESISTOR		
	R2577	NRSA63J-104X	MG RESISTOR		
	R2578	NRSA63J-104X	MG RESISTOR		
	R2581	NRSA63J-104X	MG RESISTOR		
	R2582	NRSA63J-104X	MG RESISTOR		
	R2583	NRSA63J-123X	MG RESISTOR		
	R2584	NRSA63J-223X	MG RESISTOR		
	R2585	NRSA63J-302X	MG RESISTOR		
	R2586	NRSA63J-332X	MG RESISTOR		
	R2587	NRSA63J-103X	MG RESISTOR		
	R2588	NRSA63J-103X	MG RESISTOR		
	R2589	NRSA63J-104X	MG RESISTOR		
	R2590	NRSA63J-333X	MG RESISTOR		
	R2591	NRSA63J-122X	MG RESISTOR		
	R2592	NRSA63J-333X	MG RESISTOR		
	R2594	NRSA63J-333X	MG RESISTOR		
	R2595	NRSA63J-102X	MG RESISTOR		
	R2596	NRSA63J-102X	MG RESISTOR		
	R2597	NRSA63J-104X	MG RESISTOR		
	R2598	NRSA63J-104X	MG RESISTOR		
	UN661	GP1FA351RZ	OPT RECEIVER		
	X 631	QAX0722-001Z	CRYSTAL		
	X 671	QAX0719-001Z	1COSCIALLATOR		

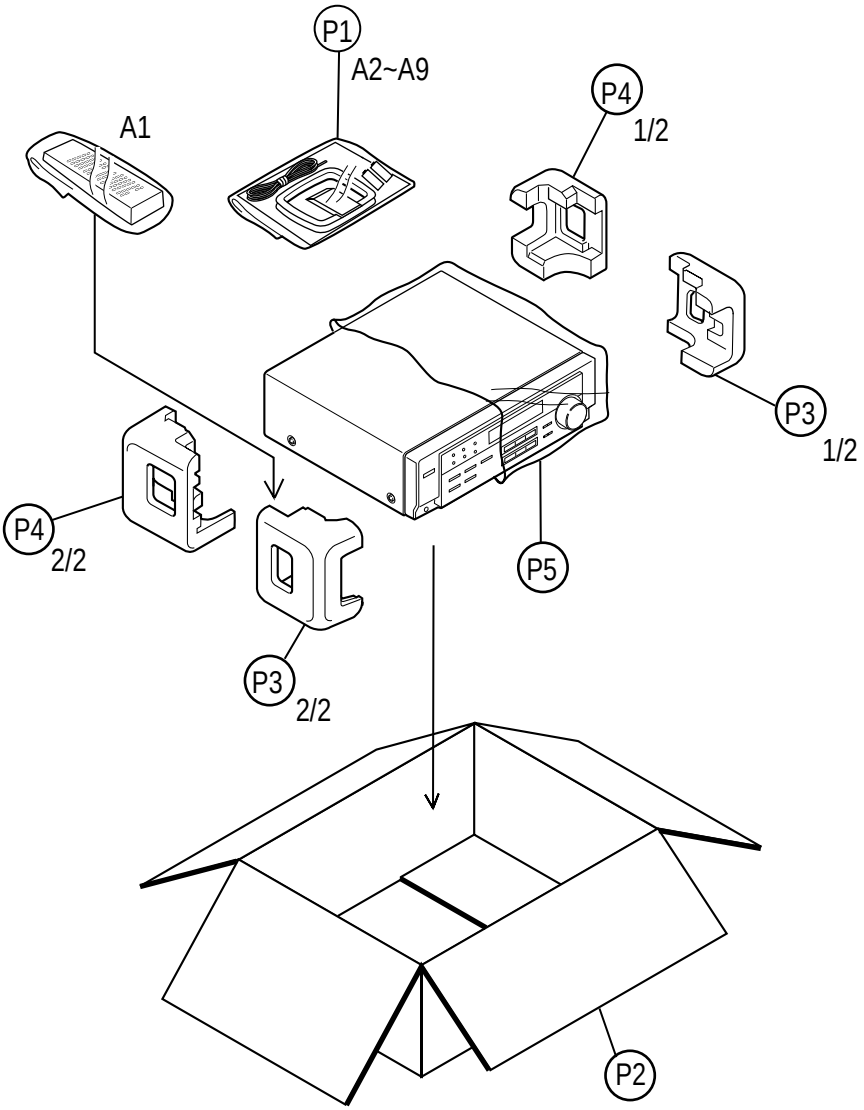
■ **Electrical parts list (Tuner board)** **Block No. 05**

⚠	Item	Parts number	Parts name	Remarks	Area
	AT101	QNB0014-001	ANT TERMINAL		
	BK 1	LV31618-001A	SHIELD BKT		
	C 101	NCB21HK-103X	C CAPACITOR		
	C 103	NCB21HK-223X	C CAPACITOR		
	C 105	NCB21HK-223X	C CAPACITOR		
	C 107	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 111	NCB21HK-473X	C CAPACITOR		
	C 112	NDC21HJ-120X	C CAPACITOR		
	C 121	NDC21HJ-120X	C CAPACITOR		
	C 122	NDC21HJ-120X	C CAPACITOR		
	C 123	NCB21HK-473X	C CAPACITOR		
	C 126	NCS21HJ-101X	C CAPACITOR		
	C 128	QENC1HM-474Z	NP E CAPACITOR	.47MF 20% 50V	
	C 129	NCB21HK-102X	C CAPACITOR		
	C 130	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 133	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 134	NCB21HK-222X	C CAPACITOR		
	C 135	NCB21HK-223X	C CAPACITOR		
	C 136	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 137	NCB21HK-331X	C.CAPA. C.M		
	C 138	NCB21HK-473X	C CAPACITOR		
	C 139	NCB21HK-333X	C CAPACITOR		
	C 140	NCB21HK-333X	C CAPACITOR		
	C 141	NCB21HK-473X	C CAPACITOR		
	C 143	NCB21HK-223X	C CAPACITOR		
	C 144	NCB21HK-473X	C CAPACITOR		
	C 146	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 147	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 148	QEKC1HM-224Z	E CAPACITOR	.22MF 20% 50V	
	C 149	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 150	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 156	QDGB1HK-102Y	C CAPACITOR		
	C 157	NCB21HK-473X	C CAPACITOR		
	C 158	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 161	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 162	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 163	NCB21HK-223X	C CAPACITOR		
	C 164	NCB21HK-473X	C CAPACITOR		
	C 168	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 184	QEKC1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 185	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 186	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	CF101	QAX0419-001Z	C FILTER		
	CF102	QAX0604-001Z	C FILTER		
	CF103	QAX0519-001Z	C FILTER		
	CN111	QGB2501K2-12	CONNECTOR		
	D 121	1SS133-T2	SI DIODE IM		
	D 123	1SS133-T2	SI DIODE IM		
	D 124	1SS133-T2	SI DIODE IM		
	D 125	1SS133-T2	SI DIODE IM		
	D 129	1SS133-T2	SI DIODE IM		
	IC102	LA1838	IC		
	IC121	LC72136N	IC		
	O 102	2SC535/BC/-T	TRANSISTOR		
	O 103	2SC461/BC/-T	TRANSISTOR		
	O 121	KRA103M-T	TRANSISTOR	FM+B	
	R 103	NRSA02J-221X	MG RESISTOR		
	R 104	NRSA02J-272X	MG RESISTOR		
	R 105	NRSA02J-391X	MG RESISTOR		
	R 106	NRSA02J-102X	MG RESISTOR		
	R 107	NRSA02J-391X	MG RESISTOR		
	R 108	NRSA02J-332X	MG RESISTOR		
	R 109	NRSA02J-221X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 115	NRSA02J-104X	MG RESISTOR		
	R 119	NRSA02J-103X	MG RESISTOR		
	R 122	NRSA02J-472X	MG RESISTOR		
	R 124	NRSA02J-222X	MG RESISTOR		
	R 126	NRSA02J-562X	MG RESISTOR		
	R 127	NRSA02J-822X	MG RESISTOR		
	R 128	NRSA02J-472X	MG RESISTOR		
	R 129	NRSA02J-222X	MG RESISTOR		
	R 130	QRZ9005-680X	F RESISTOR	68 1/4W	
	R 132	NRSA02J-393X	MG RESISTOR		
	R 133	NRSA02J-392X	MG RESISTOR		
	R 134	NRSA02J-102X	MG RESISTOR		
	R 140	NRSA02J-183X	MG RESISTOR		
	R 141	NRSA02J-102X	MG RESISTOR		
	R 142	NRSA02J-470X	MG RESISTOR		
	R 143	NRSA02J-562X	MG RESISTOR		
	R 144	NRSA02J-332X	MG RESISTOR		
	R 145	NRSA02J-103X	MG RESISTOR		
	R 146	NRSA02J-392X	MG RESISTOR		
	R 147	NRSA02J-332X	MG RESISTOR		
	R 150	NRSA02J-331X	MG RESISTOR		
	R 157	NRSA02J-682X	MG RESISTOR		
	R 158	NRSA02J-682X	MG RESISTOR		
	R 161	NRSA02J-102X	MG RESISTOR		
	R 162	NRSA02J-102X	MG RESISTOR		
	R 182	NRSA02J-103X	MG RESISTOR		
	R 183	NRSA02J-103X	MG RESISTOR		
	R 184	NRSA02J-103X	MG RESISTOR		
	RF101	QAU0124-002	FRONT END		
	T 111	QQR0796-001	COIL BLOCK		
	T 142	QQR0973-001	IFT		
	X 121	QAX0402-001	CRYSTAL		

Packing materials and accessories parts list

Block No. M 3 M M
Block No. M 5 M M



■ Parts list (Packing)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPA02503505P	POLY BAG	1		
	P 2	LV20983-030A	CARTON BOX	1	RX-5020VBK	
		LV20983-038A	CARTON BOX	1	RX-5022VSL	
	P 3	LV20925-001A	PACKING PAD	1		
	P 4	LV20926-001A	PACKING PAD	1		
	P 5	QPC06507015P	POLY BAG	1		

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	RM-SRX5020J	REMOCON	1		
	A 2	----------	BATTERY	2		
	A 3	LVT0850-001A	INST BOOK	1	ENG	J
		LVT0850-002A	INST BOOK	1	ENG,FRE	C
	A 4	EWP503-001C	ANT.WIRE	1		
	A 5	QAL0204-001	AM LOOP ANT	1		
	A 6	BT-51028-1	J=REGIST CAR	1		J
	A 7	YU20333	SAFETY INST.	1		
	A 8	BT-52004-2	WARRANTY CARD	1		C
	A 9	BT-20071B	SERVICE NETWORK	1		C