

JVC

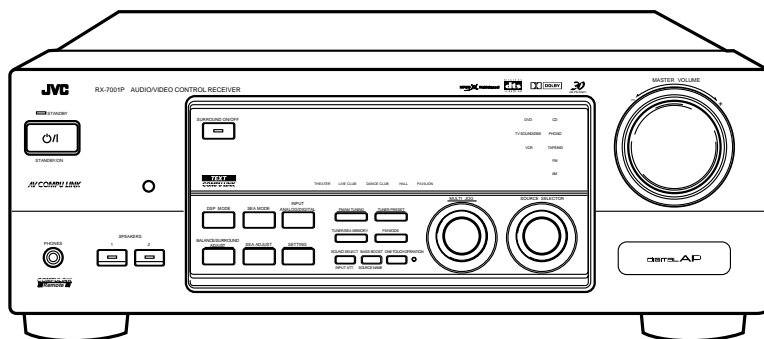
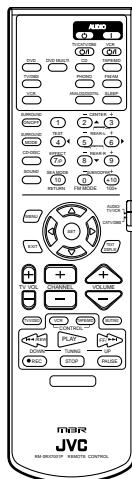
SERVICE MANUAL

AUDIO/VIDEO CONTROL RECEIVER

RX-7001PGD

Area Suffix

A Australia
 UF China
 US Singapore



DIGITAL AP

MPEG  **Multichannel**

TEXT
COMPU LINK

AV COMPU LINK

COMPU LINK
/// Remote ///

3D
3D-PHONIC

DIGITAL
dts
SURROUND

DOLBY
DIGITAL

Contents

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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 current 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.

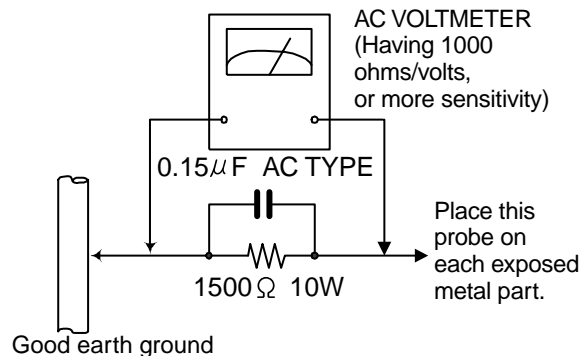
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA 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 measure 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

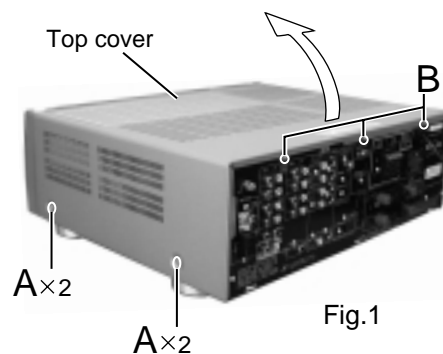
1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety 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 performing repair of this system.

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.



■ 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 CN400 on the main board and CN402 on the power supply board in the front panel assembly.
 2. Cut off the tie band fixing the harness.
 3. Disconnect the harness from connector CN202 on the video board.
 4. Remove the three screws C attaching the front panel assembly.
 5. Remove the five screws D attaching the front panel assembly on the bottom of the body. Detach the front panel assembly toward the front.

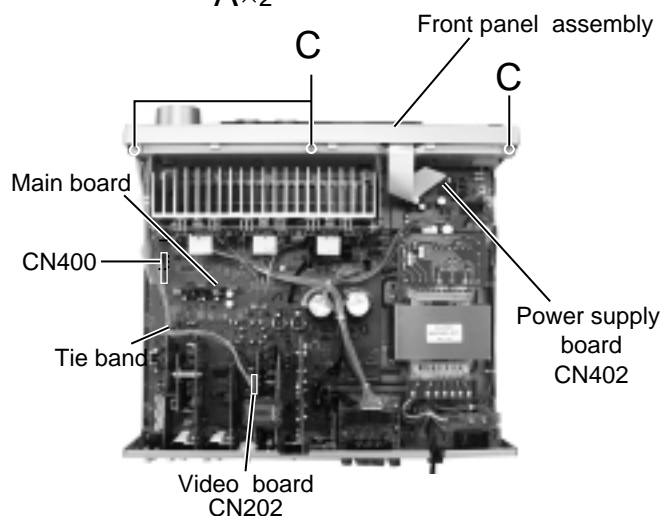


Fig.2

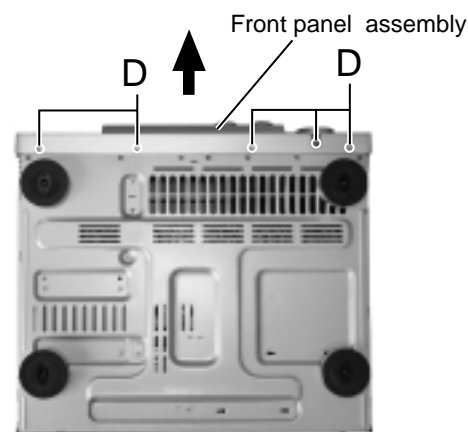


Fig.3

■ 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 twenty-eight screws E attaching the each boards to the rear panel on the back of the body.
 3. Remove the three screws F attaching the rear panel on the back of the body.

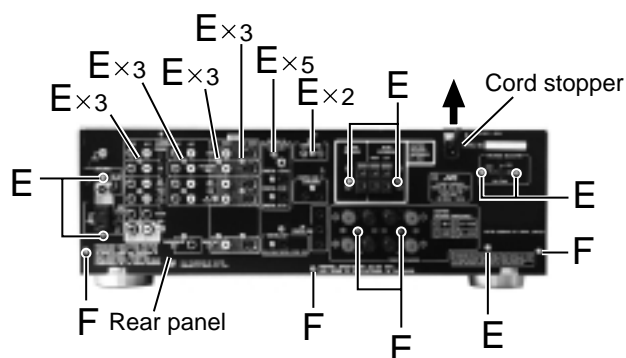


Fig.4

■ Removing each board connected to the rear side of the main board
(See Fig.5 to 9)

• 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 harness from connector CN202 on the video board.
3. Disconnect the tuner board from connector CN101 on the main board.
4. Disconnect the SEA board and the audio board from connector CN452, CN301 and CN302 on the main board.
5. Disconnect the V-audio board from connector CN303 on the main board.
6. Disconnect the relay board 4. Then, disconnect the video board and the S-video board from connector CN201 and CN241 on the main board.
7. Disconnect the DSP board from connector CN501 and CN601 on the main board while removing the DSP board from the bracket fixing the lower part of the DSP board at the same time.
8. Disconnect the compulink board from connector CN255 on the main board.

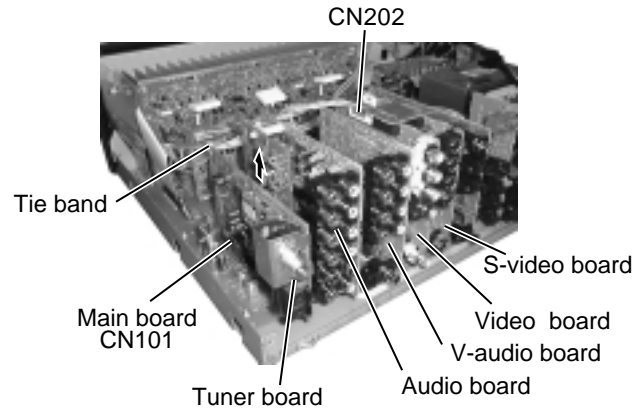


Fig.5

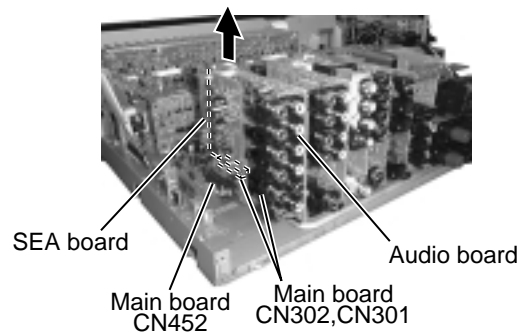


Fig.6

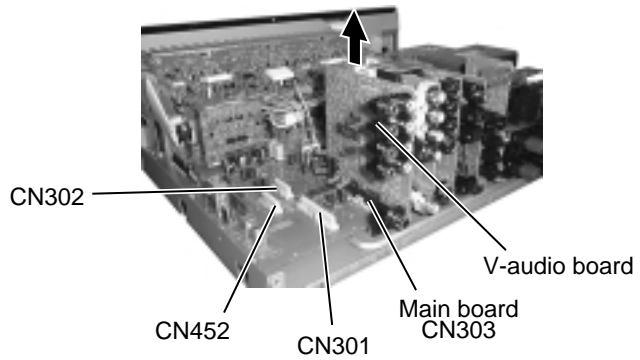


Fig.7

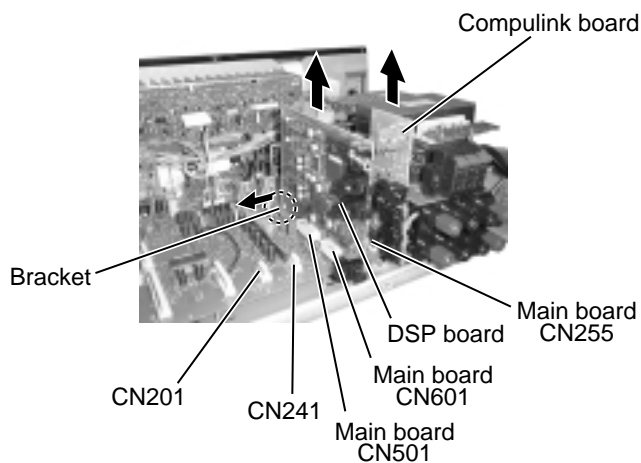


Fig.9

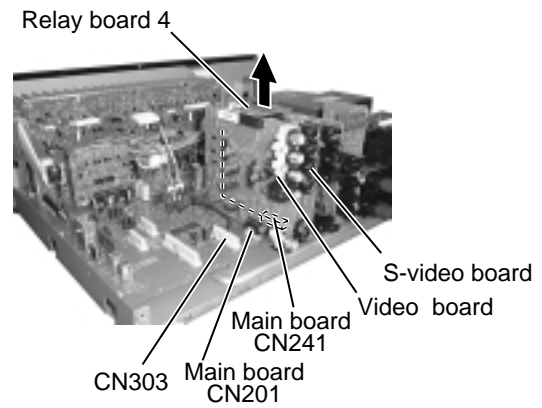


Fig.8

■ Removing the main board / regulator board (See Fig.10 to 12)

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

ATTENTION: It is not necessary to remove the boards connected to the back of the main board. But to disassemble the main board and the power supply board efficiently, remove them.

1. Disconnect the card wire from connector CN400 on the main board.
2. Cut off the three tie bands fixing the harnesses.
3. Disconnect the harness from connector CN811 on the power transformer board.
4. Disconnect the relay board 1,2 and 3 from the main board and the power supply board.
5. Disconnect the harness from connector CN704, CN821, CN901, CN711, CN712, CN931 and CN932.
6. Remove the screw G attaching the regulator board to the heat sink cover.
7. Remove the four screws H attaching the main board to the heat sink cover.
8. Remove the five screws I and the screw J attaching the main board to the chassis base (The resistor board will come off at the same time).

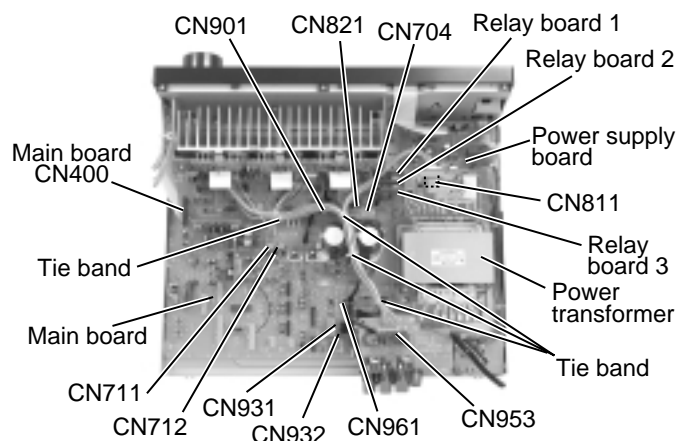


Fig.10

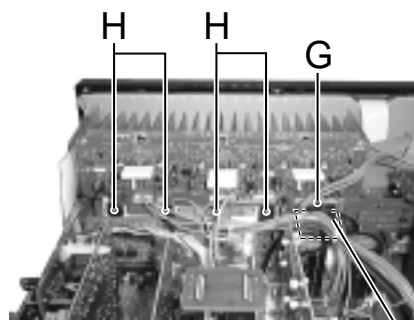


Fig.11 Regulator board

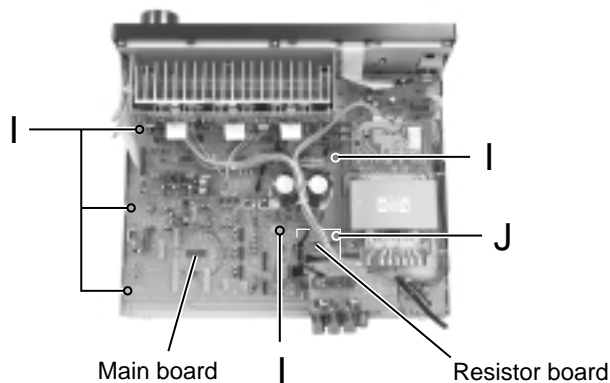


Fig.12

■ Removing the resistor board (See Fig.13)

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

1. Disconnect the harness from connector CN881 on the resistor board.
2. Remove the screw J attaching the resistor board.

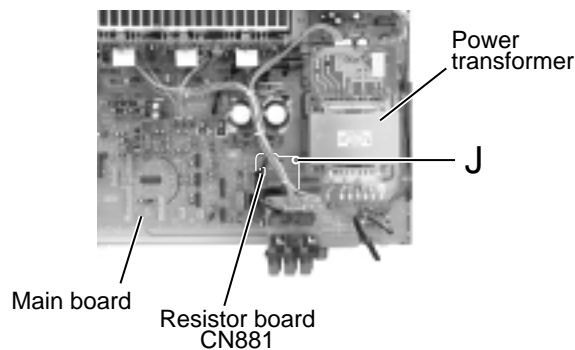


Fig.13

■ Removing the amplifier board
(See Fig.10 and 14)

- Prior to performing the following procedure, remove the top cover.
1. Cut off the four tie bands fixing the harnesses.
 2. Disconnect the harnesses from connector CN711, CN712, CN704 and CN901 on the main board respectively.
 3. Disconnect the harnesses from connector CN953 on the SP terminal board.
 4. Remove the four screws K and six screws L attaching the amplifier board.

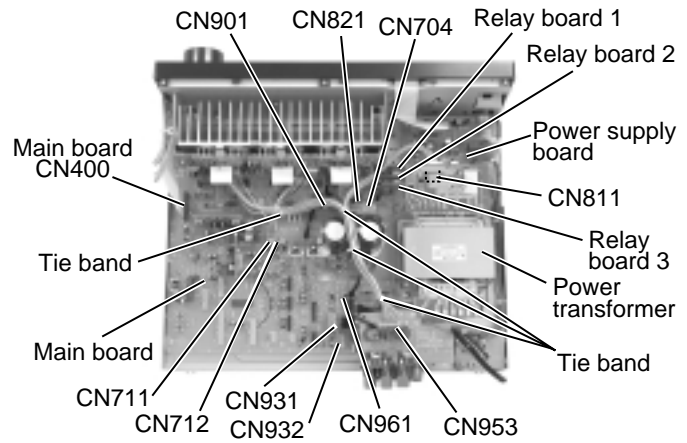


Fig.10

■ Removing the power transformer
(See Fig.15)

- Prior to performing the following procedures, remove the top cover.
1. Unsolder the seven harnesses connected to the power transformer.
 2. Disconnect the harness from connector CN811 and the harnesses connected to connector CN55 and CN56 on the power transformer board.
 3. Remove the four screws M attaching the power transformer.

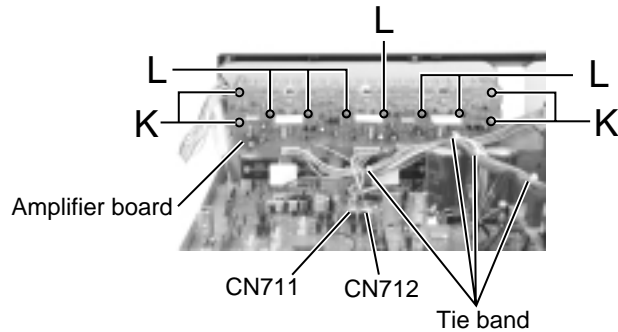


Fig.14

■ Removing the Voltage selector board
(See Fig.16)

- Prior to performing the following procedure, remove the top cover and the rear panel.
1. Unsolder the six harnesses connected to the Voltage selector board.

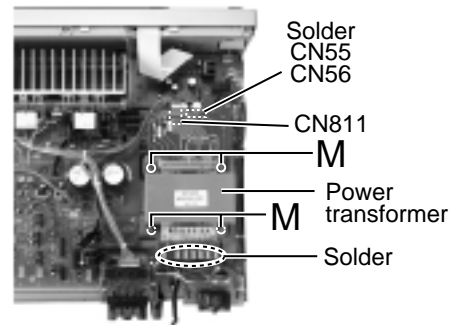


Fig.15

■ Removing the power / fuse board
(See Fig.17)

- Prior to performing the following procedure, remove the top cover and the rear panel.
1. Remove the screw N attaching the power / fuse board.
 2. Unsolder the power cord and other harnesses connected to the power / fuse board.

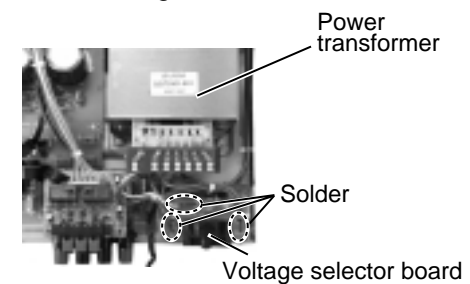


Fig.16

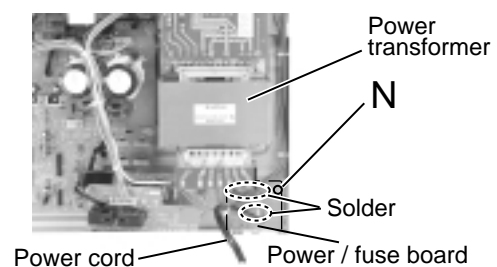


Fig.17

■ Removing the power supply board (See Fig.18 and 19)

- 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 relay board 1, 2 and 3 from the power supply board and the main board respectively.
 3. Disconnect the harness connected to connector CN55 and CN56 on the power transformer board (If necessary, cut off the band fixing the harness on the side of the base chassis).
 4. Remove the four screws **O** attaching the power supply board and pull out the power supply board from the front bracket backward.
 5. Unsolder the three harnesses connected to the power supply board.

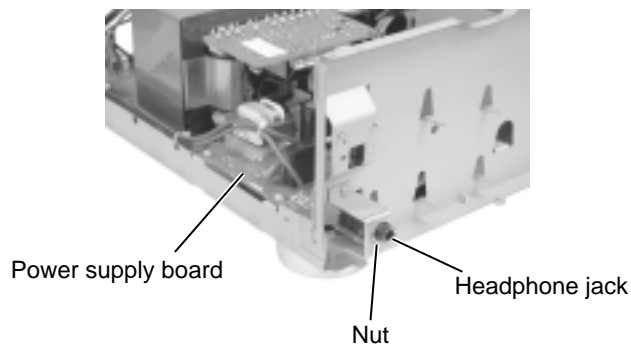


Fig.18

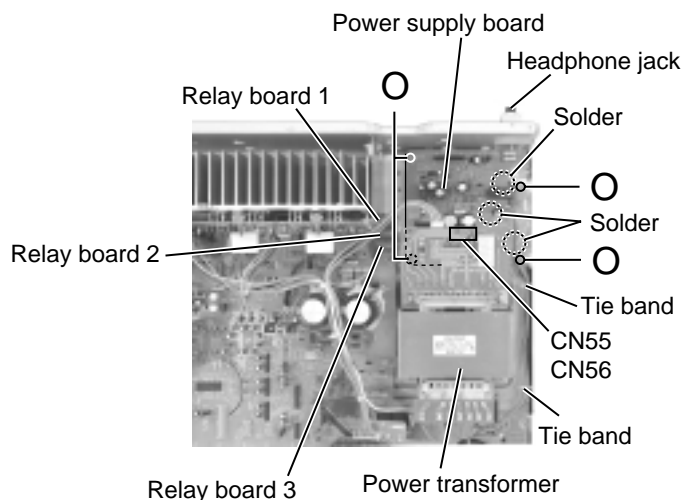


Fig.19

■ Removing the system control board / power switch board (See Fig.20 to 21)

- 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 six screws **P** attaching the system control board on the back of the front panel and disconnect the harness from connector CN422 on the system control board.
 3. Disconnect the harness from connector CN430 on the power switch board.
 4. Remove the five screws **Q** attaching the power switch board.

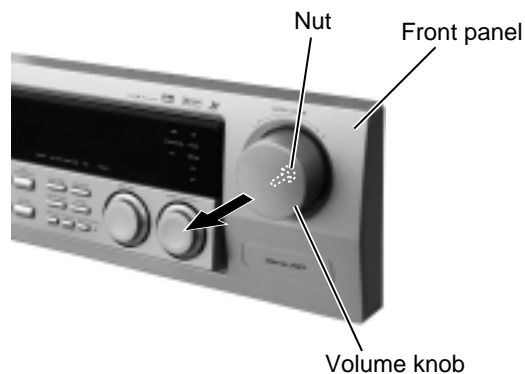


Fig.20

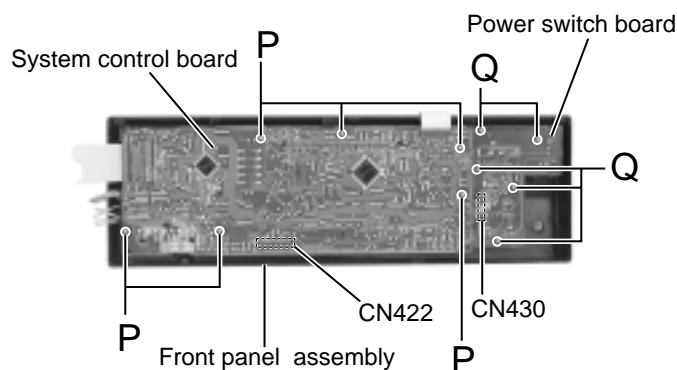


Fig.21

■ Removing the operation switch board
(See Fig.22 to 24)

• Prior to performing the following procedure, remove the top cover, the front panel assembly and the system control board.

1. Remove the six screws R attaching the operation switch board on the back of the front panel.
2. On the back of the front panel, release the four joints by pushing the joint tabs inward. Remove the operation switch board toward the front.
3. Pull out the multi jog knob and the source selector knob.
4. Remove the two screws S attaching the operation switch board.

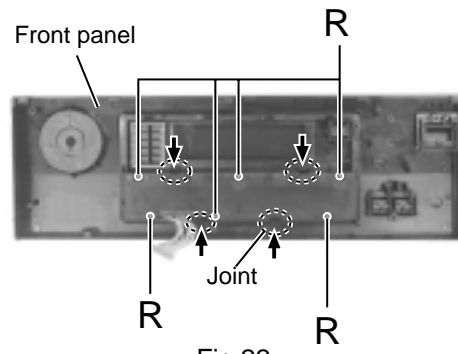


Fig.22

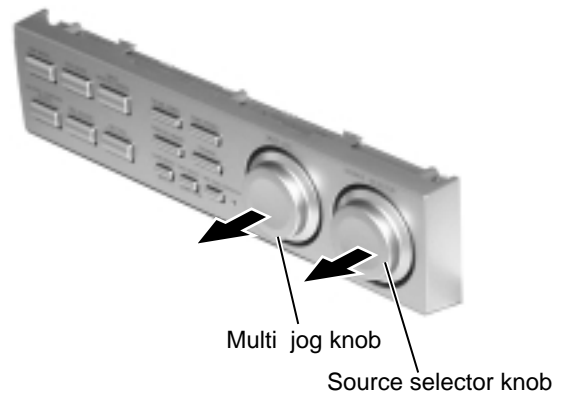


Fig.23

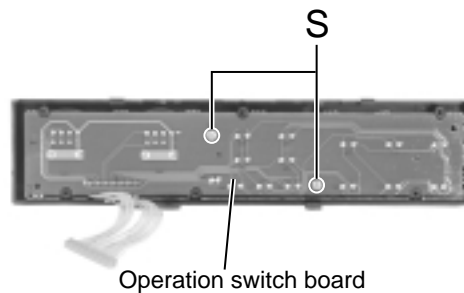


Fig.24

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	TP781
Adjustment part	VR787(Lch) , VR788(Rch)

Attention

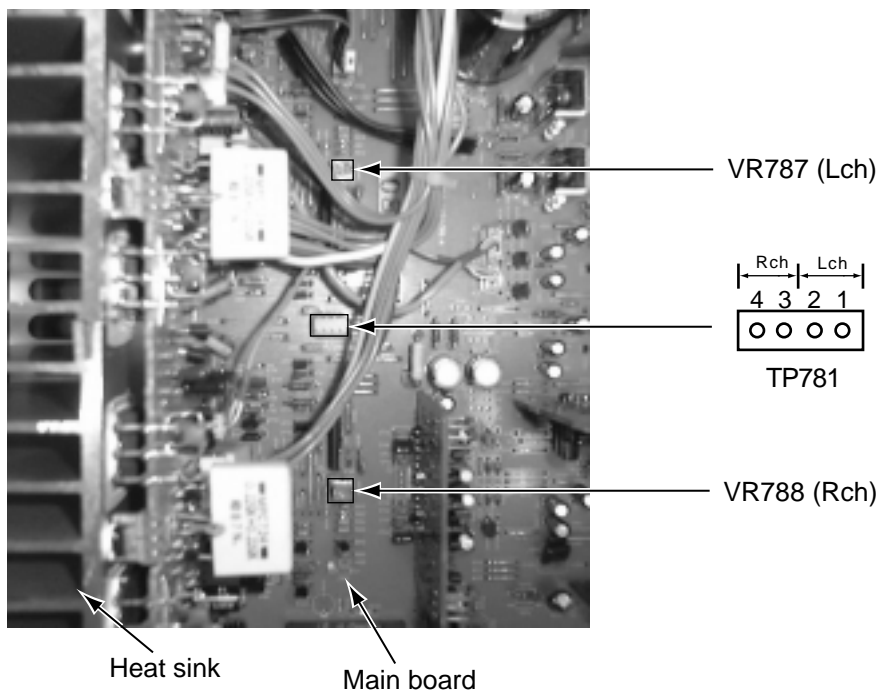
This adjustment does not obtain a correct adjustment value immediately after the amplifier is used (state that an internal temperature has risen).

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 VR787 and VR788 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 TP781's pin1 and pin2 (Lch)
And, connect it between pin3 and pin4(Rch).
4. 30 minutes later after power on, adjust VR787 for L-ch, or VR788 for R-ch so that the DC voltmeter value has 1mV~10mV.

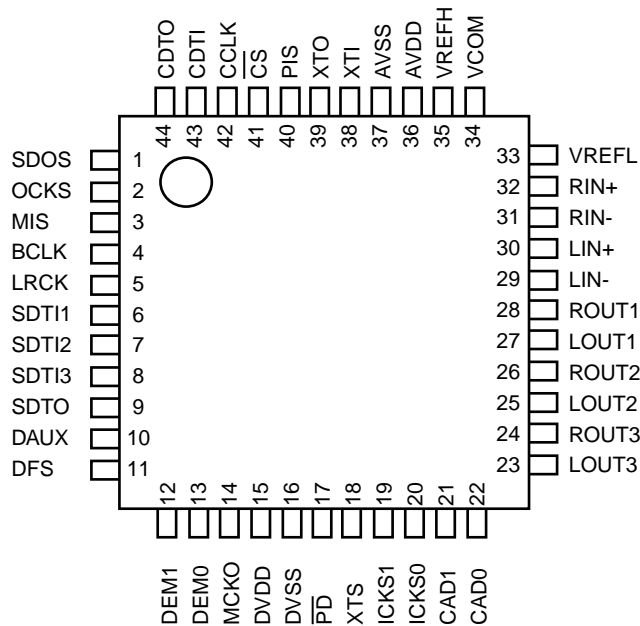
* It is not abnormal though the idling current might not become 0mA even if it is finished to turn variable resistance (VR787, VR788) in the direction of counterclockwise.



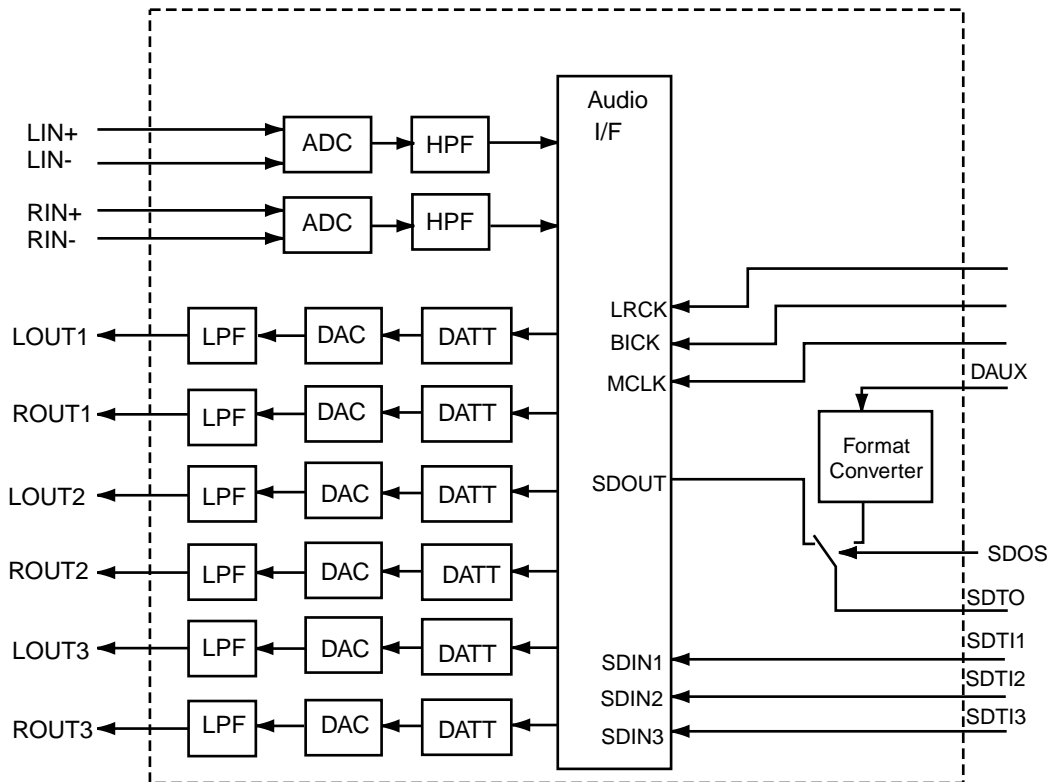
Description of major ICs

■ AK4527 (IC601) : A/D,D/A Converter

1.Pin layout



2.Block diagram



Block Diagram (DIR and AC-3) DSP are external parts)

3. Pin function (1/2)

AK4527(1/2)

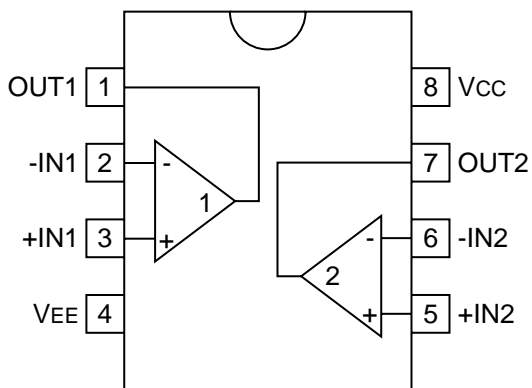
No.	Pin name	I/O	Function
1	SDOS	I	SDTO Source select pin "L" : Internal ADC output, "H" : DAUX input ORed with serial control register if P/S="L".
2	OCKS	I	MCKO Clock frequency select pin "L" : MCLK, "H" : MCLK/2. ORed with serial control register if P/S= "L".
3	MIS	I	Connect to GND
4	BICK	I	Audio serial data clock pin
5	LRCK	I/O	Input/Output channel clock pin
6	SDTI1	I	DAC1 Audio serial data input pin
7	SDTI2	I	DAC2 Audio serial data input pin
8	SDTI3	I	DAC3 Audio serial data input pin
9	SDTO	O	Audio serial data output pin
10	DAUX	I	AUX Audio serial data input pin
11	DFS	I	Double speed sampling mode pin "L" : Normal speed, "H" : Double speed, the ADC is powered down. ORed with serial control register if P/S="L".
12	DEM1	I	De-emphasis pin ORed with serial control register if P/S="L"
13	DEM0	I	De-emphasis Pin ORed with serial control register if P/S="L"
14	MCKO	O	Master clock output pin
15	DVDD	-	Digital power supply pin
16	DVSS	-	Digital ground pin
17	$\overline{\text{PD}}$	I	Power-down & Reset pin When "L", the AK4527 is powered-down and the control registers are reset to default state. If the state of CAD0-1 changes, then the AK4527 must be reset by PDN.
18	XTS	I	X'tal oscillator Select/Test mode pin "H" : X'tal Oscillator selected "L" : External clock source selected
19	ICKS1	I	Input clock select 1 pin
20	ICKS0	I	Input clock select 0 pin
21	CAD1	I	Chip address pin Used during the serial control mode.
22	CAD0	I	Chip address pin Used during the serial control mode.
23	LOUT3	O	Lch #3 analog output pin
24	ROUT3	O	Rch #3 analog output pin
25	LOUT2	O	Lch #2 analog output pin
26	ROUT2	O	Rch #2 analog output pin
27	LOUT1	O	Lch #1 analog output pin
28	ROUT1	O	Rch #1 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

3.Pin function (2/2)

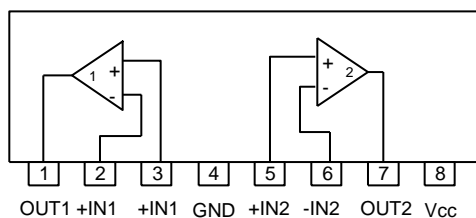
AK4527(2/2)

No.	Pin Name	I/O	Function
33	VREFL	I	Negative voltage reference Input pin, AVSS
34	VCOM	O	Common voltage output pin,AVDD/2 Large external capacitor around 2.2uF is used to reduce power-supply noise
35	VREFH	I	Positive voltage reference input pin,AVDD
36	AVDD	-	Analog power supply pin
37	AVSS	-	Analog ground pin
38	XTI	I	X'tal input pin
39	XTO	O	X'tal output pin if XTS="H"
	MCKI	I	External master clock input pin if XTS="L"
40	P/S	I	Parallel/Serial select pin "L" : Serial control mode, "H" : Parallel control mode
41	DIF0	I	Audio data interface format pin in parallel mode
	CS	I	Chip select pin in serial mode
42	DIF1	I	Audio data interface format pin in parallel mode
	CCLK	I	Control data clock pin in serial mode
43	LOOP0	I	Loop back mode pin in parallel mode Enables digital loop-back from ADC to 3 DACs.
	CDTI	I	Control data input pin in serial mode
44	LOOP1	I	Loop back mode pin in parallel mode Enable all 3 DAC channels to be input from SDTII.
	CDTO	O	Control data output pin in serial mode

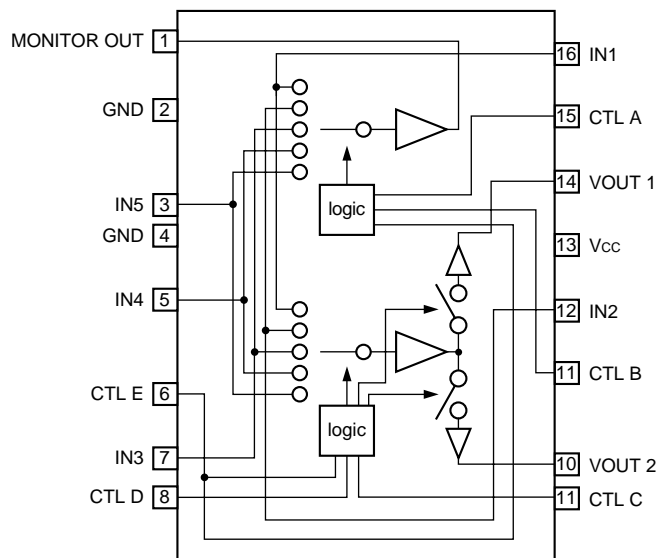
■ BA15218F(IC303):OP AMP.



■ BA15218N (IC501, IC510, IC511) : Dual Ope. Amp.



■ BA7625 (IC242,IC201) / BA7626 (IC241): Video selector



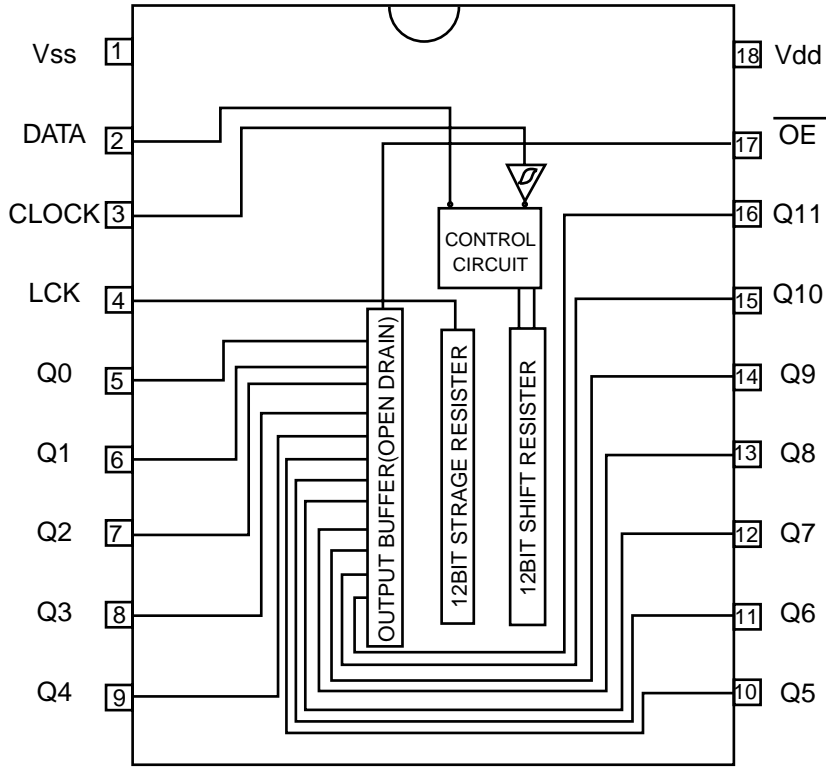
A	B	E	MONITOR OUT
L	L	*	IN1
H	L	*	IN2
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

C	D	E	VOUT1
L	L	*	--
H	L	*	IN2
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

C	D	E	VOUT2
L	L	*	IN1
H	L	*	--
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

■ BU2092(IC402,IC405):LED Controller

1. Terminal Layout

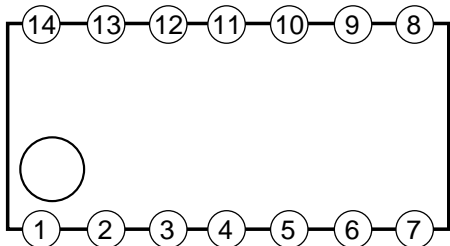


2. Pin Function

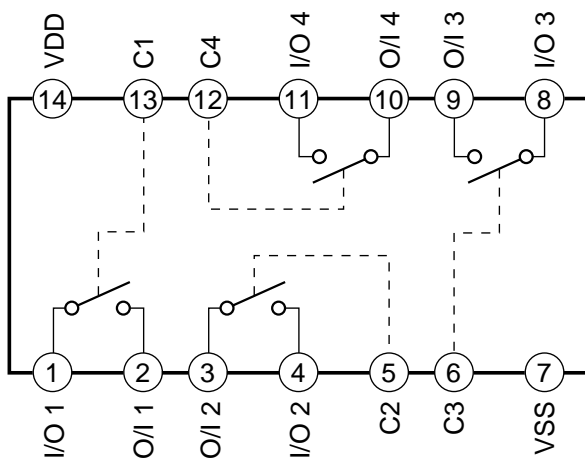
Pin No.	Symbol	I/O	Function						
1	Vss	-	Connect to GND						
2	DATA	I	Serial Data input						
3	CLOCK	I	Shift Clock of Data						
4	LCK	I	Latch Clock of Data						
5~16	Q0~Q11	O	Parallel Data Output <table border="1" style="margin-left: 20px;"> <tr> <td>Latch Data</td> <td>L</td> <td>H</td> </tr> <tr> <td>OUTPUT</td> <td>ON</td> <td>OFF</td> </tr> </table>	Latch Data	L	H	OUTPUT	ON	OFF
Latch Data	L	H							
OUTPUT	ON	OFF							
17	$\overline{\text{OE}}$	I	Output Enable						
18	Vdd	-	Power Supply						

■ BU4066BCF (IC602,IC611) : Switch

1.Pin Layout

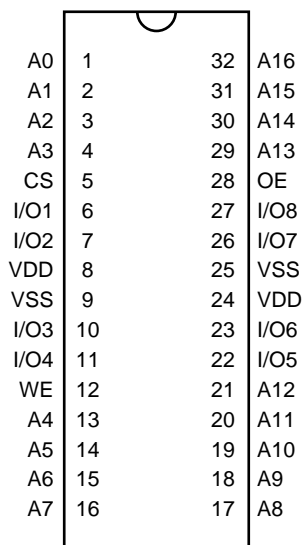


2.Block Diagram

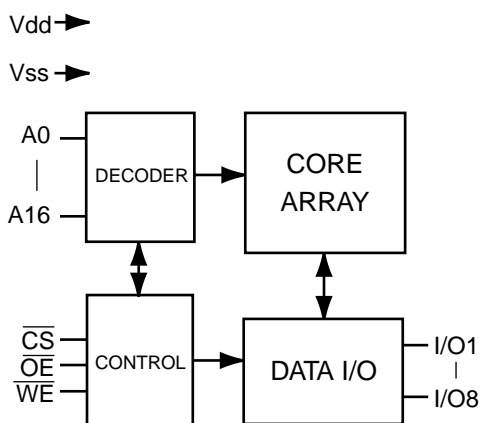


■ W24L011AJ-15(IC641):SDRAM

1.Pin layout



2.Block diagram

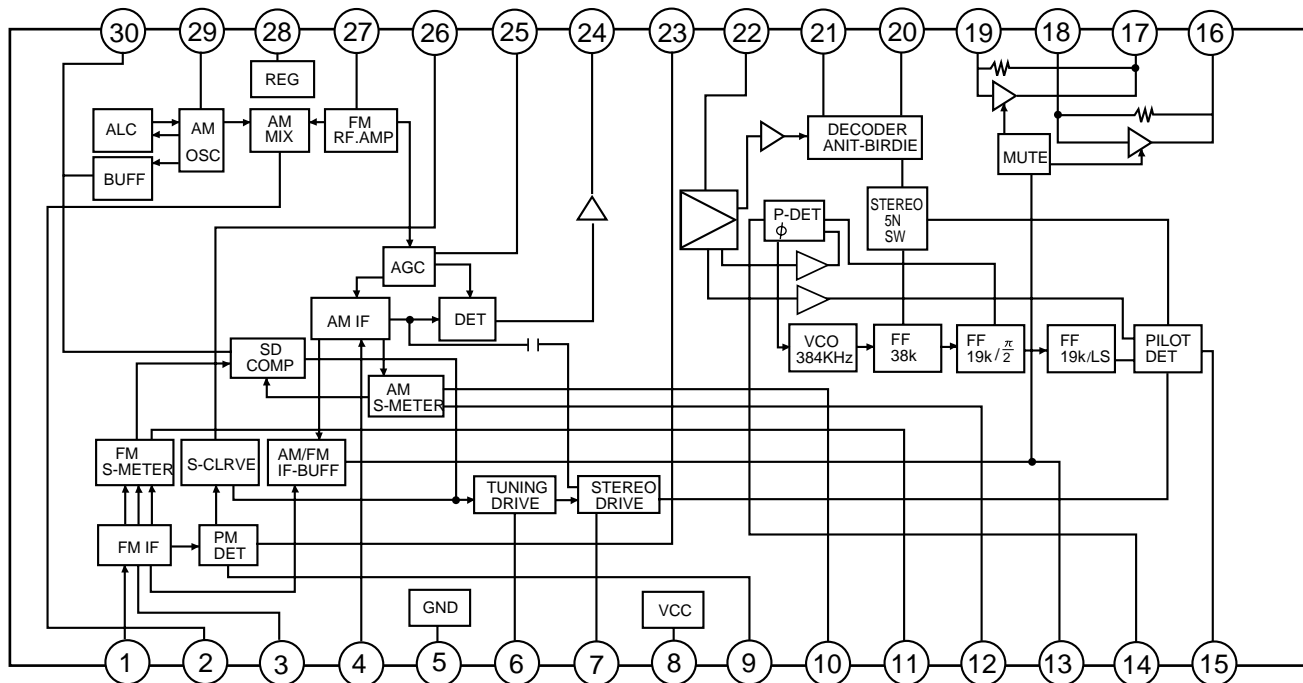


3.Pin function

Symbol	Description
A0~A16	Address inputs
I/O1~I/O8	Data inputs/outputs
CS	Chip select inputs
WE	Write enable input
OE	Output enable input
Vdd	Power supply
Vss	Ground

■ LA1838(IC102): FM AM IF AMP&detector, FM MPX Decoder

1. Block Diagram



2. Pin Function

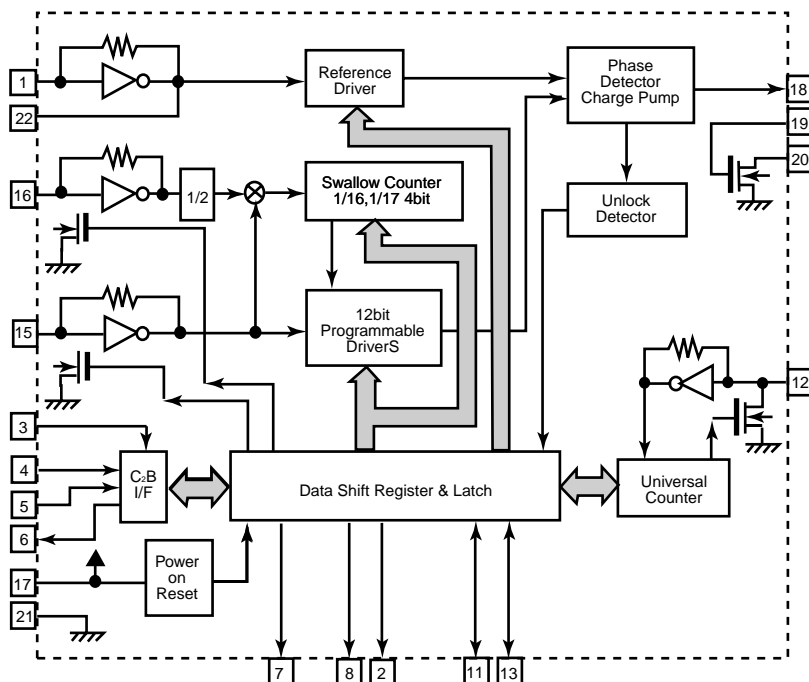
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.	16	R OUT	O	Right channel signal output.
2	AM MIX	O	This is an out put terminal for AM mixer.	17	L OUT	O	Left channel signal output.
3	FM IF	I	Bypass of FM IF	18	R IN	I	Input terminal of the Right channel post AMP.
4	AM IF	I	Input of AM IF Signal.	19	L IN	I	Input terminal of the Left channel post AMP.
5	GND	—	This is the device ground terminal.	20	RO	O	Mpx Right channel signal output.
6	TUNED	O	When the set is tuning,this terminal becomes "L".	21	LO	O	Mpx Left channel signal output.
7	STEREO	O	Stereo indicator output. Stereo "L", Mono: "H"	22	IF 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/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	MONO/ST	O	Stereo : "H", Mono: "L"	30	OSC BUFFER	O	AM Local oscillation Signal output.

■ LC72136N (IC121) : PLL Frequency synthesizer

1. Pin layout

XT	1	22	XT
FM/AM	2	21	GND
CE	3	20	LPFOUT
DI	4	19	LPFIN
CLOCK	5	18	PD
DO	6	17	VCC
FM/ST/VCO	7	16	FMIN
AM/FM	8	15	AMIN
	9	14	
	10	13	IFCONT
SDIN	11	12	IFIN

2. Block diagram

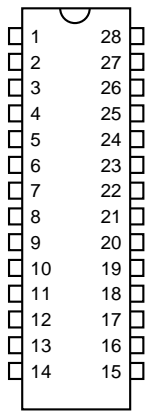


3. Pin function

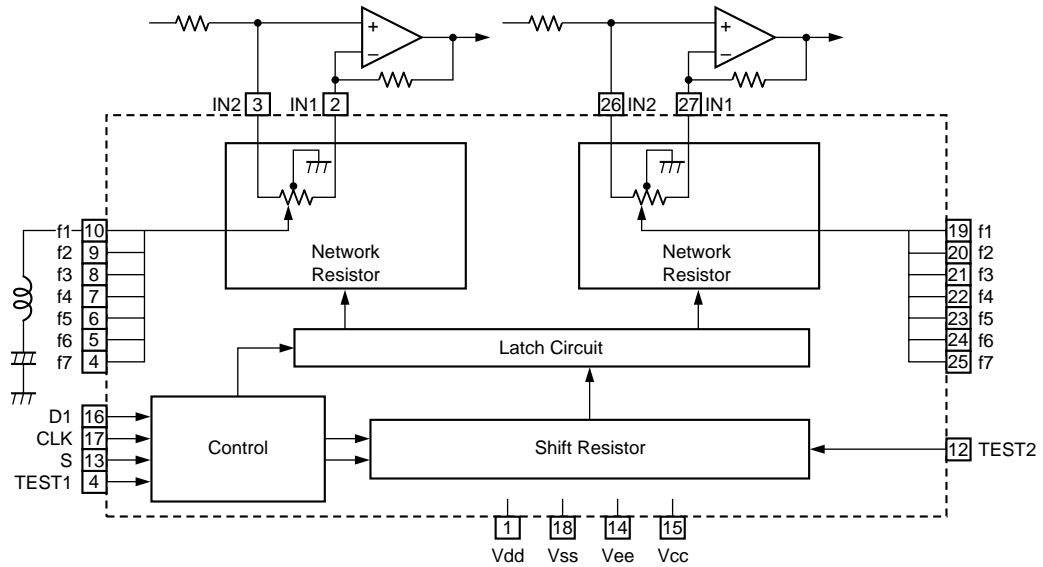
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	FM/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14	-	-	Not use
4	DI	I	Input for receive the serial data 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 supply(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	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	XT	I	X'tal oscillator(75KHz)

■ LC7522 (IC451) : SEA Control

1.Pin layout



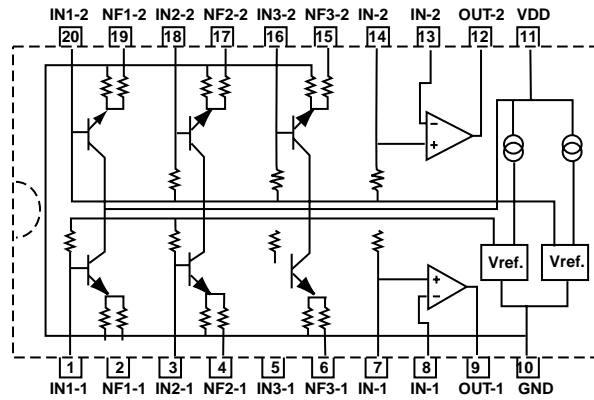
2.Block diagram



3.Pin function

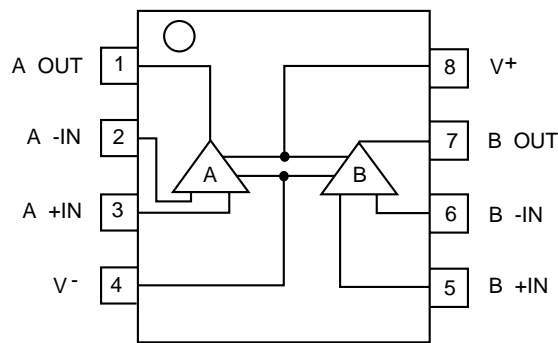
Pin No.	Symbol	Function
1	V _{DD}	Power Supply terminal for Audio signal +7V(typ)
18	V _{SS}	Power Supply terminal 0V
14	V _{EE}	Power Supply terminal for Audio signal. Single channel use, joint VSS.
15	V _{CC}	Power Supply terminal +5V(typ)
2,27 3,26	IN 1 IN 2	Audio signal Input terminal IN1 joint opposite input of Operation amp. IN2 joint inapposite input of Operation amp. It have Right and Left.
16	D1	Data input terminal from CPU Shumit inverter style
17	CLK	Clock input terminal from CPU Shumit inverter style
4~10 19~25	f1~f7	Joint terminal of B.P.F. f1~f7 X Right, Left Total 14 terminal
11 12	TEST1 TEST2	Internal test terminal of IC It can use open condition
13	S	Select terminal for 2 tip use "1" input, key code 7C3 - VDD joint "0" input, key code 7C2 - VEE joint
28	NC	No use

■ M5243AP12(IC452):S.E.A.Graphic equalizer



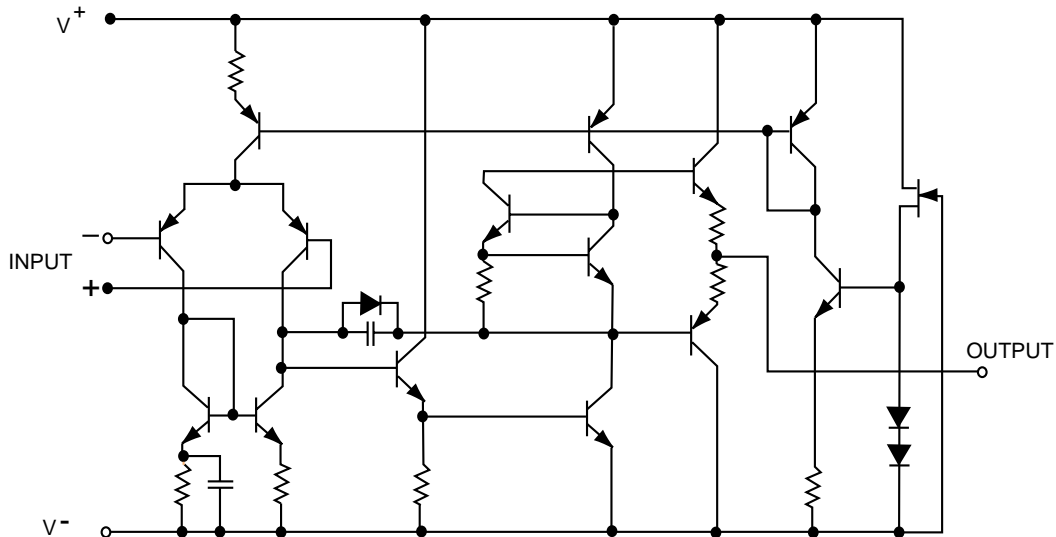
■ NJM4580D (IC301, IC302, IC306) : LPF, Mic and H.phone Amp.

1.Terminal layout



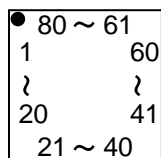
(TOP VIEW)

2.Block diagram



■ MN101C15FDE (IC401) : System control micon

1. Pin layout

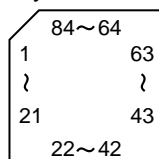


2. Pin function

Pin No	Symbol	Functions	Pin No	Symbol	Functions
1	GND	Ground	41	VIDEO3	VIDEO 3 signal terminal
2	DVD-S/C	DVD S/C signal select terminal	42	VIDEO4	VIDEO 4 signal terminal
3	VCR1-S/C	VCR1 S/C signal select terminal	43	S.MUTE	Source mute control terminal
4	VIDEO-S/C	VIDEO S/C signal select terminal	44	—————	No use
5	TV-S/C	TV S/C select terminal	45	—————	No use
6	4/8-IN	4 ohm / 8 ohm select signal terminal	46	—————	No use
7	—————	—————	47	RDS-DATA	RDS control signal terminal
8	GND	Ground	48	—————	No use
9	PROTECT	Protect	49	RDS-CLK	RDS control signal clock
10	GND	Ground	50	DSP-READY	DSP control signal clock
11	VDD	Power supply	51	DSP-RESET	DSP reset signal terminal
12	OSC 12	Oscillation terminal	52	M/CS	Control signal from IC400
13	OSC 11	Oscillation terminal	53	M-RESET	Reset signal from IC400
14	VSS	Ground	54	M-STATUS	Status signal from IC400
15	X1	Ground	55	M-COMMAND	Command signal from IC400
16	X0	Ground	56	M-CLK	Clock signal from IC400
17	GND	Ground	57	SEA-CLK	SEA clock signal from terminal
18	TEXT-OUT	Text signal output terminal	58	SEA-DATA	SEA data signal terminal
19	TEXT-IN	Text signal input terminal	59	VL/VH	Connect to power supply board
20	MASTER	Master signal terminal	60	4/8 OUT	4 ohm / 8 ohm select signal terminal
21	DSP-COMMAND	DSP control signal terminal	61	SW-DATA	Switch data signal terminal
22	DSP-STATUS	DSP control signal terminal	62	SW-CLK	Switch clock signal terminal
23	DSP-CLK	DSP control signal terminal	63	VOL-STB	Volume strobe signal terminal
24	—————	No use	64	VOL-DATA	Volume data signal terminal
25	RESET-IN	Reset signal input terminal	65	VOL-CLK	Volume clock signal terminal
26	TUNER-CE	Tuner chip enable	66	SW-STB	Switch strobe signal terminal
27	TUNER-CLK	Tuner clock signal terminal	67	—————	No use
28	—————	No use	68	—————	No use
29	TUNER-DATA	Tuner control signal terminal	69	FR1-RELAY	Relay 1 signal terminal
30	TUNER-MUTE	Tuner mute signal terminal	70	FR2-RELAY	Relay 2 signal terminal
31	TUNER-IN	Tuner signal input terminal	71	CNTR-RELAY	Center speaker relay terminal
32	STEREO-IN	Stereo signal input terminal	72	SUR-RELAY	Surround speaker relay terminal
33	RDS-ST	No use	73	SUB-MUTE	SUB woofer out mute control
34	M-BUSY	Busy signal from IC400	74	LED-LCK2	LED latch clock signal terminal
35	INH	No use	75	C.TONE3	Center tone 3 signal terminal
36	OSD-DATA	OSD data signal input terminal	76	C.TONE2	Center tone 2 signal terminal
37	OSD-STB	OSD standby signal terminal	77	C.TONE1	Center tone 1 signal terminal
38	OSD-CLK	OSD clock signal terminal	78	LED-LCK1	LED latch clock signal terminal
39	VIDEO1	VIDEO 1 signal terminal	79	LED-DATA	LED data signal terminal
40	VIDEO2	VIDEO 2 signal terminal	80	LED-CLK	LED clock signal terminal

■ MN173222DG(IC400):FL Display & Operation switch control

1.Pin layout



2.Key matrix

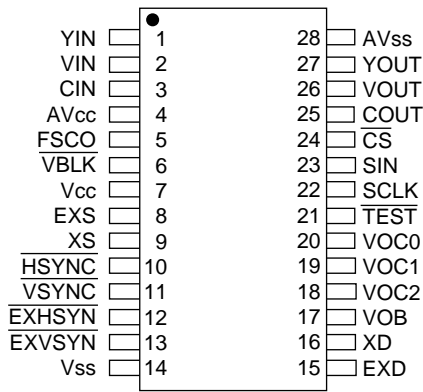
	KEY OUT 0	KEY OUT1	KEY OUT 2	KEY OUT 3	KEY OUT 5
KEY IN 0	POWER	ANALOG/ DIGITAL	SEA ADJUST	FM/AM TUNING	ONE TOUCH OPERATION
KEY IN 1	SURROUND	DSP MODE	FM MODE	TUNER PRESET	————
KEY IN 2	SPEAKER 1	LOUDNESS	LEVEL ADJUST	MEMORY	————
KEY IN 3	SPEAKER 2	SEA MODE	SOUND SELECT	SETTING	————

3.Pin function

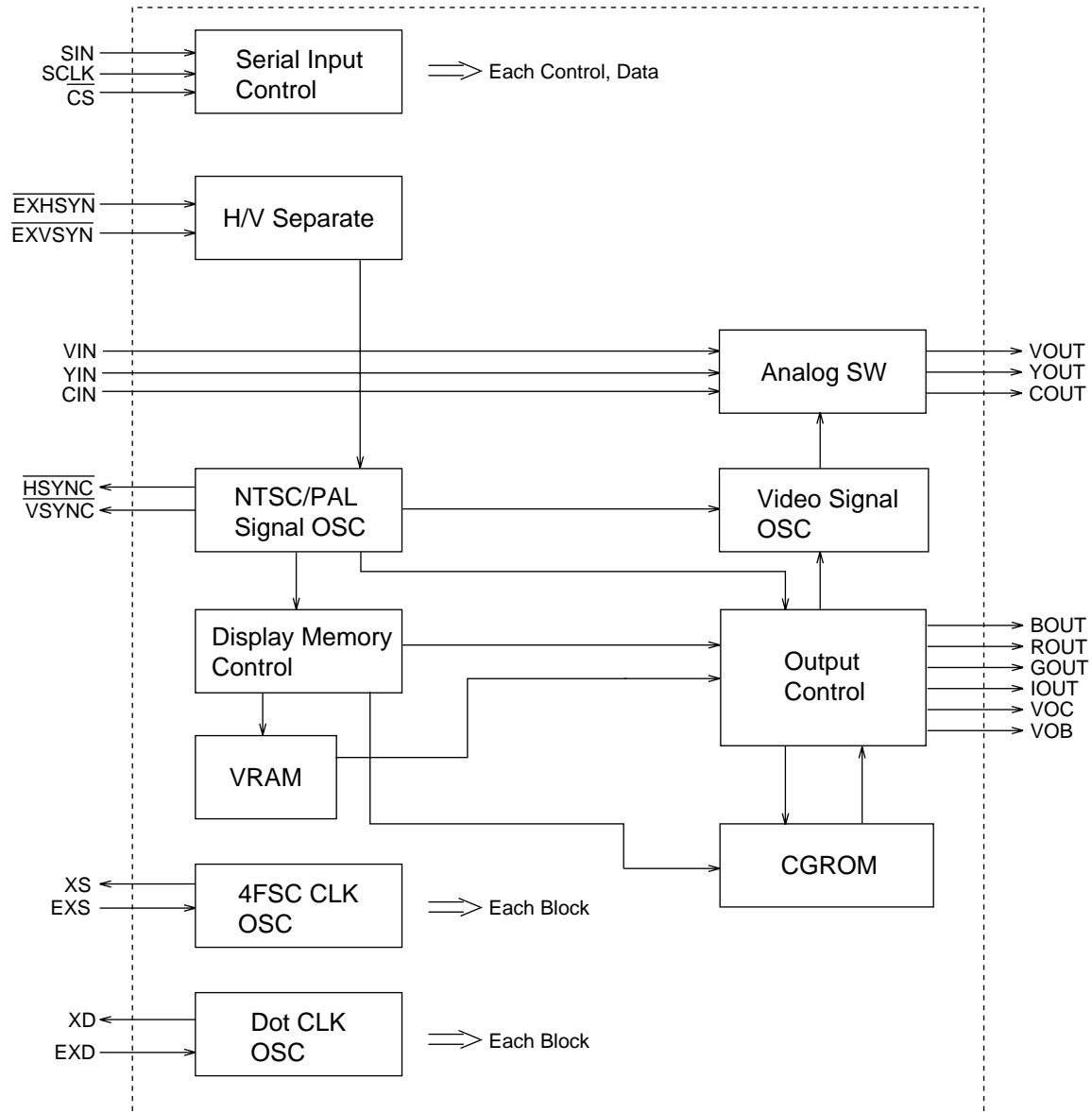
Pin No.	Symbol	I/O	Description
1~22	S22~S1	O	FL Segment control signal
23	VPP	-	Power supply terminal
24~39	G15~G1/KO0~5	O	FL grid control signal / Key matrix output
40,41	JOG1,2	I	Source select JOG1,2
42,43	JOG3,4	I	Volume JOG 3,4
44	M BUSY	O	BUSY Signal output to IC401
45	M CLK	I/O	Clock signal to IC401
46	M COMMAND	I	Command data input from IC401
47	M STATUS	O	Status signal output to IC401
48	M CS	I	Chip select signal input from IC401
49	RM	I	Remote control signal input
50	VCRI	I	AV Compu-link VCR input
51	DCSI	I	AV Compu-link DCS input
52	DCSO	O	AV Compu-link DCS output
53	VCRO	O	AV Compu-link VCR output
54	TVD	O	AV Compu-link TV output
55	TVC	O	AV Compu-link TV control output
56,57	JOG5,6	I	Multi JOG 5,6
58	POWER	I	Power ON control output
59		O	STANDBY LED control H:Lighting
60~63	KI3~KI0	I	Key matrix input
64~67	S36~S33	O	FL Segment control signal
68	RST	I	Reset input
69	X1	-	Connect to GND
70	X2	-	Non connect
71	VSS	-	Connect to GND
72	OSC2	-	Oscillation terminal 6MHz
73	OSC1	-	Oscillation terminal 6MHz
74		-	Not use
75~84	S32~S23	O	FL Segment control signal

■ **MB90088 (IC203) : On screen display controller**

1. Terminal layout



2. Block diagram

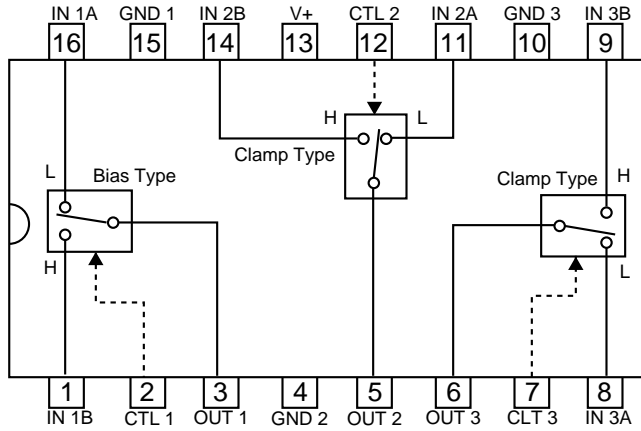


3.Pin functions (MB90088)

pin no	Symbol	I/O	Function
1	YIN	I	Brightness signal Input terminal for Superinpause indication
2	VIN	I	Composite video signal input terminal for Superinpause indication
3	CIN	I	Contrast signal input terminal for Superinpause indication
4	AVcc	-	Analog power supply terminal
5	IOUT	O	Color (Brightness) signal output terminal
6	VOC	O	Character output terminal
7	Vcc	-	Power supply terminal
8	EXS	I	Clock generater outside circuit terminal for color burst
9	XS	O	
10	$\overline{\text{HSYNC}}$	O	Horizontal signal output terminal
11	$\overline{\text{VSYNC}}$	O	Vertical signal output terminal
12	$\overline{\text{EXHSYN}}$	I	EXT horizontal signal input terminal
13	$\overline{\text{EXVSYN}}$	I	EXT vertical signal input terminal
14	Vss	-	GND
15	EXD	I	Dot clock generater outside circuit signal terminal for indication
16	XD	O	
17	VOB	O	Character & background signal output terminal
18	GOUT	O	Color signal (Green, Red, Blue)
19	ROUT		
20	BOUT		
21	$\overline{\text{TEST}}$	I	Test signal input terminal
22	SCLK	I	Shift clock input terminal for serial transmission
23	SIN	I	Serial data input terminal
24	$\overline{\text{CS}}$	I	Chip select terminal
25	COUT	O	Contrast signal output terminal
26	VOUT	O	Composite video signal output terminal
27	YOUT	O	Brightness signal output terminal
28	AVss	-	Analog GND terminal

■ **NJM2285D (IC202) : Video switch**

1. Terminal layout & Block diagram

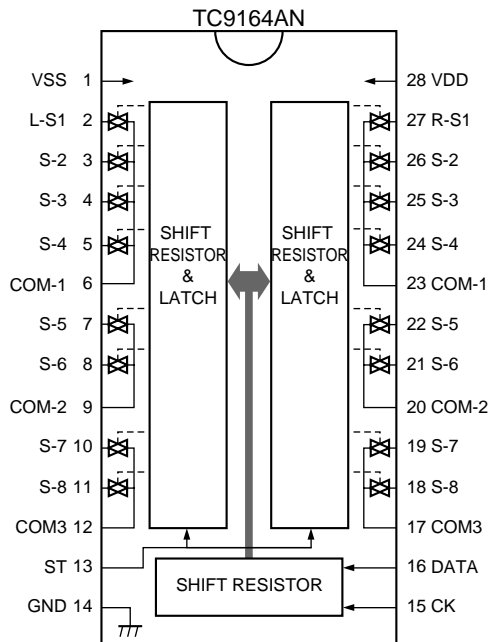


■ **TC9164AN (IC432): Analog switch**

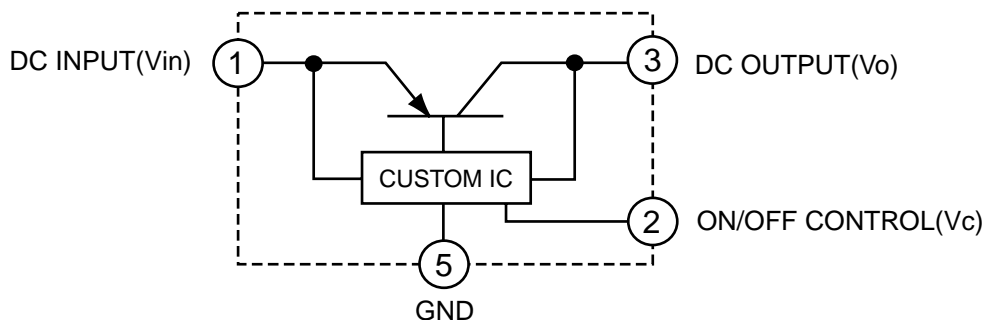
1. Function

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

2. Terminal Lay out & Block Diagram



■ **PQ3DZ53 (IC661, IC663) : Regulator IC**



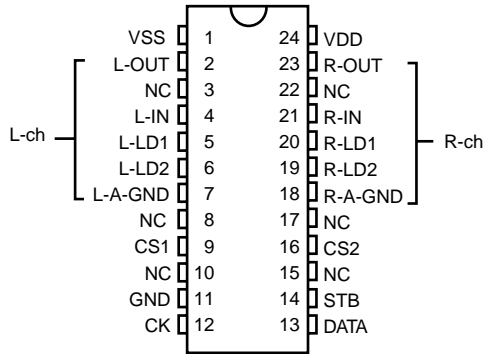
**TC9446F-013(IC631):Digital signal processor for dolby digital
/ DTS audio decode**

Pin No.	Symbol	I/O	Function
1	RST	I	Reset signal input terminal (L:reset H:Operation usually)
2	MIMD	I	Microcomputer interface mode selection input terminal (L:serial H:IC bus)
3	MICS	I	Microcomputer interface chip select input terminal
4	MILP	I	Microcomputer interface latch pulse input
5	MIDIO	I/O	Microcomputer interface data I/O terminal
6	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	TEST0,1	I	Test input terminal 0/1 (L:test H:operation usually)
29~31	LRCKOB,BCKOB,TXO	-	Non connect
32,33	TEST2,3	I	Test input terminal (L:test H:operation usually)
34	RX	I	SPDIF input terminal
35	VSS	-	Ground terminal for digital circuit
36	TSTSUB0	I	Test sub input terminal 0 (L:test H:operation usually)
37	FCONT	O	VCO Frequency control output terminal
38,39	TSTSUB1,TSTSUB2	I	Test sub input terminal 1,2 (L:test H:operation usually)
40	PDO	O	Phase error 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	AMP.input terminal for LPF
44	AMPO	O	AMP.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 detection output terminal
49	VSS	-	Ground terminal for digital circuit
50	WR	O	External SRAM writing signal output terminal
51	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 terminal for oscillation circuit
98,99	XO,XI	I/O	Oscillation I/O terminal
100	VDDX	-	Power supply terminal for oscillation circuit

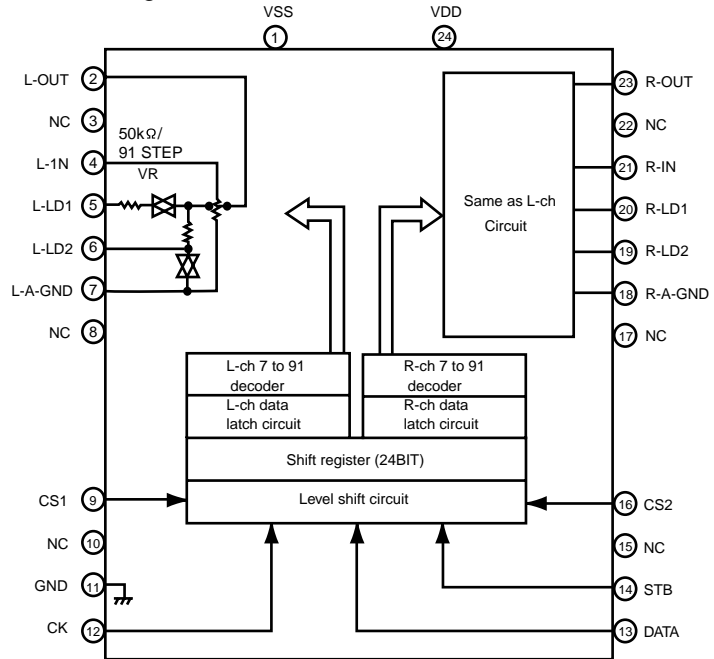
DLCKS terminal	DLONterminal	DLL clock setting
L	L	SCKI input (DLL circuit OFF)
L	H	Four times XI clock
H	L	Three times XI clock
H	H	Six times XI clock

TC9459F (IC331,IC332,IC333) : Electronic volume control

1.Pin layout



2. Block diagram

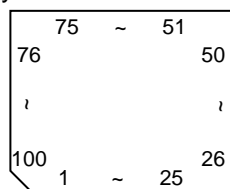


3.Pin function

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	VSS	Negative power supply pin	13	DATA	Volume setup serial data input
2	L-OUT	Volume output pin	14	STB	Data write strobe input
3	NC	No connection	15	NC	No connection
4	NC	No connection	16	CS2	Chip select input pin
5	L-LD1	Loudness tap output pin	17	NC	No connection
6	L-LD2	Loudness tap output pin	18	R-A-GND	Analog GND pin
7	L-A-GND	Analog GND pin	19	R-LD2	Loudness tap output pin
8	NC	No connection	20	R-LD1	Loudness tap output pin
9	CS1	Chip select input pin	21	R-IN	Volume input pin
10	NC	No connection	22	NC	No connection
11	NC	No connection	23	R-OUT	Volume output pin
12	CK	Data transfer clock input	24	VDD	Positive power supply pin

■ UPD78F4216AGC(IC671):UNIT CPU

1.Pin layout

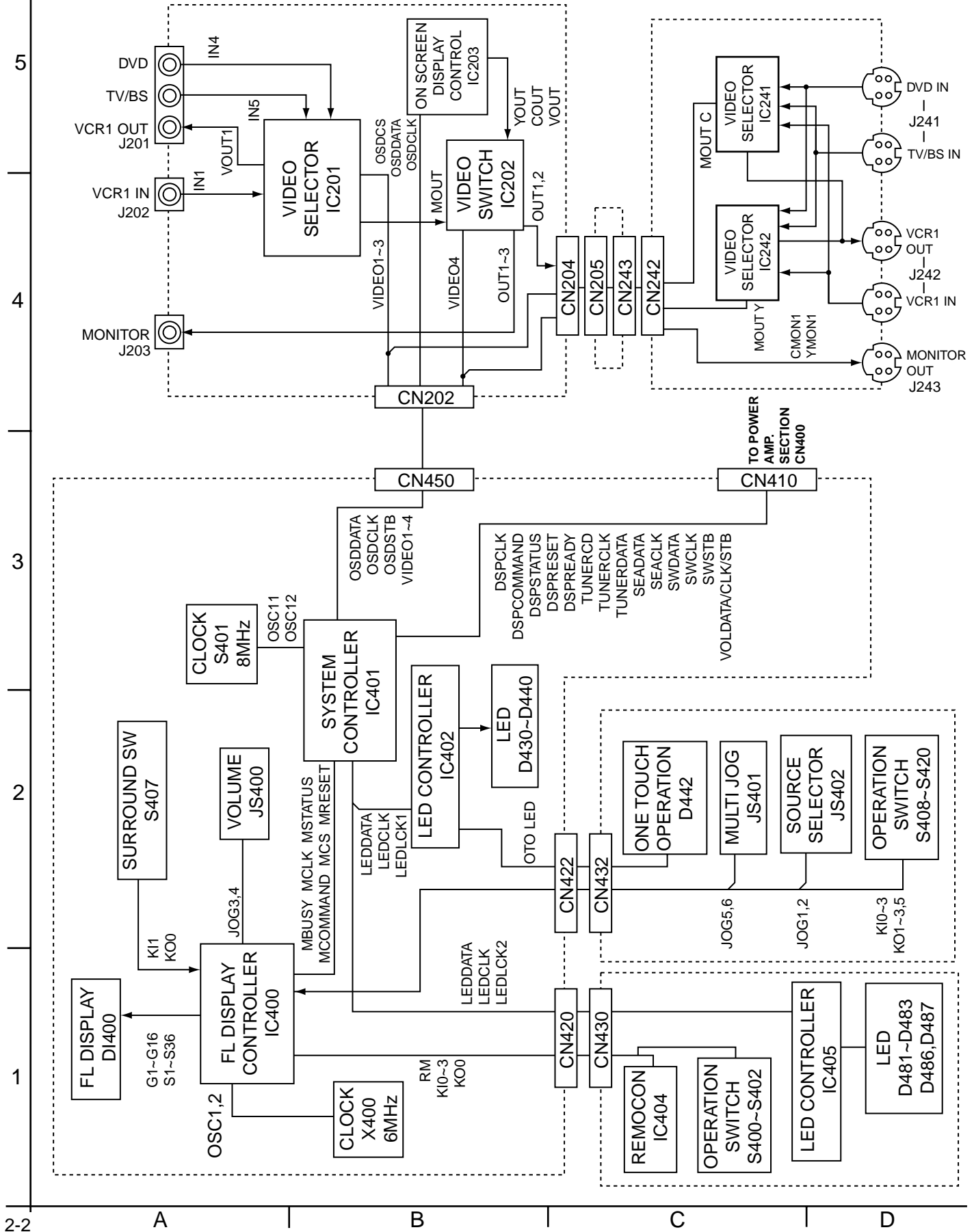


2.Pin function

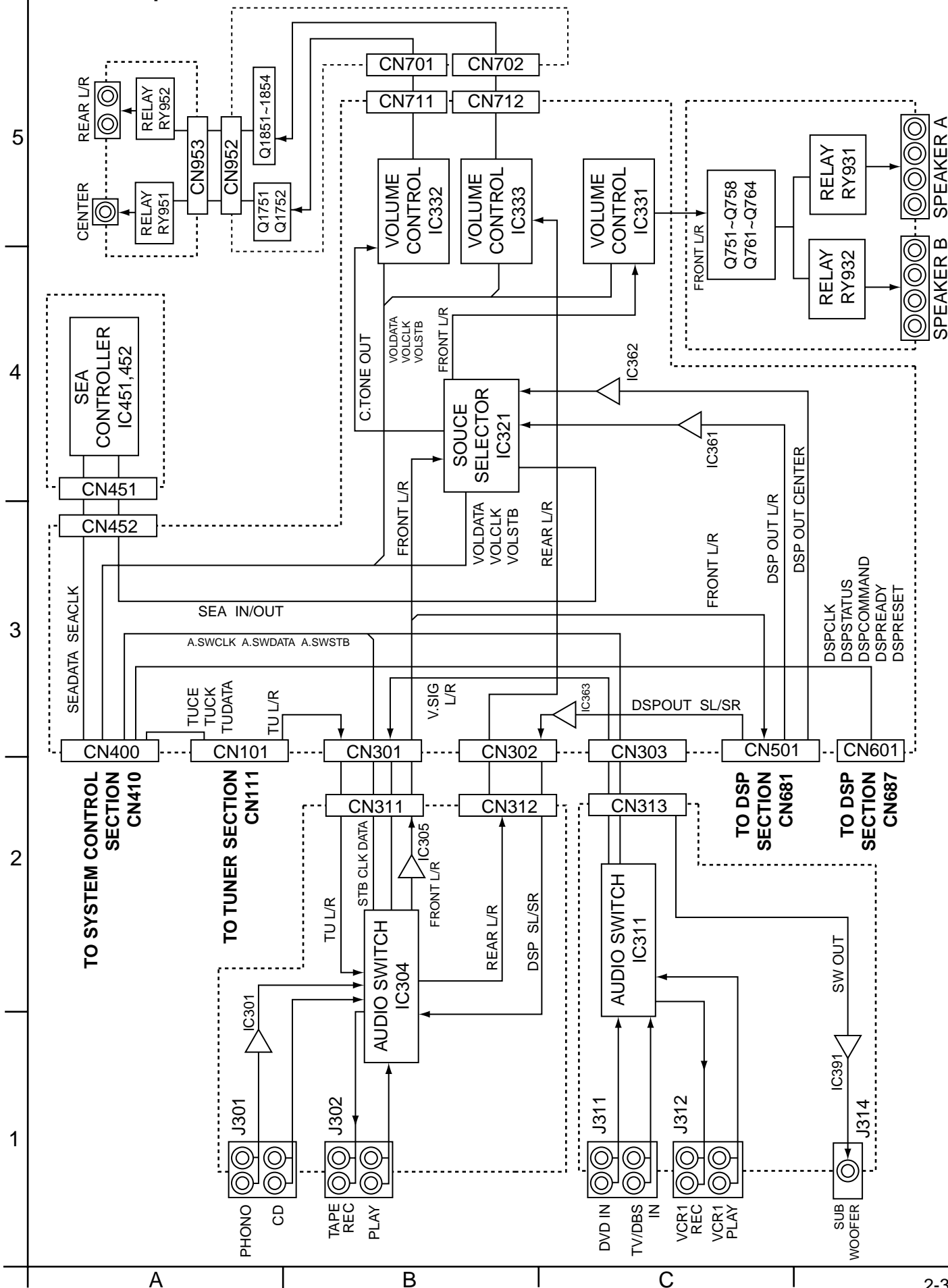
Pin No.	Symbol	I/O	Function
1~8		-	Non connect
9	VDD	-	Power supply terminal
10	X2	O	Connecting the crystal oscillator for system main clock
11	X1	I	Connecting the crystal oscillator for system main clock
12	VSS	-	Connect to GND
13	XT2	O	Connecting the crystal oscillator for system sub clock
14	XT1	I	Connecting the crystal oscillator for system sub clock
15	RESET	I	System reset signal input
16	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	RSTDET	I	Reset signal input
23	AVDD	-	Power supply terminal
24	AVREF0	-	Connect to GND
25~32		-	Connect to GND
33	AVSS	-	Connect to GND
34,35		-	Non connect
36		-	Power supply terminal
37,38	RX,TX	-	Not use
39		-	Non connect
40	DSPCOM	I	Communication port from IC401
41	DSPSTS	O	Status communication port to IC401
42	DSPCLK	I	Clock input from IC401
43	DSPRDY	I	Ready signal input from IC401
44		-	Non connect
45,46	MIDIO_IN/OUT	I/O	Interface I/O terminal with microcomputer
47	MICK	O	Interface I/O terminal with microcomputer of clock signal
48	MICS	O	Interface I/O terminal with microcomputer of chip select
49	MILP	O	Interface I/O terminal with microcomputer
50	MIACK	O	Interface I/O terminal with microcomputer
51,52		-	Non connect
53	DSPRST	O	Reset signal output of DSP
54~63		-	Non connect
64,65	CDTI/CDTO	I/O	Interface I/O terminal with microcomputer
66	CCLK	O	Interface I/O terminal with microcomputer of clock signal
67	CS	O	Interface I/O terminal with microcomputer of chip select
68	XTS	O	OSC Select
69,70		-	Non connect
71	PD	O	Reset signal output
72	GND	-	Connect to GND
73~80		-	Non connect
81	VDD	-	Power supply
82	3D-ON	-	Non connect
83	3D-ON	O	Switch at output destination of surround channel
84	ANA/T-TONE	O	Test tone control
85	REF-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	S.MUTE	O	Mute of the audio signal is controlled
89		-	Non connect
90~93	ASW1~4	O	Selection of digital input selector
94	TEST	-	Test terminal
95~100		-	Non connect

Block diagrams

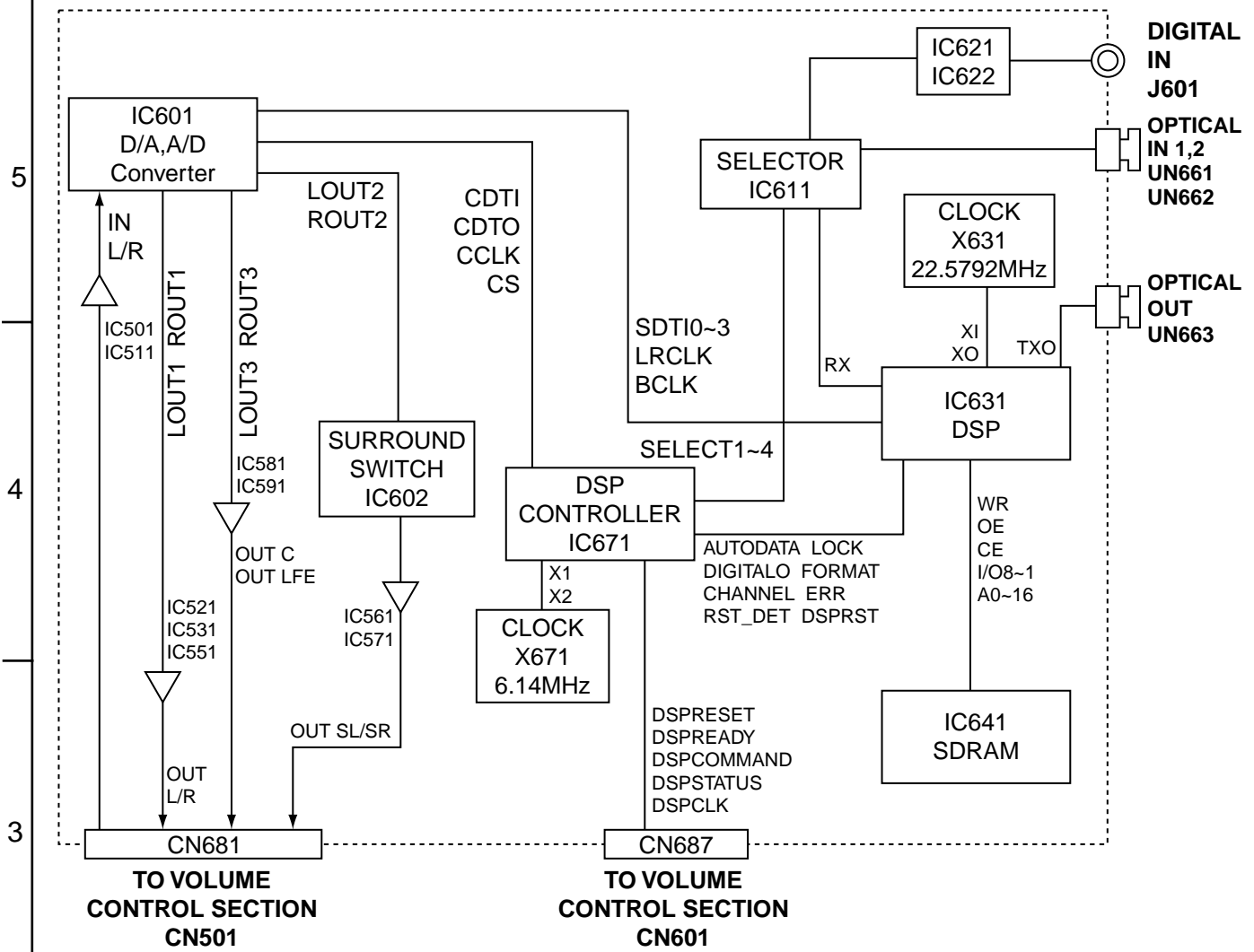
■ System control & Video I/O section



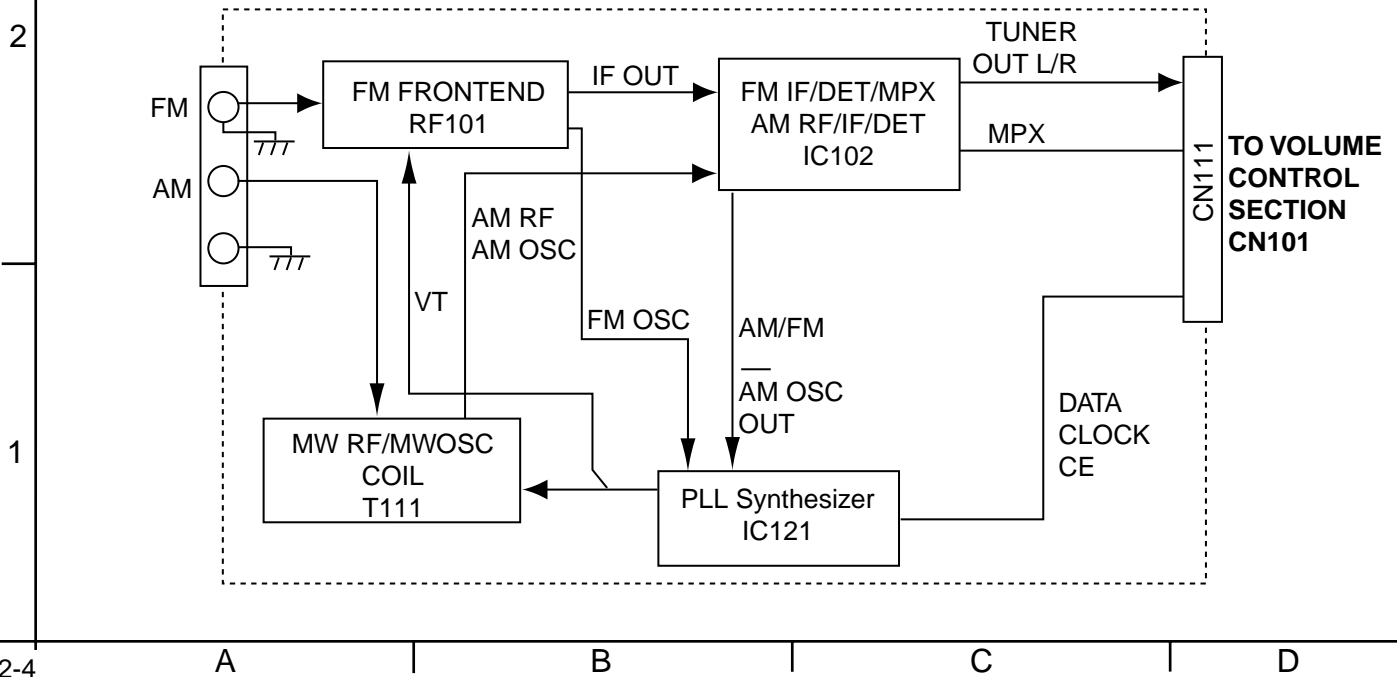
■ Main amplifier & Audio I/O section



■ DSP Section



■ Tuner section



Standard schematic diagrams

■ Power supply section

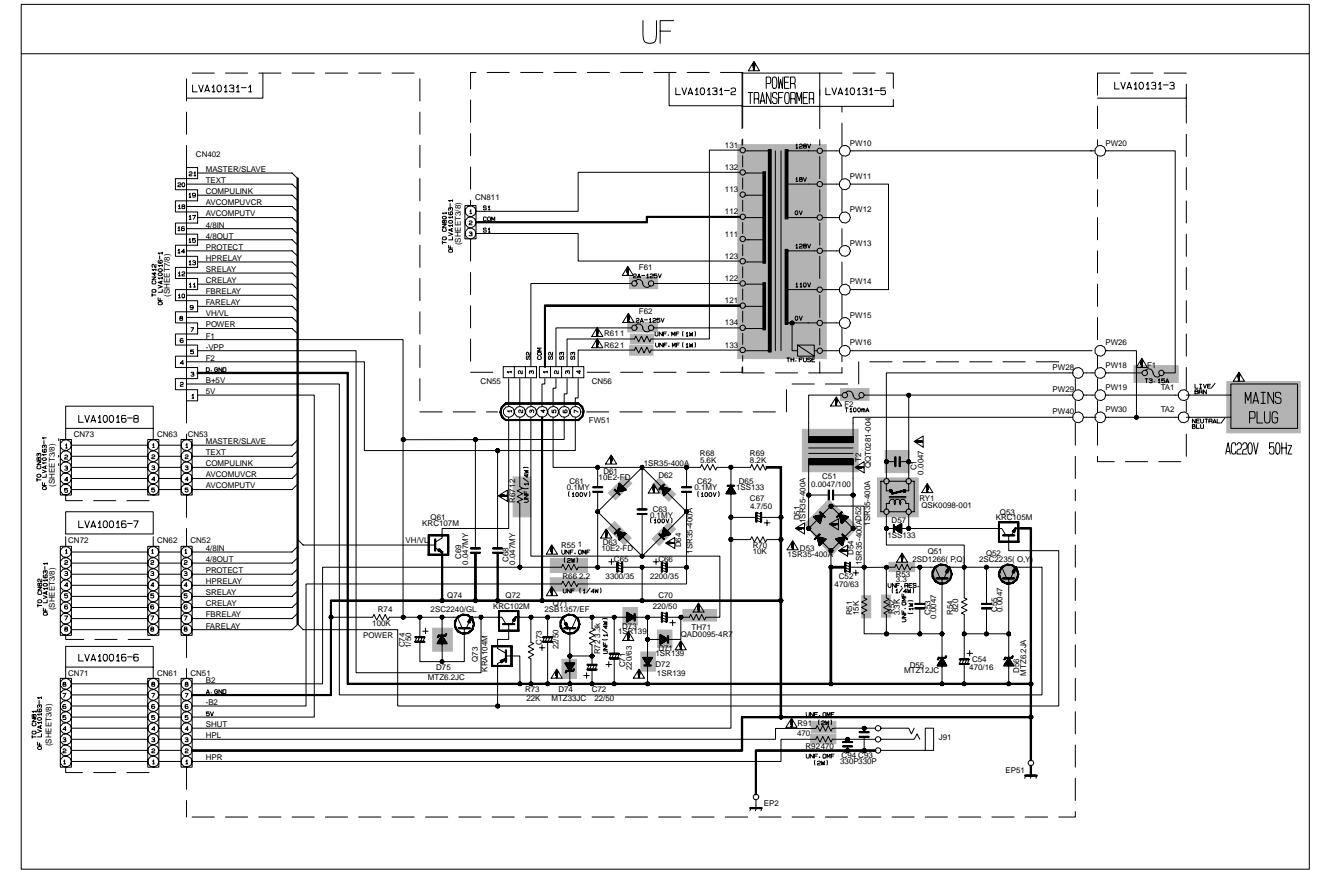
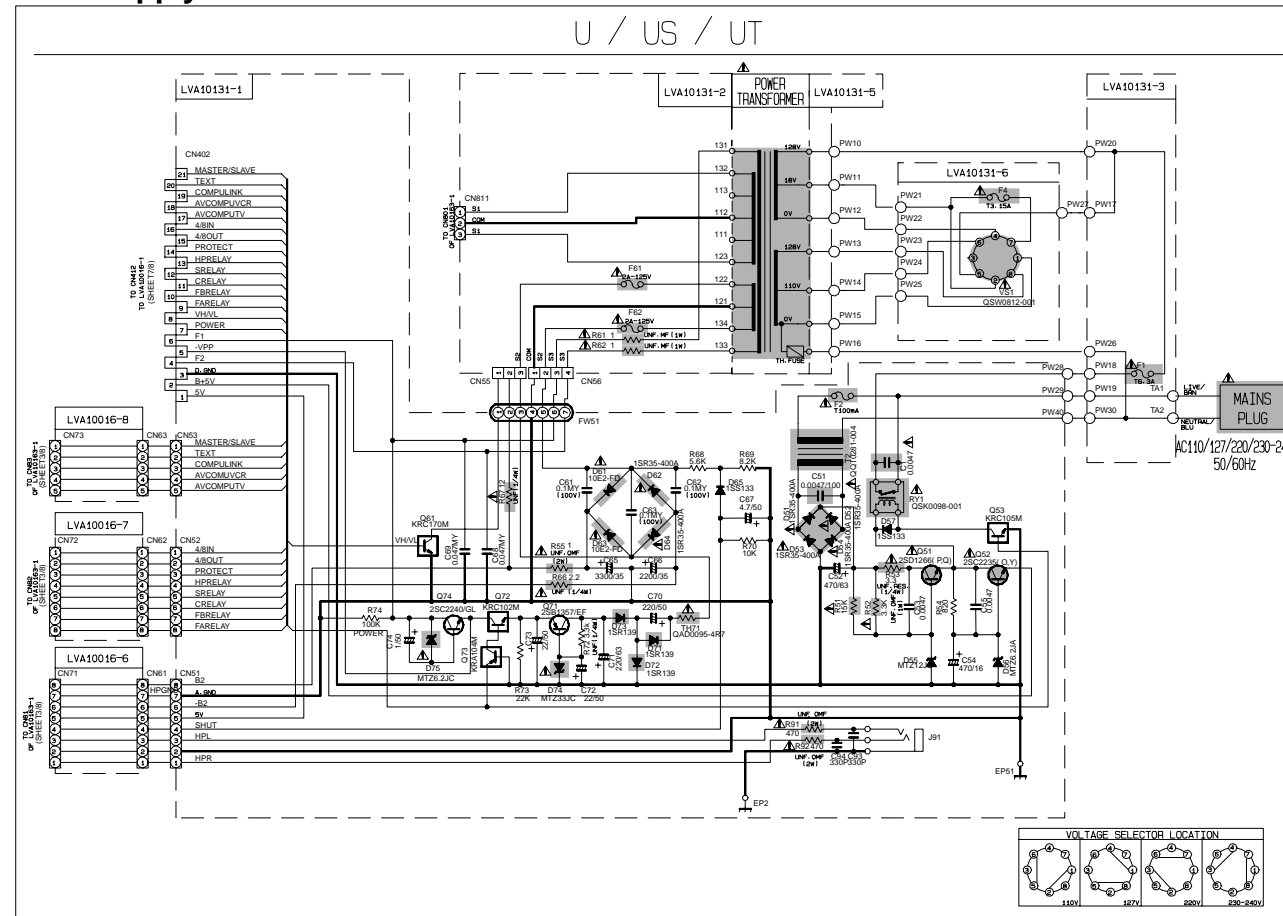
5

4

3

2

1



VERSION CODES	
US :	SINGAPORE
UT :	TAIWAN
UF :	CHINA
A :	AUSTRALIA
U :	UNIVERSAL EXCEPT ALL OF ABOVE

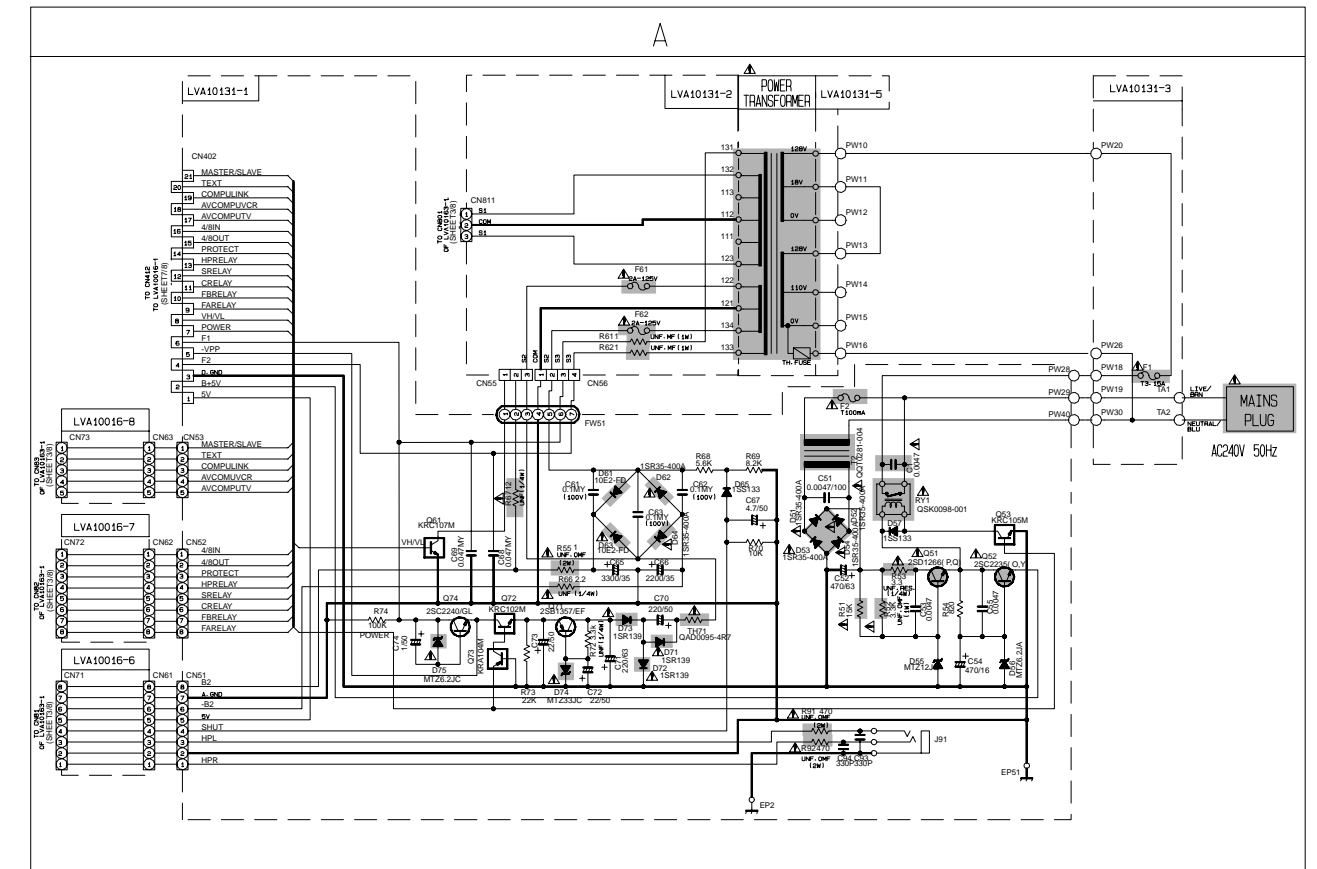
SHEET NUMBER	CIRCUIT DESCRIPTION
1/8	PRIMARY / RECTIFIER
2/8	VOLUME (FRONT/CENTER/REAR ch.) / SEA / SOURCE SELECT IC
3/8	AUDIO AMP (FRONT ch.) / SPEAKER TERMINAL (FRONT ch.) / REGULATOR / RECTIFIER
4/8	AUDIO AMP (CENTER/REAR ch.) / SPEAKER TERMINAL (CENTER/REAR ch.)
5/8	AUDIO SIGNAL INPUT TERMINAL / SOURCE SELECT IC / SYSTEMCONTROL SIGNAL TERMINAL
6/8	VIDEO SIGNAL INPUT TERMINAL / SOURCE SELECT IC
7/8	USER CONTROL KEYS / SYSTEMCONTROL LSI / FL DISPLAY
8/8	SURROUND IC / DIGITAL SIGNAL INPUT TERMINAL

NOTES:
 MARK (*) IS TO SHOW DEVIATION IN VERSIONS.
 DETAILS ARE EXPLAINED NEAR THE MARK.

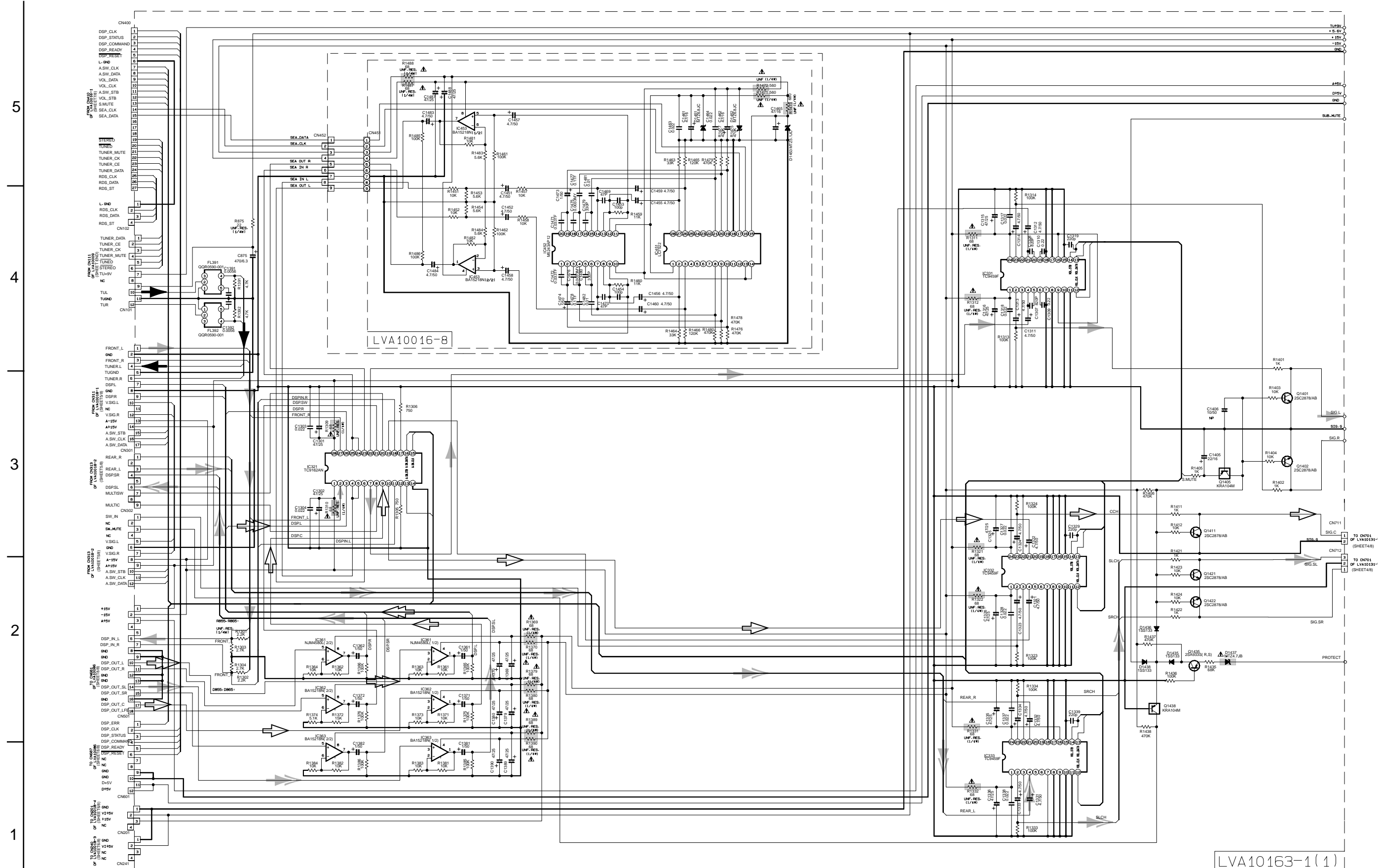
EXPLANATION OF OVERALL OF SCHEMA.
 RX-7000VBKU/RX-7001VGD/RX-7000PBK/RX-7001PGD/RX-7000PBK

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

MODEL RX-7001PGD SHEET 1/8



■ Main amplifier section 1/2



CENTER Signal
 AUDIO Signal
 FRONT Signal
 SURROUND Signal
 TUNER Signal

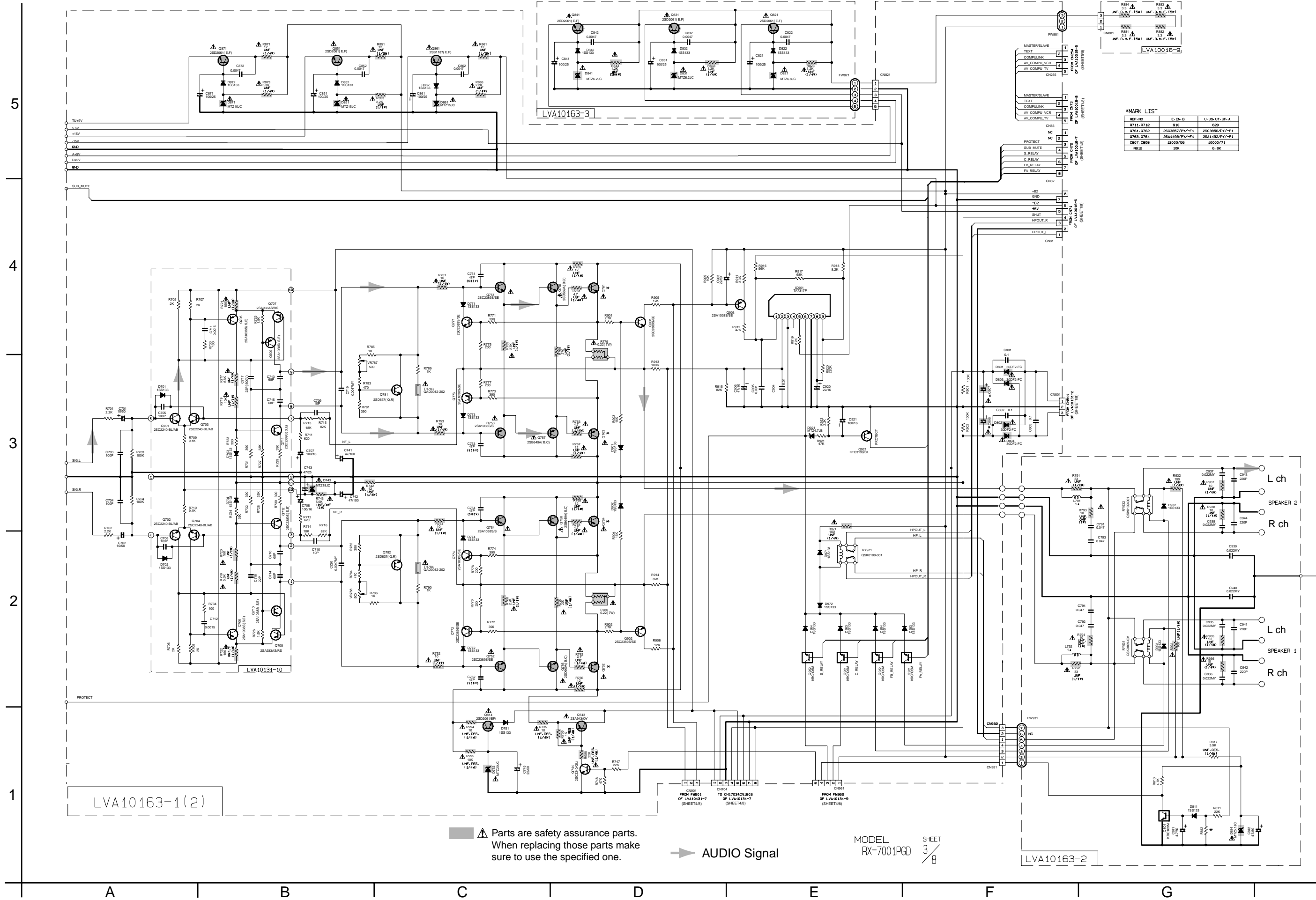
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

MODEL
 RX-7001PGD

SHEET
 2/8

LVA10163-1(1)

Main amplifier section 2/2



5
4
3
2
1

LVA10163-1(2)

LVA10163-3

LVA10163-2

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

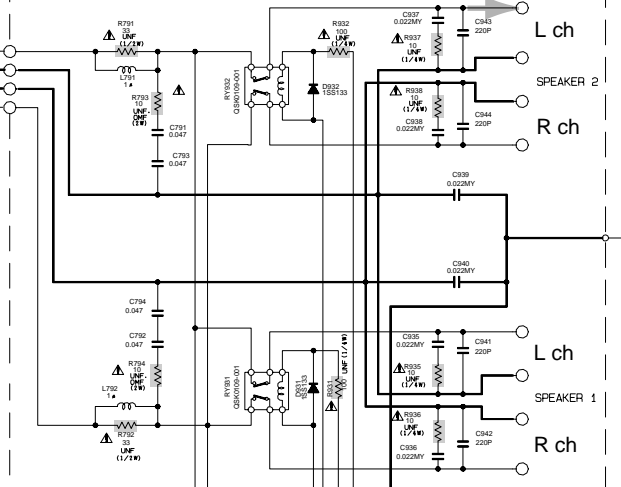
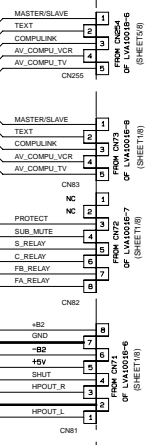
➔ AUDIO Signal

MODEL RX-7001PGD

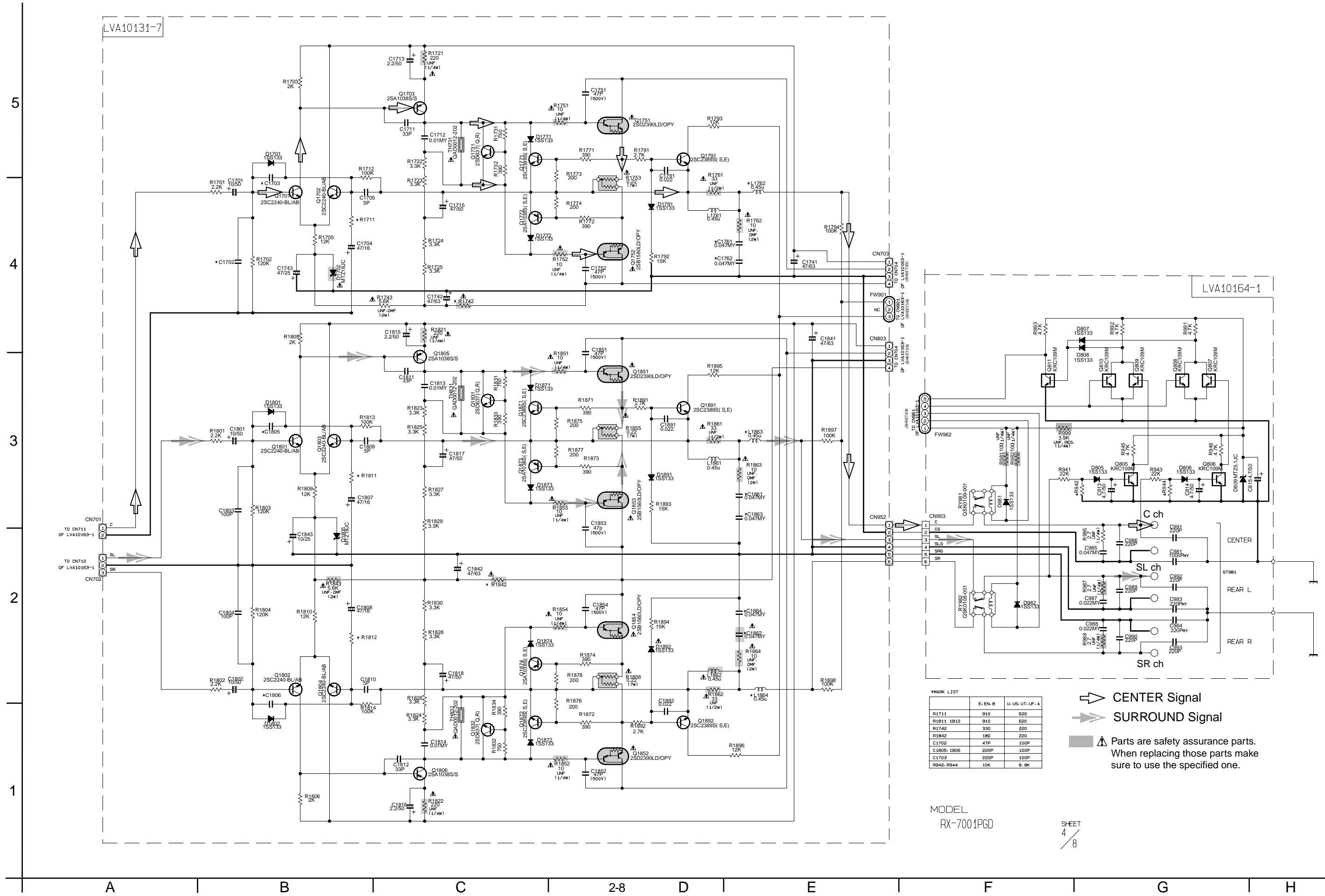
SHEET 3/8

MARK LIST

REF. NO	E. EN. B	U. U.S. U.F. A
R711, R712	910	630
Q761, Q762	2SC2671P/F1-F1	2SC2671P/F1-F1
Q763, Q764	2SA1493P/F1-F1	2SA1493P/F1-F1
CR07, CR08	10000/76	10000/71
RB12	10K	6.8K



Center / Rear amplifier section



MARK LIST

	E·EN·B	U·US·UT·UF·A
R1711	910	620
R1811 1812	910	620
R1742	330	220
R1842	180	220
C1702	47P	100P
C1805-1806	220P	100P
C1703	220P	100P
R942-R944	10K	6.8K

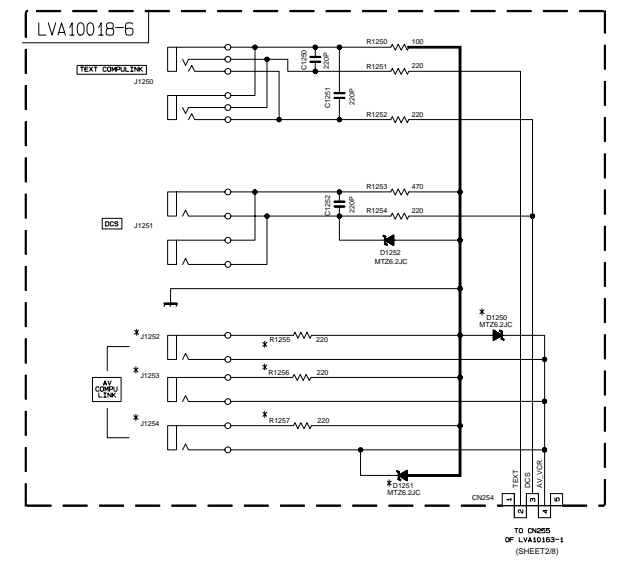
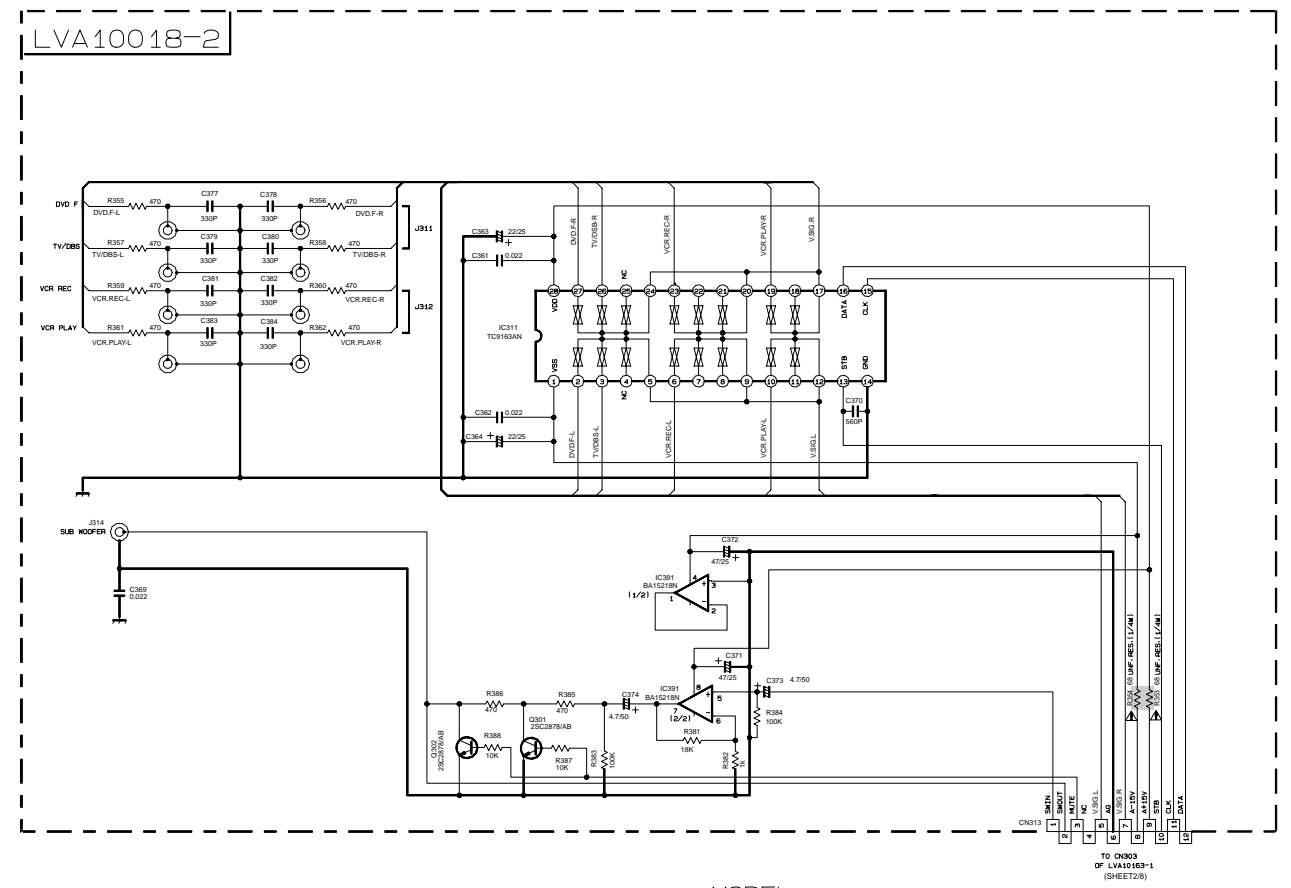
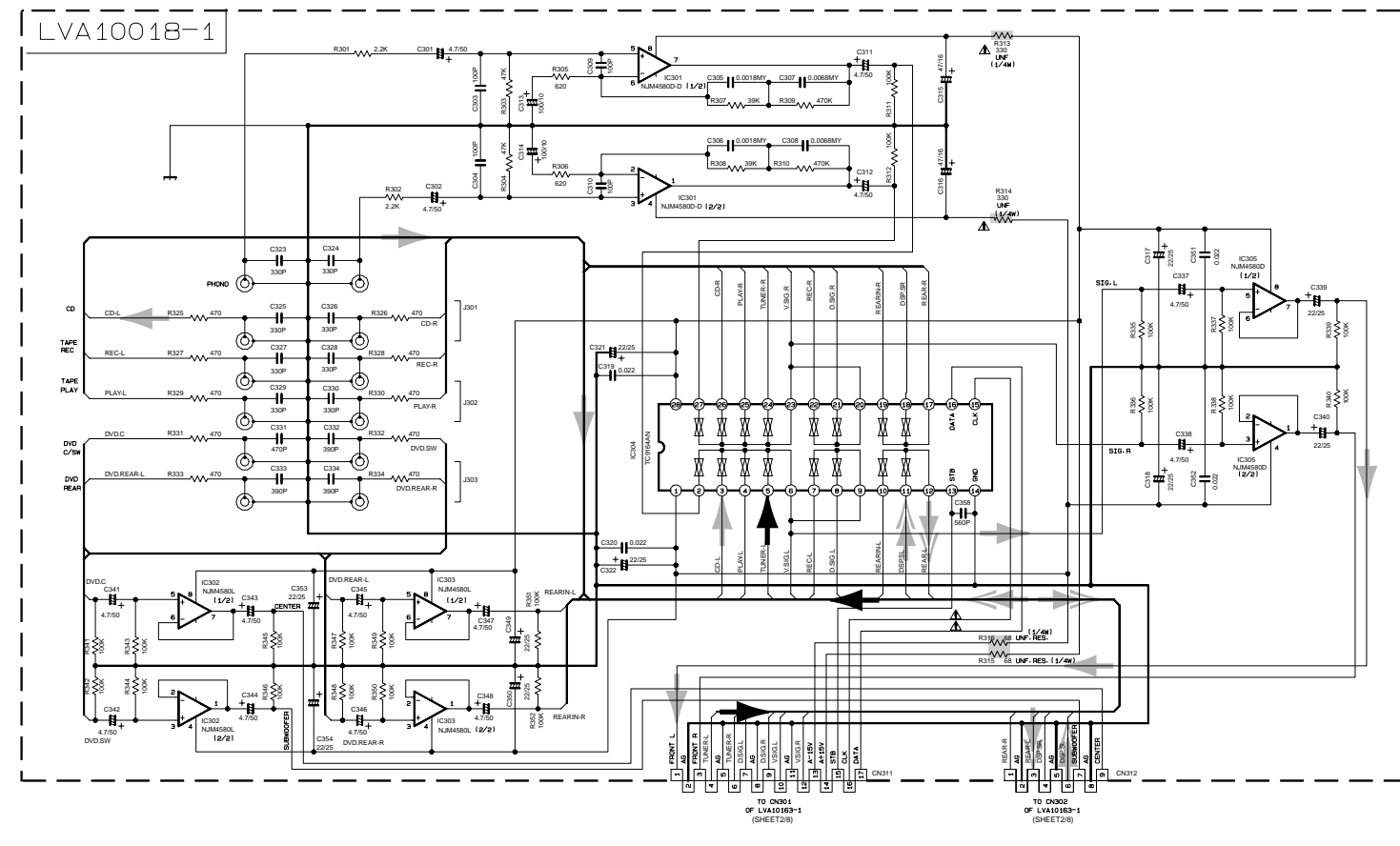
CENTER Signal
 SURROUND Signal
 Parts are safety assurance parts.
 When replacing those parts make sure to use the specified one.

MODEL
RX-7001PGD

SHEET
4
8

Audio signal section

5
4
3
2
1



#MARK LIST

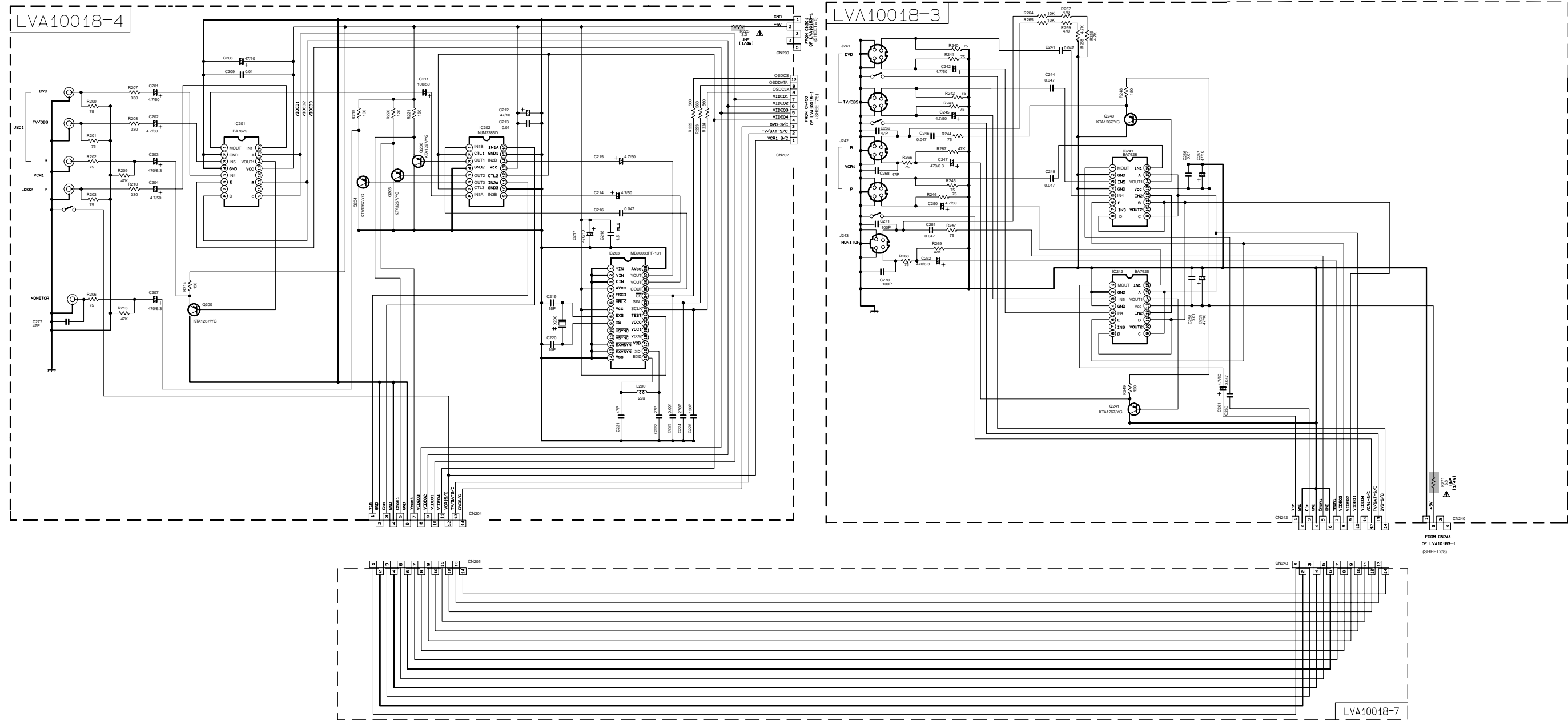
REF. NO	E-EN-B-A	U-US-UT-LF
J1252-J1253-J1254	NONE	USED
R1255-R1256-R1257	NONE	USED
C1250	NONE	USED
D1251	NONE	USED

- CD / AUDIO Signal
- ➡ TUNER Signal
- SURROUND Signal

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

MODEL RX-7001PGD SHEET 5/8

Video signal section



* MARK LIST

	VBKU, UT	PGDU, B, E, EN, US, UF, A
X200	GAX0260-001Z	GAX0261-001Z

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

FL Display & System control section

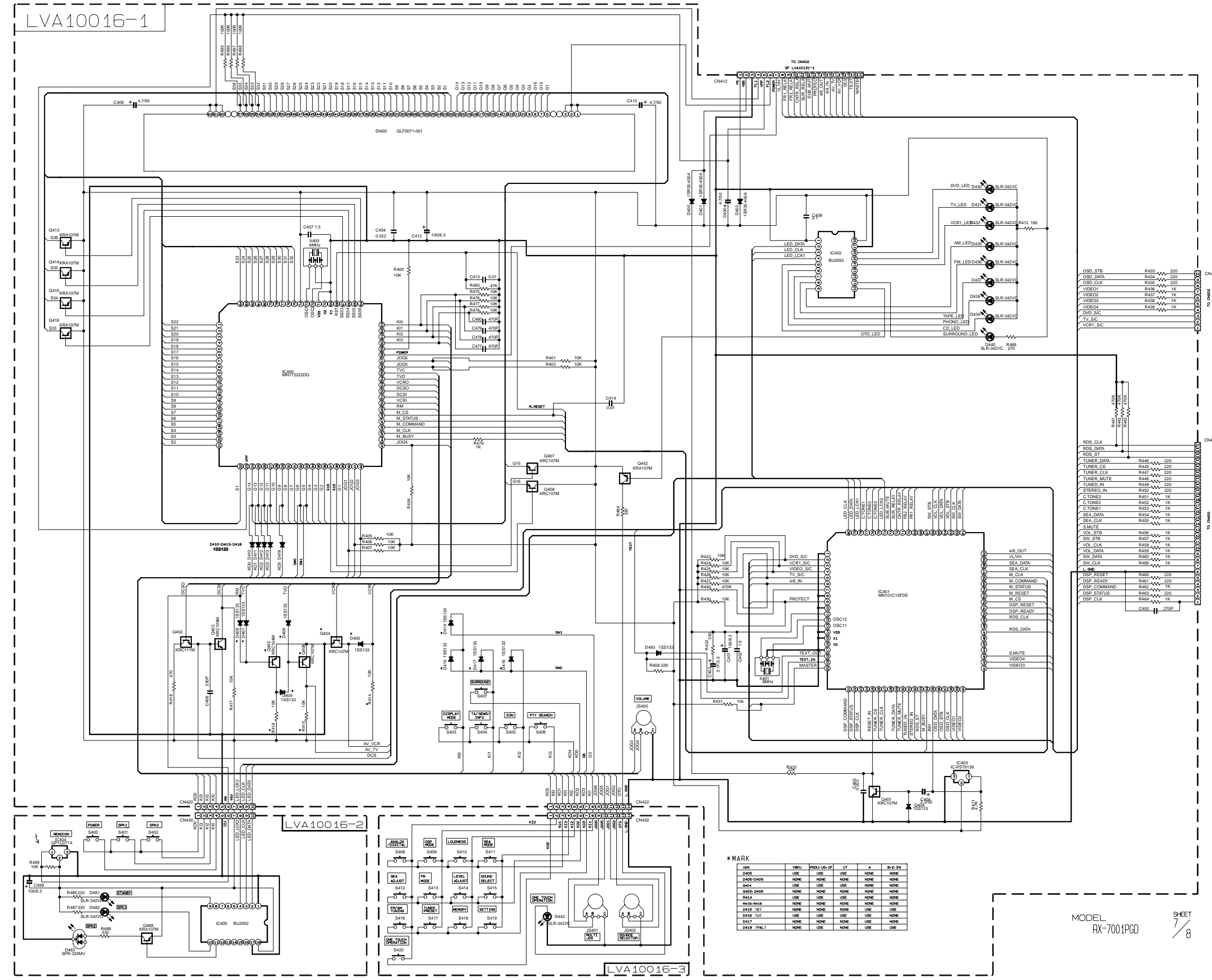
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A

B

C

D

E

F

G

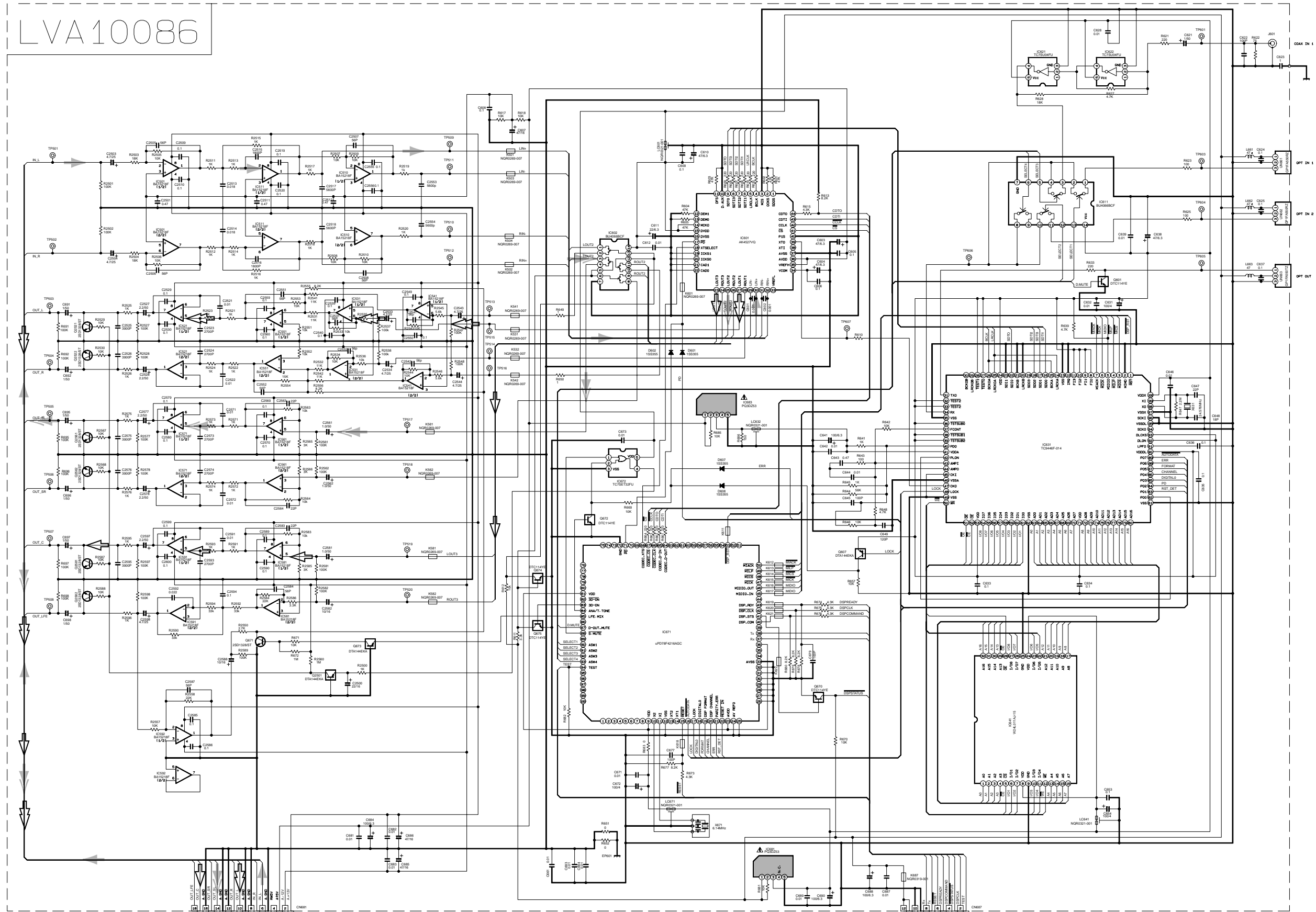
2-11

* MARK

VAR	VALUE	PRODA	LEG-UP	UT	A	B-C	EN
D405	USE	USE	USE	NONE	NONE	NONE	
D406-D409	NONE	NONE	NONE	NONE	NONE	NONE	
G44	USE	USE	USE	NONE	NONE	NONE	
G455-G458	NONE	NONE	NONE	NONE	NONE	NONE	
R44	USE	USE	USE	NONE	NONE	NONE	
R415-R448	NONE	NONE	NONE	NONE	NONE	NONE	
D415 (E1)	NONE	NONE	NONE	USE	USE	USE	
D416 (U1)	USE	USE	USE	USE	USE	USE	
D417	NONE	NONE	NONE	USE	USE	USE	
D419 (PAL1)	NONE	USE	NONE	USE	USE	USE	

MODEL RX-7001PGD SHEET 7/8

■ DSP Section



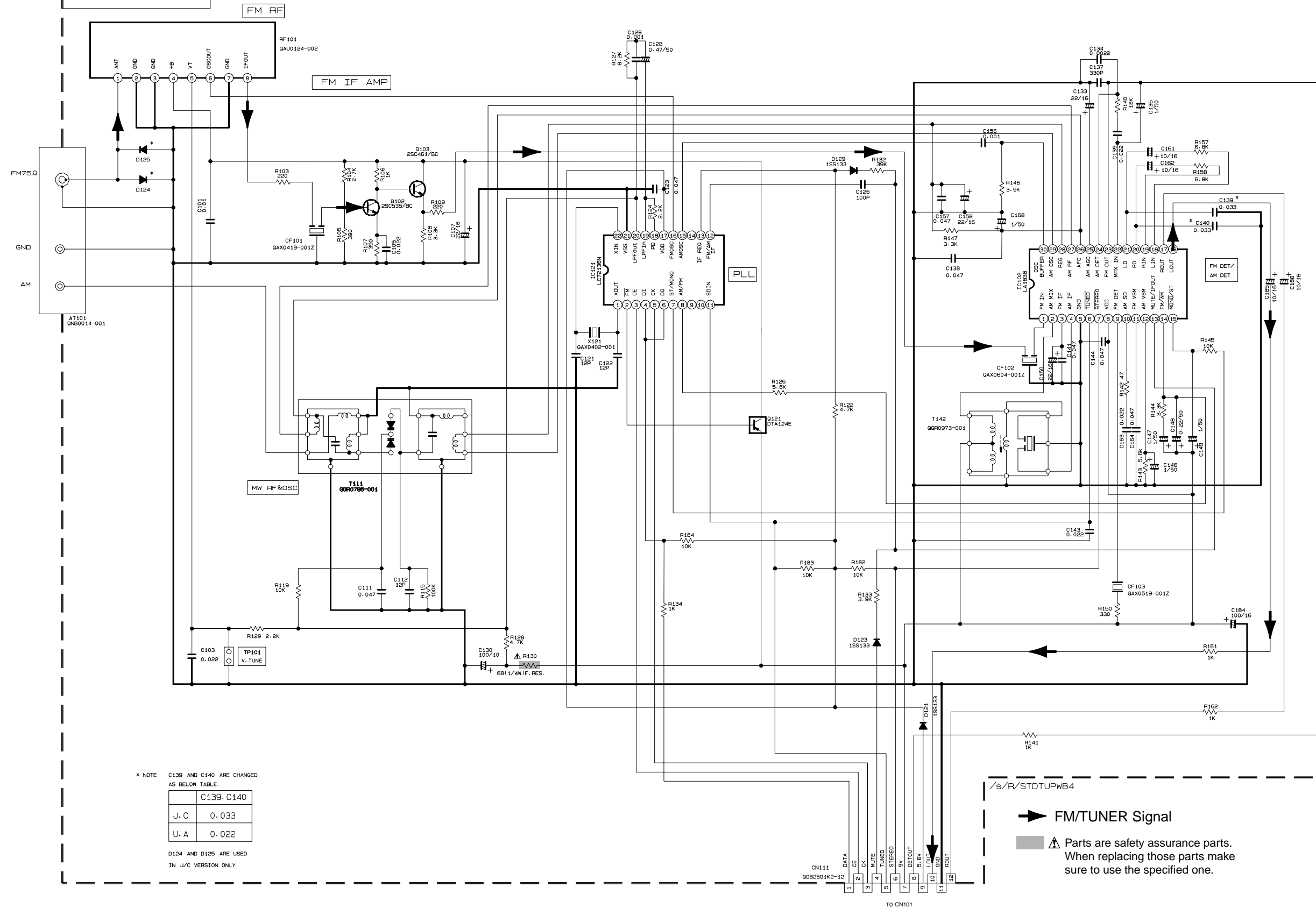
→ SURROUND Signal → AUDIO Signal ⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

⇨ CENTER Signal ⇨ FRONT Signal

Tuner section

FOR J, C, U, A

LVA10009



* NOTE C139 AND C140 ARE CHANGED AS BELOW TABLE.

	C139-C140
J.C	0.033
U.A	0.022

D124 AND D125 ARE USED IN J/C VERSION ONLY

FM/TUNER Signal

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

SHEET END

5

4

3

2

1

A

B

C

D

E

F

G

Printed circuit boards

■ Main board

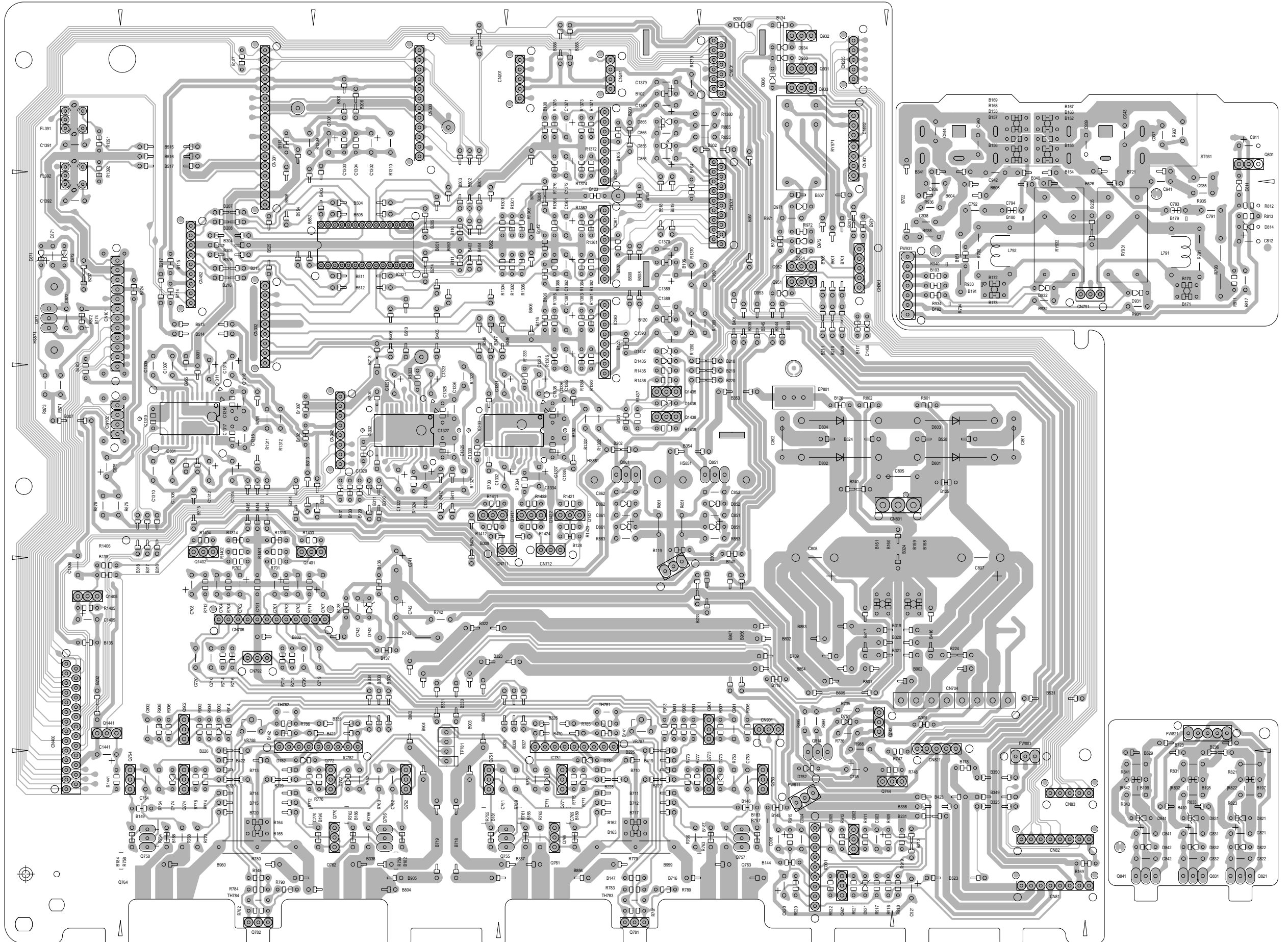
5

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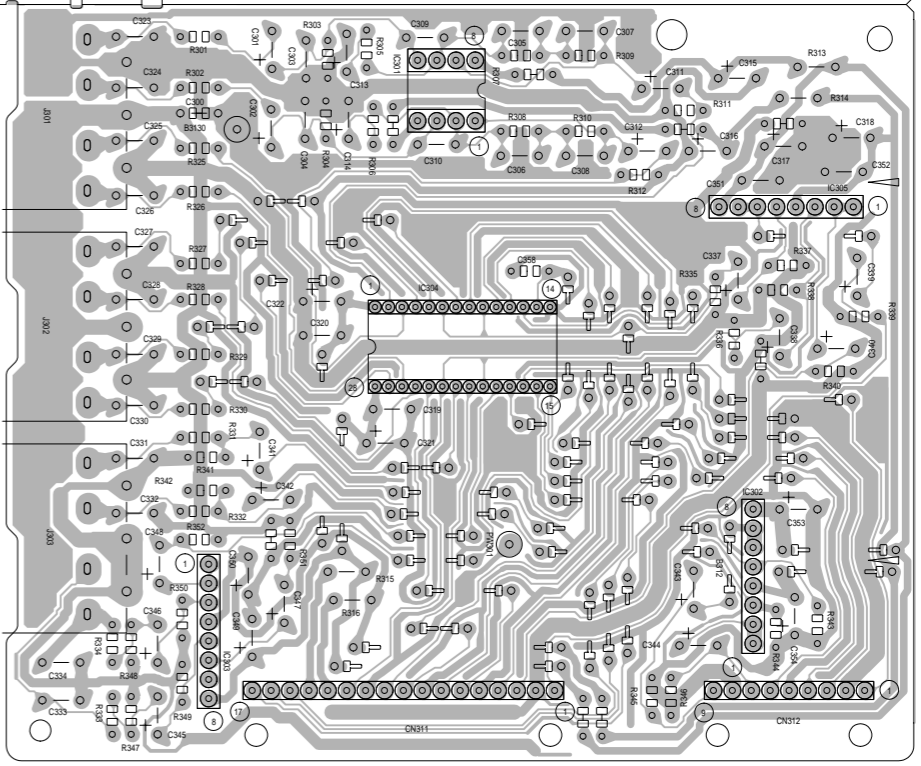
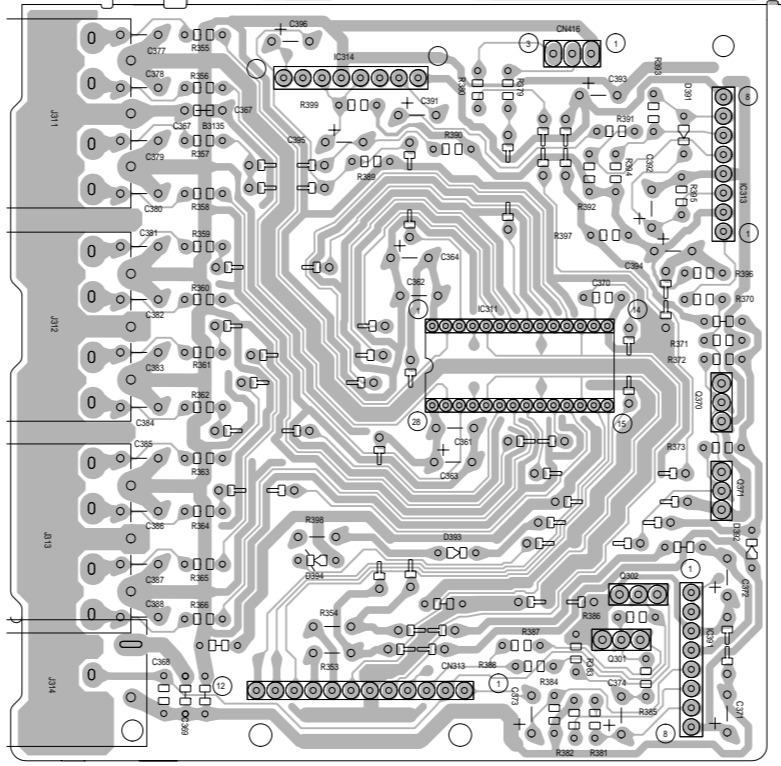
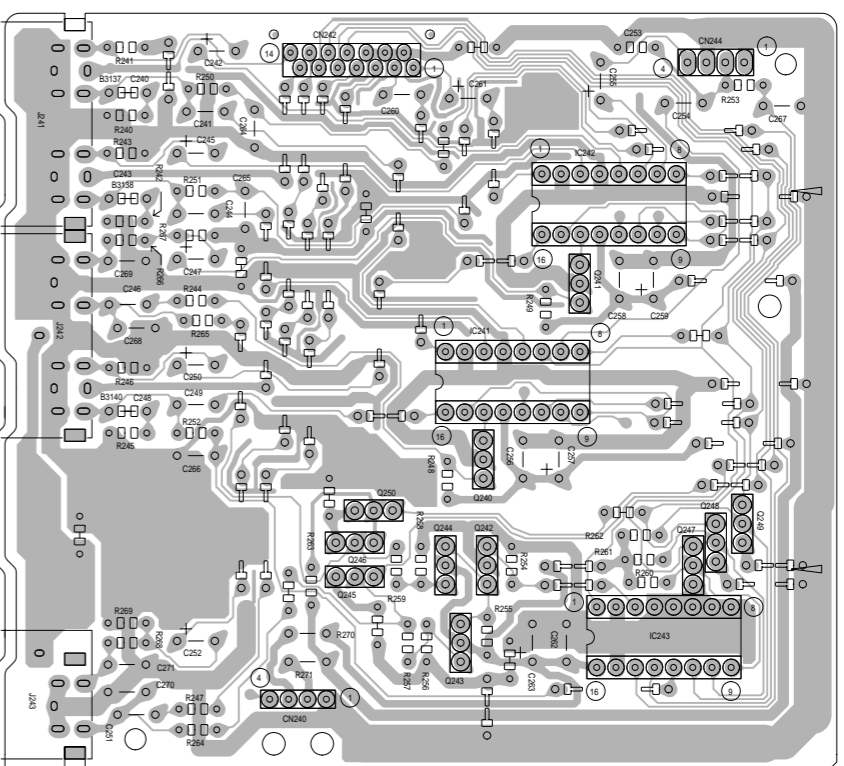
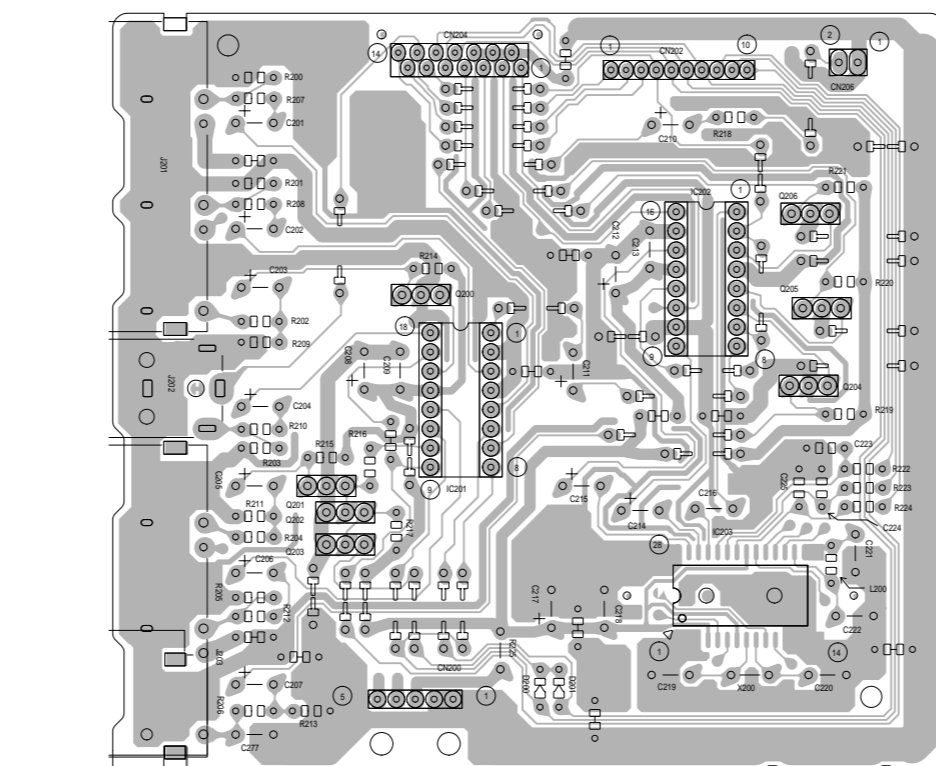
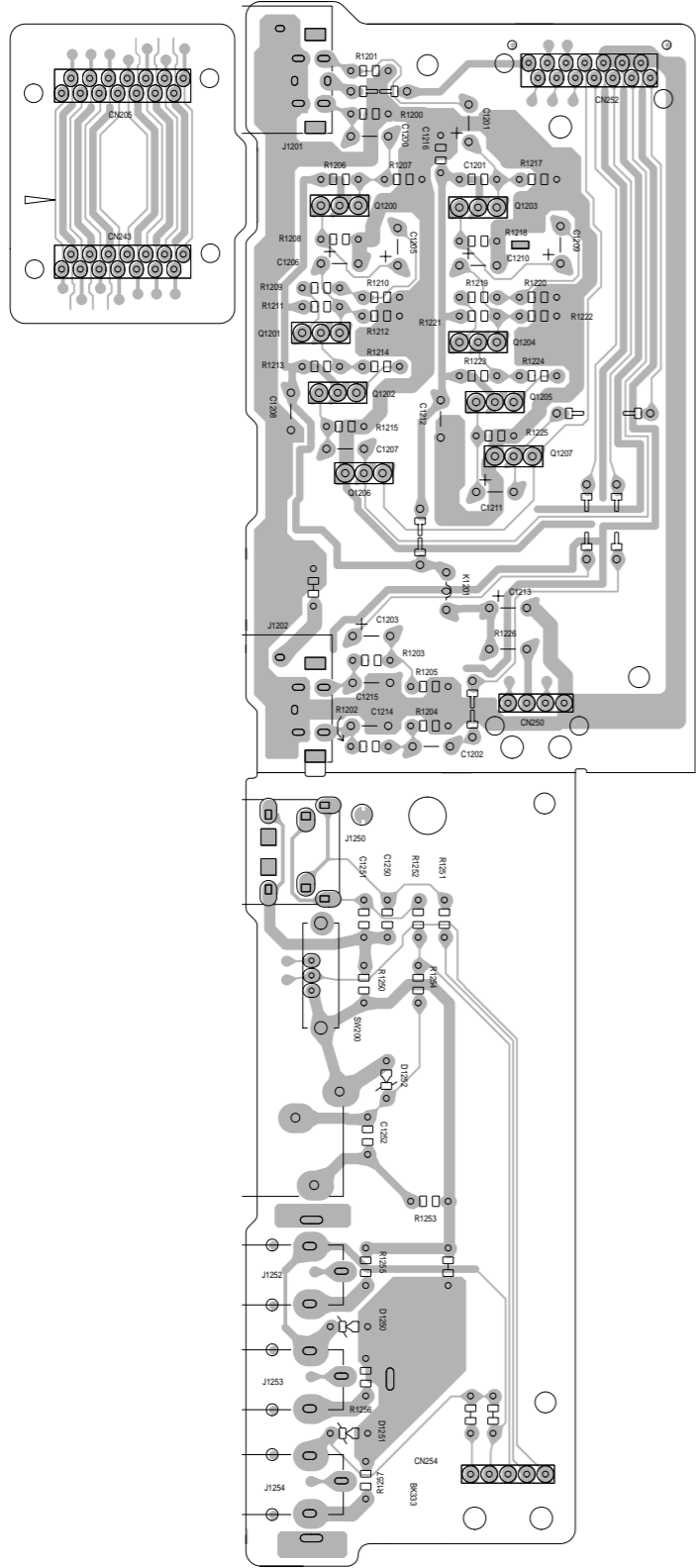
1



A B C 2-14 D E F G H

Input/output board

5
4
3
2
1



A

B

C

D

E

F

G

■ FL display & system control board

5

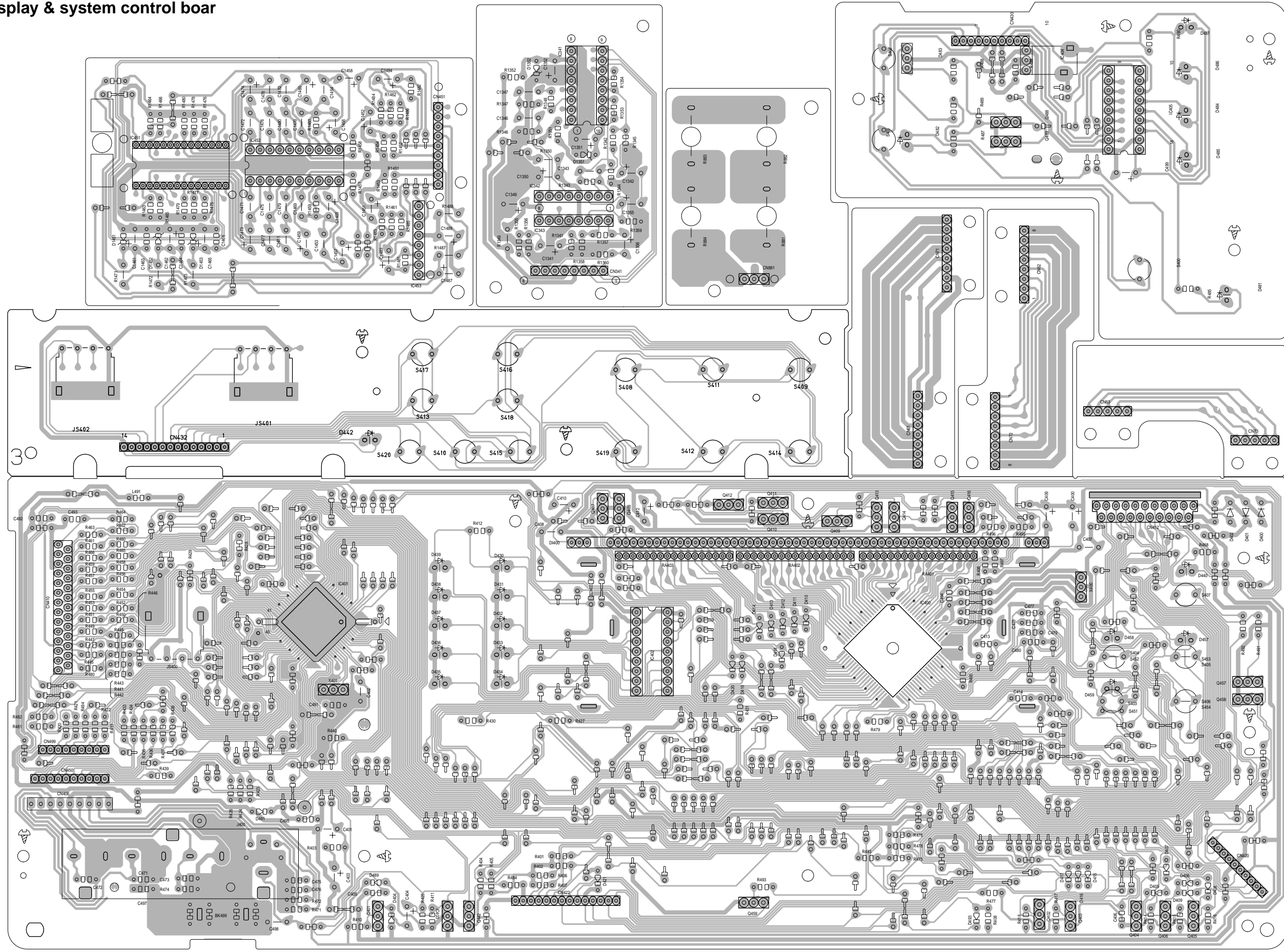
4

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2

1

A B C 2-16 D E F G H



Power AMP. & power supply board

5

4

3

2

1

A

B

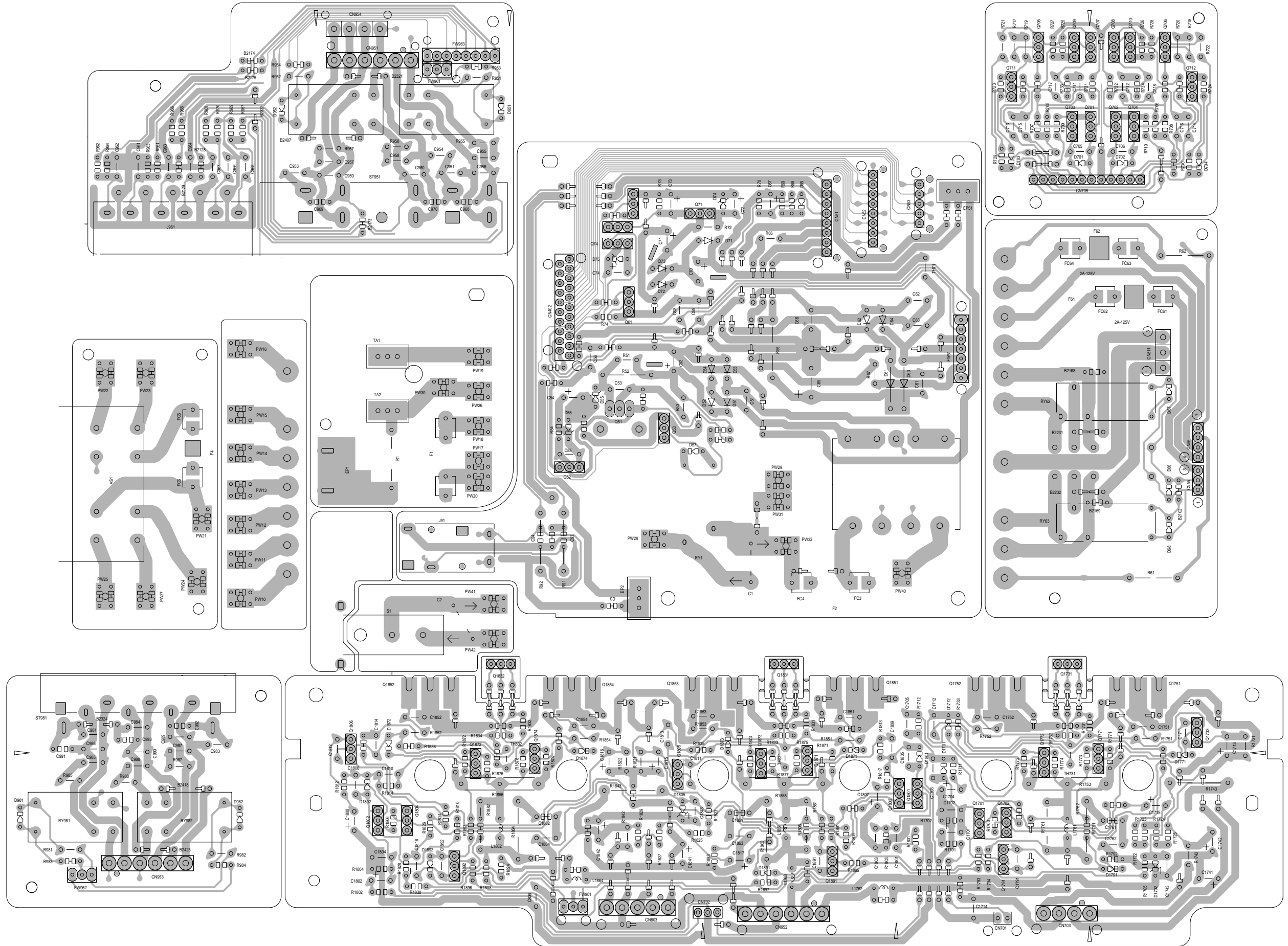
C

D

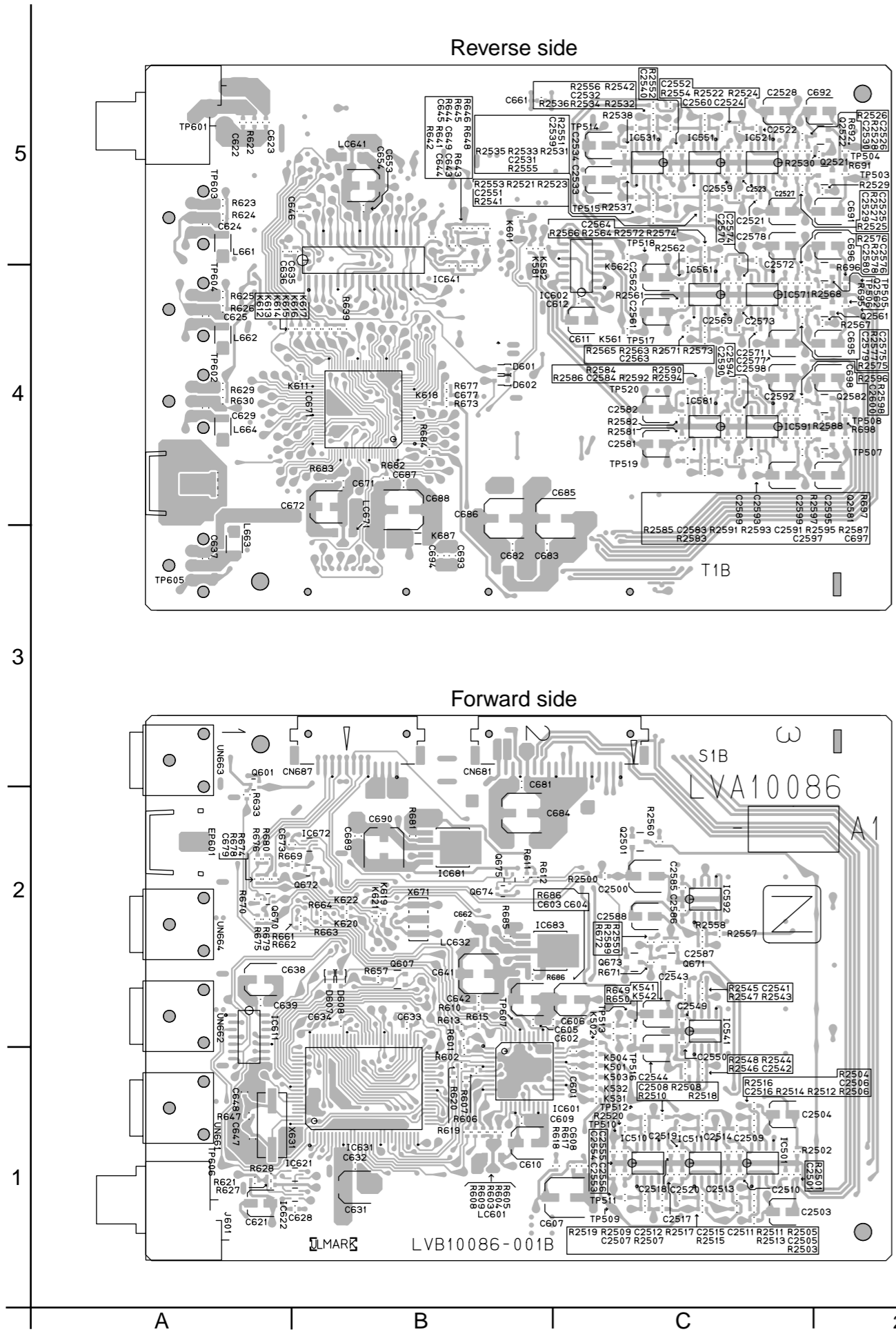
E

F

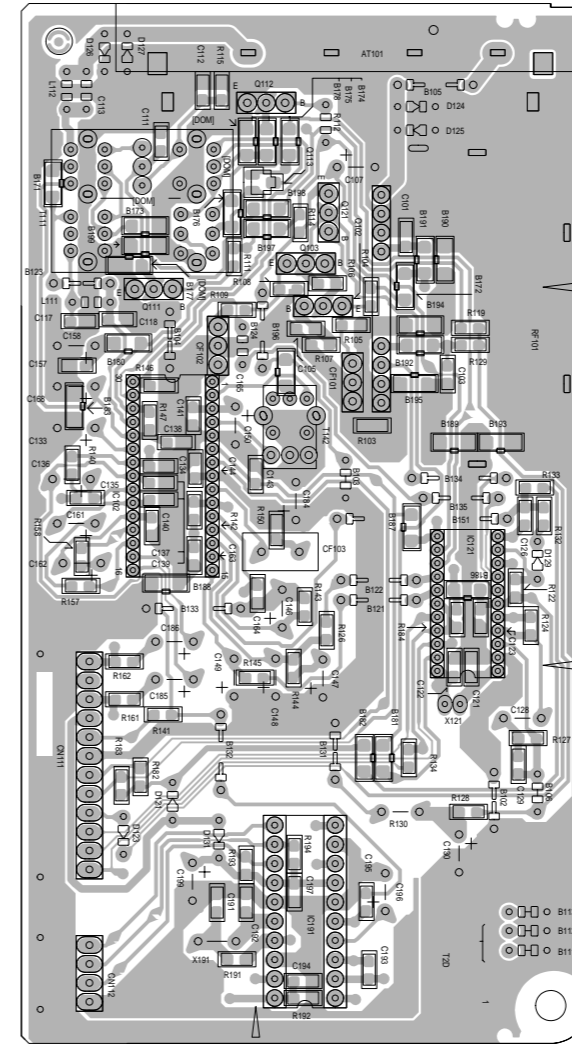
G



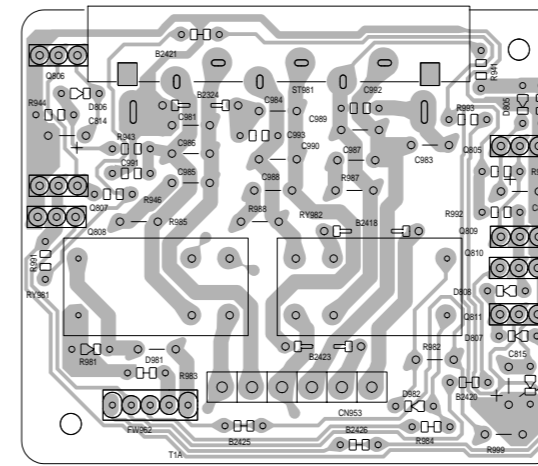
■ DSP board



■ Tuner board



■ SP terminal board



PARTS LIST

[RX-7001PGD]

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

Area suffix

A ----- Australia
 UF ----- China
 US ----- Singapore

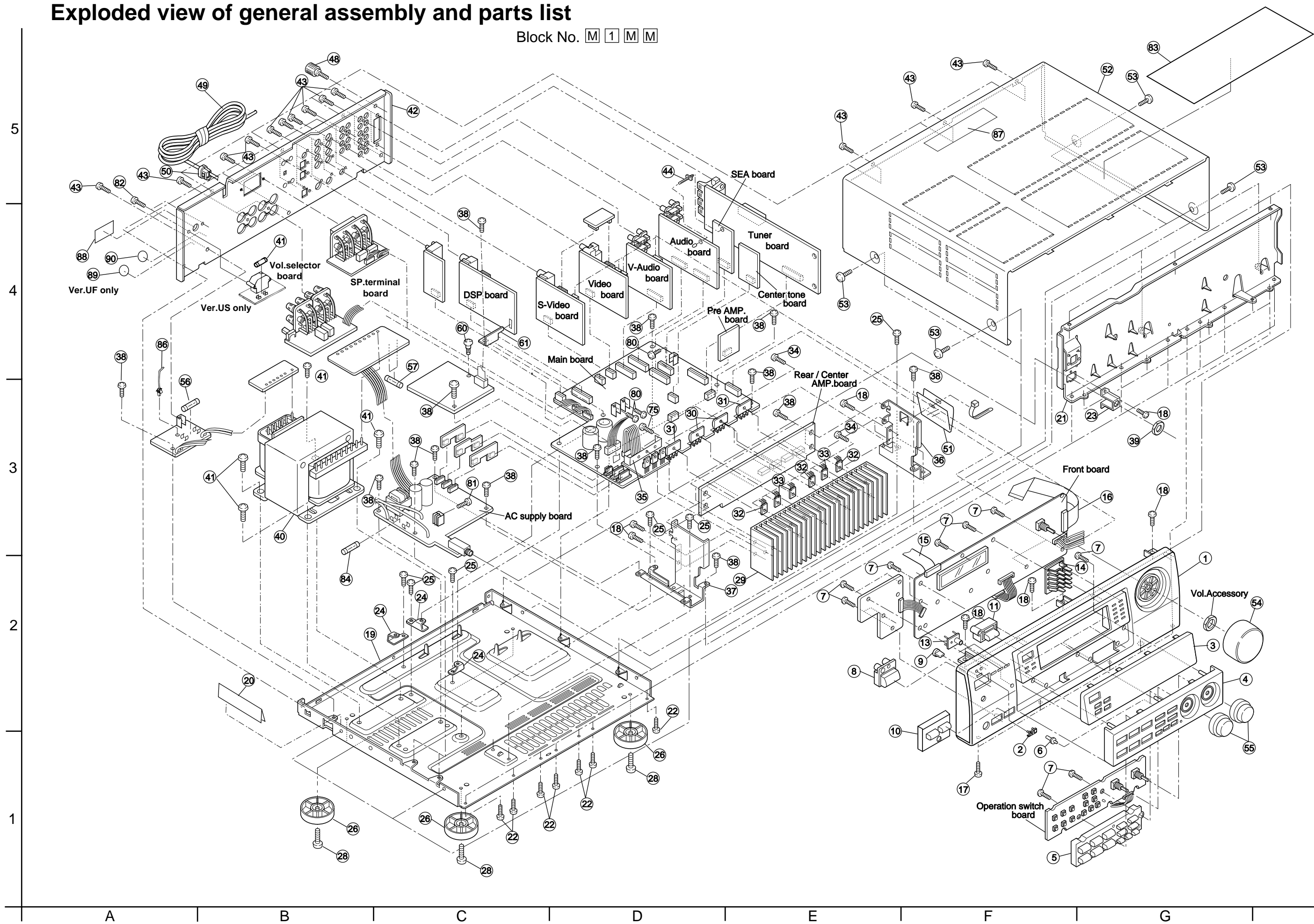
- Contents -

Exploded view of general assembly and parts list	3-3
Electrical parts list	3-5
Packing materials and accessories parts list	3-32

-MEMO-

Exploded view of general assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10018-037A	FRONT PANEL	1		A
		LV10018-034A	FRONT PANEL	1		US,UF
	2	VJD5429-001SS	JVC MARK	1		
	3	LV20031-022A	LENS	1		
	4	LV20032-010A	FRONT ESC	1		
	5	LV20034-004A	PUSH BUTTON	1		
	6	LV40099-001A	INDICATOR	1		
	7	QYSDSF2608Z	SCREW	18		
	8	LV30068-005A	P.BUTTON(POWER)	1		
	9	FSJD4001-002	INDICATOR	1	POWER	
	10	LV30069-003A	P.BUTTON ASSY	1	SPK	
	11	LV30071-001A	P.BUTTON ASSY	1	DOLBY	
	13	E308744-003	REMOTE LENS	1		
	14	LV30073-001A	SOURCE INDICATO	1		
	15	QUQB12-2120CJ	FLAT WIRE	1		UF
		QUQC12-2120CJ	FFC WIRE	1		A,US
	16	QUQC12-2722CJ	FFC WIRE	1		A,US
		QUQB12-2722CJ	FLAT WIRE	1		UF
	17	QYSDSG3008N	T.SCREW	5	FRONT D	
	18	QYSBSG3008E	T.SCREW	8		
	19	LV10019-002A	CHASSIS BASE	1		
	20	EXO150010H09S11	FELT SPACER	1	FOR C.BASE	
	21	LV10020-001A	FRONT BRACKET	1		
	22	QYSDSG3008E	T.SCREW	7	C.B-F.B	
	23	LE40139-001A	H.P. BKT	1		
	24	E68587-223SM	CB BKT	3		
	25	QYSBST3006E	T.SCREW	7		
	26	QZF6018-001	FOOT	4		
	28	QYSBST3010Z	T.SCREW	4	FOOT	
	29	LV30075-203A	HEAT SINK	1		
△	30	2SC3856/PY/-F1	TRANSISTOR	2		
△	31	2SA1492/PY/-F1	TRANSISTOR	2		
△	32	2SD2390LD/OPY/	TRANSISTOR 50	3		
△	33	2SB1560LD/OPY/	TRANSISTOR 51	3		
	34	E73525-003SS	SCREW	10	TR	
		E73525-003	SCREW	10	TR	UF
	35	LV41603-001A	LEAF SPRING	1		
	36	LV20035-001A	H.S BRACKET(R)	1		
	37	LV20036-001A	H.S BRACKET(L)	1		
	38	QYSBSGG3008E	T.SCREW	17		
	39	VKZ4150-001	SPECIAL NUT	1		
△	40	QQT0301-001	POWER TRANS.	1		
	41	QYSDSTL4008E	SPECIAL SCREW	4	P.TRANS	
	42	LV10021-066A	REAR PANEL	1		US
		LV10021-069A	REAR PANEL	1		A
		LV10021-070A	REAR PANEL	1		UF
	43	QYSBSGY3008E	SPECIAL SCREW	32	R.P-C.BASE	
	44	E302321-001	FASTNER	1	SPACER	

■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	48	E409257-001	GND TERMINAL	1		
△	49	QMPR100-200-JC	POWER CORD	1		UF
△		QMPG040-244-JD	POWER CORD	1		A
△		QMP3900-200L	POWER CORD	1		US
△	50	QHS3771-108	CORD STOPPER	1		
	51	LV30076-001A	PROTECTOR	1		
	52	LV20038-003A/S/	TOP COVER	1		
	53	E406308-004	SPECIAL SCREW	4		
	54	LV30480-006A	VOL KNOB ASS'Y	1		
	55	LV30481-003A	JOG KNOB ASS'Y	2		
△	56	QMF51E2-6R3-J1	FUSE	1	F1	US
△		QMF51E2-3R15-J1	FUSE	1	F1	A,UF
△	57	QMF51E2-2R0-J1	FUSE	2		
	60	E310243-002	PLASTIC RIVET	1		
	61	LV41240-002A	BRACKET	1		
	75	QYSBSG3008E	T.SCREW	1	TR(LEAF)	
	80	QYSBSG3008E	T.SCREW	3		
	81	QYSBSG3008E	T.SCREW	1		
	82	QYSBSGY3008E	SPECIAL SCREW	2	VOL SEL	US
	83	LV30077-002A	PROTECT SHEET	1		
△	84	QMF51E2-R10-J1	FUSE	1	F2	
△	85	QMF51E2-3R15-J1	FUSE	1	F4	US
	86	E307572-001	FASTENER	1		
	87	E409396-001	CAUTION LABEL	1		
	88	LV30092-095A	UF LABEL	1		UF
	89	LV41768-001A	CCIB LABEL	1		UF
	90	E409372-001	CCEE LABEL	1		UF

Electrical parts list

■ Electrical parts list (Main board) Ver.A/US Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 701	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V			CN241	QGB2510J1-04	CONNECTOR		
	C 702	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V			CN255	QGB2510J1-05	CONNECTOR		
	C 703	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN301	QGB2510J1-17	CONNECTOR		
	C 704	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN302	QGB2510J1-09	CONNECTOR		
	C 707	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			CN303	QGB2510J1-12	CONNECTOR		
	C 708	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			CN400	QGF1205C1-27	CONNECTOR		
	C 709	QCS11HJ-100	C CAPACITOR	10PF 5% 50V			CN452	QGB2510J1-09	CONNECTOR		
	C 710	QCS11HJ-100	C CAPACITOR	10PF 5% 50V			CN501	QGB1214J3-18S	CONNECTOR		
	C 719	QFLC1HJ-472Z	M CAPACITOR	4700PF 5% 50V			CN601	QGB1214J3-12S	CONNECTOR		
	C 720	QFLC1HJ-472Z	M CAPACITOR	4700PF 5% 50V			CN704	QGA3901C1-08	8P CONNECTOR		
	C 741	QETN2AM-476Z	E CAPACITOR	47MF 20% 100V			CN706	QGB2510J1-12	CONNECTOR		
	C 742	QETN2AM-476Z	E CAPACITOR	47MF 20% 100V			CN711	QGA2501C1-02	2P CONNECTOR		
	C 743	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			CN712	QGA2501C1-03	3P CONNECTOR		
	C 745	QEKC1HM-226Z	E CAPACITOR	22MF 20% 50V			CN801	QJK012-032803	SKT WIRE ASSY		
	C 751	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN821	QGD2501C1-05Z	SOCKET		
	C 752	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN901	QGD2501C1-03Z	SOCKET		
	C 753	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN931	QGD2501C1-04Z	SOCKET		
	C 754	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN932	QGD2501C1-03Z	SOCKET		
	C 791	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			CN961	QGD2501C1-05Z	SOCKET		
	C 792	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1301	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 793	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1302	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 794	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1303	QDVB1EZ-223Y	C CAPACITOR		
	C 801	QFN82CK-104	M CAPACITOR	.10MF 10% 160V			C1304	QDVB1EZ-223Y	C CAPACITOR		
	C 802	QFN82CK-104	M CAPACITOR	.10MF 10% 160V			C1309	QFVJ1HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
	C 805	QFN82CK-104	M CAPACITOR	.10MF 10% 160V			C1310	QFVJ1HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
△	C 807	QEZ0355-109	E CAPACITER	10000MF			C1311	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
△	C 808	QEZ0355-109	E CAPACITER	10000MF			C1312	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 811	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1313	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 812	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1314	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 821	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1315	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 822	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1316	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 831	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1317	QDVB1EZ-223Y	C CAPACITOR		
	C 832	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1318	QDVB1EZ-223Y	C CAPACITOR		
	C 841	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1319	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 842	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1321	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 851	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1322	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 852	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1323	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 861	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1324	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 862	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1325	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 871	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1326	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 872	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1327	QDVB1EZ-223Y	C CAPACITOR		
	C 875	QETNOJM-477Z	E CAPACITOR	470MF 20% 6.3V			C1328	QDVB1EZ-223Y	C CAPACITOR		
	C 903	QER61HM-226Z	E CAPACITOR	22MF 20% 50V			C1329	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 904	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C1331	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 905	QCB31HK-102Z	C CAPACITOR	1000PF 10% 50V			C1332	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 906	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C1333	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 920	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V			C1334	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 921	QER61CM-107Z	E CAPACITOR	100MF 20% 16V			C1335	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 935	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1336	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 936	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1337	QDVB1EZ-223Y	C CAPACITOR		
	C 937	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1338	QDVB1EZ-223Y	C CAPACITOR		
	C 938	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1339	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 939	QFLC1HJ-392Z	M CAPACITOR	3900PF 5% 50V			C1361	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 940	QFLC1HJ-392Z	M CAPACITOR	3900PF 5% 50V			C1362	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 941	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1369	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 942	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1370	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 943	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1371	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 944	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1372	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN 81	QGB2510J1-08	CONNECTOR				C1379	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	CN 82	QGB2510J1-08	CONNECTOR				C1380	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	CN 83	QGB2510J1-05	CONNECTOR				C1381	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN101	QGB2501J1-12	CONNECTOR				C1382	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN201	QGB2510J1-05	CONNECTOR				C1389	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	

■ Electrical parts list (Main board) Ver.A/US Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C1390	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			IC362	BA15218N	IC		
	C1391	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V			IC363	BA15218N	IC		
	C1392	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V			IC901	TA7317P	IC		
	C1405	QETN1CM-226Z	E CAPACITOR	22MF 20% 16V			L 791	QQLZ003-1R0	INDUCTOR		
	C1406	QENC1HM-106Z	NP E CAPACITOR	10MF 20% 50V			L 792	QQLZ003-1R0	INDUCTOR		
△	D 743	MTZJ18C-T2	Z DIODE				Q 743	2SA965/OY/-T	TRANSISTOR		
	D 751	1SS133-T2	SI DIODE				Q 744	2SC2240/GL/-T	TRANSISTOR		
△	D 752	MTZJ20C-T2	Z DIODE			△	Q 751	2SC2389S/SE/-T	TRANSISTOR		
	D 771	1SS133-T2	SI DIODE			△	Q 752	2SC2389S/SE/-T	TRANSISTOR		
	D 772	1SS133-T2	SI DIODE			△	Q 753	2SA1038S/S/-T	TRANSISTOR		
	D 773	1SS133-T2	SI DIODE			△	Q 754	2SA1038S/S/-T	TRANSISTOR		
	D 774	1SS133-T2	SI DIODE			△	Q 755	2SD669A/BC/	TRANSISTOR		
△	D 801	30DF2-FC	DIODE			△	Q 756	2SD669A/BC/	TRANSISTOR		
△	D 802	30DF2-FC	DIODE			△	Q 757	2SB649A/BC/	TRANSISTOR		
△	D 803	30DF2-FC	DIODE			△	Q 758	2SB649A/BC/	TRANSISTOR		
△	D 804	30DF2-FC	DIODE				Q 771	2SC2389S/SE/-T	TRANSISTOR		
	D 811	1SS133-T2	SI DIODE				Q 772	2SC2389S/SE/-T	TRANSISTOR		
△	D 814	MTZJ5.1C-T2	ZENER DIODE				Q 773	2SA1038S/SE/-T	TRANSISTOR		
△	D 821	MTZJ6.8C-T2	Z DIODE				Q 774	2SA1038S/SE/-T	TRANSISTOR		
	D 822	1SS133-T2	SI DIODE				Q 781	2SD637/QR/	TRANSISTOR		
△	D 831	MTZJ6.2C-T2	Z DIODE				Q 782	2SD637/QR/	TRANSISTOR		
	D 832	1SS133-T2	SI DIODE				Q 801	KRC109M-T	D TRANSISTOR		
△	D 841	MTZJ6.2C-T2	Z DIODE			△	Q 814	2SD2061/EF/	TRANSISTOR		
	D 842	1SS133-T2	SI DIODE			△	Q 821	2SD2061/EF/	TRANSISTOR		
△	D 851	MTZJ15C-T2	Z DIODE			△	Q 831	2SD2061/EF/	TRANSISTOR		
	D 852	1SS133-T2	SI DIODE			△	Q 841	2SD2061/EF/	TRANSISTOR		
△	D 861	MTZJ15C-T2	Z DIODE			△	Q 851	2SD2061/EF/	TRANSISTOR		
	D 862	1SS133-T2	SI DIODE			△	Q 861	2SB1187/EF/	TRANSISTOR		
△	D 871	MTZJ10C-T2	Z DIODE			△	Q 871	2SD2061/EF/	TRANSISTOR		
	D 872	1SS133-T2	SI DIODE				Q 901	2SC2389S/SE/-T	TRANSISTOR		
	D 901	1SS133-T2	SI DIODE				Q 902	2SC2389S/SE/-T	TRANSISTOR		
	D 902	1SS133-T2	SI DIODE				Q 903	2SA1038S/SE/-T	TRANSISTOR		
△	D 921	MTZJ4.7B-T2	Z DIODE				Q 921	KTC3199/GL/-T	TRANSISTOR		
	D 931	1SS133-T2	SI DIODE				Q 931	KRC105M-T	D TRANSISTOR		
	D 932	1SS133-T2	SI DIODE				Q 932	KRC105M-T	D TRANSISTOR		
	D 933	1SS133-T2	SI DIODE				Q 951	KRC105M-T	D TRANSISTOR		
	D 934	1SS133-T2	SI DIODE				Q 952	KRC105M-T	D TRANSISTOR		
	D 953	1SS133-T2	SI DIODE				Q1401	2SC2878/AB/-T	TRANSISTOR		
	D 954	1SS133-T2	SI DIODE				Q1402	2SC2878/AB/-T	TRANSISTOR		
	D 971	1SS133-T2	SI DIODE				Q1405	KRA104M-T	D TRANSISTOR		
	D 972	1SS133-T2	SI DIODE				Q1411	2SC2878/AB/-T	TRANSISTOR		
	D1435	1SS133-T2	SI DIODE				Q1421	2SC2878/AB/-T	TRANSISTOR		
	D1436	1SS133-T2	SI DIODE				Q1422	2SC2878/AB/-T	TRANSISTOR		
△	D1437	MTZJ4.7B-T2	Z DIODE				Q1435	2SA933S/RS/-T	TRANSISTOR		
	D1438	1SS133-T2	SI DIODE				Q1438	KRA104M-T	D TRANSISTOR		
	EP801	QNZ0136-001Z	EARTH PLATE				R 701	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	FL391	QQR0590-001	FILTER				R 702	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	FL392	QQR0590-001	FILTER				R 703	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW811	QUM133-10Z4Z4	PARA RIBON WIRE				R 704	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW821	QUM135-08DGZ4	PARA RIBON WIRE				R 711	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	FW881	QUM133-26DGZ4	PARA RIBON WIRE				R 712	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	FW931	QUM137-16DGZ4	PARA RIBON WIRE				R 713	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	HL331	VYH7653-002	IC HOLDER				R 714	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	HL332	VYH7653-002	IC HOLDER				R 715	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	HL333	VYH7653-002	IC HOLDER				R 716	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	HS851	E70306-001	HEAT SINK			△	R 735	QRZ9005-100X	F RESISTOR	10 1/0W	
	HS861	E70306-001	HEAT SINK			△	R 736	QRJ146J-102X	UNF C RESISTOR	1.0K 5% 1/4W	
	HS871	E70306-001	HEAT SINK			△	R 742	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W	
	IC321	TC9162AN	IC			△	R 743	QRL022J-562	UNF OMF RES	5.6K 5% 1/2W	
	IC331	TC9459F	IC				R 747	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	IC332	TC9459F	IC				R 748	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	IC333	TC9459F	IC			△	R 751	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	IC361	NJM4580L	IC			△	R 752	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	

■ Electrical parts list (Main board) Ver.A/US Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
△	R 753	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W			R 915	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
△	R 754	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W			R 916	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
△	R 759	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W			R 917	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
△	R 760	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W			R 918	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
△	R 761	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 919	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
△	R 762	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 920	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
△	R 763	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 921	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
△	R 764	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 922	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 765	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 931	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 766	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 932	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 767	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 935	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 768	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 936	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 769	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W		△	R 937	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 770	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W		△	R 938	QRZ9005-100X	F RESISTOR	10 1/0W	
	R 771	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 971	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
	R 772	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 988	QRJ146J-223X	UNF C RESISTOR	22K 5% 1/4W	
	R 773	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 994	QRZ9005-100X	F RESISTOR	10 1/0W	
	R 774	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 995	QRJ146J-103X	UNF C RESISTOR	10K 5% 1/4W	
	R 775	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY931	QSK0109-001	RELAY		
	R 776	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY932	QSK0109-001	RELAY		
	R 777	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY971	QSK0109-001	RELAY		
	R 778	QRE141J-201Y	C RESISTOR	200 5% 1/4W			R1301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 779	QRZ0196-R22	EMIT RESISTOR	1/1W			R1302	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 780	QRZ0196-R22	EMIT RESISTOR	1/1W			R1303	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 781	QRE141J-391Y	C RESISTOR	390 5% 1/4W			R1304	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 782	QRE141J-391Y	C RESISTOR	390 5% 1/4W			R1305	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R 783	QRE141J-471Y	C RESISTOR	470 5% 1/4W			R1306	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R 784	QRE141J-471Y	C RESISTOR	470 5% 1/4W		△	R1309	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 785	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1310	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 786	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1311	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 789	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1312	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 790	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1313	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 791	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W			R1314	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 792	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W		△	R1321	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 793	QRL022J-100	UNF OMF RES	10 5% 1/2W		△	R1322	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 794	QRL022J-100	UNF OMF RES	10 5% 1/2W			R1323	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 801	QRE141J-104Y	C RESISTOR	100K 5% 1/4W			R1324	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 802	QRE141J-104Y	C RESISTOR	100K 5% 1/4W		△	R1331	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 811	QRE141J-223Y	C RESISTOR	22K 5% 1/4W		△	R1332	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 812	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W			R1333	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 813	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W			R1334	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 817	QRJ146J-392X	UNF C RESISTOR	3.9K 5% 1/4W			R1361	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 823	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1362	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 833	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1363	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 843	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1364	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 851	QRK126J-120X	UNF C RESISTOR	12 5% 1/2W			R1365	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 853	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W			R1366	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 861	QRK126J-120X	UNF C RESISTOR	12 5% 1/2W		△	R1369	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 863	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W		△	R1370	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 871	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W			R1371	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 873	QRJ146J-332X	UNF C RESISTOR	3.3K 5% 1/4W			R1372	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
△	R 875	QRZ9005-220X	F RESISTOR	22 1/0W			R1373	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 901	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W			R1374	QRE141J-512Y	C RESISTOR	5.1K 5% 1/4W	
	R 902	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W			R1375	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 903	QRE141J-153Y	C RESISTOR	15K 5% 1/4W			R1376	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 904	QRE141J-153Y	C RESISTOR	15K 5% 1/4W		△	R1379	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 905	QRE141J-123Y	C RESISTOR	12K 5% 1/4W		△	R1380	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 906	QRE141J-123Y	C RESISTOR	12K 5% 1/4W			R1381	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 909	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1382	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 911	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W			R1383	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 912	QRE141J-473Y	C RESISTOR	47K 5% 1/4W			R1384	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 913	QRE141J-104Y	C RESISTOR	100K 5% 1/4W			R1385	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 914	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R1386	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	

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△	Item	Parts number	Parts name	Remarks	Area
△	R1389	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R1390	QRZ9005-680X	F RESISTOR	68 1/0W	
	R1391	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1392	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1401	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1402	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1403	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1404	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1405	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1406	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R1411	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1412	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1421	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1422	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1423	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1424	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1435	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R1436	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1437	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R1438	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	ST931	QNB0024-001	SPK TERMINAL		
△	TH783	QAD0012-202	THERMISTOR		
△	TH784	QAD0012-202	THERMISTOR		
	TP781	QMV5005-004K	4P PLUG ASSY		
	VR787	QVP0004-501Z	SEMI V RESISTOR		
	VR788	QVP0004-501Z	SEMI V RESISTOR		

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

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 701	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			CN241	QGB2510J1-04	CONNECTOR		
	C 702	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			CN255	QGB2510J1-05	CONNECTOR		
	C 703	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN301	QGB2510J1-17	CONNECTOR		
	C 704	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN302	QGB2510J1-09	CONNECTOR		
	C 707	QETC1CM-107Z	E CAPACITOR	100MF 20% 16V			CN303	QGB2510J1-12	CONNECTOR		
	C 708	QETC1CM-107Z	E CAPACITOR	100MF 20% 16V			CN400	QGF1205C1-27	CONNECTOR		
	C 709	QCS11HJ-100	C CAPACITOR	10PF 5% 50V			CN452	QGB2510J1-09	CONNECTOR		
	C 710	QCS11HJ-100	C CAPACITOR	10PF 5% 50V			CN501	QGB1214J3-18S	CONNECTOR		
	C 719	QFN31HJ-472Z	M CAPACITOR	4700PF 5% 50V			CN601	QGB1214J3-12S	CONNECTOR		
	C 720	QFN31HJ-472Z	M CAPACITOR	4700PF 5% 50V			CN704	QGA3901C1-08	8P CONNECTOR		
	C 741	QETC2AM-476Z	E CAPACITOR	47MF 20% 100V			CN706	QGB2510J1-12	CONNECTOR		
	C 742	QETC2AM-476Z	E CAPACITOR	47MF 20% 100V			CN711	QGA2501C1-02	2P CONNECTOR		
	C 743	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V			CN712	QGA2501C1-03	3P CONNECTOR		
	C 745	QEKC1HM-226Z	E CAPACITOR	22MF 20% 50V			CN801	QJK012-032803	SKT WIRE ASSY		
	C 751	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN821	QGD2501C1-05Z	SOCKET		
	C 752	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN901	QGD2501C1-03Z	SOCKET		
	C 753	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN931	QGD2501C1-04Z	SOCKET		
	C 754	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			CN932	QGD2501C1-03Z	SOCKET		
	C 791	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			CN961	QGD2501C1-05Z	SOCKET		
	C 792	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1301	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 793	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1302	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 794	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1303	QDVB1EZ-223Y	C CAPACITOR		
	C 801	QFN82CK-104	M CAPACITER	.10MF 10% 160V			C1304	QDVB1EZ-223Y	C CAPACITOR		
	C 802	QFN82CK-104	M CAPACITER	.10MF 10% 160V			C1309	QFVJ1HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
	C 805	QFN82CK-104	M CAPACITER	.10MF 10% 160V			C1310	QFVJ1HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
△	C 807	QEZO355-109	E CAPACITER	10000MF			C1311	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
△	C 808	QEZO355-109	E CAPACITER	10000MF			C1312	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 811	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1313	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 812	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1314	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 821	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1315	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 822	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1316	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 831	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1317	QDVB1EZ-223Y	C CAPACITOR		
	C 832	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1318	QDVB1EZ-223Y	C CAPACITOR		
	C 841	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1319	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 842	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1321	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 851	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1322	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 852	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1323	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 861	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1324	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 862	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1325	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 871	QEHR1EM-107Z	E CAPACITOR	100MF 20% 25V			C1326	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 872	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1327	QDVB1EZ-223Y	C CAPACITOR		
	C 875	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C1328	QDVB1EZ-223Y	C CAPACITOR		
	C 903	QER61HM-226Z	E CAPACITOR	22MF 20% 50V			C1329	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 904	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C1331	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 905	QCB31HK-102Z	C CAPACITOR	1000PF 10% 50V			C1332	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 906	QETC1AM-476Z	E CAPACITOR	47MF 20% 10V			C1333	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 920	QETC1CM-226Z	E CAPACITOR	22MF 20% 16V			C1334	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 921	QER61CM-107Z	E CAPACITOR	100MF 20% 16V			C1335	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 935	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1336	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 936	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1337	QDVB1EZ-223Y	C CAPACITOR		
	C 937	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1338	QDVB1EZ-223Y	C CAPACITOR		
	C 938	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V			C1339	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 939	QFLC1HJ-392Z	M CAPACITOR	3900PF 5% 50V			C1361	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 940	QFLC1HJ-392Z	M CAPACITOR	3900PF 5% 50V			C1362	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 941	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1369	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 942	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1370	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 943	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1371	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 944	QCS11HJ-221	C CAPACITOR	220PF 5% 50V			C1372	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN 81	QGB2510J1-08	CONNECTOR				C1379	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	CN 82	QGB2510J1-08	CONNECTOR				C1380	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	CN 83	QGB2510J1-05	CONNECTOR				C1381	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN101	QGB2501J1-12	CONNECTOR				C1382	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	CN201	QGB2510J1-05	CONNECTOR				C1389	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	

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

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C1390	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V			IC362	BA15218N	IC		
	C1391	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V			IC363	BA15218N	IC		
	C1392	QFLC1HJ-562Z	M CAPACITOR	5600PF 5% 50V			IC901	TA7317P	IC		
	C1405	QETN1CM-226Z	E CAPACITOR	22MF 20% 16V			L 791	QQLZ003-1R0	INDUCTOR		
	C1406	QENC1HM-106Z	NP E CAPACITOR	10MF 20% 50V			L 792	QQLZ003-1R0	INDUCTOR		
△	D 743	MTZJ18C-T2	Z DIODE				Q 743	2SA965/OY/-T	TRANSISTOR		
	D 751	1SS133-T2	SI DIODE				Q 744	2SC2240/GL/-T	TRANSISTOR		
△	D 752	MTZJ20C-T2	Z DIODE			△	Q 751	2SC2389S/SE/-T	TRANSISTOR		
	D 771	1SS133-T2	SI DIODE			△	Q 752	2SC2389S/SE/-T	TRANSISTOR		
	D 772	1SS133-T2	SI DIODE			△	Q 753	2SA1038S/S/-T	TRANSISTOR		
	D 773	1SS133-T2	SI DIODE			△	Q 754	2SA1038S/S/-T	TRANSISTOR		
	D 774	1SS133-T2	SI DIODE			△	Q 755	2SD669A/BC/	TRANSISTOR		
△	D 801	30DF2-FC	DIODE			△	Q 756	2SD669A/BC/	TRANSISTOR		
△	D 802	30DF2-FC	DIODE			△	Q 757	2SB649A/BC/	TRANSISTOR		
△	D 803	30DF2-FC	DIODE			△	Q 758	2SB649A/BC/	TRANSISTOR		
△	D 804	30DF2-FC	DIODE				Q 771	2SC2389S/SE/-T	TRANSISTOR		
	D 811	1SS133-T2	SI DIODE				Q 772	2SC2389S/SE/-T	TRANSISTOR		
△	D 814	MTZJ5.1C-T2	ZENER DIODE				Q 773	2SA1038S/SE/-T	TRANSISTOR		
△	D 821	MTZJ6.8C-T2	Z DIODE				Q 774	2SA1038S/SE/-T	TRANSISTOR		
	D 822	1SS133-T2	SI DIODE				Q 781	2SD637/QR/	TRANSISTOR		
△	D 831	MTZJ6.2C-T2	Z DIODE				Q 782	2SD637/QR/	TRANSISTOR		
	D 832	1SS133-T2	SI DIODE				Q 801	KRC109M-T	D TRANSISTOR		
△	D 841	MTZJ6.2C-T2	Z DIODE			△	Q 814	2SD2061/EF/	TRANSISTOR		
	D 842	1SS133-T2	SI DIODE			△	Q 821	2SD2061/EF/	TRANSISTOR		
△	D 851	MTZJ15C-T2	Z DIODE			△	Q 831	2SD2061/EF/	TRANSISTOR		
	D 852	1SS133-T2	SI DIODE			△	Q 841	2SD2061/EF/	TRANSISTOR		
△	D 861	MTZJ15C-T2	Z DIODE			△	Q 851	2SD2061/EF/	TRANSISTOR		
	D 862	1SS133-T2	SI DIODE			△	Q 861	2SB1187/EF/	TRANSISTOR		
△	D 871	MTZJ10C-T2	Z DIODE			△	Q 871	2SD2061/EF/	TRANSISTOR		
	D 872	1SS133-T2	SI DIODE				Q 901	2SC2389S/SE/-T	TRANSISTOR		
	D 901	1SS133-T2	SI DIODE				Q 902	2SC2389S/SE/-T	TRANSISTOR		
	D 902	1SS133-T2	SI DIODE				Q 903	2SA1038S/SE/-T	TRANSISTOR		
△	D 921	MTZJ4.7B-T2	Z DIODE				Q 921	KTC3199/GL/-T	TRANSISTOR		
	D 931	1SS133-T2	SI DIODE				Q 931	KRC105M-T	D TRANSISTOR		
	D 932	1SS133-T2	SI DIODE				Q 932	KRC105M-T	D TRANSISTOR		
	D 933	1SS133-T2	SI DIODE				Q 951	KRC105M-T	D TRANSISTOR		
	D 934	1SS133-T2	SI DIODE				Q 952	KRC105M-T	D TRANSISTOR		
	D 953	1SS133-T2	SI DIODE				Q1401	2SC2878/AB/-T	TRANSISTOR		
	D 954	1SS133-T2	SI DIODE				Q1402	2SC2878/AB/-T	TRANSISTOR		
	D 971	1SS133-T2	SI DIODE				Q1405	KRA104M-T	D TRANSISTOR		
	D 972	1SS133-T2	SI DIODE				Q1411	2SC2878/AB/-T	TRANSISTOR		
	D1435	1SS133-T2	SI DIODE				Q1421	2SC2878/AB/-T	TRANSISTOR		
	D1436	1SS133-T2	SI DIODE				Q1422	2SC2878/AB/-T	TRANSISTOR		
△	D1437	MTZJ4.7B-T2	Z DIODE				Q1435	2SA933S/RS/-T	TRANSISTOR		
	D1438	1SS133-T2	SI DIODE				Q1438	KRA104M-T	D TRANSISTOR		
	EP801	QNZ0136-001Z	EARTH PLATE				R 701	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	FL391	QQR0590-001	FILTER				R 702	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	FL392	QQR0590-001	FILTER				R 703	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW811	QUM153-10Z4Z4	PARA RIBON WIRE				R 704	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW821	QUM155-08DGZ4	PARA RIBON WIRE				R 711	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	FW881	QUM153-26DGZ4	PARA RIBON WIRE				R 712	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	FW931	QUM157-16DGZ4	PARA RIBON WIRE				R 713	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	HL331	VYH7653-002	IC HOLDER				R 714	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	HL332	VYH7653-002	IC HOLDER				R 715	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	HL333	VYH7653-002	IC HOLDER				R 716	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	HS851	E70306-001	HEAT SINK			△	R 735	QRZ9005-100X	F RESISTOR	10 1/0W	
	HS861	E70306-001	HEAT SINK			△	R 736	QRJ146J-102X	UNF C RESISTOR	1.0K 5% 1/4W	
	HS871	E70306-001	HEAT SINK			△	R 742	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W	
	IC321	TC9162AN	IC			△	R 743	QRL022J-562	UNF.OMF.RES.	5.6K 5% 1/2W	
	IC331	TC9459F	IC				R 747	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	IC332	TC9459F	IC				R 748	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	IC333	TC9459F	IC			△	R 751	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	IC361	NJM4580L	IC			△	R 752	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	

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

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
△	R 753	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W			R 915	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
△	R 754	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W			R 916	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
△	R 759	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W			R 917	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
△	R 760	QRJ146J-272X	UNF C RESISTOR	2.7K 5% 1/4W			R 918	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
△	R 761	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 919	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
△	R 762	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 920	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
△	R 763	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 921	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
△	R 764	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W			R 922	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 765	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 931	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 766	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 932	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 767	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 935	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 768	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W		△	R 936	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 769	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W		△	R 937	QRZ9005-100X	F RESISTOR	10 1/0W	
△	R 770	QRJ146J-271X	UNF C RESISTOR	270 5% 1/4W		△	R 938	QRZ9005-100X	F RESISTOR	10 1/0W	
	R 771	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 971	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
	R 772	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 988	QRJ146J-223X	UNF C RESISTOR	22K 5% 1/4W	
	R 773	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 994	QRZ9005-100X	F RESISTOR	10 1/0W	
	R 774	QRE141J-391Y	C RESISTOR	390 5% 1/4W		△	R 995	QRJ146J-103X	UNF C RESISTOR	10K 5% 1/4W	
	R 775	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY931	QSK0109-001	RELAY		
	R 776	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY932	QSK0109-001	RELAY		
	R 777	QRE141J-201Y	C RESISTOR	200 5% 1/4W			RY971	QSK0109-001	RELAY		
	R 778	QRE141J-201Y	C RESISTOR	200 5% 1/4W			R1301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 779	QRZ0196-R22	EMIT.RESISTOR	1/1W			R1302	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 780	QRZ0196-R22	EMIT.RESISTOR	1/1W			R1303	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 781	QRE141J-391Y	C RESISTOR	390 5% 1/4W			R1304	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 782	QRE141J-391Y	C RESISTOR	390 5% 1/4W			R1305	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R 783	QRE141J-471Y	C RESISTOR	470 5% 1/4W			R1306	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R 784	QRE141J-471Y	C RESISTOR	470 5% 1/4W		△	R1309	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 785	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1310	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 786	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1311	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 789	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W		△	R1312	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 790	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1313	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 791	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W			R1314	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 792	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W		△	R1321	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 793	QRL022J-100	UNF OMF RES	10 5% 1/2W		△	R1322	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 794	QRL022J-100	UNF OMF RES	10 5% 1/2W			R1323	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 801	QRE141J-104Y	C RESISTOR	100K 5% 1/4W			R1324	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 802	QRE141J-104Y	C RESISTOR	100K 5% 1/4W		△	R1331	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 811	QRE141J-223Y	C RESISTOR	22K 5% 1/4W		△	R1332	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 812	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W			R1333	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 813	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W			R1334	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 817	QRJ146J-392X	UNF C RESISTOR	3.9K 5% 1/4W			R1361	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 823	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1362	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 833	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1363	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 843	QRJ146J-122X	UNF C RESISTOR	1.2K 5% 1/4W			R1364	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 851	QRK126J-120X	UNF C RESISTOR	12 5% 1/2W			R1365	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 853	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W			R1366	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 861	QRK126J-120X	UNF C RESISTOR	12 5% 1/2W		△	R1369	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 863	QRJ146J-222X	UNF C RESISTOR	2.2K 5% 1/4W		△	R1370	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 871	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W			R1371	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
△	R 873	QRJ146J-332X	UNF C RESISTOR	3.3K 5% 1/4W			R1372	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
△	R 875	QRZ9005-220X	F RESISTOR	22 1/0W			R1373	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 901	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W			R1374	QRE141J-512Y	C RESISTOR	5.1K 5% 1/4W	
	R 902	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W			R1375	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 903	QRE141J-153Y	C RESISTOR	15K 5% 1/4W			R1376	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 904	QRE141J-153Y	C RESISTOR	15K 5% 1/4W		△	R1379	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 905	QRE141J-123Y	C RESISTOR	12K 5% 1/4W		△	R1380	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 906	QRE141J-123Y	C RESISTOR	12K 5% 1/4W			R1381	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 909	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1382	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 911	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W			R1383	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 912	QRE141J-473Y	C RESISTOR	47K 5% 1/4W			R1384	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 913	QRE141J-104Y	C RESISTOR	100K 5% 1/4W			R1385	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 914	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R1386	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	

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

△	Item	Parts number	Parts name	Remarks	Area
△	R1389	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R1390	QRZ9005-680X	F RESISTOR	68 1/0W	
	R1391	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1392	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1401	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1402	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1403	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1404	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1405	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1406	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R1411	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1412	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1421	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1422	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1423	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1424	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1435	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R1436	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1437	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R1438	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	ST931	QNB0024-001	SPK.TERMINAL		
△	TH783	QAD0012-202	THERMISTOR		
△	TH784	QAD0012-202	THERMISTOR		
	TP781	QMV5005-004K	4P PLUG ASSY		
	VR787	QVP0004-501Z	SEMI.V.RESISTOR		
	VR788	QVP0004-501Z	SEMI.V.RESISTOR		

■ Electrical parts list
(FL display & System control board)

Block No. 03

Item	Parts number	Parts name	Remarks	Area	Item	Parts number	Parts name	Remarks	Area
C 400	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V		C1472	QFVJ1HJ-333Z	MF CAPACITOR	.033MF 5% 50V	
C 401	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V		C1473	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 402	QCZ0202-155Z	ML C CAPACITOR	1.5MF		C1474	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 403	QEZ0227-479Z	EDL CAPACITOR	47000MF		C1475	QFLC1HJ-332Z	M CAPACITOR	3300PF 5% 50V	A,US
C 404	QER61HM-225Z	E CAPACITOR	2.2MF 20% 50V		C1475	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	UF
C 405	QDVB1EZ-223Y	C CAPACITOR			C1476	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	UF
C 406	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V		C1476	QFLC1HJ-332Z	M CAPACITOR	3300PF 5% 50V	A,US
C 407	QCZ0202-155Z	ML C CAPACITOR	1.5MF		C1477	QFVJ1HJ-104Z	MF CAPACITOR	.10MF 5% 50V	
C 408	QFVJ1HJ-104Z	MF CAPACITOR	.10MF 5% 50V		C1478	QFVJ1HJ-104Z	MF CAPACITOR	.10MF 5% 50V	
C 409	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V		C1479	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
C 410	QEKC1HM-475Z	E CAPACITOR	4.7MF 20% 50V		C1480	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
C 412	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V		C1481	QFVJ1HJ-103Z	MF CAPACITOR	.010MF 5% 50V	
C 413	QDYB1CM-103Y	C CAPACITOR			C1482	QFVJ1HJ-103Z	MF CAPACITOR	.010MF 5% 50V	
C 414	QDYB1CM-103Y	C CAPACITOR			C1483	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V	
C 477	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V		C1484	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V	
C 478	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V		C1487	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	A,US
C 479	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V		C1487	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	UF
C 480	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V		C1488	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	UF
C 491	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%		C1488	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	A,US
C 492	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V		D 400	1SR35-400A-T5	DIODE		
C 493	QCBB1HK-271Y	C CAPACITOR	270PF 10% 50V		D 401	1SR35-400A-T5	DIODE		
C 494	QDVB1EZ-223Y	C CAPACITOR			D 402	1SR35-400A-T5	DIODE		
C 495	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%		D 404	1SS133-T2	SI DIODE		
C 499	QEKC0JM-107Z	E CAPACITOR	100MF 20% 6.3V		D 405	1SS133-T2	SI DIODE		US,UF
CN 61	QGB2510K1-08	CONNECTOR			D 410	RB441Q-40-T2	S B DIODE		
CN 62	QGB2510K1-08	CONNECTOR			D 411	1SS133-T2	SI DIODE		
CN 63	QGB2510K1-05	CONNECTOR			D 412	1SS133-T2	SI DIODE		
CN 71	QGB2510K1-08	CONNECTOR			D 413	1SS133-T2	SI DIODE		
CN 72	QGB2510K1-08	CONNECTOR			D 415	1SS133-T2	SI DIODE		A
CN 73	QGB2510K1-05	CONNECTOR			D 416	1SS133-T2	SI DIODE	BAND2(U)	
CN410	QGF1205F1-27	CONNECTOR			D 417	1SS133-T2	SI DIODE		A
CN412	QGF1210G1-21	CONNECTOR			D 418	1SS133-T2	SI DIODE		
CN420	QJK018-100800	SKT WIRE	(LEFT)	A,US	D 419	1SS133-T2	SI DIODE	PAL	
CN420	QJB002-100800	SOCKET WIRE ASS		UF	D 430	SLR-342VC-T	LED	(DVD)	
CN422	QGA2001F1-14	14P PLUG ASSY			D 431	SLR-342VC-T	LED	(TV)	
CN430	QGA2001F1-10	10P PLUG ASSY			D 432	SLR-342VC-T	LED	(VCR1)	
CN432	QJK018-140804	SKT WIRE ASSY		A,US	D 435	SLR-342VC-T	LED	(AM)	
CN432	QJB002-140804	SOCKET WIRE ASS		UF	D 436	SLR-342VC-T	LED	(FM)	
CN450	QJB001-104000	SOCKET WIRE ASS		UF	D 437	SLR-342VC-T	LED	(TAPE)	
CN450	QJK021-104000	C-B WIRE ASSY	(VIDEO)	A,US	D 438	SLR-342VC-T	LED	(PHONO)	
CN451	QGB2510K1-09	CONNECTOR			D 439	SLR-342VC-T	LED	(CD)	
CN881	QGD2501C1-03Z	SOCKET			D 440	SLR-342VC-T	LED	(SURROUND)	
C1451	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D 442	SLR-342VC-T	LED	(OTO)	
C1452	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D 481	SLR-342VC-T	LED	(STANDBY)	
C1453	QCS11HJ-101	C CAPACITOR	100PF 5% 50V		D 482	SLR-342VC-T	LED	(SPK1)	
C1454	QCS11HJ-101	C CAPACITOR	100PF 5% 50V		D 483	SPR-325MVWL-T	LED	(SPK2)	
C1455	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D 491	1SS133-T2	SI DIODE		
C1456	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D 493	1SS133-T2	SI DIODE		
C1457	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		DI400	QLF0071-001	FL TUBE		
C1458	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D1451	MTZJ6.8C-T2	Z DIODE		
C1459	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D1452	MTZJ6.8C-T2	Z DIODE		
C1460	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V		D1453	MTZJ5.1C-T2	ZENER DIODE		
C1461	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	A,US	FS400	E3400-444	FELT SPACER		
C1461	QETC1CM-476Z	AL E CAPACITOR	47MF 20% 16V	UF	FS401	E3400-444	FELT SPACER		
C1462	QETC1CM-476Z	AL E CAPACITOR	47MF 20% 16V	UF	HL400	VYH7653-001	IC HOLDER		
C1462	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	A,US	HL401	VYH7237-003	IC HOLDER		A,US
C1463	QDVB1EZ-223Y	C CAPACITOR			HL401	VYH7237-003SC	IC HOLDER		UF
C1464	QDVB1EZ-223Y	C CAPACITOR			IC400	MN173222DG	IC		
C1465	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	A,US	IC401	MN101C15FDE	IC		
C1465	QETC1CM-476Z	AL E CAPACITOR	47MF 20% 16V	UF	IC402	BU2092	IC		
C1469	QCS11HJ-470	C CAPACITOR	47PF 5% 50V		IC403	IC-PST9139-T	IC		
C1470	QCS11HJ-470	C CAPACITOR	47PF 5% 50V		IC404	GP1U271X	RM RECIVER		
C1471	QFVJ1HJ-333Z	MF CAPACITOR	.033MF 5% 50V		IC405	BU2092	IC		

■ Electrical parts list
(FL display & System control board)

Block No. 03

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	IC451	LC7522	IC				R 457	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	IC452	M5243AP12	IC				R 458	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	IC453	BA15218N	IC				R 459	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	JS400	QSW0502-001	SWITCH				R 460	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	JS401	QSW0672-001	ROTARY ENCODER	(MULTI)			R 461	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	JS402	QSW0672-001	ROTARY ENCODER	(SOURCE)			R 462	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	Q 401	KRC107M-T	D TRANSISTOR				R 463	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	Q 402	KRC111M-T	TRANSISTOR				R 464	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	Q 403	KRC109M-T	D TRANSISTOR		US,UF		R 465	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	Q 404	KRC107M-T	D TRANSISTOR				R 466	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	Q 407	KRC107M-T	D TRANSISTOR				R 468	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	Q 408	KRC107M-T	D TRANSISTOR				R 475	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q 413	KRA107M-T	D TRANSISTOR				R 476	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q 414	KRA107M-T	D TRANSISTOR				R 477	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q 415	KRA107M-T	D TRANSISTOR				R 478	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q 416	KRA107M-T	D TRANSISTOR				R 479	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	Q 442	KRA107M-T	D TRANSISTOR				R 483	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	Q 488	KRA107M-T	D TRANSISTOR				R 484	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 400	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 485	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 401	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 487	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 402	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 488	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 403	QRE141J-331Y	C RESISTOR	330 5% 1/4W			R 490	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 404	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 495	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 405	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 496	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 406	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 497	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 407	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 498	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 408	QRE141J-223Y	C RESISTOR	22K 5% 1/4W			R 499	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 410	QRE141J-223Y	C RESISTOR	22K 5% 1/4W		△	R 881	QRZ0209-3R3	RESISTOR	3.3 1/2W	
	R 411	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W		△	R 882	QRZ0209-3R3	RESISTOR	3.3 1/2W	
	R 412	QRE141J-181Y	C RESISTOR	180 5% 1/4W		△	R 883	QRZ0209-3R3	RESISTOR	3.3 1/2W	
	R 414	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	US,UF	△	R 884	QRZ0209-3R3	RESISTOR	3.3 1/2W	
	R 417	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1451	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 418	QRE141J-471Y	C RESISTOR	470 5% 1/4W			R1452	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 423	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1453	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 424	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1454	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 425	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1457	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 426	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1458	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 427	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1459	QRE141J-113Y	C RESISTOR	11K 5% 1/4W	
	R 430	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1460	QRE141J-113Y	C RESISTOR	11K 5% 1/4W	
	R 431	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R1461	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 433	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1462	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 434	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1463	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R 435	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1464	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R 436	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1465	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R 437	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1466	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R 438	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			△	R1471	QRJ146J-561X	UNF C RESISTOR	560 5% 1/4W
	R 439	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			△	R1472	QRJ146J-561X	UNF C RESISTOR	560 5% 1/4W
	R 440	QRE141J-474Y	C RESISTOR	470K 5% 1/4W			△	R1473	QRJ146J-681X	UNF C RESISTOR	680 5% 1/4W
	R 441	QRE141J-474Y	C RESISTOR	(PULLDOWN)			R1475	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 442	QRE141J-474Y	C RESISTOR	(PULLDOWN)			R1476	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 443	QRE141J-474Y	C RESISTOR	(PULLDOWN)			R1477	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 445	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1478	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 446	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1479	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 447	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1480	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 448	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1481	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 449	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1482	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 450	QRE141J-221Y	C RESISTOR	220 5% 1/4W			R1483	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 451	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1484	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 452	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1485	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 453	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R1486	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 454	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			△	R1487	QRZ9005-680X	F RESISTOR	68 1/0W
	R 455	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			△	R1488	QRZ9005-680X	F RESISTOR	68 1/0W
	R 456	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			S 400	QSW0683-001Z	PUSH SWITCH	(POWER)	

■ Electrical parts list

(FL display & System control board)

Block No. 03

△	Item	Parts number	Parts name	Remarks	Area
	S 401	QSW0683-001Z	PUSH SWITCH	(SPK1)	
	S 402	QSW0683-001Z	PUSH SWITCH	(SPK2)	
	S 407	QSW0683-001Z	PUSH SWITCH	(SURROUND)	
	S 408	QSW0683-001Z	PUSH SWITCH	(DIGITAL)	
	S 409	QSW0683-001Z	PUSH SWITCH	(DSP MODE)	
	S 410	QSW0683-001Z	PUSH SWITCH	(LOUDNESS)	
	S 411	QSW0683-001Z	PUSH SWITCH	(SEA MODE)	
	S 412	QSW0683-001Z	PUSH SWITCH	(SEA ADJ)	
	S 413	QSW0683-001Z	PUSH SWITCH	(FM MODE)	
	S 414	QSW0683-001Z	PUSH SWITCH	(ADJUST)	
	S 415	QSW0683-001Z	PUSH SWITCH	(S.SELECT)	
	S 416	QSW0683-001Z	PUSH SWITCH	(TUNING)	
	S 417	QSW0683-001Z	PUSH SWITCH	(PRESET)	
	S 418	QSW0683-001Z	PUSH SWITCH	(MEMORY)	
	S 419	QSW0683-001Z	PUSH SWITCH	(SETTING)	
	S 420	QSW0683-001Z	PUSH SWITCH	(OTO)	
	X 400	QAX0112-001Z	RESONATOR		
	X 401	QAX0246-001Z	RESONATOR		

■ Electrical parts list
 (Power AMP & Power supply board) Ver.A/US Block No. 04

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
△	C 1	QCZ9019-472	C CAPACITOR	4700PF			C1803	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 51	QFN32AK-472Z	M CAPACITOR	4700PF 10% 100V			C1804	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 52	QETM1JM-477	E CAPACITOR	470MF 20% 63V			C1805	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 53	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1806	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 54	QETN1CM-477Z	E CAPACITOR	470MF 20% 16V			C1807	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 55	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1808	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 56	QCZ0202-155Z	ML C CAPACITOR	1.5MF			C1809	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V	
	C 61	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1810	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V	
	C 62	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1811	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 63	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1812	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 65	QETM1VM-338	E CAPACITOR	3300MF 20% 35V			C1813	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 66	QETM1VM-108	E CAPACITOR	1000MF 20% 35V			C1814	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 67	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1815	QEK1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 68	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1816	QEK1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 69	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1817	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 70	QETN1HM-227Z	E CAPACITOR	220MF 20% 50V			C1818	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 71	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V			C1841	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 72	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V			C1842	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 73	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V			C1843	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 74	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V			C1851	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 93	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V			C1852	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 94	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V			C1853	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 705	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C1854	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 706	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C1861	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 711	QFLC1HJ-152Z	M CAPACITOR	1500PF 5% 50V			C1862	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 712	QFLC1HJ-152Z	M CAPACITOR	1500PF 5% 50V			C1863	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 713	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1864	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 714	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1891	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 715	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1892	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 716	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			△	D 51	1SR35-400A-T5	DIODE	
	C 717	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V			△	D 52	1SR35-400A-T5	DIODE	
	C 718	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V			△	D 53	1SR35-400A-T5	DIODE	
	CN 51	QGB2510J1-08	CONNECTOR				△	D 54	1SR35-400A-T5	DIODE	
	CN 52	QGB2510J1-08	CONNECTOR				△	D 55	MTZJ12C-T2	ZENER DIODE	
	CN 53	QGB2510J1-05	CONNECTOR				△	D 56	MTZJ6.2A-T2	Z DIODE	
	CN 55	QGD2501C1-03Z	SOCKET					D 57	1SS133-T2	SI DIODE	
	CN 56	QGD2501C1-04Z	SOCKET				△	D 61	10E2-FD	DIODE	
	CN402	QGF1205C1-21	CONNECTOR				△	D 62	1SR35-400A-T5	DIODE	
	CN701	QJP002-021401	SHI CR C-B WIRE				△	D 63	10E2-FD	DIODE	
	CN702	QJP001-031401	SHI CR C-B WIRE				△	D 64	1SR35-400A-T5	DIODE	
	CN703	WJK0034-001A	SKT WIRE ASSY	(WITH CN803)				D 65	1SS133-T2	SI DIODE	
	CN705	QGB2510K1-12	CONNECTOR				△	D 71	1SR35-400A-T5	DIODE	
	CN811	QGA3901F2-03	CONNECTOR				△	D 72	1SR35-400A-T5	DIODE	
	CN952	QJK015-062801	SIN CR C-B WIRE				△	D 73	1SR35-400A-T5	DIODE	
	C1701	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V			△	D 74	MTZJ33C-T2	Z DIODE	
	C1702	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			△	D 75	MTZJ6.2C-T2	Z DIODE	
	C1703	QCS11HJ-101	C CAPACITOR	100PF 5% 50V				D 701	1SS133-T2	SI DIODE	
	C1704	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V				D 702	1SS133-T2	SI DIODE	
	C1705	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V				D 703	1SS133-T2	SI DIODE	
	C1711	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V				D 704	1SS133-T2	SI DIODE	
	C1712	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V				D1701	1SS133-T2	SI DIODE	
	C1713	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V			△	D1702	MTZJ18C-T2	Z DIODE	
	C1715	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V				D1771	1SS133-T2	SI DIODE	
	C1741	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V				D1772	1SS133-T2	SI DIODE	
	C1742	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V				D1791	1SS133-T2	SI DIODE	
	C1743	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V				D1801	1SS133-T2	SI DIODE	
	C1751	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V				D1802	1SS133-T2	SI DIODE	
	C1752	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			△	D1805	MTZJ18C-T2	Z DIODE	
	C1761	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V				D1871	1SS133-T2	SI DIODE	
	C1762	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V				D1872	1SS133-T2	SI DIODE	
	C1791	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%				D1873	1SS133-T2	SI DIODE	
	C1801	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V				D1874	1SS133-T2	SI DIODE	
	C1802	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V				D1891	1SS133-T2	SI DIODE	

■ Electrical parts list
(Power AMP & Power supply board) Ver.A/US Block No. 04

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	D1892	1SS133-T2	SI DIODE				R 51	QRJ146J-153X	UNF C RESISTOR	15K 5% 1/4W	
	EP 1	E409182-001SM	GRAND TERMINAL				R 52	QRL012J-332	UNF OMF RES	3.3K 5% 1/1W	
	EP 2	QNZ0136-001Z	EARTH PLATE				R 53	QRZ9015-3R3	FUSI RESISTOR	3.3 1/0W	
	EP 51	QNZ0136-001Z	EARTH PLATE				R 54	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	FC 1	QNG0020-001Z	FUSE CLIP	F001			R 55	QRT022J-1R0	MF RESISTOR	1.0 5% 1/2W	
	FC 2	QNG0020-001Z	FUSE CLIP	F001			R 61	QRT012J-1R0	UNF MF RESISTOR	1.0 5% 1/1W	
	FC 3	QNG0020-001Z	FUSE CLIP	F002			R 62	QRT012J-1R0	UNF MF RESISTOR	1.0 5% 1/1W	
	FC 4	QNG0020-001Z	FUSE CLIP	F002			R 66	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	FC 5	QNG0020-001Z	FUSE CLIP	F004	US		R 67	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W	
	FC 6	QNG0020-001Z	FUSE CLIP	F004	US		R 68	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	FC 61	QNG0020-001Z	FUSE CLIP	F061			R 69	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	FC 62	QNG0020-001Z	FUSE CLIP	F061			R 70	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	FC 63	QNG0020-001Z	FUSE CLIP	F062			R 72	QRJ146J-332X	UNF C RESISTOR	3.3K 5% 1/4W	
	FC 64	QNG0020-001Z	FUSE CLIP	F062			R 73	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	FW 51	QUM137-10DGZ4	PARA RIBON WIRE				R 74	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW901	QUM133-08DGZ4	PARA RIBON WIRE				R 91	QRL022J-471	UNF OMF RES	470 5% 1/2W	
	HS 51	E70945-H40B	HEAT SINK				R 92	QRL022J-471	UNF OMF RES	470 5% 1/2W	
	J 91	QNS0023-001	JACK				R 705	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1761	QQLZ005-R45	INDUCTOR				R 706	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1762	QQLZ005-R45	INDUCTOR				R 707	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1861	QQLZ005-R45	INDUCTOR				R 708	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1862	QQLZ005-R45	INDUCTOR				R 709	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	L1863	QQLZ005-R45	INDUCTOR				R 710	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	L1864	QQLZ005-R45	INDUCTOR				R 717	QRJ146J-562X	UNF C RESISTOR	5.6K 5% 1/4W	
△	Q 51	2SD1266/QP/	TRANSISTOR			△	R 718	QRJ146J-562X	UNF C RESISTOR	5.6K 5% 1/4W	
△	Q 52	2SC2235/OY/-T	TRANSISTOR			△	R 719	QRK126J-103X	UNF C RESISTOR	10K 5% 1/2W	
	Q 53	KRC105M-T	D TRANSISTOR			△	R 720	QRK126J-103X	UNF C RESISTOR	10K 5% 1/2W	
	Q 61	KRC107M-T	D TRANSISTOR			△	R 721	QRJ146J-151X	UNF C RESISTOR	150 5% 1/4W	
	Q 71	2SB1357/EF/-T	TRANSISTOR			△	R 722	QRJ146J-151X	UNF C RESISTOR	150 5% 1/4W	
	Q 74	2SC2240/GL/-T	TRANSISTOR				R 723	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 701	2SC2240-BL/AB/T	TRANSISTOR				R 724	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 702	2SC2240-BL/AB/T	TRANSISTOR				R 725	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	Q 703	2SC2240-BL/AB/T	TRANSISTOR				R 726	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	Q 704	2SC2240-BL/AB/T	TRANSISTOR				R 727	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	Q 705	2SA1038S/SE/-T	TRANSISTOR				R 728	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	Q 706	2SA1038S/SE/-T	TRANSISTOR				R 729	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 707	2SA933AS/RS/-T	TRANSISTOR				R 730	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 708	2SA933AS/RS/-T	TRANSISTOR				R 731	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 709	2SA1038S/SE/-T	TRANSISTOR				R 732	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 710	2SA1038S/SE/-T	TRANSISTOR				R 733	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 711	2SC2389S/SE/-T	TRANSISTOR				R 734	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 712	2SC2389S/SE/-T	TRANSISTOR			△	RY 1	QSK0098-001	RELAY		
	Q1701	2SC2240-BL/AB/T	TRANSISTOR				R1701	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	Q1702	2SC2240-BL/AB/T	TRANSISTOR				R1702	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	Q1703	2SA1038S/S/-T	TRANSISTOR				R1703	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	Q1731	2SD637/QR/	TRANSISTOR				R1705	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	Q1771	2SC2389S/SE/-T	TRANSISTOR				R1711	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	Q1772	2SA1038S/SE/-T	TRANSISTOR				R1712	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	Q1791	2SC2389S/SE/-T	TRANSISTOR			△	R1721	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	Q1801	2SC2240-BL/AB/T	TRANSISTOR				R1722	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1802	2SC2240-BL/AB/T	TRANSISTOR				R1723	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1803	2SC2240-BL/AB/T	TRANSISTOR				R1724	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1804	2SC2240-BL/AB/T	TRANSISTOR				R1725	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1805	2SA1038S/S/-T	TRANSISTOR				R1731	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	Q1806	2SA1038S/S/-T	TRANSISTOR				R1732	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q1831	2SD637/QR/	TRANSISTOR			△	R1742	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	Q1832	2SD637/QR/	TRANSISTOR			△	R1743	QRL022J-562	UNF OMF RES	5.6K 5% 1/2W	
	Q1871	2SC2389S/SE/-T	TRANSISTOR			△	R1751	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	Q1872	2SC2389S/SE/-T	TRANSISTOR			△	R1752	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	Q1873	2SA1038S/SE/-T	TRANSISTOR			△	R1753	QRZ0196-R22	EMIT RESISTOR	1/1W	
	Q1874	2SA1038S/SE/-T	TRANSISTOR			△	R1761	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
	Q1891	2SC2389S/SE/-T	TRANSISTOR			△	R1762	QRL022J-100	UNF OMF RES	10 5% 1/2W	
	Q1892	2SC2389S/SE/-T	TRANSISTOR				R1771	QRE141J-391Y	C RESISTOR	390 5% 1/4W	

■ Electrical parts list
 (Power AMP & Power supply board) Ver.A/US Block No. 04

△	Item	Parts number	Parts name	Remarks	Area
	R1772	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1773	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1774	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1791	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1792	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1793	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1794	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1801	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1802	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1803	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R1804	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R1805	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	R1806	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	R1809	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1810	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1811	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	R1812	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	R1813	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1814	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R1821	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
△	R1822	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	R1823	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1824	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1825	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1826	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1827	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1828	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1829	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1830	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1831	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R1832	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R1833	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1834	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
△	R1842	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
△	R1843	QRL022J-562	UNF OMF RES	5.6K 5% 1/2W	
△	R1851	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1852	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1853	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1854	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1855	QRZ0196-R22	EMIT RESISTOR	1/1W	
△	R1856	QRZ0196-R22	EMIT RESISTOR	1/1W	
△	R1861	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
△	R1862	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
△	R1863	QRL022J-100	UNF OMF RES	10 5% 1/2W	
△	R1864	QRL022J-100	UNF OMF RES	10 5% 1/2W	
	R1871	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1872	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1873	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1874	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1875	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1876	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1877	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1878	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1891	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1892	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1893	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1894	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1895	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1896	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1897	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1898	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	T 2	QQT0281-004	POWER TRANSF		
	TA 1	QNZ0079-001Z	TAB		

△	Item	Parts number	Parts name	Remarks	Area
	TA 2	QNZ0079-001Z	TAB		
△	TH 71	QAD0095-4R7Z	POSISTOR		
△	TH731	QAD0012-202	THERMISTOR		
△	TH831	QAD0012-202	THERMISTOR		
△	TH832	QAD0012-202	THERMISTOR		
△	VS 1	QSW0812-001	VOLTAGE SWITCH		US

■ Electrical parts list

(Power AMP & Power supply board) Ver.UF Block No. 05

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 1	QCZ9019-472	C CAPACITOR	4700PF			C1803	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 51	QFN32AK-472Z	M CAPACITOR	4700PF 10% 100V			C1804	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 52	QETM1JM-477	E CAPACITOR	470MF 20% 63V			C1805	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 53	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1806	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
	C 54	QETN1CM-477Z	E CAPACITOR	470MF 20% 16V			C1807	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 55	QCF31HZ-472Z	C CAPACITOR	4700PF +80:-20%			C1808	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 56	QCZ0202-155Z	ML C CAPACITOR	1.5MF			C1809	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V	
	C 61	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1810	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V	
	C 62	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1811	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 63	QFN32AJ-104Z	M CAPACITOR	.10MF 5% 100V			C1812	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V	
	C 65	QETM1VM-338	E CAPACITOR	3300MF 20% 35V			C1813	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 66	QETM1VM-108	E CAPACITOR	1000MF 20% 35V			C1814	QFLC1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 67	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1815	QEK1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 68	QFN31HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1816	QEK1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 69	QFN31HJ-473Z	M CAPACITOR	.047MF 5% 50V			C1817	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 70	QETC1HM-227Z	E CAPACITOR	220MF 20% 50V			C1818	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 71	QETN1JM-107Z	E CAPACITOR	100MF 20% 63V			C1841	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 72	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V			C1842	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 73	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V			C1843	QETC1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 74	QETC1HM-105Z	E CAPACITOR	1.0MF 20% 50V			C1851	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 93	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V			C1852	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 94	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V			C1853	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 705	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C1854	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V	
	C 706	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C1861	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 711	QFN31HJ-152Z	M CAPACITOR	1500PF 5% 50V			C1862	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 712	QFN31HJ-152Z	M CAPACITOR	1500PF 5% 50V			C1863	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 713	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1864	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 714	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1891	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 715	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			C1892	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 716	QCS11HJ-680	C CAPACITOR	68PF 5% 50V			△	D 51	1SR35-400A-T5	DIODE	
	C 717	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V			△	D 52	1SR35-400A-T5	DIODE	
	C 718	QCS32HJ-220Z	C CAPACITOR	22PF 5% 500V			△	D 53	1SR35-400A-T5	DIODE	
	CN 51	QGB2510J1-08	CONNECTOR				△	D 54	1SR35-400A-T5	DIODE	
	CN 52	QGB2510J1-08	CONNECTOR				△	D 55	MTZJ12C-T2	ZENER DIODE	
	CN 53	QGB2510J1-05	CONNECTOR				△	D 56	MTZJ6.2A-T2	Z DIODE IDM	
	CN 55	QGD2501C1-03Z	SOCKET				△	D 57	1SS133-T2	SI DIODE	
	CN 56	QGD2501C1-04Z	SOCKET				△	D 61	10E2-FD	DIODE	
	CN402	QGF1205C1-21	CONNECTOR				△	D 62	1SR35-400A-T5	DIODE	
	CN701	QJP002-021401	SHI CR C-B WIRE				△	D 63	10E2-FD	DIODE	
	CN702	QJP001-031401	SHI CR C-B WIRE				△	D 64	1SR35-400A-T5	DIODE	
	CN703	WJK0034-001A	SKT WIRE ASSY	(WITH CN803)			△	D 65	1SS133-T2	SI DIODE	
	CN705	QGB2510K1-12	CONNECTOR				△	D 71	1SR35-400A-T5	DIODE	
	CN811	QGA3901F2-03	CONNECTOR				△	D 72	1SR35-400A-T5	DIODE	
	CN952	QJK015-062801	SIN CR C-B WIRE				△	D 73	1SR35-400A-T5	DIODE	
	C1701	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			△	D 74	MTZJ33C-T2	Z DIODE	
	C1702	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			△	D 75	MTZJ6.2C-T2	Z DIODE	
	C1703	QCS11HJ-101	C CAPACITOR	100PF 5% 50V				D 701	1SS133-T2	SI DIODE	
	C1704	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V				D 702	1SS133-T2	SI DIODE	
	C1705	QCS31HJ-5R0Z	C CAPACITOR	5.0PF 5% 50V				D 703	1SS133-T2	SI DIODE	
	C1711	QCS32HJ-330Z	C CAPACITOR	33PF 5% 500V				D 704	1SS133-T2	SI DIODE	
	C1712	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V				D1701	1SS133-T2	SI DIODE	
	C1713	QETC1HM-225Z	E CAPACITOR	2.2MF 20% 50V			△	D1702	MTZJ18C-T2	Z DIODE	
	C1715	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V				D1771	1SS133-T2	SI DIODE	
	C1741	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V				D1772	1SS133-T2	SI DIODE	
	C1742	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V				D1791	1SS133-T2	SI DIODE	
	C1743	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V				D1801	1SS133-T2	SI DIODE	
	C1751	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V				D1802	1SS133-T2	SI DIODE	
	C1752	QCS32HJ-470Z	C CAPACITOR	47PF 5% 500V			△	D1805	MTZJ18C-T2	Z DIODE	
	C1761	QFN31HJ-473Z	M CAPACITOR	.047MF 5% 50V				D1871	1SS133-T2	SI DIODE	
	C1762	QFN31HJ-473Z	M CAPACITOR	.047MF 5% 50V				D1872	1SS133-T2	SI DIODE	
	C1791	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%				D1873	1SS133-T2	SI DIODE	
	C1801	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V				D1874	1SS133-T2	SI DIODE	
	C1802	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V				D1891	1SS133-T2	SI DIODE	

■ Electrical parts list

(Power AMP & Power supply board) Ver.UF Block No. 05

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	D1892	1SS133-T2	SI DIODE				R 53	QRZ9015-3R3	FUSI RESISTOR	3.3 1/0W	
	EP 1	E409182-001SM	GRAND TERMINAL				R 54	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	EP 2	QNZ0136-001Z	EARTH PLATE			△	R 55	QRT022J-1R0	MF RESISTOR	1.0 5% 1/2W	
	EP 51	QNZ0136-001Z	EARTH PLATE			△	R 61	QRT012J-1R0	UNF MF RESISTOR	1.0 5% 1/1W	
	FC 1	QNG0020-001Z	FUSE CLIP	F001		△	R 62	QRT012J-1R0	UNF MF RESISTOR	1.0 5% 1/1W	
	FC 2	QNG0020-001Z	FUSE CLIP	F001		△	R 66	QRJ146J-2R2X	UNF C RESISTOR	2.2 5% 1/4W	
	FC 3	QNG0020-001Z	FUSE CLIP	F002		△	R 67	QRJ146J-120X	UNF C RESISTOR	12 5% 1/4W	
	FC 4	QNG0020-001Z	FUSE CLIP	F002			R 68	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	FC 61	QNG0020-001Z	FUSE CLIP	F061			R 69	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	FC 62	QNG0020-001Z	FUSE CLIP	F061			R 70	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	FC 63	QNG0020-001Z	FUSE CLIP	F062		△	R 72	QRJ146J-332X	UNF C RESISTOR	3.3K 5% 1/4W	
	FC 64	QNG0020-001Z	FUSE CLIP	F062			R 73	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	FW 51	QUM157-10DGZ4	PARA RIBON WIRE				R 74	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	FW901	QUM153-08DGZ4	PARA RIBON WIRE			△	R 91	QRL022J-471	UNF OMF RES	470 5% 1/2W	
	HS 51	E70945-H40B	HEAT SINK			△	R 92	QRL022J-471	UNF OMF RES	470 5% 1/2W	
	J 91	QNS0023-001	JACK				R 705	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1761	QQLZ005-R45	INDUCTOR				R 706	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1762	QQLZ005-R45	INDUCTOR				R 707	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1861	QQLZ005-R45	INDUCTOR				R 708	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	L1862	QQLZ005-R45	INDUCTOR				R 709	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	L1863	QQLZ005-R45	INDUCTOR				R 710	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	L1864	QQLZ005-R45	INDUCTOR			△	R 717	QRJ146J-562X	UNF C RESISTOR	5.6K 5% 1/4W	
△	Q 51	2SD1266/QP/	TRANSISTOR			△	R 718	QRJ146J-562X	UNF C RESISTOR	5.6K 5% 1/4W	
△	Q 52	2SC2235/OY/-T	TRANSISTOR			△	R 719	QRK126J-103X	UNF C RESISTOR	10K 5% 1/2W	
	Q 53	KRC105M-T	D TRANSISTOR			△	R 720	QRK126J-103X	UNF C RESISTOR	10K 5% 1/2W	
	Q 61	KRC107M-T	D TRANSISOR			△	R 721	QRJ146J-151X	UNF C RESISTOR	150 5% 1/4W	
	Q 71	2SB1357/EF/-T	TRANSISTOR			△	R 722	QRJ146J-151X	UNF C RESISTOR	150 5% 1/4W	
	Q 74	2SC2240/GL/-T	TRANSISTOR				R 723	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 701	2SC2240-BL/AB/T	TRANSISTOR				R 724	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 702	2SC2240-BL/AB/T	TRANSISTOR				R 725	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	Q 703	2SC2240-BL/AB/T	TRANSISTOR				R 726	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	Q 704	2SC2240-BL/AB/T	TRANSISTOR				R 727	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	Q 705	2SA1038S/SE/-T	TRANSISTOR				R 728	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	Q 706	2SA1038S/SE/-T	TRANSISTOR				R 729	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 707	2SA933AS/RS/-T	TRANSISTOR				R 730	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 708	2SA933AS/RS/-T	TRANSISTOR				R 731	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 709	2SA1038S/SE/-T	TRANSISTOR				R 732	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q 710	2SA1038S/SE/-T	TRANSISTOR				R 733	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 711	2SC2389S/SE/-T	TRANSISTOR				R 734	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 712	2SC2389S/SE/-T	TRANSISTOR			△	RY 1	QSK0098-001	RELAY		
	Q1701	2SC2240-BL/AB/T	TRANSISTOR				R1701	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	Q1702	2SC2240-BL/AB/T	TRANSISTOR				R1702	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	Q1703	2SA1038S/S/-T	TRANSISTOR				R1703	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	Q1731	2SD637/QR/	TRANSISTOR				R1705	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	Q1771	2SC2389S/SE/-T	TRANSISTOR				R1711	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	Q1772	2SA1038S/SE/-T	TRANSISTOR				R1712	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	Q1791	2SC2389S/SE/-T	TRANSISTOR			△	R1721	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	Q1801	2SC2240-BL/AB/T	TRANSISTOR				R1722	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1802	2SC2240-BL/AB/T	TRANSISTOR				R1723	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1803	2SC2240-BL/AB/T	TRANSISTOR				R1724	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1804	2SC2240-BL/AB/T	TRANSISTOR				R1725	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q1805	2SA1038S/S/-T	TRANSISTOR				R1731	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	Q1806	2SA1038S/S/-T	TRANSISTOR				R1732	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	Q1831	2SD637/QR/	TRANSISTOR			△	R1742	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	Q1832	2SD637/QR/	TRANSISTOR			△	R1743	QRL022J-562	UNF OMF RES	5.6K 5% 1/2W	
	Q1871	2SC2389S/SE/-T	TRANSISTOR			△	R1751	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	Q1872	2SC2389S/SE/-T	TRANSISTOR			△	R1752	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	Q1873	2SA1038S/SE/-T	TRANSISTOR			△	R1753	QRZ0196-R22	EMIT RESISTOR	1/1W	
	Q1874	2SA1038S/SE/-T	TRANSISTOR			△	R1761	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
	Q1891	2SC2389S/SE/-T	TRANSISTOR			△	R1762	QRL022J-100	UNF OMF RES	10 5% 1/2W	
	Q1892	2SC2389S/SE/-T	TRANSISTOR				R1771	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
△	R 51	QRJ146J-153X	UNF C RESISTOR	15K 5% 1/4W			R1772	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
△	R 52	QRL012J-332	UNF OMF RES	3.3K 5% 1/1W			R1773	QRE141J-201Y	C RESISTOR	200 5% 1/4W	

■ Electrical parts list

(Power AMP & Power supply board) Ver.UF Block No. 05

△	Item	Parts number	Parts name	Remarks	Area
	R1774	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1791	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1792	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1793	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1794	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1801	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1802	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1803	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R1804	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R1805	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	R1806	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	R1809	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1810	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1811	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	R1812	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	R1813	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1814	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R1821	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
△	R1822	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
	R1823	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1824	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1825	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1826	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1827	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1828	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1829	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1830	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1831	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R1832	QRE141J-751Y	C RESISTOR	750 5% 1/4W	
	R1833	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1834	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
△	R1842	QRJ146J-221X	UNF C RESISTOR	220 5% 1/4W	
△	R1843	QRL022J-562	UNF OMF RES	5.6K 5% 1/2W	
△	R1851	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1852	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1853	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1854	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
△	R1855	QRZ0196-R22	EMIT RESISTOR	1/1W	
△	R1856	QRZ0196-R22	EMIT RESISTOR	1/1W	
△	R1861	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
△	R1862	QRJ125J-330	UNF C RESISTOR	33 5% 1/2W	
△	R1863	QRL022J-100	UNF OMF RES	10 5% 1/2W	
△	R1864	QRL022J-100	UNF OMF RES	10 5% 1/2W	
	R1871	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1872	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1873	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1874	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1875	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1876	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1877	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1878	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R1891	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1892	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R1893	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1894	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R1895	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1896	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1897	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1898	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	T 2	QQT0281-004	POWER TRANSF		
	TA 1	QNZ0079-001Z	TAB		
	TA 2	QNZ0079-001Z	TAB		
△	TH 71	QAD0095-4R7Z	POSISTOR		

△	Item	Parts number	Parts name	Remarks	Area
△	TH731	QAD0012-202	THERMISTOR		
△	TH831	QAD0012-202	THERMISTOR		
△	TH832	QAD0012-202	THERMISTOR		

■ Electrical parts list (SP terminal board)
Block No. 06

△	Item	Parts number	Parts name	Remarks	Area
	C 813	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 814	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 815	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 981	QFLC1HJ-102Z	M CAPACITOR	1000PF 5% 50V	A,US
	C 981	QFN31HJ-102Z	M CAPACITOR	1000PF 5% 50V	UF
	C 983	QCS11HJ-221	C CAPACITOR	220PF 5% 50V	
	C 984	QCS11HJ-221	C CAPACITOR	220PF 5% 50V	
	C 985	QFLC1HJ-473Z	M CAPACITOR	.047MF 5% 50V	A,US
	C 985	QFN31HJ-473Z	M CAPACITOR	.047MF 5% 50V	UF
	C 986	QCS11HJ-221	C CAPACITOR	220PF 5% 50V	
	C 987	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V	A,US
	C 987	QFN31HJ-223Z	M CAPACITOR	.022MF 5% 50V	UF
	C 988	QFN31HJ-223Z	M CAPACITOR	.022MF 5% 50V	UF
	C 988	QFLC1HJ-223Z	M CAPACITOR	.022MF 5% 50V	A,US
	C 989	QCS11HJ-221	C CAPACITOR	220PF 5% 50V	
	C 990	QCS11HJ-221	C CAPACITOR	220PF 5% 50V	
	C 991	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 992	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 993	QCB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	CN953	QGA3901C1-06	6P PLUG ASSY		
	D 805	1SS133-T2	SI DIODE		
	D 806	1SS133-T2	SI DIODE		
	D 807	1SS133-T2	SI DIODE		
	D 808	1SS133-T2	SI DIODE		
	D 809	MTZJ5.1C-T2	ZENER DIODE		
	D 981	1SS133-T2	SI DIODE		
	D 982	1SS133-T2	SI DIODE		
	FW962	QUM155-15DGZ4	FLAT WIRE		UF
	FW962	QUM135-15DGZ4	PARA RIBON WIRE		A,US
	Q 805	KRC109M-T	D TRANSISTOR		
	Q 806	KRC109M-T	D TRANSISTOR		
	Q 807	KRC109M-T	D TRANSISTOR		
	Q 808	KRC109M-T	D TRANSISTOR		
	Q 809	KRC109M-T	D TRANSISTOR		
	Q 810	KRC109M-T	D TRANSISTOR		
	Q 811	KRC109M-T	D TRANSISTOR		
	R 941	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 942	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R 943	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 944	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R 945	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 946	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
△	R 981	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 982	QRJ146J-101X	UNF C RESISTOR	100 5% 1/4W	
△	R 985	QRJ146J-2R7X	UNF C RESISTOR	2.7 5% 1/4W	
△	R 987	QRJ146J-2R7X	UNF C RESISTOR	2.7 5% 1/4W	
△	R 988	QRJ146J-2R7X	UNF C RESISTOR	2.7 5% 1/4W	
	R 991	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 992	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 993	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
△	R 999	QRJ146J-392X	UNF C RESISTOR	3.9K 5% 1/4W	
	RY981	QSK0109-001	RELAY		
	RY982	QSK0109-001	RELAY		
	ST981	QNB0016-001	SPK TERMINAL		

■ Electrical parts list
(Input / output board) Ver.A/US

Block No. 07

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 201	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 319	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 202	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 320	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 203	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 321	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 204	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 322	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 207	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 323	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 208	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C 324	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 209	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 325	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 211	QETN1HM-107Z	E CAPACITOR	100MF 20% 50V			C 326	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 212	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C 327	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 213	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 328	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 214	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 329	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 215	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 330	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 216	QDX31EM-473Z	C CAPACITOR				C 331	QCS11HJ-471	C CAPACITOR	470PF 5% 50V	
	C 217	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V			C 332	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 218	QCZ0202-155Z	ML C CAPACITOR	1.5MF			C 333	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 219	QDC31HJ-150Z	C CAPACITOR				C 334	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 220	QDC31HJ-100Z	C CAPACITOR				C 337	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 221	QDC31HJ-470Z	C CAPACITOR				C 338	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 222	QDC31HJ-270Z	C CAPACITOR				C 339	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 223	QDGB1HK-102Y	C CAPACITOR				C 340	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 224	QCBB1HK-271Y	C CAPACITOR	270PF 10% 50V			C 341	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 225	QCBB1HK-121Y	C CAPACITOR	120PF 10% 50V			C 342	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 241	QDX31EM-473Z	C CAPACITOR				C 343	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 242	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 344	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 244	QDX31EM-473Z	C CAPACITOR				C 345	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 245	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 346	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 246	QDX31EM-473Z	C CAPACITOR				C 347	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 247	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 348	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 249	QDX31EM-473Z	C CAPACITOR				C 349	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 250	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 350	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 251	QDX31EM-473Z	C CAPACITOR				C 351	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 252	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 352	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 254	QDX31EM-473Z	C CAPACITOR				C 353	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 255	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 354	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 256	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 358	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C 257	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C 361	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 258	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 362	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 259	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C 363	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 260	QDX31EM-473Z	C CAPACITOR				C 364	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 261	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 369	QDVB1EZ-223Y	C CAPACITOR		
	C 268	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 370	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C 269	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 371	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 270	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 372	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 271	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 373	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 277	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 374	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 301	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 377	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 302	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 378	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 303	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 379	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 304	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 380	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 305	QFLC1HJ-182Z	M CAPACITOR	1800PF 5% 50V			C 381	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 306	QFLC1HJ-182Z	M CAPACITOR	1800PF 5% 50V			C 382	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 307	QFLC1HJ-682Z	M CAPACITOR	6800PF 5% 50V			C 383	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 308	QFLC1HJ-682Z	M CAPACITOR	6800PF 5% 50V			C 384	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 309	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN200	QGB2510K1-05	CONNECTOR		
	C 310	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN202	QGA2001F1-10	10P PLUG ASSY		
	C 311	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			CN204	QGB1214K1-14S	CONNECTOR		
	C 312	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			CN205	QGB1214J1-14S	CONNECTOR		
	C 313	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			CN240	QGB2510K1-04	CONNECTOR		
	C 314	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			CN242	QGB1214K1-14S	CONNECTOR		
	C 315	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			CN243	QGB1214J1-14S	CONNECTOR		
	C 316	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			CN254	QGB2510K1-05	CONNECTOR		
	C 317	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V			CN311	QGB2510K1-17	CONNECTOR		
	C 318	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V			CN312	QGB2510K1-09	CONNECTOR		

■ Electrical parts list
(Input / output board) Ver.A/US

Block No. 07

△	Item	Parts number	Parts name	Remarks	Area
	R 349	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 350	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 351	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 352	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 353	QRZ9005-680X	F RESISTOR	68 1/0W	
△	R 354	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 355	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 356	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 357	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 358	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 359	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 360	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 361	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 362	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 381	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 382	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 383	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 384	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 385	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 386	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 387	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 388	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1250	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1251	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1252	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1253	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R1254	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1255	QRE141J-221Y	C RESISTOR	220 5% 1/4W	US
	R1256	QRE141J-221Y	C RESISTOR	220 5% 1/4W	US
	R1257	QRE141J-221Y	C RESISTOR	220 5% 1/4W	US
	SP203	VYH7653-005	IC HOLDER		
	X 200	QAX0261-001Z	CRYSTAL		

■ Electrical parts list
(Input / output board) Ver.UF

Block No. 08

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 201	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 319	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 202	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 320	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 203	QETC0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 321	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 204	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 322	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 207	QETC0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 323	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 208	QETC1AM-476Z	E CAPACITOR	47MF 20% 10V			C 324	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 209	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 325	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 211	QETC1HM-107Z	E CAPACITOR	100MF 20% 50V			C 326	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 212	QETC1AM-476Z	E CAPACITOR	47MF 20% 10V			C 327	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 213	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 328	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 214	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 329	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 215	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 330	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 216	QDX31EM-473Z	C CAPACITOR				C 331	QCS11HJ-471	C CAPACITOR	470PF 5% 50V	
	C 217	QETC1AM-477Z	E CAPACITOR	470MF 20% 10V			C 332	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 218	QCZ0202-155Z	ML C CAPACITOR	1.5MF			C 333	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 219	QDC31HJ-150Z	C CAPACITOR				C 334	QCS31HJ-391Z	C CAPACITOR	390PF 5% 50V	
	C 220	QDC31HJ-100Z	C CAPACITOR				C 337	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 221	QDC31HJ-470Z	C CAPACITOR				C 338	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 222	QDC31HJ-270Z	C CAPACITOR				C 339	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 223	QDGB1HK-102Y	C CAPACITOR				C 340	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 224	QCBB1HK-271Y	C CAPACITOR	270PF 10% 50V			C 341	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 225	QCBB1HK-121Y	C CAPACITOR	120PF 10% 50V			C 342	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 241	QDX31EM-473Z	C CAPACITOR				C 343	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 242	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 344	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 244	QDX31EM-473Z	C CAPACITOR				C 345	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 245	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 346	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 246	QDX31EM-473Z	C CAPACITOR				C 347	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 247	QETC0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 348	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 249	QDX31EM-473Z	C CAPACITOR				C 349	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 250	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 350	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 251	QDX31EM-473Z	C CAPACITOR				C 351	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 252	QETC0JM-477Z	E CAPACITOR	470MF 20% 6.3V			C 352	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 254	QDX31EM-473Z	C CAPACITOR				C 353	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 255	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 354	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 256	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 358	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C 257	QETC1AM-476Z	E CAPACITOR	47MF 20% 10V			C 361	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 258	QCF11HZ-103	C CAPACITOR	.010MF +80:-20%			C 362	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 259	QETC1AM-476Z	E CAPACITOR	47MF 20% 10V			C 363	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 260	QDX31EM-473Z	C CAPACITOR				C 364	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 261	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 369	QDVB1EZ-223Y	C CAPACITOR		
	C 268	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 370	QCBB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	C 269	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 371	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 270	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 372	QETC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 271	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 373	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 277	QCS11HJ-470	C CAPACITOR	47PF 5% 50V			C 374	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 301	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 377	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 302	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 378	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 303	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 379	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 304	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			C 380	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 305	QFLC1HJ-182Z	M CAPACITOR	1800PF 5% 50V			C 381	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 306	QFLC1HJ-182Z	M CAPACITOR	1800PF 5% 50V			C 382	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 307	QFLC1HJ-682Z	M CAPACITOR	6800PF 5% 50V			C 383	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 308	QFLC1HJ-682Z	M CAPACITOR	6800PF 5% 50V			C 384	QCS31HJ-331Z	C CAPACITOR	330PF 5% 50V	
	C 309	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN200	QGB2510K1-05	CONNECTOR		
	C 310	QCS11HJ-101	C CAPACITOR	100PF 5% 50V			CN202	QGA2001F1-10	10P PLUG ASSY		
	C 311	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			CN204	QGB1214K1-14S	CONNECTOR		
	C 312	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			CN240	QGB2510K1-04	CONNECTOR		
	C 313	QETC1AM-107Z	E CAPACITOR	100MF 20% 10V			CN242	QGB1214K1-14S	CONNECTOR		
	C 314	QETC1AM-107Z	E CAPACITOR	100MF 20% 10V			CN254	QGB2510K1-05	CONNECTOR		
	C 315	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V			CN311	QGB2510K1-17	CONNECTOR		
	C 316	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V			CN312	QGB2510K1-09	CONNECTOR		
	C 317	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V			CN313	QGB2510K1-12	CONNECTOR		
	C 318	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V			C1250	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	

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△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C1251	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V			R 240	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	C1252	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V			R 241	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	D 200	1SS133-T2	SI DIODE				R 242	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	D 201	1SS133-T2	SI DIODE				R 243	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	D1250	MTZJ6.2C-T2	Z DIODE				R 244	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	D1251	MTZJ6.2C-T2	Z DIODE				R 245	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	D1252	MTZJ6.2C-T2	Z DIODE				R 246	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	IC201	BA7625	IC				R 247	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	IC202	NJM2285D	IC				R 248	QRE141J-151Y	C RESISTOR	150 5% 1/4W	
	IC203	MB90088PF-131	IC				R 249	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	IC241	BA7626	IC				R 256	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	IC242	BA7625	IC				R 257	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	IC301	NJM4580D-D	IC				R 258	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	IC302	NJM4580L	IC				R 259	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	IC303	NJM4580L	IC				R 264	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	IC304	TC9164AN	IC				R 265	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	IC305	NJM4580L	IC				R 266	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	IC311	TC9163AN	IC				R 267	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	IC391	BA15218N	IC				R 268	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	J 201	QNN0078-001	PIN JACK				R 269	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	J 202	QNN0067-001	PIN JACK			△	R 271	QRJ146J-6R8X	UNF C RESISTOR	6.8 5% 1/4W	
	J 203	QNN0017-002	PIN JACK				R 301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	J 241	QND0002-001	S-CONNECTOR				R 302	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	J 242	QND0028-001	DIN CONNECTOR				R 303	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	J 243	QND0024-001	S JACK				R 304	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	J 301	QNN0056-001	PIN JACK				R 305	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	J 302	QNN0056-001	PIN JACK				R 306	QRE141J-621Y	C RESISTOR	620 5% 1/4W	
	J 303	QNN0185-001	PIN JACK				R 307	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	J 311	QNN0056-001	PIN JACK				R 308	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	J 312	QNN0056-001	PIN JACK				R 309	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	J 314	QNN0107-001	PIN JACK				R 310	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	J1250	QNS0077-001	3.5 JACK				R 311	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	J1251	QNS0083-001	3.5 JACK				R 312	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	J1252	QNS0001-001	3.5 JACK(JES)			△	R 313	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
	J1253	QNS0001-001	3.5 JACK(JES)			△	R 314	QRJ146J-331X	UNF C RESISTOR	330 5% 1/4W	
	J1254	QNS0001-001	3.5 JACK(JES)			△	R 315	QRZ9005-680X	F RESISTOR	68 1/0W	
	L 200	QQL231K-220Y	INDUCTOR			△	R 316	QRZ9005-680X	F RESISTOR	68 1/0W	
	Q 200	KTA1267/YG/-T	TRANSISTOR				R 325	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 204	KTA1267/YG/-T	TRANSISTOR				R 326	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 205	KTA1267/YG/-T	TRANSISTOR				R 327	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 206	KTA1267/YG/-T	TRANSISTOR				R 328	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 240	KTA1267/YG/-T	TRANSISTOR				R 329	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 241	KTA1267/YG/-T	TRANSISTOR				R 330	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 301	2SC2878/AB/-T	TRANSISTOR				R 331	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q 302	2SC2878/AB/-T	TRANSISTOR				R 332	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 200	QRE141J-750Y	C RESISTOR	75 5% 1/4W			R 333	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 201	QRE141J-750Y	C RESISTOR	75 5% 1/4W			R 334	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 202	QRE141J-750Y	C RESISTOR	75 5% 1/4W			R 335	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 203	QRE141J-750Y	C RESISTOR	75 5% 1/4W			R 336	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 206	QRE141J-750Y	C RESISTOR	75 5% 1/4W			R 337	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 207	QRE141J-331Y	C RESISTOR	330 5% 1/4W			R 338	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 208	QRE141J-331Y	C RESISTOR	330 5% 1/4W			R 339	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 209	QRE141J-473Y	C RESISTOR	47K 5% 1/4W			R 340	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 210	QRE141J-331Y	C RESISTOR	330 5% 1/4W			R 341	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 213	QRE141J-473Y	C RESISTOR	47K 5% 1/4W			R 342	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 214	QRE141J-151Y	C RESISTOR	150 5% 1/4W			R 343	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 219	QRE141J-101Y	C RESISTOR	100 5% 1/4W			R 344	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 220	QRE141J-121Y	C RESISTOR	120 5% 1/4W			R 345	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 221	QRE141J-151Y	C RESISTOR	150 5% 1/4W			R 346	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 222	QRE141J-561Y	C RESISTOR	560 5% 1/4W			R 347	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 223	QRE141J-561Y	C RESISTOR	560 5% 1/4W			R 348	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 224	QRE141J-561Y	C RESISTOR	560 5% 1/4W			R 349	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 225	QRJ146J-3R3X	UNF C RESISTOR	3.3 5% 1/4W			R 350	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	

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Block No. 08

△	Item	Parts number	Parts name	Remarks	Area
	R 351	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 352	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
△	R 353	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 354	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 355	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 356	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 357	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 358	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 359	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 360	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 361	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 362	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 381	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 382	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 383	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 384	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 385	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 386	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 387	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 388	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1250	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1251	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1252	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1253	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R1254	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1255	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1256	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1257	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	SP203	VYH7653-005	IC HOLDER		
	X 200	QAX0261-001Z	CRYSTAL		

■ Electrical parts list (DSP board)

Block No. 09

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 601	NCB31HK-102X	C CAPACITOR				C 697	NEA71HM-105X	E CAPACITOR		
	C 602	NCB31HK-102X	C CAPACITOR				C 698	NEA71HM-105X	E CAPACITOR		
	C 603	NEA70JM-476X	E CAPACITOR				CN681	QGB1214K3-18W	CONNECTOR		
	C 604	NEA70JM-476X	E CAPACITOR				CN687	QGB1214K3-12W	CONNECTOR		
	C 605	NCB31CK-104X	C CAPACITOR				C2500	NEA71CM-226X	E CAPACITOR		
	C 606	NCB31CK-104X	C CAPACITOR				C2501	NCB31AK-474X	C CAPACITOR		
	C 607	NEA71CM-476X	E CAPACITOR				C2503	NEA71EM-475X	E CAPACITOR		
	C 608	NCF31CZ-104X	C CAPACITOR				C2504	NEA71EM-475X	E CAPACITOR		
	C 609	NCB31CK-104X	C CAPACITOR				C2505	NCS31HJ-560X	C CAPACITOR		
	C 610	NEA70JM-476X	E CAPACITOR				C2506	NCS31HJ-560X	C CAPACITOR		
	C 611	NEA70JM-226X	E CAPACITOR				C2507	NCS31HJ-560X	C CAPACITOR		
	C 612	NCB31CK-103X	C CAPACITOR				C2508	NCS31HJ-560X	C CAPACITOR		
	C 621	NEA71HM-105X	E CAPACITOR				C2509	NCF31CZ-104X	C CAPACITOR		
	C 622	NDC31HK-101X	C CAPACITOR		A,US		C2510	NCF31CZ-104X	C CAPACITOR		
	C 622	NCB31HK-101X	C CAPACITOR		UF		C2511	NCB31AK-474X	C CAPACITOR		
	C 623	NCB30JK-105X	C CAPACITOR				C2512	NCB31AK-474X	C CAPACITOR		
	C 624	NCB31CK-104X	C CAPACITOR				C2513	NCB31CK-183X	C CAPACITOR		
	C 625	NCB31CK-104X	C CAPACITOR				C2514	NCB31CK-183X	C CAPACITOR		
	C 628	NCB31CK-103X	C CAPACITOR				C2515	NCB31HK-182X	C CAPACITOR		
	C 631	NEA70GM-107X	E CAPACITOR				C2516	NCB31HK-182X	C CAPACITOR		
	C 632	NCB31CK-103X	C CAPACITOR				C2517	NCB31HK-562X	C CAPACITOR		
	C 633	NCB31CK-104X	C CAPACITOR				C2518	NCB31HK-562X	C CAPACITOR		
	C 634	NCB31CK-104X	C CAPACITOR				C2519	NCF31CZ-104X	C CAPACITOR		
	C 635	NCB31CK-104X	C CAPACITOR				C2520	NCF31CZ-104X	C CAPACITOR		
	C 636	NCB31CK-473X	C CAPACITOR				C2521	NCB31CK-103X	C CAPACITOR		
	C 637	NCB31CK-104X	C CAPACITOR				C2522	NCB31CK-103X	C CAPACITOR		
	C 638	NEA70JM-476X	E CAPACITOR				C2523	NCB31HK-272X	C CAPACITOR		
	C 639	NCB31CK-103X	C CAPACITOR				C2524	NCB31HK-272X	C CAPACITOR		
	C 641	NEA70JM-107X	E CAPACITOR				C2525	NCB31HK-392X	C CAPACITOR		
	C 642	NCB31CK-103X	C CAPACITOR				C2526	NCB31HK-392X	C CAPACITOR		
	C 643	NCB31AK-474X	C CAPACITOR				C2527	NEA71HM-225X	E CAPACITOR		
	C 644	NCB31CK-103X	C CAPACITOR				C2528	NEA71HM-225X	E CAPACITOR		
	C 645	NCS31HJ-101X	C CAPACITOR				C2529	NCF31CZ-104X	C CAPACITOR		
	C 646	NCB31CK-103X	C CAPACITOR				C2530	NCF31CZ-104X	C CAPACITOR		
	C 647	NCS31HJ-220X	C CAPACITOR				C2531	NCS31HJ-560X	C CAPACITOR		
	C 648	NCS31HJ-180X	C CAPACITOR				C2532	NCS31HJ-560X	C CAPACITOR		
	C 649	NCS31HJ-121X	C CAPACITOR				C2533	NEA71EM-475X	E CAPACITOR		
	C 653	NCB31CK-104X	C CAPACITOR				C2534	NEA71EM-475X	E CAPACITOR		
	C 654	NEA70GM-107X	E CAPACITOR				C2539	NCF31CZ-104X	C CAPACITOR		
	C 661	NCB31CK-103X	C CAPACITOR				C2540	NCF31CZ-104X	C CAPACITOR		
	C 671	NCB31CK-103X	C CAPACITOR				C2541	NCS31HJ-560X	C CAPACITOR		
	C 672	NEA70GM-107X	E CAPACITOR				C2542	NCS31HJ-560X	C CAPACITOR		
	C 673	NCB31CK-103X	C CAPACITOR				C2543	NEA71EM-475X	E CAPACITOR		
	C 677	NDC31HK-101X	C CAPACITOR		A,US		C2544	NEA71EM-475X	E CAPACITOR		
	C 677	NCB31HK-101X	C CAPASITOR		UF		C2549	NCF31CZ-104X	C CAPACITOR		
	C 679	NCB31HK-101X	C CAPACITOR		UF		C2550	NCF31CZ-104X	C CAPACITOR		
	C 679	NDC31HK-101X	C CAPACITOR		A,US		C2551	NCS31HJ-560X	C CAPACITOR		
	C 681	NCB31CK-103X	C CAPACITOR				C2552	NCS31HJ-560X	C CAPACITOR		
	C 682	NCB31CK-103X	C CAPACITOR				C2553	NCB31HK-562X	C CAPACITOR		
	C 683	NCB31CK-103X	C CAPACITOR				C2554	NCB31HK-562X	C CAPACITOR		
	C 684	NEA70JM-107X	E CAPACITOR				C2555	NCF31CZ-104X	C CAPACITOR		
	C 685	NEA71CM-476X	E CAPACITOR				C2556	NCF31CZ-104X	C CAPACITOR		
	C 686	NEA71CM-476X	E CAPACITOR				C2559	NCF31CZ-104X	C CAPACITOR		
	C 687	NCB31CK-103X	C CAPACITOR				C2560	NCF31CZ-104X	C CAPACITOR		
	C 688	NEA70JM-107X	E CAPACITOR				C2561	NEA71HM-105X	E CAPACITOR		
	C 689	NCB31CK-103X	C CAPACITOR				C2562	NEA71HM-105X	E CAPACITOR		
	C 690	NEA70JM-107X	E CAPACITOR				C2563	NCS31HJ-220X	C CAPACITOR		
	C 691	NEA71HM-105X	E CAPACITOR				C2564	NCS31HJ-220X	C CAPACITOR		
	C 692	NEA71HM-105X	E CAPACITOR				C2569	NCF31CZ-104X	C CAPACITOR		
	C 693	NCB31CK-103X	C CAPACITOR				C2570	NCF31CZ-104X	C CAPACITOR		
	C 694	NCB31CK-103X	C CAPACITOR				C2571	NCB31CK-103X	C CAPACITOR		
	C 695	NEA71HM-105X	E CAPACITOR				C2572	NCB31CK-103X	C CAPACITOR		
	C 696	NEA71HM-105X	E CAPACITOR				C2573	NCB31HK-272X	C CAPACITOR		

■ Electrical parts list (DSP board)

Block No. 09

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C2574	NCB31HK-272X	C CAPACITOR				Q 675	DTC114YE-X	TRANSISTOR		
	C2575	NCB31HK-392X	C CAPACITOR				Q2501	DTA144EKA-X	TRANSISTOR		
	C2576	NCB31HK-392X	C CAPACITOR				Q2521	2SD1328/ST/-X	TRANSISTOR		
	C2577	NEA71HM-225X	E CAPACITOR				Q2522	2SD1328/ST/-X	TRANSISTOR		
	C2578	NEA71HM-225X	E CAPACITOR				Q2561	2SD1328/ST/-X	TRANSISTOR		
	C2579	NCF31CZ-104X	C CAPACITOR				Q2562	2SD1328/ST/-X	TRANSISTOR		
	C2580	NCF31CZ-104X	C CAPACITOR				Q2581	2SD1328/ST/-X	TRANSISTOR		
	C2581	NEA71HM-105X	E CAPACITOR				Q2582	2SD1328/ST/-X	TRANSISTOR		
	C2582	NEA71CM-106X	E CAPACITOR				R 600	NRSA63J-0R0X	MG RESISTOR		
	C2583	NCS31HJ-220X	C CAPACITOR				R 601	NRSA63J-473X	MG RESISTOR		
	C2584	NCS31HJ-560X	C CAPACITOR				R 602	NRSA63J-473X	MG RESISTOR		
	C2585	NCF31CZ-104X	C CAPACITOR				R 603	NRSA63J-473X	MG RESISTOR		
	C2586	NCF31CZ-104X	C CAPACITOR				R 604	NRSA63J-473X	MG RESISTOR		
	C2587	NCS31HJ-560X	C CAPACITOR				R 605	NRSA63J-473X	MG RESISTOR		
	C2588	NEA71CM-106X	E CAPACITOR				R 606	NRSA63J-221X	MG RESISTOR		
	C2589	NCF31CZ-104X	C CAPACITOR				R 607	NRSA63J-221X	MG RESISTOR		
	C2590	NCF31CZ-104X	C CAPACITOR				R 608	NRSA63J-221X	MG RESISTOR		
	C2591	NCB31CK-103X	C CAPACITOR				R 609	NRSA63J-221X	MG RESISTOR		
	C2592	NCB31HK-223X	C CAPACITOR				R 610	NRSA63J-221X	MG RESISTOR		
	C2593	NCB31HK-272X	C CAPACITOR				R 611	NRSA63J-332X	MG RESISTOR		
	C2594	NCB31CK-104X	C CAPACITOR				R 612	NRSA63J-103X	MG RESISTOR		
	C2595	NCB31HK-392X	C CAPACITOR				R 613	NRSA63J-822X	MG RESISTOR		
	C2597	NEA71HM-225X	E CAPACITOR				R 615	NRSA63J-432X	MG RESISTOR		
	C2598	NEA71EM-475X	E CAPACITOR				R 617	NRSA63J-103X	MG RESISTOR		
	C2599	NCF31CZ-104X	C CAPACITOR				R 618	NRSA63J-103X	MG RESISTOR		
	C2600	NCF31CZ-104X	C CAPACITOR				R 619	NRSA63J-221X	MG RESISTOR		
	D 602	1SS355-X	DIODE				R 620	NRSA63J-221X	MG RESISTOR		
	D 607	1SS355-X	DIODE				R 621	NRSA63J-221X	MG RESISTOR		
	D 608	1SS355-X	DIODE				R 622	NRSA63J-750X	MG RESISTOR		
	EP601	E409182-001SM	GRAND TERMINAL				R 623	NRSA63J-101X	MG RESISTOR		
	IC501	BA15218F-XE	IC				R 625	NRSA63J-101X	MG RESISTOR		
	IC510	BA15218F-XE	IC				R 627	NRSA63J-472X	MG RESISTOR		
	IC511	BA15218F-XE	IC				R 628	NRSA63J-183X	MG RESISTOR		
	IC521	BA15218F-XE	IC				R 632	NRSA63J-221X	MG RESISTOR		
	IC531	BA15218F-XE	IC				R 633	NRSA63J-221X	MG RESISTOR		
	IC541	BA15218F-XE	IC				R 634	NRSA63J-221X	MG RESISTOR		
	IC551	BA15218F-XE	IC				R 635	NRSA63J-221X	MG RESISTOR		
	IC561	BA15218F-XE	IC				R 636	NRSA63J-221X	MG RESISTOR		
	IC571	BA15218F-XE	IC				R 637	NRSA63J-221X	MG RESISTOR		
	IC581	BA15218F-XE	IC				R 638	NRSA63J-221X	MG RESISTOR		
	IC591	BA15218F-XE	IC				R 639	NRSA63J-472X	MG RESISTOR		
	IC592	BA15218F-XE	IC				R 640	NRSA63J-0R0X	MG RESISTOR		
	IC601	AK4527VQ	IC				R 641	NRSA63J-102X	MG RESISTOR		
	IC602	BU4066BCF-X	IC				R 642	NRSA63J-103X	MG RESISTOR		
	IC611	BU4066BCF-X	IC				R 643	NRSA63J-101X	MG RESISTOR		
	IC621	TC7SU04FU-X	IC				R 644	NRSA63J-563X	MG RESISTOR		
	IC622	TC7SU04FU-X	IC				R 645	NRSA63J-102X	MG RESISTOR		
	IC631	TC9446F-014	IC				R 646	NRSA63J-103X	MG RESISTOR		
	IC641	AS7C31025-15TJX	IC		A,US		R 647	NRSA63J-225X	MG RESISTOR		
	IC641	W24L011AJ-15-X	IC(M)		UF		R 648	NRSA63J-472X	MG RESISTOR		
	IC671	UPD784215AGC103	IC				R 649	NRSA63J-1R0X	MG RESISTOR		
	IC672	TC7SET32FU-X	IC				R 650	NRSA63J-1R0X	MG RESISTOR		
	IC681	PQ3DZ53-X	IC				R 651	NRSA63J-0R0X	MG RESISTOR		
△	IC683	PQ3DZ53-X	IC				R 652	NRSA63J-0R0X	MG RESISTOR		
	J 601	EMN00TV-107A	PIN JACK				R 657	NRSA63J-103X	MG RESISTOR		
	L 663	NQL024J-470X	INDUCTOR		A,US		R 661	NRSA63J-221X	MG RESISTOR		
	Q 601	DTC114YE-X	TRANSISTOR				R 662	NRSA63J-221X	MG RESISTOR		
	Q 607	DTA144EKA-X	TRANSISTOR				R 663	NRSA63J-221X	MG RESISTOR		
	Q 670	DTC114YE-X	TRANSISTOR				R 664	NRSA63J-221X	MG RESISTOR		
	Q 671	2SD1328/ST/-X	TRANSISTOR				R 669	NRSA63J-103X	MG RESISTOR		
	Q 672	DTC114YE-X	TRANSISTOR				R 670	NRSA63J-103X	MG RESISTOR		
	Q 673	DTA144EKA-X	TRANSISTOR				R 671	NRSA63J-103X	MG RESISTOR		
	Q 674	DTC114YE-X	TRANSISTOR				R 672	NRSA63J-105X	MG RESISTOR		

■ Electrical parts list (DSP board)

Block No. 09

△	Item	Parts number	Parts name	Remarks	Area
	R 673	NRSA63J-432X	MG RESISTOR		
	R 674	NRSA63J-432X	MG RESISTOR		
	R 675	NRSA63J-432X	MG RESISTOR		
	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 681	NRSA63J-103X	MG RESISTOR		
	R 682	NRSA63J-103X	MG RESISTOR		
	R 683	NRSA63J-0R0X	MG RESISTOR		
	R 685	NRSA63J-103X	MG RESISTOR		
	R 686	NRSA63J-151X	MG RESISTOR		
	R 687	NRSA63J-0R0X	MG RESISTOR		
	R 689	NRSA63J-0R0X	MG RESISTOR		
	R 691	NRSA63J-104X	MG RESISTOR		
	R 692	NRSA63J-104X	MG RESISTOR		
	R 695	NRSA63J-104X	MG RESISTOR		
	R 696	NRSA63J-104X	MG RESISTOR		
	R 697	NRSA63J-104X	MG RESISTOR		
	R 698	NRSA63J-104X	MG RESISTOR		
	R2500	NRSA63J-102X	MG RESISTOR		
	R2501	NRSA63J-104X	MG RESISTOR		
	R2502	NRSA63J-104X	MG RESISTOR		
	R2503	NRSA63J-183X	MG RESISTOR		
	R2504	NRSA63J-183X	MG RESISTOR		
	R2505	NRSA63J-103X	MG RESISTOR		
	R2506	NRSA63J-103X	MG RESISTOR		
	R2507	NRSA63J-103X	MG RESISTOR		
	R2508	NRSA63J-103X	MG RESISTOR		
	R2509	NRSA63J-103X	MG RESISTOR		
	R2510	NRSA63J-103X	MG RESISTOR		
	R2511	NRSA63J-102X	MG RESISTOR		
	R2512	NRSA63J-102X	MG RESISTOR		
	R2513	NRSA63J-102X	MG RESISTOR		
	R2514	NRSA63J-102X	MG RESISTOR		
	R2515	NRSA63J-102X	MG RESISTOR		
	R2516	NRSA63J-102X	MG RESISTOR		
	R2517	NRSA63J-102X	MG RESISTOR		
	R2518	NRSA63J-102X	MG RESISTOR		
	R2519	NRSA63J-102X	MG RESISTOR		
	R2520	NRSA63J-102X	MG RESISTOR		
	R2521	NRSA63J-102X	MG RESISTOR		
	R2522	NRSA63J-102X	MG RESISTOR		
	R2523	NRSA63J-102X	MG RESISTOR		
	R2524	NRSA63J-102X	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-113X	MG RESISTOR		
	R2532	NRSA63J-113X	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		
	R2541	NRSA63J-113X	MG RESISTOR		
	R2542	NRSA63J-113X	MG RESISTOR		
	R2543	NRSA63J-103X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R2544	NRSA63J-103X	MG RESISTOR		
	R2545	NRSA63J-562X	MG RESISTOR		
	R2546	NRSA63J-562X	MG RESISTOR		
	R2547	NRSA63J-104X	MG RESISTOR		
	R2548	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-822X	MG RESISTOR		
	R2556	NRSA63J-822X	MG RESISTOR		
	R2557	NRSA63J-103X	MG RESISTOR		
	R2558	NRSA63J-223X	MG RESISTOR		
	R2560	NRSA63J-105X	MG RESISTOR		
	R2561	NRSA63J-104X	MG RESISTOR		
	R2562	NRSA63J-104X	MG RESISTOR		
	R2563	NRSA63J-103X	MG RESISTOR		
	R2564	NRSA63J-103X	MG RESISTOR		
	R2565	NRSA63J-302X	MG RESISTOR		
	R2566	NRSA63J-302X	MG RESISTOR		
	R2567	NRSA63J-103X	MG RESISTOR		
	R2568	NRSA63J-103X	MG RESISTOR		
	R2571	NRSA63J-102X	MG RESISTOR		
	R2572	NRSA63J-102X	MG RESISTOR		
	R2573	NRSA63J-102X	MG RESISTOR		
	R2574	NRSA63J-102X	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-103X	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-102X	MG RESISTOR		
	R2592	NRSA63J-333X	MG RESISTOR		
	R2593	NRSA63J-102X	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	GP1FA550RZ	OPT RECEIVER		
	UN662	GP1FA550RZ	OPT RECEIVER		
	UN663	GP1FA550TZ	OPT TRANSMITTER		
	X 631	NAX0385-001X	CRYSTAL		
	X 671	NAX0275-001X	1COSCIALLATOR		

■ Electrical parts list (Tuner board)

Block No. 10

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	AT101	QNB0014-001	ANT TERMINAL				R 124	NRSA02J-222X	MG RESISTOR		
	C 101	NCB21HK-103X	C CAPACITOR				R 126	NRSA02J-562X	MG RESISTOR		
	C 103	NCB21HK-223X	C CAPACITOR				R 127	NRSA02J-822X	MG RESISTOR		
	C 105	NCB21HK-223X	C CAPACITOR				R 128	NRSA02J-472X	MG RESISTOR		
	C 107	QEK1CM-226Z	E CAPACITOR	22MF 20% 16V			R 129	NRSA02J-222X	MG RESISTOR		
	C 111	NCB21HK-473X	C CAPACITOR			△	R 130	QRZ9005-680X	F RESSITOR	68 1/0W	
	C 112	NDC21HJ-120X	C CAPACITOR				R 132	NRSA02J-393X	MG RESISTOR		
	C 121	NDC21HJ-120X	C CAPACITOR				R 133	NRSA02J-392X	MG RESISTOR		
	C 122	NDC21HJ-120X	C CAPACITOR				R 134	NRSA02J-102X	MG RESISTOR		
	C 123	NCB21HK-473X	C CAPACITOR				R 140	NRSA02J-183X	MG RESISTOR		
	C 126	NCS21HJ-101X	C CAPACITOR				R 141	NRSA02J-102X	MG RESISTOR		
	C 128	QENC1HM-474Z	NP E CAPACITOR	.47MF 20% 50V			R 142	NRSA02J-470X	MG RESISTOR		
	C 129	NCB21HK-102X	C CAPACITOR				R 143	NRSA02J-562X	MG RESISTOR		
	C 130	QEK1AM-107Z	E CAPACITOR	100MF 20% 10V			R 144	NRSA02J-332X	MG RESISTOR		
	C 133	QEK1CM-226Z	E CAPACITOR	22MF 20% 16V			R 145	NRSA02J-103X	MG RESISTOR		
	C 134	NCB21HK-222X	C CAPACITOR				R 146	NRSA02J-392X	MG RESISTOR		
	C 135	NCB21HK-223X	C CAPACITOR				R 147	NRSA02J-332X	MG RESISTOR		
	C 136	QEK1HM-105Z	E CAPACITOR	1.0MF 20% 50V			R 150	NRSA02J-331X	MG RESISTOR		
	C 137	NCB21HK-331X	C CAPACITOR				R 157	NRSA02J-682X	MG RESISTOR		
	C 138	NCB21HK-473X	C CAPACITOR				R 158	NRSA02J-682X	MG RESISTOR		
	C 139	NCB21HK-223X	C CAPACITOR				R 161	NRSA02J-102X	MG RESISTOR		
	C 140	NCB21HK-223X	C CAPACITOR				R 162	NRSA02J-102X	MG RESISTOR		
	C 141	NCB21HK-473X	C CAPACITOR				R 182	NRSA02J-103X	MG RESISTOR		
	C 143	NCB21HK-223X	C CAPACITOR				R 183	NRSA02J-103X	MG RESISTOR		
	C 144	NCB21HK-473X	C CAPACITOR				R 184	NRSA02J-103X	MG RESISTOR		
	C 146	QEK1HM-105Z	E CAPACITOR	1.0MF 20% 50V			RF101	QAU0124-002	FRONT END		
	C 147	QEK1HM-105Z	E CAPACITOR	1.0MF 20% 50V			T 111	QQR0796-001	COIL BLOCK		
	C 148	QEK1HM-224Z	E CAPACITOR	.22MF 20% 50V			T 142	QQR0973-001	IFT		
	C 149	QEK1HM-105Z	E CAPACITOR	1.0MF 20% 50V			X 121	QAX0402-001	CRYSTAL		
	C 150	QEK1CM-226Z	E CAPACITOR	22MF 20% 16V							
	C 156	QDGB1HK-102Y	C CAPACITOR								
	C 157	NCB21HK-473X	C CAPACITOR								
	C 158	QEK1CM-226Z	E CAPACITOR	22MF 20% 16V							
	C 161	QEK41CM-106	E CAPACITOR	10MF 20% 16V							
	C 162	QEK41CM-106	E CAPACITOR	10MF 20% 16V							
	C 163	NCB21HK-223X	C CAPACITOR								
	C 164	NCB21HK-473X	C CAPACITOR								
	C 168	QEK1HM-105Z	E CAPACITOR	1.0MF 20% 50V							
	C 184	QEK1CM-107Z	E CAPACITOR	100MF 20% 16V							
	C 185	QEK41CM-106	E CAPACITOR	10MF 20% 16V							
	C 186	QEK41CM-106	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								
	D 123	1SS133-T2	SI DIODE								
	D 129	1SS133-T2	SI DIODE								
	IC102	LA1838	IC								
	IC121	LC72136N	IC								
	Q 102	2SC535/BC/-T	TRANSISTOR								
	Q 103	2SC461/BC/-T	TRANSISTOR								
	Q 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								
	R 115	NRSA02J-104X	MG RESISTOR								
	R 119	NRSA02J-103X	MG RESISTOR								
	R 122	NRSA02J-472X	MG RESISTOR								

Packing materials and accessories parts list

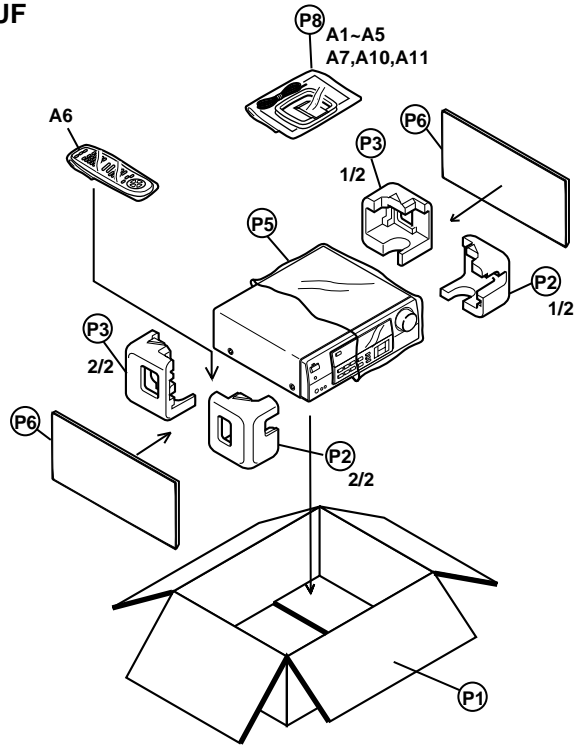
Block No.

M	2	M	M
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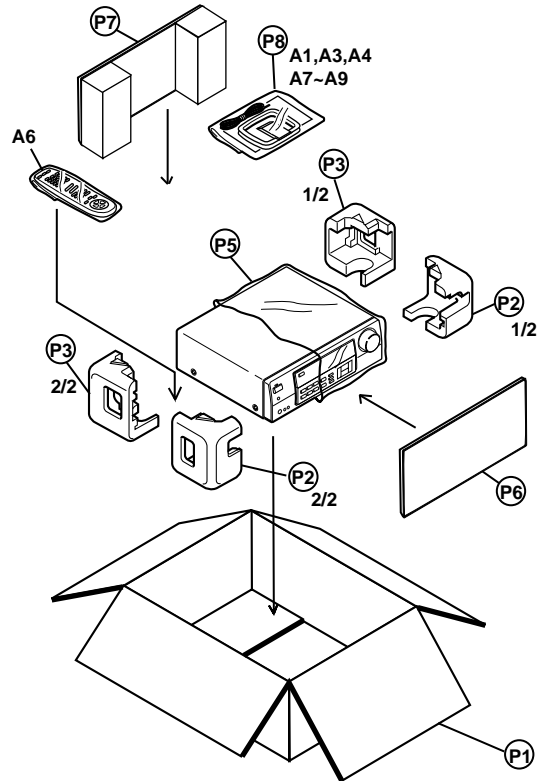
Block No.

M	3	M	M
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Ver.US/UF



Ver.A



■ Parts list (Packing)

Block No. M2MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	LV20806-006A	CARTON BOX	1		UF
		LV30044-0D7A	CARTON BOX	1		A
		LV30044-0D4A	CARTON BOX	1		US
	P 2	LV20809-001A	PACKING PAD	1		UF
		LV20039-002A	PACKING PAD	1		A,US
	P 3	LV20810-001A	PACKING PAD	1		UF
		LV20040-001A	PACKING PAD	1		A,US
	P 5	LV40363-001A	ENVELOPE	1	FOR SET	
	P 6	LV32034-004A	SHEET	1		A
		LV32034-003A	SHEET	2		US
	P 7	LV30385-004A	PACKING SHEET	1		A
	P 8	QPA02503505P	POLY BAG	1	FOR INST	

■ Parts list (Accessories)

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LVT0396-008A	INST.BOOK	1		US
		LVT0396-011A	INST.BOOK	1		UF
		LVT0396-010A	INST.BOOK	1		A
	A 2	QAM0147-001	PLUG CORD ASSY	1		UF
	A 3	EWP503-001C	ANT.WIRE	1		
	A 4	QAL0014-001	LOOP ANTENNA	1		UF
		QAL0204-001	AM LOOP ANT	1		A,US
	A 5	QAM0112-001	AC PLUG ADAPTER	1		US
	A 6	RM-SRX7001P	REMOCON	1		
	A 7	-----	BATTERY	1		
	A 8	BT-56001-2	WARRANTY CARD	1		A
	A 9	BT-56002-2	SERVICE NETWORK	1		A
	A 10	BT-59009-1	SERVICE NETWORK	1		UF
	A 11	BT-59007-2	WARRANTY CARD	1		UF

JVC

VICTOR COMPANY OF JAPAN, LIMITED

AUDIO & COMMUNICATION BUSINESS DIVISION

PERSONAL & MOBILE NETWORK BUSINESS UNIT 10-1, 1chome, Ohwatari-machi, Maebashi-city, 371-8543, Japan

JVC



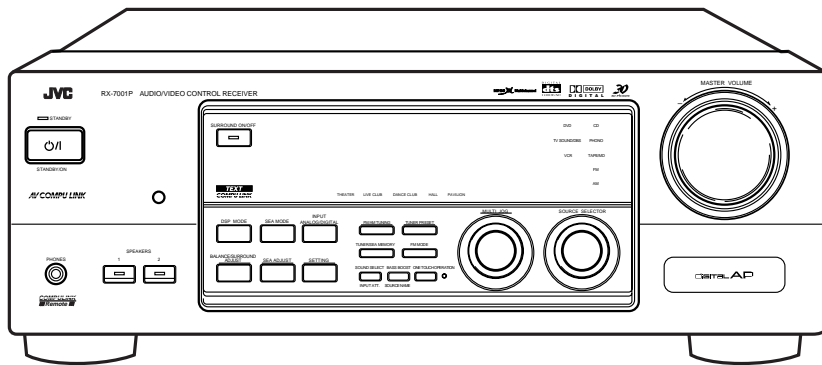
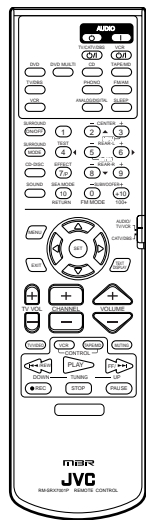
AUDIO/VIDEO CONTROL RECEIVER

RECEPTOR DE CONTROL DE AUDIO/VÍDEO

RECEPTOR DE COMANDO AUDIO/VÍDEO

AV功率放大器（带收音）

RX-7001PGD



DIGITAL AP

**TEXT
COMPU LINK**

AV COMPU LINK

**COMPU LINK
Remote**

MPEG Multichannel

3D-PHONIC

**DIGITAL
dts
SURROUND**

**DOLBY
DIGITAL**

INSTRUCTIONS

**MANUAL DE INSTRUCCIONES
INSTRUÇÕES
使用说明书**

For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

LVT0396-008A
[U, US]

Warnings, Cautions and Others / Avisos, precauciones y otras notas / Advertências, precauções e outras notas / 警告，注意及其他须知事项 تحذيرات، تنبيهات وأشياء أخرى

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

PRECAUCIÓN

Para reducir riesgos de choques eléctricos, incendio, etc.:

1. No extraiga los tornillos, los cubiertas ni la caja.
2. No exponga este aparato a la lluvia o a la humedad.

ATENÇÃO

Para reduzir riscos de choques eléctricos, incêndio, etc.:

1. Não retire parafusos nem desmonte as tampas ou o gabinete.
2. Não exponha este aparelho à chuva nem à umidade.

警告

为了减低触电，火灾等危险：


1. 请勿擅自卸下螺丝钉，盖子或机壳。
2. 切勿让本机受雨淋或置潮湿环境中。

تحذير


لتجنب خطر الحريق، الصدمات الكهربائية، الخ.:

١. لا تقم بفك البراغي، الاغطية أو الخزانات.
٢. لا تقم بتعرض هذا الجهاز للمطر أو للرطوبة.


Caution — STANDBY/ON switch!

Disconnect the mains plug to shut the power off completely. The STANDBY/ON  switch in any position does not disconnect the mains line. The power can be remote controlled.


Precaución — Interruptor STANDBY/ON !

Desconectar el cable de alimentación para desactivar la alimentación totalmente. Cualquier que sea la posición de ajuste del interruptor STANDBY/ON , la alimentación no es cortada completamente. La alimentación puede ser controlada remotamente.


Precaução — Interruptor STANDBY/ON !

Desconectar o cabo de alimentação para desligar a alimentação por completo. Qualquer que seja a posição de ajuste do interruptor STANDBY/ON , a alimentação não é completamente cortada. A alimentação pode ser controlada remotamente.

注意— 开关！

无论  开关在任何位置，电源线的电源还是没有被切断，若要将电源完全关闭，应把电源插头拔离插座。电源开关可用遥控器控制。

تحذير — الطاقة

انزع قابس الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كلياً. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع  الطاقة الكهربائية عن الجهاز. يمكن التحكم عن بعد بالطاقة الكهربائية.

Caution: Proper Ventilation

To avoid risk of electric shock and fire and to protect from damage. Locate the apparatus as follows:

- Front: No obstructions open spacing.
Sides: No obstructions in 10 cm from the sides.
Top: No obstructions in 10 cm from the top.
Back: No obstructions in 15 cm from the back
Bottom: No obstructions, place on the level surface.
In addition, maintain the best possible air circulation as illustrated.

Precaución: Ventilación Adecuada

Para evitar el riesgo de choque eléctrico e incendio y para proteger el aparato contra daños.

Ubique el aparato de la siguiente manera:

- Frente: Espacio abierto sin obstrucciones
Lados: 10 cm sin obstrucciones a los lados
Parte superior: 10 cm sin obstrucciones en la parte superior
Parte trasera: 15 cm sin obstrucciones en la parte trasera
Fondo: Sin obstrucciones, colóquelo sobre una superficie nivelada

Además, mantenga la mejor circulación de aire posible como se ilustra.

Precaução: ventilação apropriada

Para prevenir o risco de choque elétrico ou incêndio e para proteger o aparelho contra danos.

Localize-o da seguinte maneira:

- Frente: Espaço aberto, sem obstruções
Lados: Espaço de 10 cm sem obstruções nos lados
Topo: Espaço de 10 cm sem obstruções acima
Atrás: Espaço de 15 cm sem obstruções atrás
Parte inferior: Sem obstruções. Coloque o aparelho em superfície nivelada.

Mantenha, além disso, a maior circulação de ar possível, como indica a ilustração.

注意：正确的通风方法

为了防止触电、火灾以及避免损坏，按如下要求放置机器：

- 前面：留下空间不要放置障碍物。
侧面：侧面的 10cm 之内不要放置障碍物。
上面：上面的 10cm 之内不要放置障碍物。
背面：背面的 15cm 之内不要放置障碍物。
底部：不要放置障碍物、水平放置。

此外，如图所示，尽可能保持最佳的空气循环。

تنبيه: حول التهوية الصحيحة لتفادي وقوع الصدمة الكهربائية والحريق، ولحماية الأجهزة من التلف قم بتحديد مواقع تركيب الأجهزة كالتالي:

الامام: مساحة فارغة بدون عوائق
الجوانب: عدم وجود أية عوائق بطول ١٠ سم من الجوانب
السطح العلوي: عدم وجود أية عوائق بطول ١٠ سم من السطح العلوي
الخلف: عدم وجود أية عوائق بطول ١٥ سم من اللوحة الخلفية
القاع: عدم وجود أية عوائق، يجب وضع الأجهزة على السطح المستوي.
بالإضافة الى ذلك، احتفظ بأفضل توزيع للهواء كما هو مبين في الرسم.

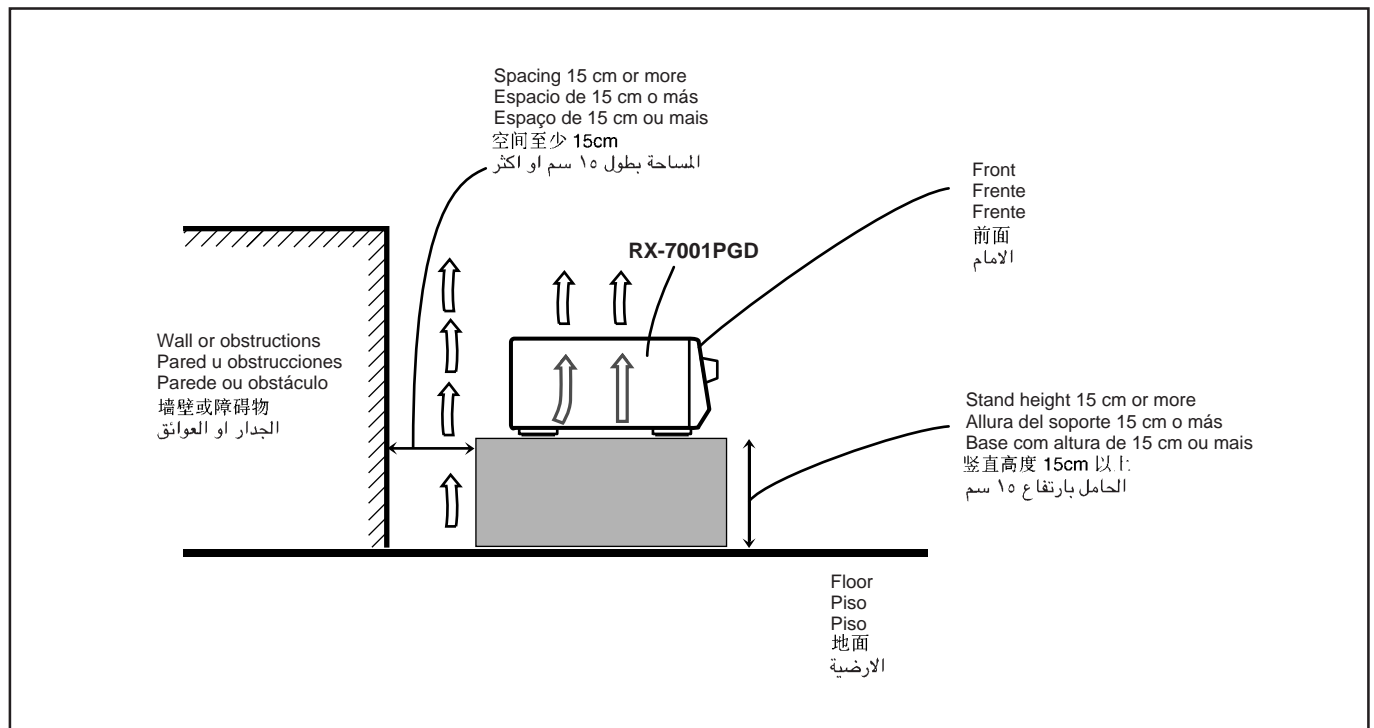
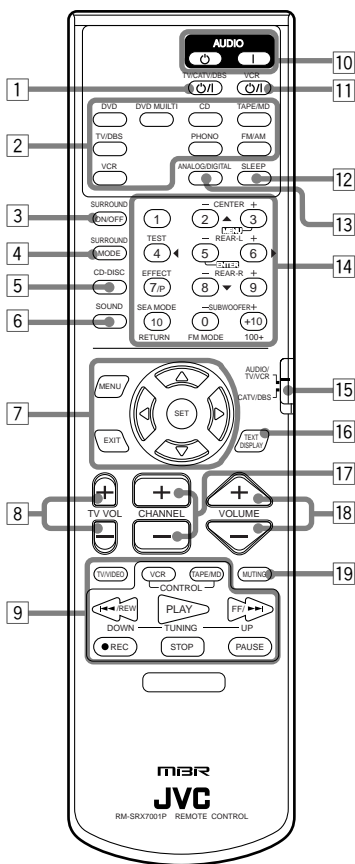
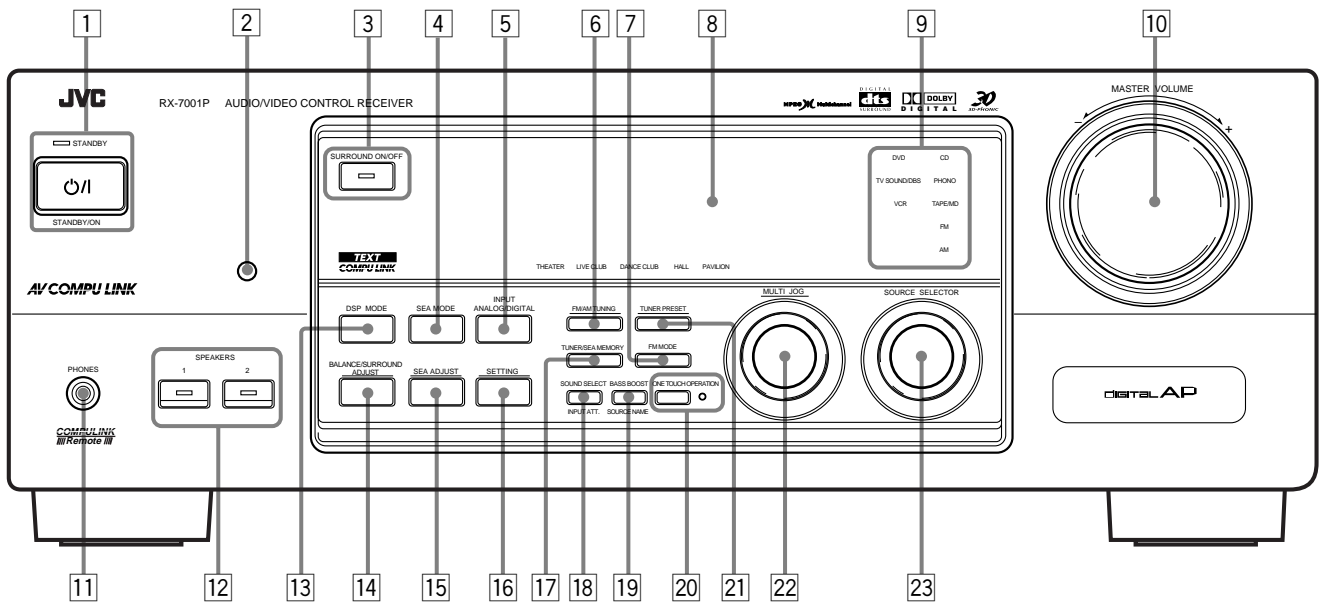


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Creating Your Own SEA Mode	20		

Parts Identification

Become familiar with the buttons and controls on the receiver before use. Refer to the pages in parentheses for details.



Remote Control

- 1 TV/CATV/DBS \odot /I button (45, 46)
- 2 Source selecting buttons (10)
DVD, DVD MULTI, CD, TAPE/MD, TV/DBS, PHONO, FM/AM, VCR
- 3 SURROUND ON/OFF button (25, 27)
- 4 SURROUND MODE button (25, 26)
- 5 CD-DISC button (44)
- 6 SOUND button (20, 24, 29)
- 7 On-screen operation buttons (30, 37)
- 8 TV VOL +/- buttons (45, 46)
- 9 Operating buttons for audio/video components (43 - 47)
- 10 AUDIO buttons \odot , | (10)
- 11 VCR \odot /I button (45, 47)
- 12 SLEEP button (17)
- 13 ANALOG/DIGITAL button (16)
- 14
 - 10 keys for selecting preset channels (19)
 - 10 keys for adjusting sound (20, 24 - 27, 29)
 - 10 keys for operating audio/video components (43 - 47)
- 15 Remote control mode selector (10, 43, 46)
- 16 TEXT DISPLAY button (37)
- 17 CHANNEL +/- buttons (45 - 47)
- 18 VOLUME +/- buttons (11)
- 19 MUTING button (12)

Front Panel

- 1 STANDBY/ON \odot /I button and STANDBY lamp (10)
- 2 Remote sensor (9)
- 3 SURROUND ON/OFF button and lamp (26, 27)
- 4 SEA MODE button (20)
- 5 INPUT ANALOG/DIGITAL button (16)
- 6 FM/AM TUNING button (18)*
- 7 FM MODE button (19)
- 8 Display (10)
- 9 Source lamps (10)
- 10 MASTER VOLUME control (11)
- 11 PHONES jack (12)
- 12 SPEAKERS 1/2 buttons and lamps (11)
- 13 DSP MODE button (24)
- 14 BALANCE/SURROUND ADJUST button (12, 13, 24)*
- 15 SEA ADJUST button (20)*
- 16 SETTING button (14 - 17)*
- 17 TUNER/SEA MEMORY button (18 - 20)
- 18 SOUND SELECT/INPUT ATT. button (11, 12)
- 19 BASS BOOST/SOURCE NAME button (12, 13)
- 20 ONE TOUCH OPERATION button and lamp (17)
- 21 TUNER PRESET button (19)*
- 22 MULTI JOG control
What this control actually does depends on which function you are trying to adjust. Before using this control, select the function by pressing one of the buttons marked with *.
- 23 SOURCE SELECTOR control (10)

Getting Started

This section explains how to connect audio/video components and speakers to the receiver, and how to connect the power supply.

Before Installation

General

- Be sure your hands are dry.
- Turn the power off to all components.
- Read the manuals supplied with the components you are going to connect.

Locations

- Install the receiver in a location that is level and protected from moisture.
- The temperature around the receiver must be between -5°C and 35°C (23°F and 95°F).
- Make sure there is good ventilation around the receiver. Poor ventilation could cause overheating and damage the receiver.

Handling the receiver

- Do not insert any metal object into the receiver.
- Do not disassemble the receiver or remove screws, covers, or cabinet.
- Do not expose the receiver to rain or moisture.

Checking the Supplied Accessories

Check to be sure you have all of the following items, which are supplied with the receiver.

The number in the parentheses indicates quantity of the pieces supplied.

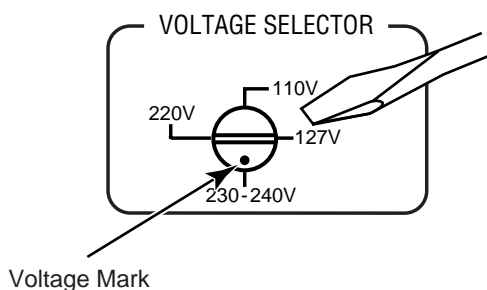
- Remote Control (1)
- Batteries (2)
- AM Loop Antenna (1)
- FM Antenna (1)
- AC Plug Adaptor (1)

If anything is missing, contact your dealer immediately.

Setting the Voltage Selector Switch

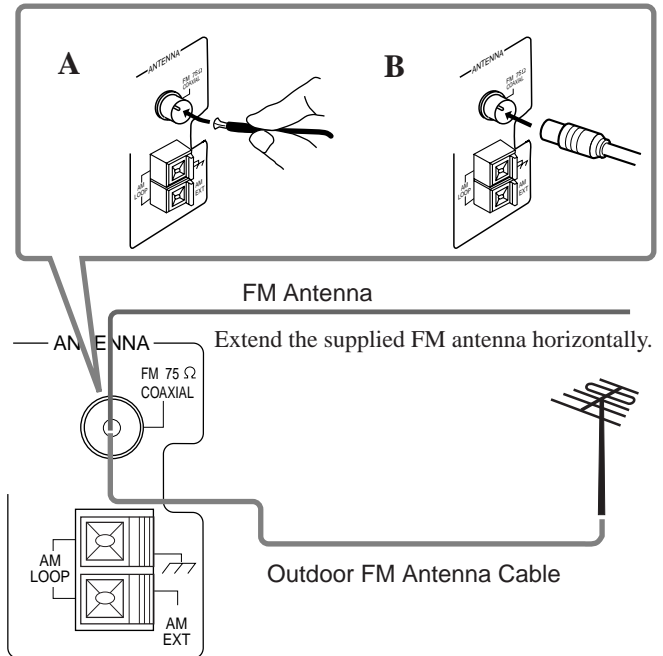
Before connections, always do the following first if necessary.

Set the correct voltage for your area with the voltage selector switch on the rear panel. Use a screw driver to rotate the switch so the number the arrow is pointing at is the same as the voltage where you are plugging in the receiver.



Connecting the FM and AM Antennas

FM Antenna Connections



A. Using the Supplied FM Antenna

The FM antenna provided can be connected to the FM 75 Ω COAXIAL terminal as temporary measure.

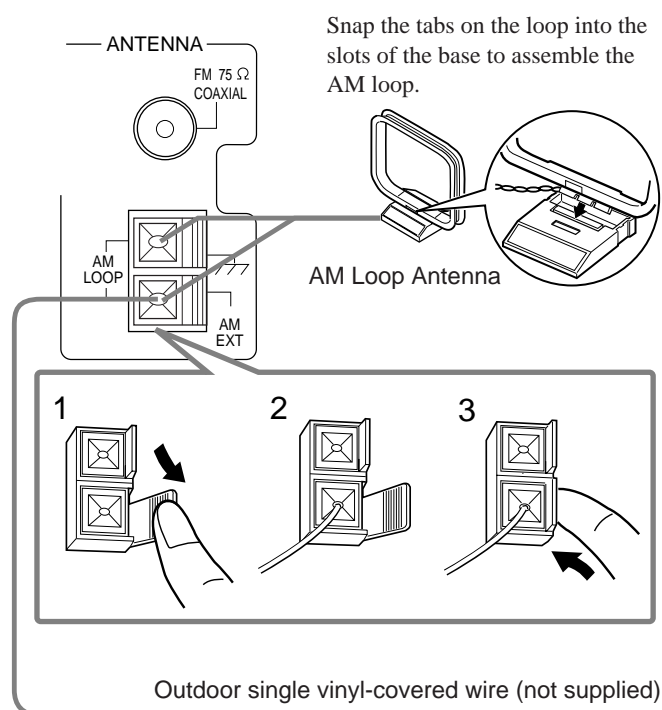
B. Using the Standard Type Connector (Not Supplied)

A standard type connector should be connected to the FM 75 Ω COAXIAL terminal.

Note:

If reception is poor, connect the outdoor antenna. Before attaching a 75 Ω coaxial cable (the kind with a round wire going to an outdoor antenna), disconnect the supplied FM antenna.

AM Antenna Connections



Turn the loop until you have the best reception.

Notes:

- Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. This could cause poor reception.
- If reception is poor, connect an outdoor single vinyl-covered wire to the AM EXT terminal. (Keep the AM loop antenna connected.)

Connecting the Speakers

You can connect the following speakers:

- Two pairs of front speakers to produce normal stereo sound.
- One pair of rear speakers to enjoy the surround effect.
- One center speaker to produce more effective surround effect (to emphasize human voices).
- One subwoofer to enhance the bass.

IMPORTANT:

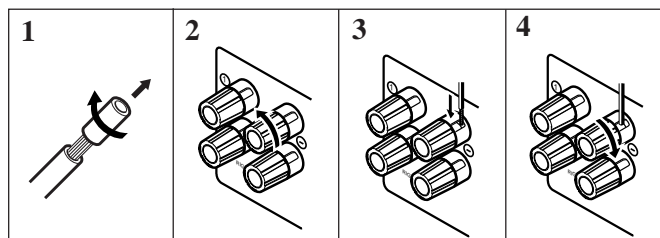
After connecting the speakers listed above, set the speaker setting information properly to obtain the best possible DSP effect. For details, see page 14.

For each speaker (except for a subwoofer), connect the (-) and (+) terminals on the rear panel to the (-) and (+) terminals marked on the speakers. For connecting a subwoofer, see page 5.

CAUTION:

Use speakers with the SPEAKER IMPEDANCE indicated by the speaker terminals.

Basic connecting procedure

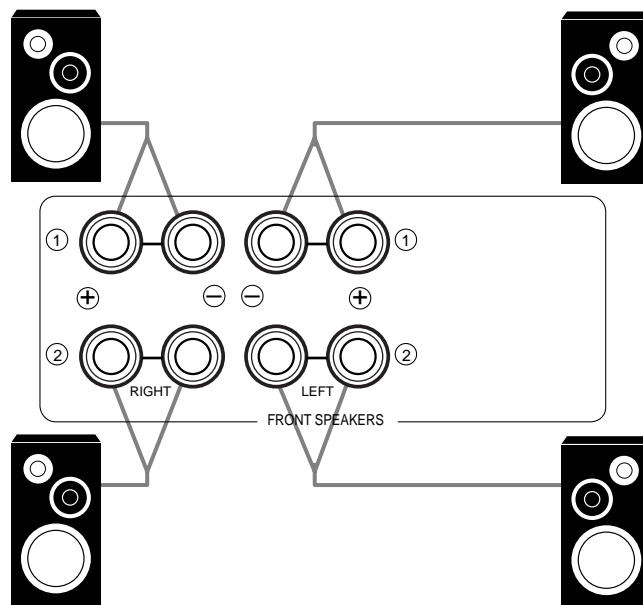


- 1 Cut, twist and remove the insulation at the end of each speaker signal cable (not supplied).
- 2 Turn the knob counterclockwise.
- 3 Insert the speaker signal cable.
- 4 Turn the knob clockwise.

Connecting the front speakers

You can connect two pairs of front speakers (one pair to the FRONT SPEAKERS ① terminals, and another pair to the FRONT SPEAKERS ② terminals).

Right speaker — FRONT SPEAKERS ① — Left speaker

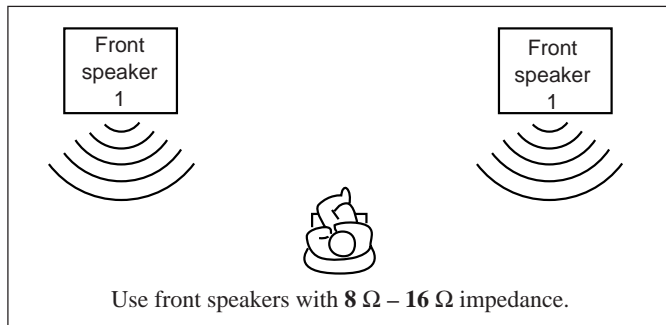


Right speaker — FRONT SPEAKERS ② — Left speaker

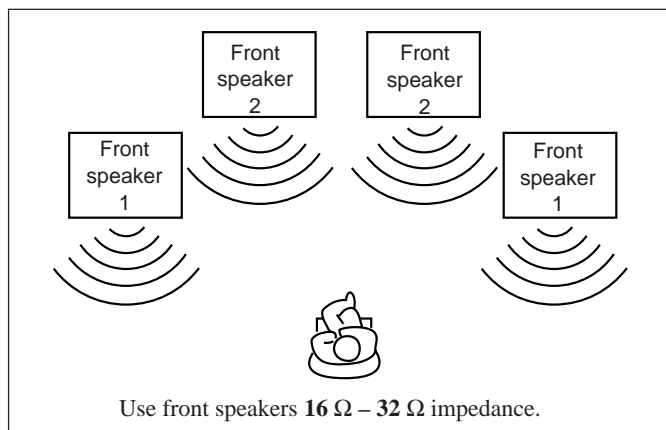
About the speaker impedance

The required speaker impedance of the front speakers does differ depending on whether both the FRONT SPEAKERS ① and FRONT SPEAKERS ② terminals are used or only one of them is used.

CASE 1 When you connect only one set of front speakers

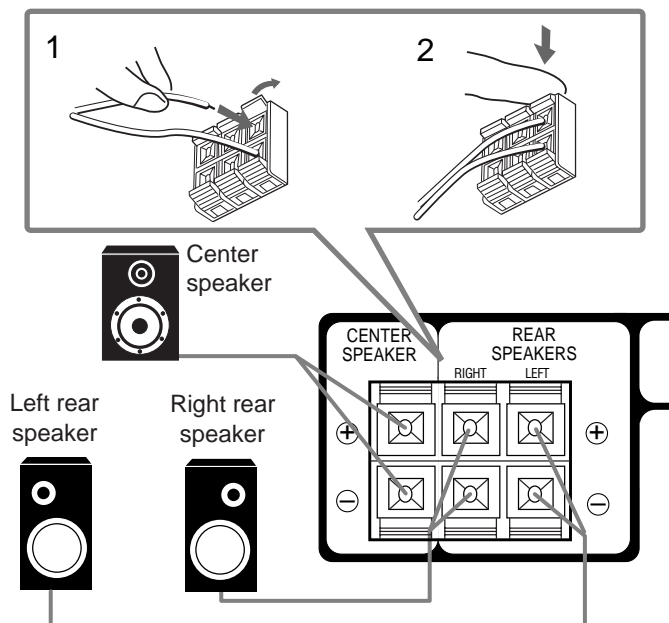


CASE 2 When you connect two sets of front speakers



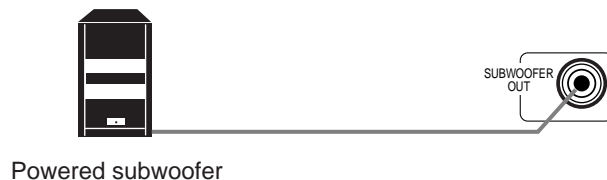
Connecting the rear and center speakers

Connect rear speakers to the REAR SPEAKERS terminals and a center speaker to the CENTER SPEAKER terminals.



Connecting the subwoofer speaker

You can enhance the bass by connecting a subwoofer. Connect the input jack of a powered subwoofer to the SUBWOOFER OUT jack on the rear panel, using a cable with RCA pin plugs (not supplied).



Connecting Audio/Video Components

You can connect the following audio/video components to this receiver. Refer also to the manuals supplied with your components.

Audio Components	Video Components
• Turntable	• DVD player*
• CD player*	• TV*
• Cassette deck or MD recorder*	• DBS tuner*
	• VCR

* You can connect these components using the methods described in "Analog connections" (below) or in "Digital connections" (see page 8).

Analog connections

Audio component connections

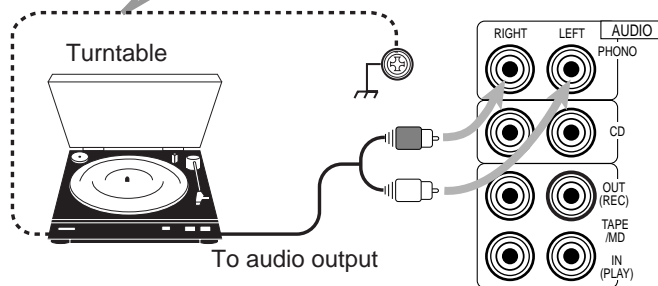
Use the cables with RCA pin plugs (not supplied). Connect the white plug to the audio left jack, and the red plug to the audio right jack.

CAUTION:

If you connect a sound-enhancing device such as a graphic equalizer between the source components and this receiver, the sound output through this receiver may be distorted.

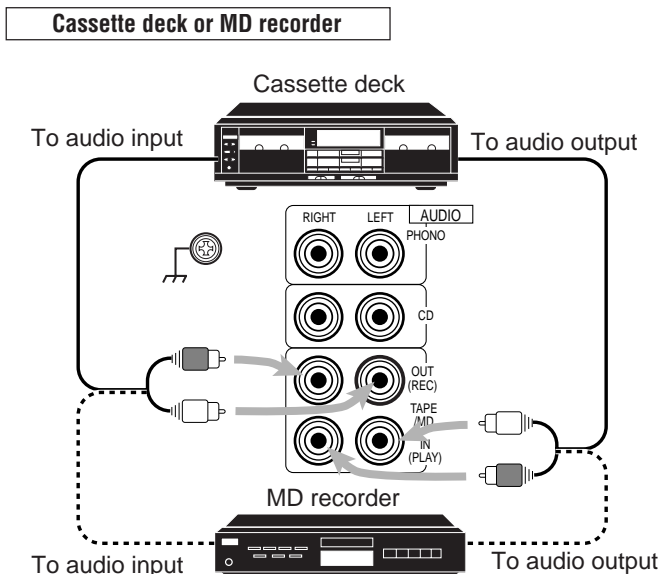
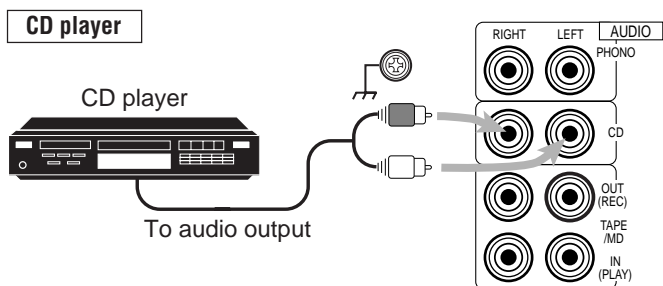
Turntable

If an earth cable is provided for your turntable, connect the cable to the screw marked (⊕) on the rear panel.



Note:

Any turntables incorporating a small-output cartridge such as an MC (moving-coil) type must be connected to this receiver through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.



Note:

You can connect either a cassette deck or an MD recorder to the TAPE/MD jacks. When connecting an MD recorder to the TAPE/MD jacks, change the source name, which will be shown on the display when selected as the source, to "MD." See page 13 for details.

If your audio components have a COMPU LINK-3 or TEXT COMPU LINK jack

- See also page 35 for detailed information about the connection and the COMPU LINK-3 remote control system.
- See also page 36 for detailed information about the connection and the TEXT COMPU LINK remote control system.

Video component connections

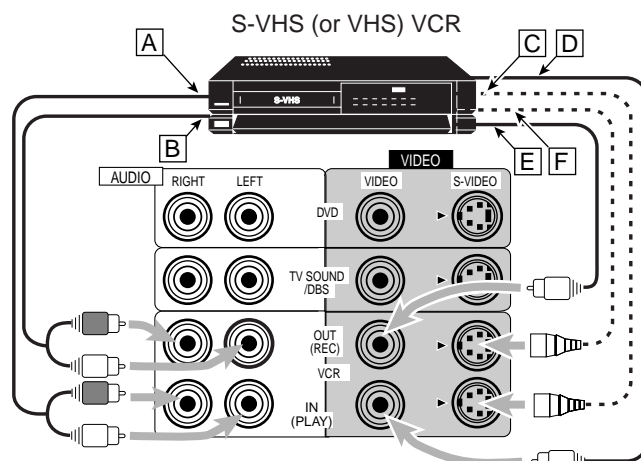
Use the cables with RCA pin plugs (not supplied). Connect the white plug to the audio left jack, the red plug to the audio right jack, and the yellow plug to the video jack. If your video components have S-video (Y/C-separation) terminals, connect them using S-video cables (not supplied). Connecting these video components through the S-video input/output terminals will give you better picture playback (or recording) quality.

IMPORTANT:

This receiver is equipped with both the composite video and S-video input/output terminals for connecting video components. You do not have to connect both the composite video and S-video terminals.

However, **remember that the video signals from the composite video input terminals are output only through the composite video output terminals, while the ones from the S-video input terminals are output only through the S-video output terminals.** Therefore, if a recording video component and a playing video component are connected to the receiver through the different video terminals, you cannot record the picture from the playing component on the recording component. In addition, if the TV and a playing video component are connected to the receiver through the different video terminals, you cannot view the playback picture from the playing component on the TV.

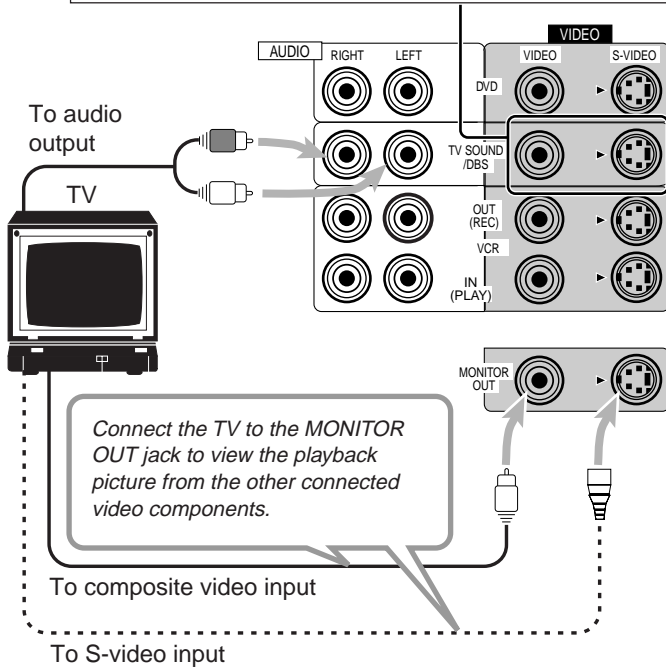
VCR



- [A] To left/right channel audio output
- [B] To left/right channel audio input
- [C] To S-video output
- [D] To composite video output
- [E] To composite video input
- [F] To S-video input

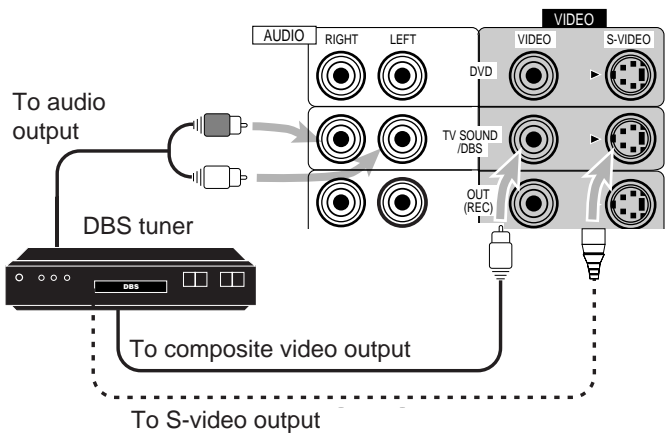
TV and/or DBS tuner

When connecting the TV, DO NOT connect the TV's video output to these video input terminals.



Note:

Use a TV of the PAL- or multi-color system.

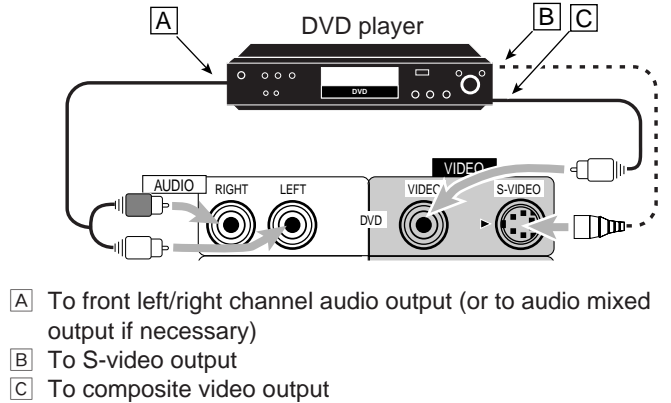


Note:

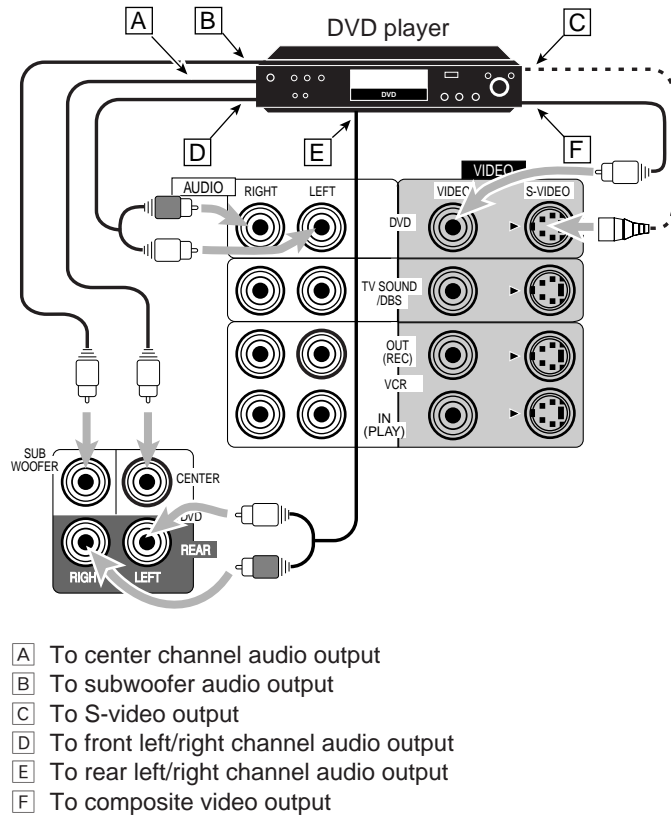
When connecting the DBS tuner to the TV SOUND/DBS jacks, change the source name, which will be shown on the display when selected as the source, to "DBS." See page 13 for details.

DVD player

- When you connect the DVD player with stereo output jacks:



- When you connect the DVD player with its analog discrete output (5.1 CH reproduction) jacks:



Digital connections

This receiver is equipped with three DIGITAL IN terminals — one digital coaxial terminal and two digital optical terminals, and one DIGITAL OUT terminal.

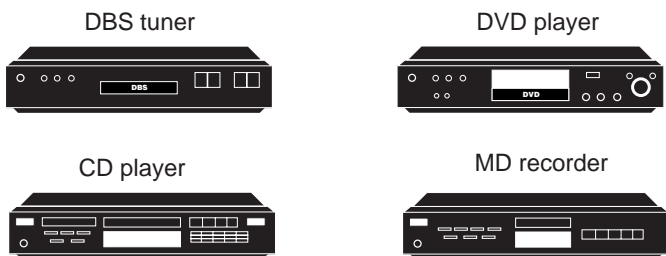
You can connect any digital equipment such as —

- DBS tuner,
- Digital TV broadcast tuner,
- DVD player,
- CD player,
- and MD recorder.

IMPORTANT:

- When connecting the DVD player, digital TV broadcast tuner or DBS tuner using the digital terminals, you also need to connect it to the video jack (either composite video terminal or S-video terminal) on the rear. Without connecting it to the video jack, you can view no playback picture.
- After connecting the components using the DIGITAL IN terminals, set the following correctly if necessary.
 - Set the digital input (DIGITAL IN) terminal setting correctly. For details, see “Digital Input (DIGITAL IN) Terminal Setting” on page 16.
 - Select the digital input mode correctly. For details, see “Selecting the Analog or Digital Input Mode” on page 16.

Digital input terminals



Digital coaxial cable (not supplied)
between digital coaxial terminals



Digital optical cable (not supplied)
between digital optical terminals



Notes:

- When shipped from the factory, the DIGITAL IN terminals have been set for use with the following components.
 - DIGITAL 1 (coaxial): For DVD player
 - DIGITAL 2 (optical): For CD player
 - DIGITAL 3 (optical): For digital TV broadcast tuner
- When you want to operate the CD player or MD recorder using the COMPU LINK remote control system, connect the target component also as described in “Analog connections” (see pages 5 and 6).
- When you want to operate the DVD player using the AV COMPU LINK remote control system, connect the DVD player also as described in “Analog connections” (see page 7).

Digital output terminal

MD recorder, etc.



Digital optical cable (not supplied)
between digital optical terminals



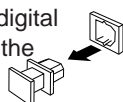
When the digital recording equipment such as an MD recorder has a digital optical input terminal, connecting it to the DIGITAL OUT terminal enables you to perform digital-to-digital recording.



When the component has a digital coaxial output terminal, connect it to the DIGITAL 1 (DVD) terminal, using the digital coaxial cable (not supplied).

When the component has a digital optical output terminal, connect it to the DIGITAL 2 (CD), or DIGITAL 3 (TV) terminal, using the digital optical cable (not supplied).

Before connecting a digital optical cable, unplug the protective plug.



Connecting the Power Cord

Before plugging the receiver into an AC outlet, make sure that all connections have been made.

Plug the power cord into an AC outlet.

Keep the power cord away from the connecting cables and the antenna. The power cord may cause noise or screen interference. We recommend that you use a coaxial cable to connect the antenna, since it is well-shielded against interference.

Notes:

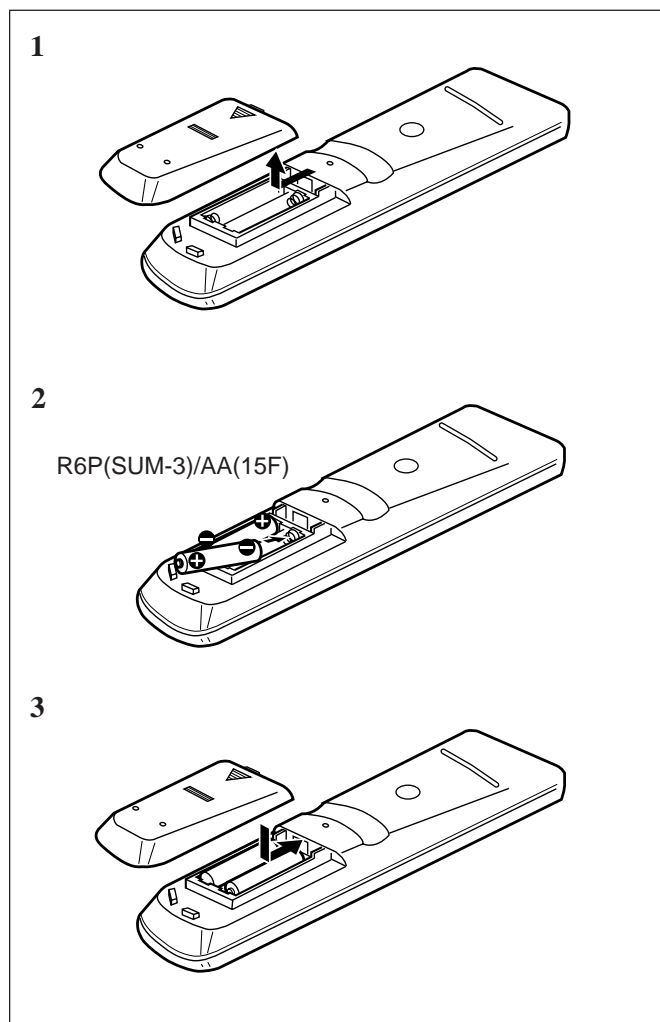
- The preset settings such as preset channels and sound adjustment may be erased in a few days in the following cases:
 - When you unplug the power cord.
 - When a power failure occurs.
- If the wall outlet does not match the AC plug, use the supplied AC plug adaptor.

CAUTIONS:

- Do not plug in before setting the voltage selector switch on the rear of the unit and all connection procedures are complete.
- Do not touch the power cord with wet hands.
- Do not pull on the power cord to unplug the cord. When unplugging the cord, always grasp the plug so as not to damage the cord.

Putting Batteries in the Remote Control

Before using the remote control, put two supplied batteries first. When using the remote control, aim the remote control directly at the remote sensor on the receiver.



1. On the back of the remote control, remove the battery cover.
2. Insert batteries. Make sure to match the polarity: (+) to (+).
3. Replace the cover.

If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6P(SUM-3)/AA(15F) type dry-cell batteries.

CAUTION:

Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity: (+) to (+).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

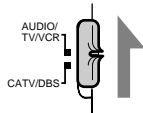
Basic Operations

The following operations are commonly used when you play any sound source.

IMPORTANT:

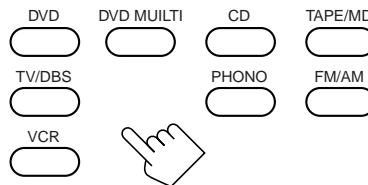
When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR."



From the remote control:

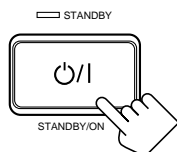
Press one of the source selecting buttons.



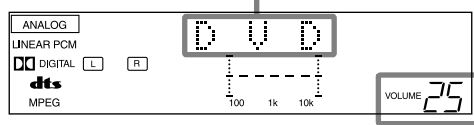
Turning the Power On and Off (Standby)

On the front panel:

To turn on the power, press STANDBY/ON . The STANDBY lamp goes off. The name of the current source (or station frequency) appears on the display.



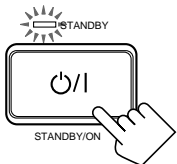
Current source name appears



Current volume level is shown here

To turn off the power (into standby mode), press STANDBY/ON again.

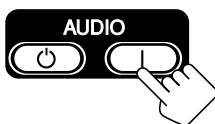
The STANDBY lamp lights up. A small amount of power is consumed in standby mode. To turn the power off completely, unplug the AC power cord.



From the remote control:

To turn on the power, press AUDIO .

The STANDBY lamp goes off. The name of the current source (or station frequency) appears on the display.



To turn off the power (into standby mode), press AUDIO .

The STANDBY lamp lights up.

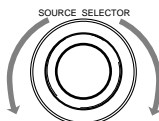


Selecting the Source to Play

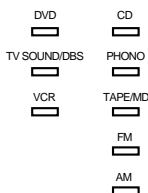
On the front panel:

Turn SOURCE SELECTOR until the source name you want appears on the display.

- As you turn the selector, the source changes as follows:

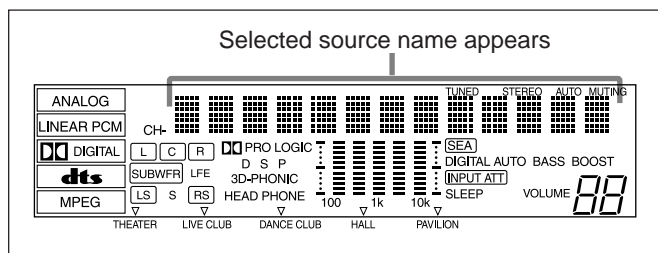


CD ⇄ PHONO ⇄ TAPE (or MD) ⇄ FM ⇄ AM ⇄ DVD ⇄ DVD MULTI ⇄ TV SOUND (or DBS) ⇄ VCR ⇄ (back to the beginning)



The selected source lamp also lights up.

- The DVD lamp lights up both for "DVD" and "DVD MULTI."



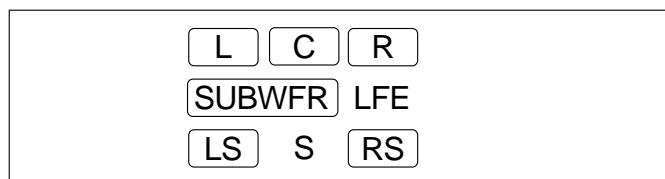
- DVD** Select the DVD player.
- DVD MULTI** Select the DVD player for viewing the digital video disc using the analog discrete output mode (5.1CH reproduction) on the DVD player. To enjoy the DVD MULTI playback, see page 29.
- CD*** Select the CD player.
- TAPE/MD*** Select the cassette deck (or the MD recorder).
- TV/DBS** Select TV sounds (or the DBS tuner).
- PHONO*** Select the turntable.
- FM/AM*** Select an FM or AM broadcast.
 - Each time you press the button, the band alternates between FM and AM.
- VCR** Select the video component connected to the VCR jacks.

Notes:

- When connecting an MD recorder (to the TAPE/MD jacks), and a DBS tuner (to the TV SOUND/DBS jacks), change the source name shown on the display. For details, see page 13.
- When you press one of the source selecting buttons on the remote control marked above with an asterisk (*), the receiver automatically turns on.

Signal and speaker indicators on the display

- The signal indicators light up to indicate the incoming channel signals.
 - Only the indicators for the incoming signals light up.
- The frame of the signal indicator (except for "LFE" and "S") lights up if the corresponding speaker is set to "LARGE" or "SMALL" (for subwoofer, "YES").
 - The frames of "L" and "R" indicators always light up.



- L:**
- When digital input is selected:** Lights up when the left channel signal comes in.
 - When analog input is selected:** Always lights up.
- R:**
- When digital input is selected:** Lights up when the right channel signal comes in.
 - When analog input is selected:** Always lights up.
- C:** Lights up when the center channel signal comes in.
- LS:** Lights up when the left rear channel signal comes in.
- RS:** Lights up when the right rear channel signal comes in.
- S:** Lights up when the monaural rear channel signal comes in.
- LFE:** Lights up when the LFE channel signal comes in.

Notes:

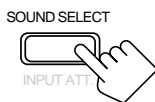
- When "SUBWOOFER" is set to "YES," **SUBWFR** lights up.
- When you select "DVD MULTI," all the signal indicators except "S" light up.

Selecting different sources for picture and sound

You can watch picture from a video component while listening to sound from another component.

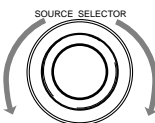
On the front panel:

- Press **SOUND SELECT (INPUT ATT.)** briefly while viewing the picture from a video component such as the VCR or DVD player, etc.



"SOUND SELECT" appears on the display.

- Turn **SOURCE SELECTOR** to select the sound (except the TV sound), while the indication of the above step is still on the display.



From the remote control:

Press one of the audio source selecting buttons (CD, TAPE/MD, PHONO, FM/AM, TV/DBS*), while viewing the picture from a video component such as the VCR or DVD player, etc.

Notes:

- Once you have selected a video source, pictures of the selected source are sent to the TV until you select another video source.
- * The TV/DBS button only works for selecting "DBS" as the source but not for selecting "TV SOUND." When you use the DBS tuner, change the source name correctly (see page 13).

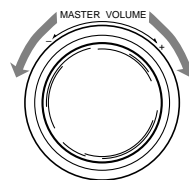
Adjusting the Volume

On the front panel:

To increase the volume, turn MASTER VOLUME clockwise.

To decrease the volume, turn it counterclockwise.

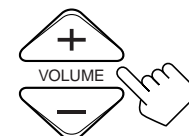
- When you turn MASTER VOLUME rapidly, the volume level also changes rapidly.
- When you turn MASTER VOLUME slowly, the volume level also changes slowly.



From the remote control:

To increase the volume, press VOLUME +.

To decrease the volume, press VOLUME -.



CAUTION:

Always set the volume to the minimum before starting any source. If the volume is set at its high level, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

Note:

The volume level can be adjusted within the range of "0" (minimum) to "90" (maximum).

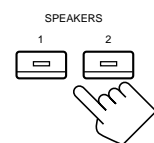
Selecting the Front Speakers

On the front panel ONLY:

When you have connected two pairs of the front speakers, you can select which to use.

Press **SPEAKERS 1** or **SPEAKERS 2** to select the speaker to use.

- Each time you press the button, the lamp on the respective button turns on and off. When the lamp on either button lights up, the respective speakers are activated.



Note:

If you use any of the DSP modes other than the 3D-PHONIC modes with both front speakers activated, the speakers connected to the FRONT SPEAKERS ② terminals are deactivated.

Listening only with headphones

You can listen with the headphones without deactivating both pairs of speakers; however, if you want to use the HEADPHONE mode (see below), you must turn off both pairs of speakers.

1. Connect a pair of headphones to the PHONES jack on the front panel.
2. Press SPEAKERS 1 and/or 2 so that no lamps on the buttons are turned on.

This cancels the surround mode or DSP mode currently selected, and activates the HEADPHONE mode (see below).

- The HEAD PHONE indicator lights up on the display.

HEADPHONE mode:

This mode can reproduce the LFE channel signals, mixing them with the front channel signals. So you will not miss the subwoofer sounds even if you listen to a source using the headphones.

Notes:

- While in the HEADPHONE mode, you cannot use any other DSP modes (see page 21.)
- Activating the speaker cancels the headphones mode and turns on the DSP mode previously selected.

CAUTION:

Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.

Muting the Sound

From the remote control ONLY:

Press **MUTING** to mute the sound through all speakers and headphones connected.

“MUTING” appears on the display and the volume turns off (the volume level indicator goes off).



To restore the sound, press **MUTING** again so that “OFF” appears on the display.

- Turning **MASTER VOLUME** on the front panel or pressing **VOLUME +/-** on the remote control also restores the sound.

Reinforcing the Bass

You can boost the bass level.

On the front panel ONLY:

Press **BASS BOOST (SOURCE NAME)** briefly to select the bass boost function.

- Each time you press the button, the bass boost function turns on (“BASSBOOST ON”) and off (“BASSBOOST OFF”).
 - Select “BASSBOOST ON” to activate the bass boost function. The **BASS BOOST** indicator lights up on the display.
 - Select “BASSBOOST OFF” to cancel it. The indicator goes off.



Note:

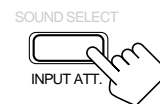
This function affects the front speaker sounds only.

Attenuating the Input Signal

When the input level of the playing source is too high, the sounds will be distorted. If this happens, you need to attenuate the input signal level to prevent the sound distortion.

On the front panel ONLY:

Press and hold **INPUT ATT. (SOUND SELECT)** so that the **ATT** indicator lights up on the display.



- Each time you press and hold the button, the Input Attenuator mode turns on (“INPUT ATT ON”) or off (“INPUT NORMAL”).

Notes:

- This function is available only for the sources connected using the analog terminals.
- This function takes effect when the DSP mode is in use.
- When selecting “DVD MULTI” as the source, this effect does not work.

Adjusting the Subwoofer Output Level

You can adjust the subwoofer output level if you have selected “YES” for the “SUBWOOFER” (see page 14).

Once it has been adjusted, the receiver memorizes the adjustment.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- When the front speakers are all deactivated, the subwoofer level cannot be adjusted.

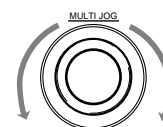
On the front panel:

1. Press **(BALANCE/) SURROUND ADJUST** repeatedly until “SUBWFR LEVEL” appears on the display.



The display changes to show the current setting.

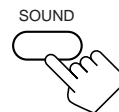
2. Turn **MULTI JOG** to adjust the subwoofer output level (–10 dB to +10 dB).



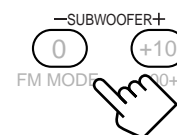
From the remote control:

1. Press **SOUND**.

The 10 keys are activated for sound adjustments.



2. Press **SUBWOOFER +/-** to adjust the subwoofer output level (–10 dB to +10 dB).



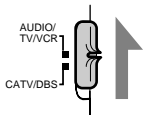
Basic Settings

Some of the following settings are required after connecting and positioning your speakers in your listening room, while others will make operations easier.

IMPORTANT:

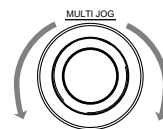
When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR."



2. Turn MULTI JOG to adjust the balance.

- Turning it clockwise decreases the left channel output.
- Turning it counterclockwise decreases the right channel output.



Recording a Source

For analog-to-analog recording

You can record any analog source through the receiver to —

- the cassette deck (or MD recorder) connected to the TAPE/MD jacks, and
 - the VCR connected to the VCR jacks
- at the same time.

For digital-to-digital recording

You can record the currently selected digital input through the receiver to a digital recording device connected to the DIGITAL OUT terminal.

Notes:

- Analog-to-digital and digital-to-analog recordings are not possible.
- The output volume level, bass boost (see page 12), SEA modes (see page 20), and DSP modes (see page 21) cannot affect the recording.
- The test tone signal (see page 25, 26) does not come out through the DIGITAL OUT terminal.

Adjusting the Front Speaker Output Balance

If the sounds you hear from the front right and left speakers are unequal, you can adjust the speaker output balance.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press **BALANCE (/SURROUND) ADJUST** repeatedly until "L/R BALANCE" appears on the display.

The display changes to show the current setting.



Changing the Source Name

When you have connected an MD recorder to the TAPE/MD jacks or the DBS tuner to the TV SOUND/DBS jacks on the rear panel, change the source name which will be shown on the display when you select the MD recorder or DBS tuner as the source.

On the front panel ONLY:

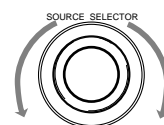
1. When changing the source name from "TAPE" to "MD":

- Turn **SOURCE SELECTOR** until "TAPE" appears.

When changing the source name from "TV SOUND" to "DBS":

- Turn **SOURCE SELECTOR** until "TV SOUND" appears.

2. Press and hold **SOURCE NAME (BASS BOOST)** until "ASSGN. MD" or "ASSGN. DBS" appears on the display.



To change the source name to "TAPE" or "TV SOUND," repeat the same procedure above — in step 1, select "MD" or "DBS" then press and hold SOURCE NAME (BASS BOOST).

Note:

Without changing the source name, you can still use the connected components. However, there may be some inconvenience.

- "TAPE" or "TV SOUND" will appear on the display when you select the MD recorder or DBS tuner.
- You cannot use the digital input (see page 16) for the MD recorder.
- You cannot use the COMPU LINK remote control system (see page 35) to operate the MD recorder.

Setting the Subwoofer Information

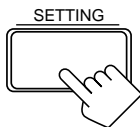
Register whether or not you have connected a subwoofer.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

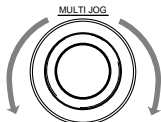
On the front panel ONLY:

1. Press **SETTING** repeatedly until “**SUBWOOFER**” appears on the display.



The display changes to show the current setting.

2. Turn **MULTI JOG** to register whether you have connected a subwoofer or not.



- As you turn it, the subwoofer setting alternates between “YES” and “NO.”

YES:	Select this when a subwoofer is used. [SUBWFR] lights up on the display (see page 11).
NO:	Select this when no subwoofer is used.

Setting the Speakers for the DSP Modes

To obtain the best possible surround sound of the DSP modes, you have to register the information about the speakers arrangement after all connections are completed.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

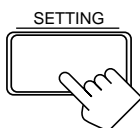
Front, Center, and Rear Speaker Setting

Register the sizes of all the connected speakers.

- When you change your speakers, you need to register the information about the speakers again.

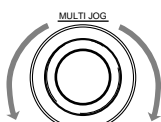
On the front panel ONLY:

1. Press **SETTING** repeatedly until “**FRONT SPK**” (Front Speaker), “**CENTER SPK**” (Center Speaker) or “**REAR SPK**” (Rear Speaker) appears on the display.

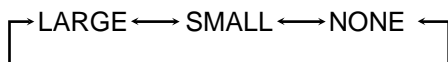


The display changes to show the current setting.

2. Turn **MULTI JOG** to select the appropriate item about the speaker selected in the above step.



- As you turn it, the display changes to show the following:



LARGE:	Select this when the speaker size is relatively large.
SMALL:	Select this when the speaker size is relatively small.
NONE:	Select this when you have not connected a speaker. (Not selectable for the front speakers.)

3. Repeat steps 1 and 2 to select the appropriate items for the other speakers.

Notes:

- Keep the following comment in mind as reference when adjusting.
 - If the size of the cone speaker unit built in your speaker is greater than 12 cm, select “LARGE,” and if it is smaller than 12 cm, select “SMALL.”
- If you have selected “NO” for the subwoofer setting, you can only select “LARGE” for the front speaker setting.
- If you have selected “SMALL” for the front speaker setting, you cannot select “LARGE” for the center and rear speaker settings.

Center Delay Time Setting

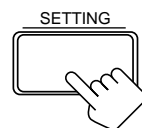
Register the delay time of the sound from the center speaker, comparing to that of the sound from the front speakers.

If the distance from your listening point to the center speaker is equal to that to the front speakers, select 0 msec. As the distance to the center speaker becomes shorter, increase the delay time.

- 1 msec increase (or decrease) in delay time corresponds to 30 cm decrease (or increase) in distance.
- When shipped from the factory, delay time is set to 0 msec.

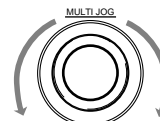
On the front panel ONLY:

1. Press **SETTING** repeatedly until “**CENTER DELAY**” appears on the display.



The display changes to show the current setting.

2. Turn **MULTI JOG** to select the delay time of the center speaker output.



- Turn it clockwise to increase the delay time from 0 msec (“C. DELAY: 0ms”) to 5 msec (“C. DELAY: 5ms”).
- Turn it counterclockwise to decrease the delay time from 5 msec (“C. DELAY: 5ms”) to 0 msec (“C. DELAY: 0ms”).

Notes:

- Center delay time setting is not valid for the DVD MULTI playback mode.
- You cannot adjust the center delay time when you have set “CENTER SPK” to “NONE.”

Rear Delay Time Setting

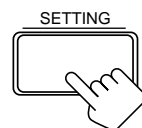
Register the delay time of the sound from the rear speakers, comparing to that of the sound from the front speakers.

If the distance from your listening point to the rear speakers is equal to that to the front speakers, select 0 msec. As the distance to the rear speakers becomes shorter, increase the delay time.

- 1 msec increase (or decrease) in delay time corresponds to 30 cm decrease (or increase) in distance.
- Rear delay time for Dolby Digital, DTS Digital Surround and MPEG Multichannel is to be set to 5 msec.
- When shipped from the factory, delay time is set to 5 msec.

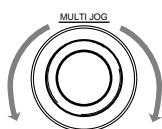
On the front panel ONLY:

1. Press **SETTING** repeatedly until “**REAR DELAY**” appears on the display.



The display changes to show the current setting.

2. Turn MULTI JOG to select the delay time of the rear speaker output.



- Turn it clockwise to increase the delay time from 0 msec (“R. DELAY: 0ms”) to 15 msec (“R. DELAY: 15ms”).
- Turn it counterclockwise to decrease the delay time from 15 msec (“R. DELAY: 15ms”) to 0 msec (“R. DELAY: 0ms”).

Notes:

- Rear delay time setting is not valid for the DVD MULTI playback mode.
- You cannot adjust the rear delay time when you have set “REAR SPK” to “NONE.”

Crossover Frequency Setting

Small speakers cannot reproduce the bass sound very well. So, if you have used a small speaker for any of the front, center, and rear channels, this receiver automatically reallocate the bass elements, originally assigned to the channel for which you have connected the small speaker, to another channel (for which you have connected the large speaker).

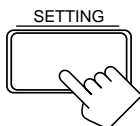
To use this function properly, you need to set the crossover frequency level according to the size of the small speaker connected.

- If you have selected “LARGE” for all speakers (see page 14), this function is set to “OFF” and cannot be adjusted.

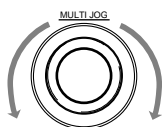
On the front panel ONLY:

1. Press SETTING repeatedly until “CROSSOVER FRQ” (Crossover Frequency) appears on the display.

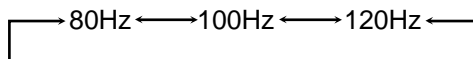
The display changes to show the current setting.



2. Turn MULTI JOG to select the crossover frequency level according to the size of the small speaker connected.



- As you turn it, the display changes to show the following:



- Use the following comments as reference when adjusting.

80Hz: Select this when the cone speaker unit built in the speaker is about 12 cm.

100Hz: Select this when the cone speaker unit built in the speaker is about 10 cm.

120Hz: Select this when the cone speaker unit built in the speaker is about 8 cm.

Note:

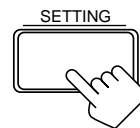
Crossover frequency setting is not valid for the DVD MULTI playback mode, 3D-PHONIC mode, and HEADPHONE mode.

Low Frequency Effect Attenuator Setting

If the bass sound is distorted while playing back a source using Dolby Digital, DTS Digital Surround or MPEG Multichannel follow the procedure below.

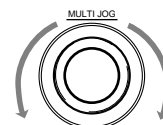
On the front panel ONLY:

1. Press SETTING repeatedly until “LFE ATT” (Low Frequency Effect Attenuator) appears on the display.



The display changes to show the current setting.

2. Turn MULTI JOG to select the low frequency effect attenuator level.



- As you turn it, the display changes to show the following:

0dB ←→ 10dB

0dB: Normally select this.

10dB: Select this when the bass sound is distorted.

Note:

Low frequency effect attenuator setting is not valid for the DVD MULTI playback mode.

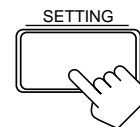
Dynamic Range Compression Setting

You can compress the dynamic range (difference between maximum sound and minimum sound) of the reproduced sound. This is useful when enjoying surround sound at night.

- This function takes effect only when playing back a source using Dolby Digital.

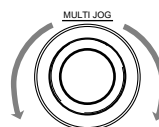
On the front panel ONLY:

1. Press SETTING repeatedly until “D. RANGE COMP.” (Dynamic Range Compression) appears on the display.

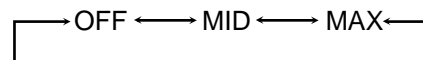


The display changes to show the current setting.

2. Turn MULTI JOG to select the appropriate item about the compression level.



- As you turn it, the display changes to show the following:



OFF: Select this when you want to enjoy surround with its full dynamic range. (No effect applied.)

MID: Select this when you want to reduce the dynamic range a little. (Factory setting.)

MAX: Select this when you want to apply the compression effect fully. (Useful at night.)

Note:

Dynamic Range Compression setting is not valid for the DTS Digital Surround, MPEG Multichannel and DVD MULTI playback mode.

Digital Input (DIGITAL IN) Terminal Setting

When you use the digital input terminals, you have to register what components are connected to which terminals (DIGITAL IN 1/2/3).

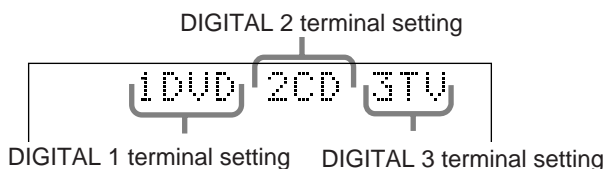
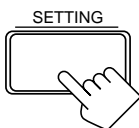
Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press **SETTING** repeatedly until “DIGITAL IN” appears on the display.

The display changes to show the current setting.



2. Turn **MULTI JOG** to select the appropriate digital terminal setting.

- As you turn it, the display changes to show the following:

1 DVD 2 CD 3 TV (or DBS*) ⇐
 1 DVD 2 CD 3 MD ⇐
 1 DVD 2 MD 3 TV (or DBS*) ⇐
 1 CD 2 DVD 3 TV (or DBS*) ⇐
 1 CD 2 DVD 3 MD ⇐
 1 CD 2 MD 3 TV (or DBS*) ⇐
 1 TV (or DBS*) 2 CD 3 DVD ⇐
 1 TV (or DBS*) 2 CD 3 MD ⇐
 1 TV (or DBS*) 2 DVD 3 MD ⇐
 1 MD 2 CD 3 TV (or DBS*) ⇐
 1 MD 2 CD 3 DVD ⇐
 1 MD 2 DVD 3 TV (or DBS*) ⇐
 (back to the beginning)

* If you have changed the source name from “TV SOUND” to “DBS,” “DBS” appears.

Note:

When shipped from the factory, the DIGITAL IN terminals can be used as the digital input for the following components.

- DIGITAL 1 (coaxial): For DVD player
- DIGITAL 2 (optical): For CD player
- DIGITAL 3 (optical): For digital TV broadcast tuner

Selecting the Analog or Digital Input Mode

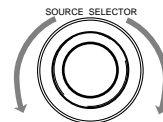
When you have connected some digital source components using the digital terminals (see page 8), you need to change the input mode for these components to the appropriate digital input mode correctly — AUTO/PCM, DOLBY DIGITAL, DTS, or MPEG.

Before you start, remember...

- The digital input (DIGITAL IN) terminal setting should be correctly done for the sources you want to select the digital input mode for. Without setting this digital input terminal correctly, you cannot change the input mode from analog input to digital input even if you follow the procedure below.

On the front panel:

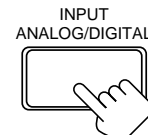
1. Turn **SOURCE SELECTOR** until the source (CD, MD, TV SOUND, DBS, or DVD)* for which you want to change the input mode appears on the display.



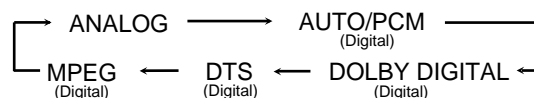
Note:

* Among the sources listed above, you can select the digital input only for the sources which you have selected the digital input terminals for. (See “Digital Input (DIGITAL IN) Terminal Setting.”)

2. Press **INPUT ANALOG/DIGITAL** repeatedly until the digital input mode you want appears on the display.



- Each time you press the button, the input mode changes as follows:



Normally select “AUTO/PCM,” so the receiver automatically detects the incoming digital signal format. (The DIGITAL AUTO indicator lights up on the display.)

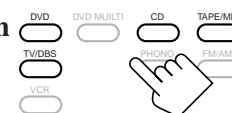
- When the receiver can recognize the digital signal format coming into the receiver, the frame of the digital signal indicator for the detected signal lights up automatically.
- When the receiver cannot recognize the incoming signal format correctly, the frame of the digital signal indicator flashes.

If this happens, select the same digital input mode with the incoming digital signal — either “DOLBY DIGITAL”, “DTS” or “MPEG.”

To change the input mode back to analog input, select “ANALOG.”

From the remote control:

1. Press the source selecting button (CD, TAPE/MD, TV/DBS, or DVD)* for which you want to change the input mode.



Note:

* Among the sources listed above, you can select the digital input only for the sources which you have selected the digital input terminals for. (See “Digital Input (DIGITAL IN) Terminal Setting.”)

2. Press **ANALOG/DIGITAL** to change the input mode.



- Each time you press the button, the input mode changes as follows:



Notes:

- Noise may come out of the speakers while searching or skipping a multi-sound source encoded with Dolby Digital, DTS Digital Surround or MPEG Multichannel. If this happens, select “DOLBY DIGITAL”, “DTS” or “MPEG” for digital input mode.
- When you change the source, the digital input mode will be automatically reset to “AUTO/PCM.”

Showing the Text Information on the Display

When you have connected an MD recorder or CD player equipped with TEXT COMPU LINK remote control system (see page 36), you can show the text information, such as disc title or track title, on the display of this receiver. To show it on the display, follow the procedure below.

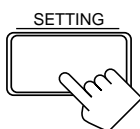
Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

1. Press **SETTING** repeatedly until “**FL DISPLAY**” appears on the display.

The display changes to show the current setting.



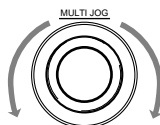
2. Turn **MULTI JOG** to select either the source name or the text information to be shown on the display.

- As you turn it, the display changes to show the following:

NORMAL ←→ TEXT

NORMAL: Source name appears during play.

TEXT: Text information appears during play.



Note:

Though you have selected “**TEXT**,” the source name such as “**CD**” or “**MD**” appears if a playing disc has no text information.

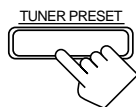
Setting the AM Tuner Interval Spacing

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

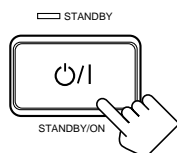
On the front panel ONLY:

To select the 10 kHz interval:

Be sure the receiver is turned off, but is plugged into an AC outlet. Hold down **TUNER PRESET** and press **STANDBY/ON** . Now the 10 kHz interval is selected.

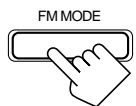


and

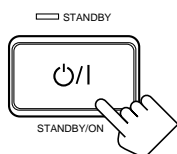


To change back to the 9 kHz interval:

Be sure the receiver is turned off, but is plugged into an AC outlet. Hold down **FM MODE** and press **STANDBY/ON** . Now the 9 kHz interval is selected.



and



Storing the Basic Settings and Adjustments — One Touch Operation

JVC's One Touch Operation function is used to assign and store different sound settings for each different playing source. By using this function, you do not have to change the settings every time you change the source. The stored settings for the newly selected source are automatically recalled. The following can be stored for each source:

- Volume level (see page 11)
- Bass boost (see page 12)
- Input attenuator mode (see page 12)
- Subwoofer output level (see page 12)
- Balance (see page 13)
- SEA modes (see page 20)
- DSP modes
 - 3D-PHONIC mode settings (see page 24)
 - DAP mode settings (see page 24)
 - Surround mode settings (see page 25)
- DVD MULTI playback mode settings (see page 29)

On the front panel ONLY:

To store the sound settings

1. Press **ONE TOUCH OPERATION**.

The **ONE TOUCH OPERATION** lamp lights up, then the previously memorized settings are recalled.



2. Adjust the sound using the functions listed above.

The newly adjusted settings are memorized.

To recall the sound settings

With the **ONE TOUCH OPERATION** lamp lit, the settings for the currently selected source are recalled when the source is selected.

To cancel the One Touch Operation function

Press **ONE TOUCH OPERATION** so that the lamp goes off.

(Even though the One Touch Operation function is canceled, the recalled sound effects remain active.)

Notes:

- If the source is **FM** or **AM**, you can assign a different setting for each band.
- The **DSP modes** and **DVD MULTI playback mode** cannot be used at the same time.

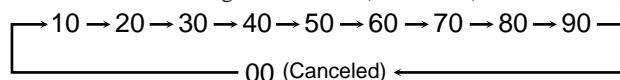
Using the Sleep Timer

Using the Sleep Timer, you can fall asleep to music and know the receiver will turn off by itself rather than play all night.

From the remote control ONLY:

Press **SLEEP** repeatedly.

The **SLEEP** indicator lights up on the display, and the shut-off time changes as follows (in minutes):



When the shut-off time comes

The receiver turns off automatically.

To check or change the time remaining until the shut-off time

Press **SLEEP** once.

The remaining time until the shut-off time appears in minutes.

- To change the shut-off time, press **SLEEP** repeatedly.

To cancel the Sleep Timer

Press **SLEEP** repeatedly until “**SLEEP 00min.**” appears on the display. (The **SLEEP** indicator goes off.)

- Turning off the power also cancels the Sleep Timer.

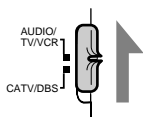
Receiving Radio Broadcasts

You can browse through all the stations or use the preset function to go immediately to a particular station.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR."



Using Preset Tuning

Once a station is assigned to a channel number, the station can be quickly tuned. You can preset up to 30 FM and 15 AM stations.

To store the preset stations

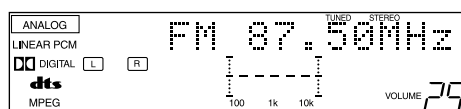
Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel ONLY:

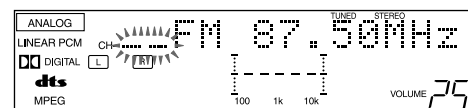
1. Tune in the station you want to preset (see "Tuning in Stations Manually").

- If you want to store the FM reception mode for this station, select the FM reception mode you want. See "Selecting the FM Reception Mode" on page 19.



2. Press TUNER (/SEA) MEMORY.

"CH-" appears and the channel number position starts flashing on the display for about 10 seconds.



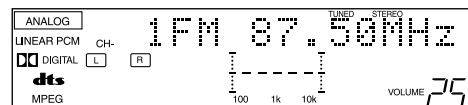
3. Turn MULTI JOG to select a channel number while the channel number position is flashing.

Note:

You can use the 10 keys on the remote control to select the preset number. When using the 10 keys, be sure that they are activated for the tuner, not for the CD and others. (See page 43.)

4. Press TUNER (/SEA) MEMORY again while the selected channel number is flashing on the display.

The selected channel number stops flashing. The station is assigned to the selected channel number.



5. Repeat steps 1 to 4 until you store all the stations you want.

To erase a stored preset station

Storing a new station on a used number erases the previously stored one.

Tuning in Stations Manually

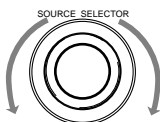
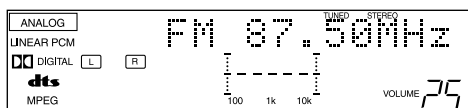
Before you start, remember...

- Check the AM tuner interval spacing (9 kHz or 10 kHz) for your area. (See page 17.)

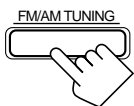
On the front panel:

1. Turn SOURCE SELECTOR to select the band (FM or AM).

The last received station of the selected band is tuned in.

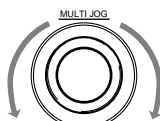


2. Press FM/AM TUNING.



3. Turn MULTI JOG until you find the frequency you want.

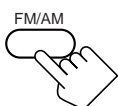
- Turning it clockwise increases the frequency.
- Turning it counterclockwise decreases the frequency.
- When you turn MULTI JOG quickly, the frequency keeps changing until a station is tuned in.



From the remote control:

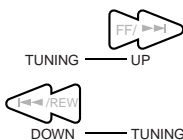
1. Press FM/AM to select the band.

- Each time you press the button, the band alternates between FM and AM.



2. Press TUNING UP or TUNING DOWN repeatedly until you find the frequency you want.

- When you hold the button (and release it), the frequency keeps changing until a station is tuned in.



Note:

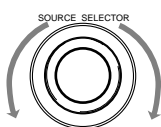
When a station of sufficient signal strength is tuned in, the TUNED indicator lights up on the display. When an FM stereo program is received, the STEREO indicator also lights up.

To tune in a preset station

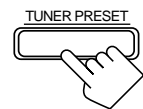
On the front panel:

1. Turn **SOURCE SELECTOR** to select the band (FM or AM).

The last received station of the selected band is tuned in.



2. Press **TUNER PRESET**.



3. Turn **MULTI JOG** until you find the channel you want.

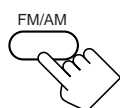
- Turning it clockwise increases the channel numbers.
- Turning it counterclockwise decreases the channel numbers.



From the remote control:

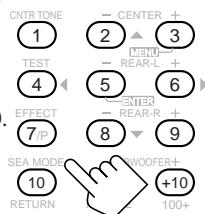
1. Press **FM/AM**.

- Each time you press the button, the band alternates between FM and AM.



2. Press the **10 keys** to select a preset channel number.

- For channel number 5, press 5.
- For channel number 15, press +10 then 5.
- For channel number 20, press +10 then 10.
- For channel number 30, press +10, +10, then 10.



Note:

When you use the 10 keys on the remote control, be sure that they are activated for the tuner, not for the CD and others. (See page 43.)

Selecting the FM Reception Mode

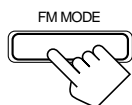
When an FM stereo broadcast is hard to receive or noisy

You can change the FM reception mode while receiving an FM broadcast.

- You can store the FM reception mode for each preset station.

Press FM MODE on the front panel or on the remote control.

- Each time you press the button, the FM reception mode alternates between "AUTO MUTING" and "MONO."



On the front panel



On the remote control

AUTO MUTING: When a program is broadcasted in stereo, you will hear stereo sound; when in monaural, you will hear monaural sounds. This mode is also useful to suppress static noise between stations. The AUTO MUTING indicator lights up on the display.

MONO: Reception will be improved although you will lose the stereo effect. In this mode, you will hear noise while tuning into the stations. The AUTO MUTING indicator goes off on the display.

Note:

When using the FM MODE button on the remote control, be sure that the 10 keys are activated for the tuner, not for the CD and others. (See page 43.)

Assigning Names to Preset Stations

You can assign a name of up to four characters to each preset station. When a preset station is tuned in, its assigned name will appear on the display.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You can use the following characters: Space (), A – Z, and 0 – 9.

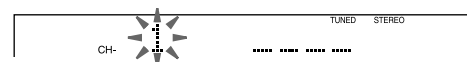
On the front panel ONLY:

1. Tune in a preset station.

See the left.

2. Press **TUNER (/SEA) MEMORY**.

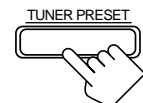
The preset channel number starts flashing for about 10 seconds.



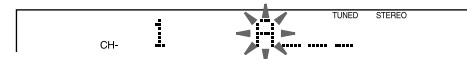
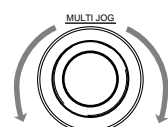
- If you turn MULTI JOG while the preset channel number is flashing, you can change the preset channel number.

3. Press **TUNER PRESET**, while the preset channel number is flashing.

The first character position starts flashing.

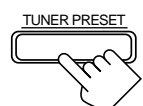


4. Turn **MULTI JOG** to select the first character, while the first character position is flashing.



5. Press **TUNER PRESET**, while a character you want is flashing.

The next character position starts flashing.



6. Repeat steps 4 and 5 to enter up to four characters.

7. Press **TUNER (/SEA) MEMORY** while the last selected character is flashing after you have assigned a name.



To erase the input characters

Insert spaces using the same procedure described above.

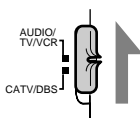
Using the SEA Modes

The SEA (Sound Effect Amplifier) modes give you control of the way your music sounds.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR."

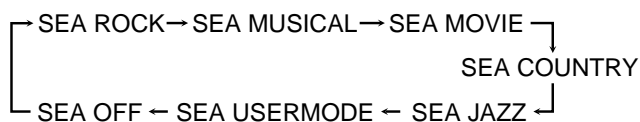


Selecting Your Favorite SEA Mode

On the front panel:

Press SEA MODE repeatedly until the SEA mode you want appears on the display.

- Each time you press the button, the SEA mode changes as follows:



SEA ROCK:	Gives a heavy sound. Both high and low frequencies are boosted.
SEA MUSICAL:	Enhances the mid-frequency range, which the human voice is mostly made up of.
SEA MOVIE:	Adds breadth to sounds so you feel like you are in a movie theater.
SEA COUNTRY:	Enhances the high-frequency range so that instruments such as the violin and banjo are emphasized.
SEA JAZZ:	Gives a feeling of a live atmosphere. Good for acoustic music.
SEA USERMODE:	Your original SEA adjustment (see the right).
SEA OFF:	No SEA mode is applied (see below).

Notes:

- The SEA modes cannot be used for recording.
- When the SEA mode is turned on, the SEA indicator lights up on the display.
- When the SEA mode is used with the DAP mode (see page 24), sounds may be distorted. If this happens, turn off the DAP mode or decrease the effect level of the DAP mode.

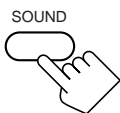
To cancel the SEA mode

Press SEA MODE repeatedly until "SEA OFF" appears. The SEA indicator goes off from the display.

From the remote control:

1. Press SOUND.

The 10 keys are activated for sound adjustments.



2. Press SEA MODE repeatedly until the SEA mode you want appears on the display.



To cancel the SEA mode

Press SEA MODE repeatedly until "SEA OFF" appears in step 2 above. The SEA indicator goes off from the display.

Creating Your Own SEA Mode

You can adjust and store your own SEA adjustment into memory (SEA USERMODE).

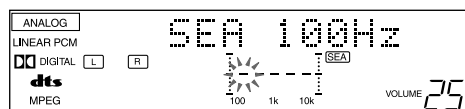
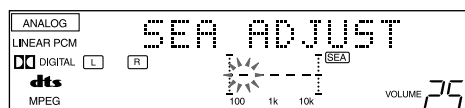
Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

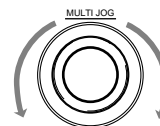
On the front panel ONLY:

If you do not want to store your adjustment, but rather want to adjust the SEA temporarily, skip step 4 below.

- Press SEA ADJUST repeatedly until the frequency range (100 Hz, 1 kHz or 10 kHz) you want appears on the display.



- Turn MULTI JOG to adjust the SEA level of the selected frequency range.

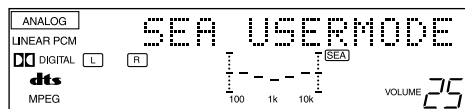


- Turning it clockwise increases the level.
- Turning it counterclockwise decreases the level.

- Repeat step 1 and 2 to adjust other frequency ranges if necessary.

- Press (TUNER/) SEA MEMORY.

Your adjustment is stored into the SEA USERMODE.



To recall your own SEA adjustment

Press SEA MODE repeatedly until "SEA USERMODE" appears.

To erase a stored adjustment

Storing a new adjustment into SEA USERMODE erases the previously stored one.

Using the DSP Modes

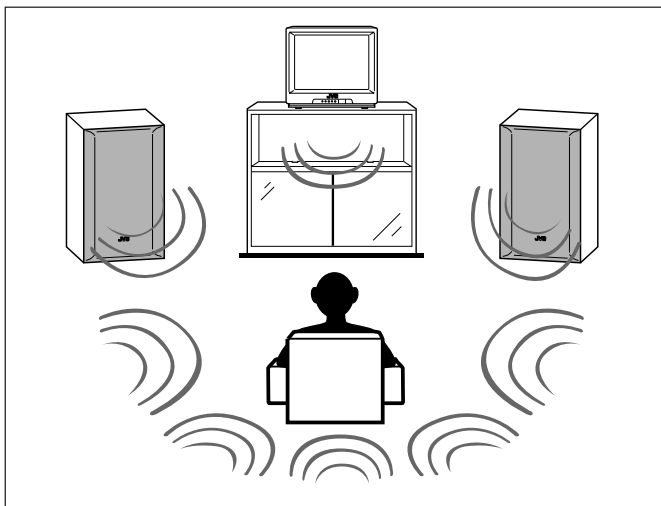
The built-in Surround Processor provides three types of the DSP (Digital Signal Processor) mode — 3D-PHONIC mode, DAP (Digital Acoustic Processor) mode and Surround mode.

3D-PHONIC modes

The 3D-PHONIC mode gives you such a nearly surround effect as is reproduced through the Dolby Surround decoder, which is widely used to reproduce sounds with a feeling of movement like those experienced in movie theaters. The 3D-PHONIC mode is the result of research on sound localization technology carried out at JVC for many years. **This mode can be used when the front speakers are connected to this receiver (without respect to the rear/center speaker connection).**

3D ACTION: Best for action and war movies — where the action is fast and explosive.

3D THEATER: Reproduces the sound field of a large theater. This mode can be selected when only front speakers are connected to this receiver and “REAR SPK” and “CENTER SPK” are set to “NONE” (see page 14).



DAP modes

The sound heard in a concert hall or club consists of direct sound and indirect sound — early reflections and reflections from behind. Direct sounds reach the listener directly without any reflection. On the other hand, indirect sounds are delayed by the distances of the ceiling and walls. These direct sounds and indirect sounds are the most important elements of the acoustic surround effects. The DAP mode can create these important elements, and gives you a real “being there” feeling. **This mode can be used when the front speakers are connected to this receiver (without respect to the rear/center speaker connection).**

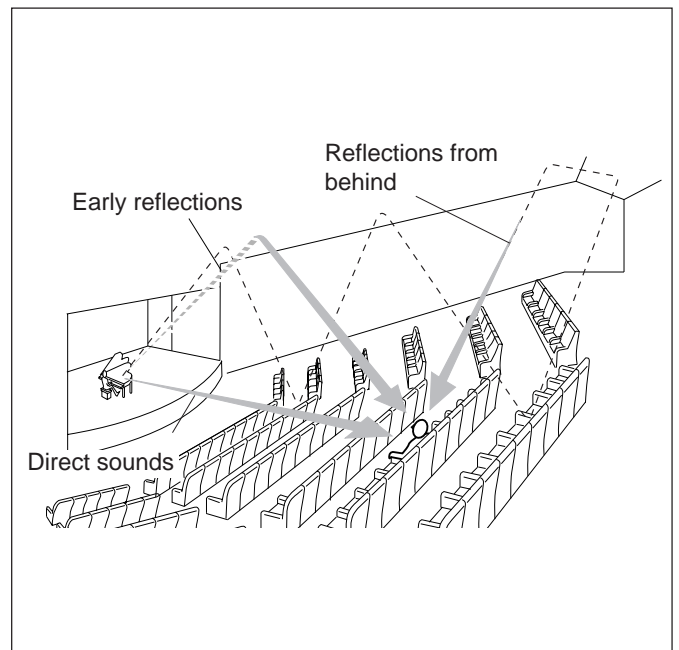
You can select one of the following to your preference while playing an analog or linear PCM source.

LIVE CLUB: Gives the feeling of a live music club with a low ceiling.

DANCE CLUB: Gives a throbbing bass beat.

HALL: Gives clear vocal and the feeling of a concert hall.

PAVILION: Gives the spacious feeling of a pavilion with a high ceiling.



Surround modes

With this receiver, you can use four types of the Surround mode. **Following modes cannot be used when only the front speakers are connected to this receiver (without the rear speakers or center speaker).**

Dolby Surround (Dolby Digital and Dolby Pro Logic)*

Used to watch the soundtracks of software encoded with Dolby Digital (bearing the mark ) or with Dolby Surround (bearing the mark .

Dolby Surround encoding format records the left front channel, right front channel, center channel, and rear channel (total 4 channels) signals into 2 channels. The Dolby Pro Logic decoder built in this receiver decode these 2 channel signals into original 4 channel signals — matrix-based multichannel reproduction, and allows you to enjoy the realistic stereo sounds in your listening room.

On the other hand, Dolby Digital encoding method (so called a discrete 5.1 channel digital audio format) records and compresses the left front channel, right front channel, center channel, left rear channel, right rear channel, and LFE channel (total 6 channels, but LFE channel is counted as 0.1 channel, therefore called 5.1 channels) signals digitally. Each channel is completely independent from other channel signals to avoid interference, therefore, you can obtain much better sound quality with much stereo and surround effects.

The Dolby Digital decoder built in this receiver can create much more realistic sound field in your listening room. You may feel as if you were in a real theater.

In addition, Dolby Digital enables stereo rear sounds, and sets the cutoff frequency of the rear treble at 20 kHz, comparing to 7 kHz for Dolby Pro Logic. These facts enhance the sound movement and being-there feelings much more than Dolby Pro Logic.

- To enjoy the software encoded with Dolby Digital, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)


DTS Digital Surround**

DTS Digital Surround is another discrete 5.1 channel digital audio format available on CD, LD, and DVD software.

Comparing to Dolby Digital, audio compression rate is relatively low. This fact allows DTS Digital Surround format to have more data recorded than Dolby Digital even using the same media, and to add breadth and depth to the reproduced sounds. As a result, DTS Digital Surround features natural, solid and clear sound.

- To enjoy the software encoded with DTS Digital Surround, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)

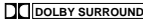
MPEG Multichannel

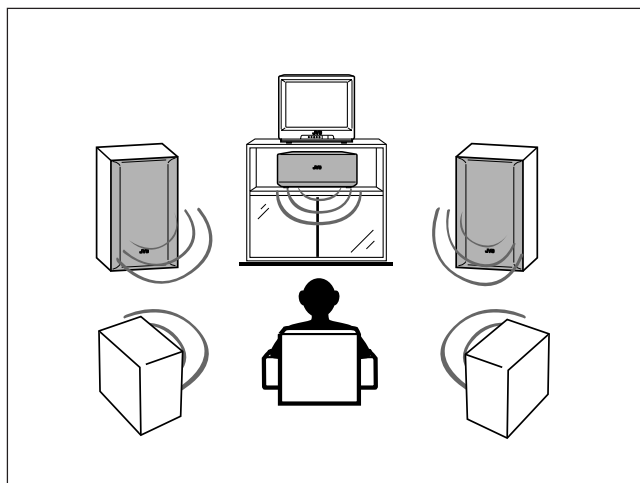
MPEG Multichannel is another discrete 5.1 channel digital audio format available on DVD software, and uses encoding method called MPEG2-Audio. (MPEG stands for “Motion Picture Expert Group” and has been originally developed for compressing video signals.) To watch the soundtracks of video software bearing the mark , the receiver can provide you with MPEG Multichannel decoder.

MPEG Multichannel is automatically selected according to software played back and the speaker arrangement you have done.


- To enjoy the software encoded with MPEG Multichannel, you must connect the source component using the digital terminal on the rear of this receiver. (See page 8.)

JVC Theater Surround

In order to reproduce a more realistic sound field in your listening room while playing soundtracks of software encoded with Dolby Surround (bearing the mark ) you can use JVC Theater Surround.



Notes:

- The DSP modes have no effect on monaural sources.
- When you select “DVD MULTI” as the source to play, you cannot select or adjust the DSP modes.
- The  PRO LOGIC indicator lights up when the Dolby Pro Logic decoder built in this receiver is activated.

DVD MULTI Playback Mode

This receiver provides the DVD MULTI playback mode for reproducing the analog discrete 5.1 channel output mode of the DVD player or other equipment.

You can adjust the DVD MULTI playback mode while playing back a video software such as a DVD using the analog discrete 5.1 channel output mode.

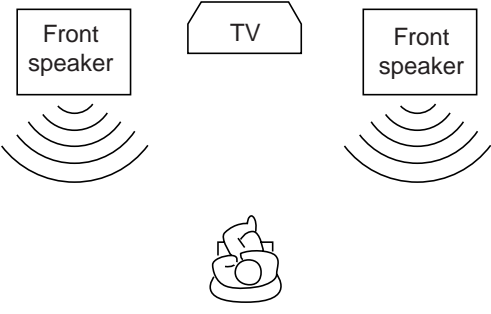
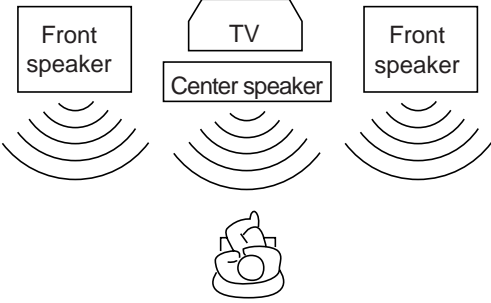
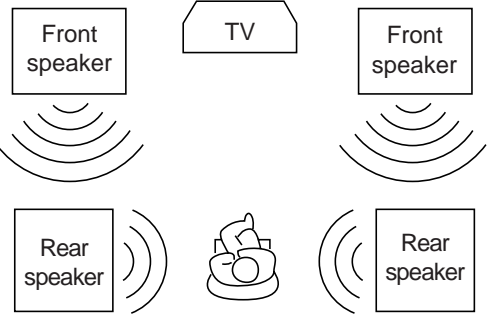
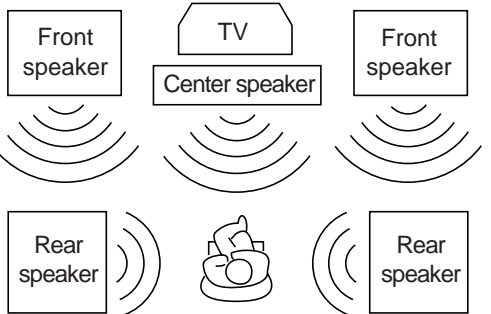
- For the DVD MULTI playback mode connection, see page 7.
- For details on the DVD MULTI playback mode, see page 29.

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** Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other world-wide patents issues and pending. “DTS” and “DTS Digital Surround” are trademarks of Digital Theater Systems, Inc. ©1996 Digital Theater Systems, Inc. All rights reserved.

Available DSP Modes According to the Speaker Arrangement

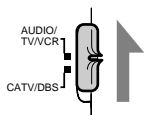
Available DSP modes will vary depending on how many speakers are used with this receiver.
Make sure that you have set the speaker information correctly (see page 14).

Speaker arrangements	Available DSP modes		
	<p>Each time you press DSP MODE on the front panel or SURROUND MODE on the remote control, the DSP modes change as follows:</p> <ul style="list-style-type: none"> • 3D THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) 		
	<p>Each time you press DSP MODE on the front panel or SURROUND MODE on the remote control, the DSP modes change as follows:</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <p>By pressing DSP MODE:</p> <ul style="list-style-type: none"> • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) </td> <td style="vertical-align: top; width: 50%;"> <p>By pressing SURROUND MODE:</p> <ul style="list-style-type: none"> • DOLBY/DTS/MPEG SURROUND (DOLBY PRO LOGIC, DOLBY DIGITAL*, DTS SURROUND**, or MPEG SURROUND***) • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) </td> </tr> </table>	<p>By pressing DSP MODE:</p> <ul style="list-style-type: none"> • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) 	<p>By pressing SURROUND MODE:</p> <ul style="list-style-type: none"> • DOLBY/DTS/MPEG SURROUND (DOLBY PRO LOGIC, DOLBY DIGITAL*, DTS SURROUND**, or MPEG SURROUND***) • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled)
<p>By pressing DSP MODE:</p> <ul style="list-style-type: none"> • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) 	<p>By pressing SURROUND MODE:</p> <ul style="list-style-type: none"> • DOLBY/DTS/MPEG SURROUND (DOLBY PRO LOGIC, DOLBY DIGITAL*, DTS SURROUND**, or MPEG SURROUND***) • THEATER • LIVE CLUB • DANCE CLUB • HALL • PAVILION • 3D ACTION • DSP OFF (DSP mode is canceled) 		
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>To activate the Surround mode, press SURROUND ON/OFF button so that the lamp on the button lights up.</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>To activate the Surround mode, you can also use the SURROUND ON/OFF button.</p> </div>		
	<p>* Activated automatically only when "AUTO/PCM" is selected as the digital input and playback source is encoded with Dolby Digital.</p> <p>** Activated automatically only when "AUTO/PCM" is selected as the digital input and playback source is encoded with DTS Digital Surround.</p> <p>*** Activated automatically only when "AUTO/PCM" is selected as the digital input and playback source is encoded with MPEG Surround.</p> <p>Notes:</p> <ul style="list-style-type: none"> • If Surround mode is canceled while playing back a multichannel source such as Dolby Digital, DTS Digital Surround and MPEG Multichannel, all channel signals are mixed with left and right front channel and are output through the front speakers. • While playing back a multichannel source such as Dolby Digital, DTS Digital Surround and MPEG Multichannel, Theater Surround, DAP modes, and 3D-PHONIC modes cannot be used. On the other hands, if you select a Dolby Digital, DTS Digital Surround and MPEG Multichannel as the source to play while using any of Theater Surround, DAP modes, and 3D-PHONIC modes, the currently selected mode will be canceled and Dolby Digital, DTS Digital Surround or MPEG Multichannel mode will be activated. 		

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR"



Adjusting the 3D-PHONIC Modes

Once you have adjusted the 3D-PHONIC modes, the adjustment is memorized for each 3D-PHONIC mode.

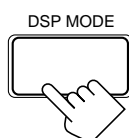
Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel:

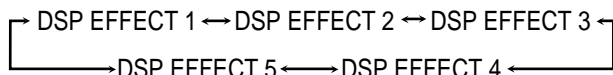
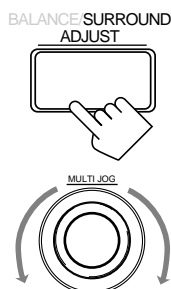
1. Press **DSP MODE** repeatedly until "3D ACTION" or "3D THEATER" appears on the display.

The 3D-PHONIC, DSP, and PRO LOGIC indicators also light up on the display.



2. Adjust the effect level.

- 1) Press **(BALANCE/) SURROUND ADJUST** repeatedly until "DSP EFFECT" appears on the display. The display changes to show the current setting.
- 2) Turn **MULTI JOG** to select the effect level.
 - As you turn it, the effect level changes as follows:



As the number increases, the selected 3D-PHONIC mode becomes stronger.

From the remote control:

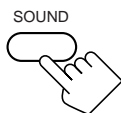
1. Press **SURROUND MODE** repeatedly until "3D ACTION" or "3D THEATER" appears on the display.

The 3D-PHONIC, DSP, and PRO LOGIC indicators also light up on the display.



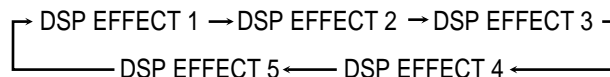
2. Press **SOUND**.

The 10 keys are activated for sound adjustments.



3. Press **EFFECT** to select an effect level you want.

- Each time you press the button, the effect level changes as follows:



As the number increases, the selected 3D-PHONIC mode becomes stronger.

Adjusting the DAP Modes

Once you have adjusted the DAP modes, the adjustment is memorized for each DAP mode.

Before you start, remember...

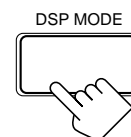
- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output level when you have set "REAR SPK" to "NONE." See page 14.
- When the DAP mode is used with the SEA mode (see page 20), sounds may be distorted. If this happens, turn off the SEA mode.

On the front panel:

1. Press **DSP MODE** repeatedly until the DAP mode — **LIVE CLUB, DANCE CLUB, HALL, or PAVILION** — appears on the display.

The DSP indicator also lights up on the display.

- When you have set "REAR SPK" to "NONE," the 3D-PHONIC indicator also lights up.



2. Adjust the speaker output levels.

- 1) Press **(BALANCE/) SURROUND ADJUST** repeatedly until one of the indications appears on the display.

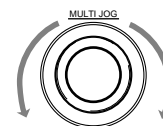
"REAR L LEVEL":

To adjust the left rear speaker level.

"REAR R LEVEL":

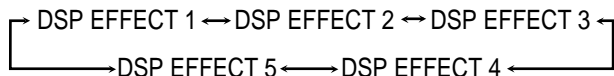
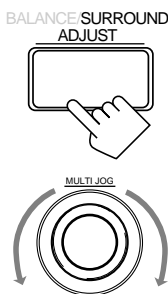
To adjust the right rear speaker level.

- 2) Turn **MULTI JOG** to adjust the selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output level.



3. Adjust the effect level.

- 1) Press (BALANCE/SURROUND ADJUST) repeatedly until "DSP EFFECT" appears on the display. The display changes to show the current setting.
- 2) Turn MULTI JOG to select the effect level.
 - As you turn it, the effect level changes as follows:



As the number increases, the selected DAP mode becomes stronger.

From the remote control:

1. Press SURROUND MODE repeatedly until the DAP mode — LIVE CLUB, DANCE CLUB, HALL, or PAVILION — appears on the display.

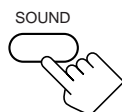
The DSP indicator also lights up on the display.

- When you have set "REAR SPK" to "NONE," the 3D-PHONIC indicator also lights up.



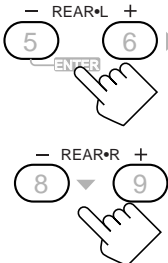
2. Press SOUND.

The 10 keys are activated for sound adjustments.



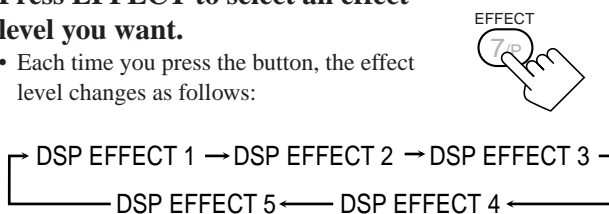
3. Adjust the speaker output levels.

- To adjust the left rear speaker level, press REAR•L -/+ (from -10 dB to +10 dB).
- To adjust the right rear speaker level, press REAR•R -/+ (from -10 dB to +10 dB).



4. Press EFFECT to select an effect level you want.

- Each time you press the button, the effect level changes as follows:



As the number increases, the selected DAP mode becomes stronger.

Adjusting the Surround Modes

Once you have adjusted the Surround modes, the adjustment is memorized for each Surround mode.

Dolby, DTS and MPEG Surround adjustments

Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output levels when you have set "REAR SPK" to "NONE." See page 14.
- You cannot adjust the center speaker output level you have set "CENTER SPK" to "NONE." See page 14.

From the remote control:

1. Press SURROUND ON/OFF to activate an appropriate Surround mode — PRO LOGIC, DOLBY DIGITAL, DTS SURROUND or MPEG SURROUND.



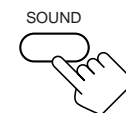
- Each time you press the button, the Surround mode turns on and off alternately.
- When "PRO LOGIC" is selected, the PRO LOGIC indicator lights up on the display.

Note:

You can also press SURROUND MODE to activate an appropriate Surround mode.

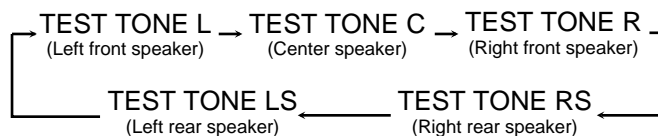
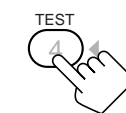
2. Press SOUND.

The 10 keys are activated for sound adjustments.



3. Press TEST to check the speaker output balance.

"TEST TONE L" starts flashing on the display, and a test tone comes out of the speakers in the following order:

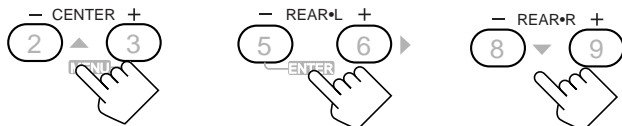


Notes:

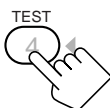
- You can adjust the speaker output levels without outputting the test tone.
- No test tone comes out of the center speaker when "CENTER SPK" is set to "NONE" (see page 14).
- No test tone comes out of the rear speakers when "REAR SPK" is set to "NONE" (see page 14).
- If the TV is turned on and the proper video input is selected on the TV, the test tone screen will appear on the TV.

4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER $-/+$ (from -10 dB to $+10$ dB).
- To adjust the left rear speaker level, press REAR•L $-/+$ (from -10 dB to $+10$ dB).
- To adjust the right rear speaker level, press REAR•R $-/+$ (from -10 dB to $+10$ dB).



5. Press TEST again to stop the test tone.



On the front panel:

You can also use the buttons on the front panel to adjust the Surround modes. However, no test tone is available when using the buttons on the front panel. So, make adjustments while listening to the sound of the source played back.

1. Press SURROUND ON/OFF to activate an appropriate Surround mode — PRO LOGIC, DOLBY DIGITAL, DTS SURROUND or MPEG SURROUND.



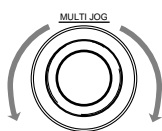
- Each time you press the button, the Surround mode turns on and off alternately.
- When “PRO LOGIC” is selected, the PRO LOGIC indicator lights up on the display.

2. Adjust the speaker output levels.

- 1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display.
 - “CENTER LEVEL”:
To adjust the center speaker level.
 - “REAR L LEVEL”:
To adjust the left rear speaker level.
 - “REAR R LEVEL”:
To adjust the right rear speaker level.



- 2) Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to $+10$ dB).
- 3) Repeat 1) and 2) to adjust the other speaker output levels.



JVC Theater Surround adjustments

Before you start, remember...

- Make sure that you have set the speaker information correctly (see page 14).
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- You cannot adjust the rear speaker output levels when you have set “REAR SPK” to “NONE.” See page 14.
- You cannot adjust the center speaker output level when you have set “CENTER SPK” to “NONE.” See page 14.

From the remote control:

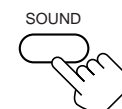
1. Press SURROUND MODE repeatedly until “THEATER” appears on the display.



The PRO LOGIC and DSP indicators also light up on the display.

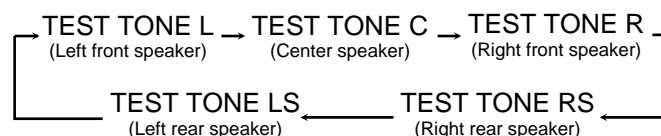
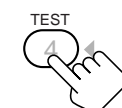
2. Press SOUND.

The 10 keys are activated for sound adjustments.



3. Press TEST to check the speaker output balance.

“TEST TONE L” starts flashing on the display, and a test tone comes out of the speakers in the following order:

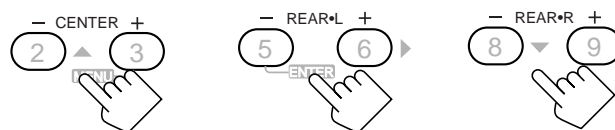


Notes:

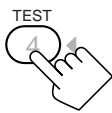
- You can adjust the speaker output levels without outputting the test tone.
- No test tone comes out of the center speaker when “CENTER SPK” is set to “NONE” (see page 14).
- No test tone comes out of the rear speakers when “REAR SPK” is set to “NONE” (see page 14).
- If the TV is turned on and the proper video input is selected on the TV, the test tone screen will appear on the TV.

4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER $-/+$ (from -10 dB to $+10$ dB).
- To adjust the left rear speaker level, press REAR•L $-/+$ (from -10 dB to $+10$ dB).
- To adjust the right rear speaker level, press REAR•R $-/+$ (from -10 dB to $+10$ dB).

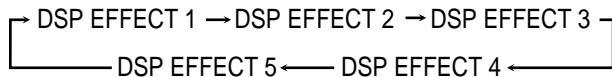


5. Press TEST again to stop the test tone.



6. Press EFFECT to select an effect level you want.

- Each time you press the button, the effect level changes as follows:



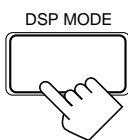
As the number increases, JVC Theater Surround becomes stronger.

On the front panel:

You can also use the buttons on the front panel to adjust the Surround modes. However, no test tone is available when using the buttons on the front panel. So, make adjustments while listening to the sound of the source played back.

1. Press DSP MODE repeatedly until “THEATER” appears on the display.

The PRO LOGIC and DSP indicators also light up on the display.



2. Adjust the speaker output levels.

- Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display. “CENTER LEVEL”:

To adjust the center speaker level.

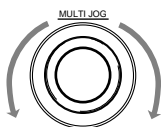
“REAR L LEVEL”:

To adjust the left rear speaker level.

“REAR R LEVEL”:

To adjust the right rear speaker level.

- Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to +10 dB).
- Repeat 1) and 2) to adjust the other speaker output levels.



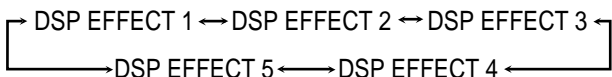
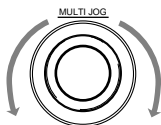
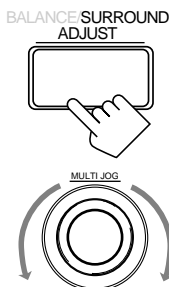
3. Adjust the effect level.

- Press (BALANCE/) SURROUND ADJUST repeatedly until “DSP EFFECT” appears on the display.

The display changes to show the current setting.

- Turn MULTI JOG to select the effect level.

As you turn it, the effect level changes as follows:



As the number increases, JVC Theater Surround becomes stronger.

Activating the DSP Modes

You can use only one DSP mode at a time. When a DSP mode is activated, another DSP mode is canceled if in use.

For Dolby Pro Logic, Dolby Digital, DTS Digital Surround and MPEG Multichannel

1. Press SURROUND ON/OFF so that the lamp on the front panel button lights up.

- Each time you press the button, the Dolby/DTS/MPEG Surround turns on and off alternately.



On the front panel



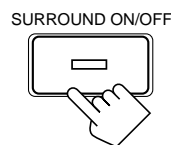
On the remote control

2. Select and play a sound source.

- To enjoy Dolby Pro Logic, play back a software encoded with Dolby Surround and labeled with mark.
- To enjoy Dolby Digital, play back a software encoded with Dolby Digital and labeled with mark.
- To enjoy DTS Digital Surround, play back a software encoded with DTS Digital Surround and labeled with mark.
- To enjoy MPEG Multichannel, play back a software encoded with MPEG Multichannel and labeled with mark.

To cancel the Dolby/DTS/MPEG Surround mode

Press SURROUND ON/OFF again so that the lamp on the front panel button goes off. (“SURROUND OFF” appears on the display.)



On the front panel



On the remote control

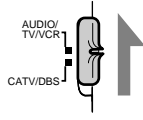
Using the DVD MULTI Playback Mode

This receiver provides the DVD MULTI playback mode for reproducing the analog discrete output mode of the DVD player. Before playing back a DVD, refer also to the manual supplied with the DVD player.

IMPORTANT:

When using the remote control, check to see if its remote control mode selector is set to the correct position:

To operate this receiver, set it to "AUDIO/TV/VCR."



Activating the DVD MULTI Playback Mode

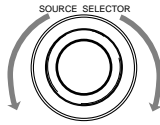
You can adjust the DVD MULTI playback mode while playing back a DVD using the analog discrete output mode on the DVD player. Once you have made adjustments, the receiver memorizes the adjustments until you change them. You also need to set the DVD player to the analog discrete output mode.

Before you start, remember...

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the front panel:

1. Turn SOURCE SELECTOR until "DVD MULTI" appears on the display.



Note:

When you select "DVD MULTI" as the source to play, the DSP mode is canceled temporarily, and the SURROUND ON/OFF and DSP MODE buttons do not work.

2. Select the analog discrete output mode on the DVD player, and start playing a DVD.

- Refer to the manual supplied with the DVD player.

If you need to make any adjustment, go to the following steps.

3. Adjust the speaker output levels.

- 1) Press (BALANCE/) SURROUND ADJUST repeatedly until one of the indications appears on the display.

"CENTER LEVEL":

To adjust the center speaker level.

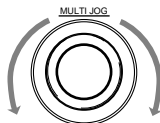
"REAR L LEVEL":

To adjust the left rear speaker level.

"REAR R LEVEL":

To adjust the right rear speaker level.

- 2) Turn MULTI JOG to adjust the selected speaker output level (from -10 dB to +10 dB).
- 3) Repeat 1) and 2) to adjust the other speaker output levels.



From the remote control:

1. Press DVD MULTI so that "DVD MULTI" appears on the display.



Note:

When you select "DVD MULTI" as the source to play, the DSP mode is canceled temporarily, and the SURROUND ON/OFF and SURROUND MODE buttons do not work.

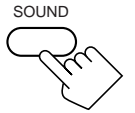
2. Select the analog discrete output mode on the DVD player, and start playing a DVD.

- Refer to the manual supplied with the DVD player.

If you need to make any adjustment, go to the following steps.

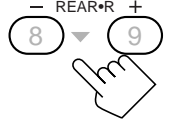
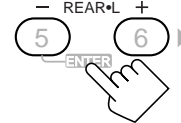
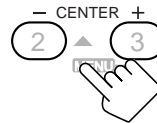
3. Press SOUND.

The 10 keys are activated for adjusting the sound.



4. Adjust the speaker output levels.

- To adjust the center speaker level, press CENTER +/- (from -10 dB to +10 dB).
- To adjust the left rear speaker level, press REAR•L +/- (from -10 dB to +10 dB).
- To adjust the right rear speaker level, press REAR•R +/- (from -10 dB to +10 dB).



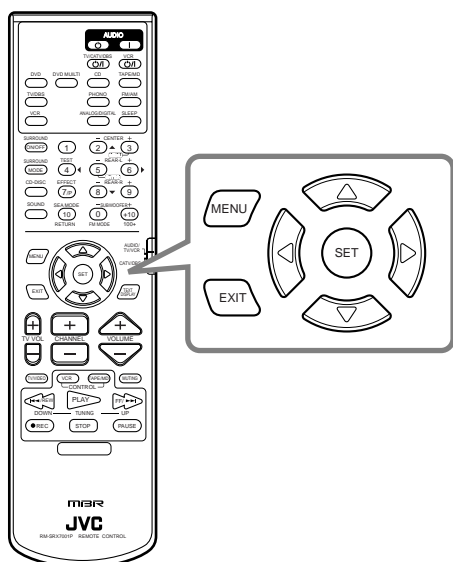
Using the On-Screen Menus

You can use the Menus on the TV screen to control the receiver.

To use this function, you need to connect the TV to the MONITOR OUT jack on the rear panel (see page 7), and set the TV's input mode to the proper position to which the receiver is connected.

- When the TV's input mode is incorrect; for example, a different video input or TV tuner mode is selected, you cannot show the Menus on the TV screen.

On-Screen Operation buttons (on the remote control)



Selecting Different Sources for Picture and Sound (Also see page 11)

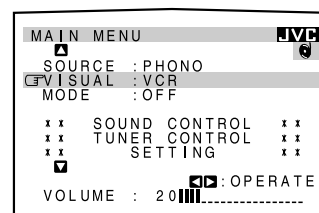
1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move to "VISUAL."

3. Press \triangleleft / \triangleright to select a different video source.



4. When you finish, press EXIT.

The menu disappears from the TV.

Activating the DSP Modes (Also see page 27)

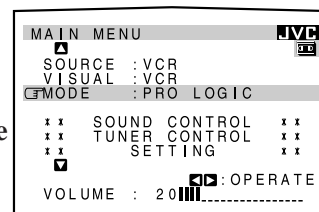
1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move to "MODE."

3. Press \triangleleft / \triangleright to select the DSP mode you want to use.



4. When you finish, press EXIT.

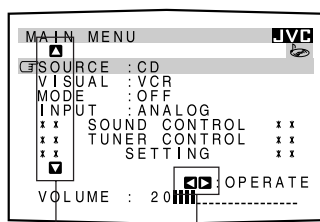
The menu disappears from the TV.

Selecting the Source to Play (Also see page 10)

1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.



Shows the buttons you can use on the current menu. In this case, use Δ / ∇ to move up and down, and \triangleleft / \triangleright to select, adjust or set the item.

Notes:

- "INPUT" appears only when the digital input (DIGITAL IN) terminal setting have been correctly done for the digital source currently selected. (See page 16.)
- The on-screen display will disappear if no operation is done for about 1 minute.

2. Press Δ / ∇ to move to "SOURCE."

3. Press \triangleleft / \triangleright to select the source.

4. When you finish, press EXIT.

The menu disappears from the TV.

Selecting the Analog or Digital Input Mode (Also see page 16)

This selection is only possible when the digital input (DIGITAL IN) terminal setting have been correctly done for the digital source currently selected.

1. Press MENU.

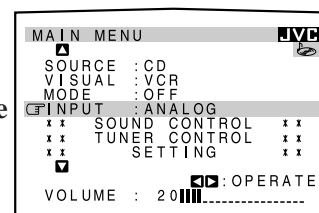
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move to "INPUT."

3. Press \triangleleft / \triangleright to select the digital or analog input you want.

For details, see page 16.



4. When you finish, press EXIT.

The menu disappears from the TV.

Adjusting the Front Speaker Output Balance

(Also see page 13)

1. Press MENU.

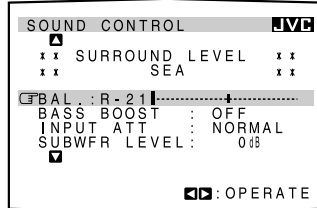
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "SOUND CONTROL," then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

3. Press Δ / ∇ to move \leftarrow to "BAL." (Balance).



4. Press \triangleleft / \triangleright to adjust the balance.

5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Reinforcing the Bass

(Also see page 12)

1. Press MENU.

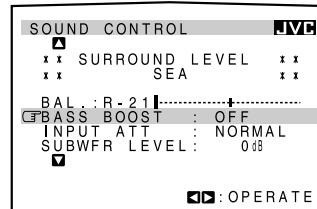
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "SOUND CONTROL," then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

3. Press Δ / ∇ to move \leftarrow to "BASS BOOST."



4. Press \triangleleft / \triangleright to turn the bass boost function "ON" or "OFF."

5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Attenuating the Input Signal

(Also see page 12)

1. Press MENU.

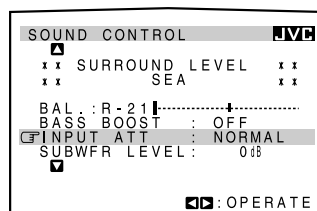
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "SOUND CONTROL," then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

3. Press Δ / ∇ to move \leftarrow to "INPUT ATT."



4. Press \triangleleft / \triangleright to turn the Input Attenuator mode "ATT ON" or "NORMAL."

5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Adjusting the Subwoofer Output Level

(Also see page 12)

1. Press MENU.

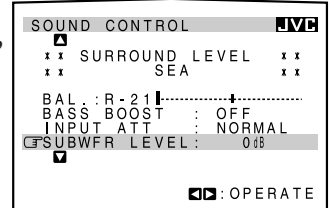
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "SOUND CONTROL," then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

3. Press Δ / ∇ to move \leftarrow to "SUBWFR LEVEL."



4. Press \triangleleft / \triangleright to adjust the subwoofer output level.

5. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Adjusting the DSP Modes

(Also see pages 24 – 27)

1. Press MENU.

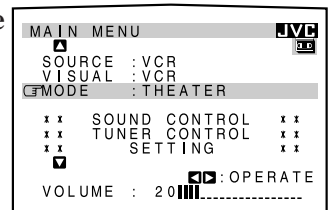
The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "MODE."

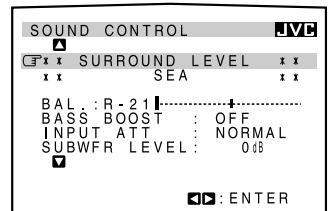
3. Press \triangleleft / \triangleright to select the DSP mode you want to adjust.

- In this example, "THEATER" is selected.



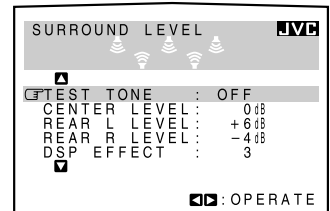
4. Press Δ / ∇ to move \leftarrow to "SOUND CONTROL," then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.



5. Press Δ / ∇ to move \leftarrow to "SURROUND LEVEL," then press \triangleleft / \triangleright .

The SURROUND LEVEL menu appears.



6. Press Δ / ∇ to move \leftarrow to the item you want to set or adjust, then press \triangleleft / \triangleright .

On these adjustment menus, you can do the following:

For 3D-PHONIC (3D ACTION, 3D THEATER):

"DSP EFFECT": Select the effect level.

For DAP (LIVE CLUB, DANCE CLUB, HALL, PAVILION):

“REAR L LEVEL”: Adjust the left rear speaker output level. *

“REAR R LEVEL”: Adjust the right rear speaker output level. *

“DSP EFFECT”: Select the effect level.

For Dolby Pro Logic:

“TEST TONE”: Output a test tone.

“CENTER LEVEL”: Adjust the center speaker output level. **

“REAR L LEVEL”: Adjust the left rear speaker output level. *

“REAR R LEVEL”: Adjust the right rear speaker output level. *

For Dolby Digital, DTS Digital Surround and MPEG Multichannel:

“TEST TONE”: Output a test tone.

“CENTER LEVEL”: Adjust the center speaker output level. **

“REAR L LEVEL”: Adjust the left rear speaker output level. *

“REAR R LEVEL”: Adjust the right rear speaker output level. *

For JVC Theater Surround:

“TEST TONE”: Output a test tone.

“CENTER LEVEL”: Adjust the center speaker output level. **

“REAR L LEVEL”: Adjust the left rear speaker output level. *

“REAR R LEVEL”: Adjust the right rear speaker output level. *

“DSP EFFECT”: Select the effect level.

Notes:

* Not displayed when “REAR SPK” is set to “NONE” (see page 14).

** Not displayed when “CENTER SPK” is set to “NONE” (see page 14).

- When you finish, press EXIT repeatedly until the menu disappears from the TV.

Adjusting the DVD MULTI Playback Mode
(Also see page 29)**1. Press MENU.**

The MAIN MENU appears on the TV.

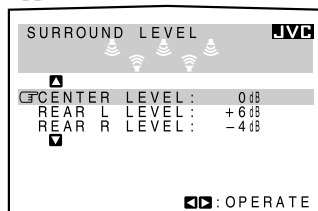
- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \square to “SOURCE.”**3. Press \triangleleft / \triangleright to select “DVD MULTI.”****4. Press Δ / ∇ to move \square to “SOUND CONTROL,” then press \triangleleft / \triangleright .**

The SOUND CONTROL menu appears.

5. Press Δ / ∇ to move \square to “SURROUND LEVEL,” then press \triangleleft / \triangleright .

The SURROUND LEVEL menu appears.

**6. Press Δ / ∇ to move \square to the item you want to set or adjust, then press \triangleleft / \triangleright .**

On this adjustment menu, you can do the following:

“CENTER LEVEL”: Adjust the center speaker output level.

“REAR L LEVEL”: Adjust the left rear speaker output level.

“REAR R LEVEL”: Adjust the right rear speaker output level.

- When you finish, press EXIT repeatedly until the menu disappears from the TV.

Selecting Your Favorite SEA Mode
(Also see page 20)**1. Press MENU.**

The MAIN MENU appears on the TV.

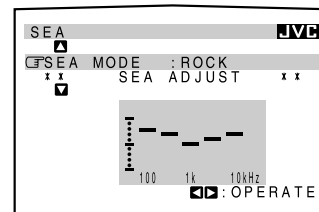
- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \square to “SOUND CONTROL,” then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

3. Press Δ / ∇ to move \square to “SEA,” then press \triangleleft / \triangleright .

The SEA menu appears.

**4. Press Δ / ∇ to move \square to “SEA MODE.”**

- Press \triangleleft / \triangleright to select the SEA mode you want.

- When you finish, press EXIT repeatedly until the menu disappears from the TV.

Creating Your Own SEA Mode
(Also see page 20)**1. Press MENU.**

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \square to “SOUND CONTROL,” then press \triangleleft / \triangleright .

The SOUND CONTROL menu appears.

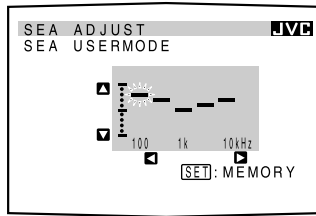
3. Press Δ / ∇ to move \square to “SEA,” then press \triangleleft / \triangleright .

The SEA menu appears.

4. Press Δ / ∇ to move

\square to “SEA ADJUST.”

The SEA ADJUST menu appears.



5. Press Δ / ∇ / \triangleleft / \triangleright to adjust the SEA mode as you want.

\triangleleft / \triangleright : Select the frequency ranges.

Δ / ∇ : Adjust the frequency levels.

6. Press SET to store the setting into the SEA USERMODE.

• If you press EXIT, without pressing SET in this step, you can return to the SEA menu. (The adjustment you have made is active but not stored.)

7. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Setting the Basic Setting Items (Also see pages 14 – 17)

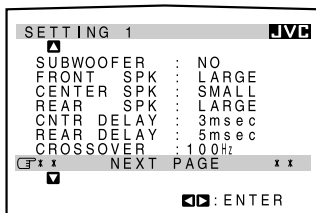
1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \square to “SETTING,” then press \triangleleft / \triangleright .

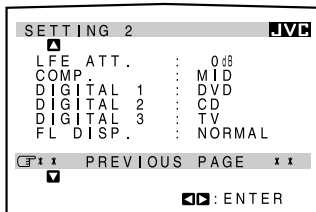
The SETTING 1 or SETTING 2 menu appears.



3. Press Δ / ∇ to move \square to the item you want to set or adjust, then press \triangleleft / \triangleright .

• To go to the SETTING 2 menu, move \square to “NEXT PAGE,” then press \triangleleft / \triangleright .

• To go back to the SETTING 1 menu, move \square to “PREVIOUS PAGE,” then press \triangleleft / \triangleright .



On the SETTING 1 and 2 menus, you can do the following:

- “SUBWOOFER”: Set the subwoofer information (see page 14).
- “FRONT SPK”: Set the front speaker information (see page 14).
- “CENTER SPK”: Set the center speaker information (see page 14).
- “REAR SPK”: Set the rear speaker information (see page 14).
- “CNTR DELAY”: Adjust the delay time of the center speaker output (see page 14).*
- “REAR DELAY”: Adjust the delay time of the rear speaker output (see page 14).**
- “CROSSOVER”: Set the crossover frequency (see page 15).

- “LFE ATT.”: Set the low frequency effect attenuator level (see page 15).
- “COMP.”: Set the dynamic range compression (see page 15).
- “DIGITAL 1/2/3”:

 - Set the digital input terminals (see page 16).

- “FL DISP.”: Shows the disc text information on the display (see page 17).

Notes:

* Not adjustable when “CENTER SPK” is set to “NONE” (see page 14).

**Not adjustable when “REAR SPK” is set to “NONE” (see page 14).

4. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Operating the Tuner (Also see pages 18 and 19)

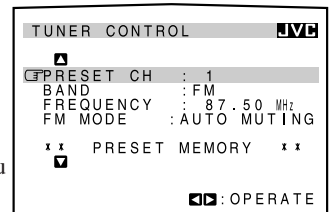
1. Press MENU.

The MAIN MENU appears on the TV.

• Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \square to “TUNER CONTROL,” then press \triangleleft / \triangleright .

The TUNER CONTROL menu appears.



3. Press Δ / ∇ to move \square to the item you want to set or adjust, then press \triangleleft / \triangleright .

On the TUNER CONTROL menu, you can do the following:

- “PRESET CH”:

 - Select a preset channel station.

- “BAND”:

 - Select the band.

- “FREQUENCY”:

 - Tune in a station manually.

- “FM MODE”:

 - Select the FM reception mode.*

- “PRESET MEMORY”:

 - See “Storing the Preset Stations” on the next page.

Note:

* Not displayed when an AM station is selected.

4. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Storing the Preset Stations (Also see page 18)

1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

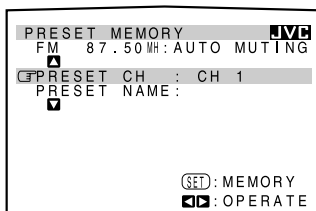
2. Press Δ / ∇ to move \leftarrow to "TUNER CONTROL," then press \triangleleft / \triangleright .

The TUNER CONTROL menu appears.

3. Tune into a station on the TUNER CONTROL menu, referring to "Operating the Tuner" on the previous page.

4. Press Δ / ∇ to move \leftarrow to "PRESET MEMORY," then press \triangleleft / \triangleright .

The PRESET MEMORY menu appears.



5. Press \triangleleft / \triangleright to select a preset station number you want.

6. Press SET to store the setting.

7. When you finish, press EXIT repeatedly until the menu disappears from the TV.

Assigning Names to Preset Stations

(Also see page 19)

1. Press MENU.

The MAIN MENU appears on the TV.

- Pressing one of the Δ / ∇ / \triangleleft / \triangleright buttons also displays the MAIN MENU.

2. Press Δ / ∇ to move \leftarrow to "TUNER CONTROL," then press \triangleleft / \triangleright .

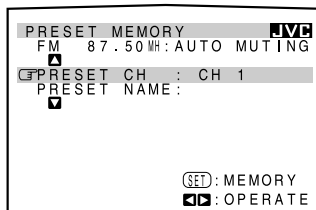
The TUNER CONTROL menu appears.

3. Press Δ / ∇ to move \leftarrow to "PRESET CH."

4. Press \triangleleft / \triangleright to select a preset station.

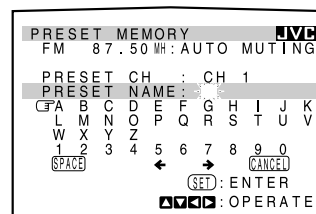
5. Press Δ / ∇ to move \leftarrow to "PRESET MEMORY," then press \triangleleft / \triangleright .

The PRESET MEMORY menu appears.



6. Press Δ / ∇ to move \leftarrow to "PRESET NAME," then press SET.

The character entry screen appears.



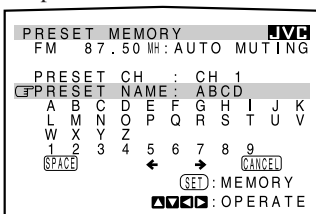
7. Press Δ / ∇ / \triangleleft / \triangleright to move \leftarrow in front of a character you want.

You can also select the following:

- SPACE** : To enter space
- CANCEL** : To erase the character
- \triangleleft / \triangleright** : To go back to the previous character position or go to the next character position

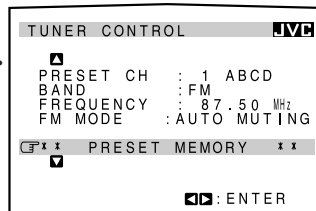
8. Press SET to enter the selected character.

9. Repeat steps 7 and 8 to enter up to four characters.



10. Press Δ / ∇ / \triangleleft / \triangleright to move \leftarrow to "PRESET NAME," then press SET to store the setting.

The TUNER CONTROL menu appears again.



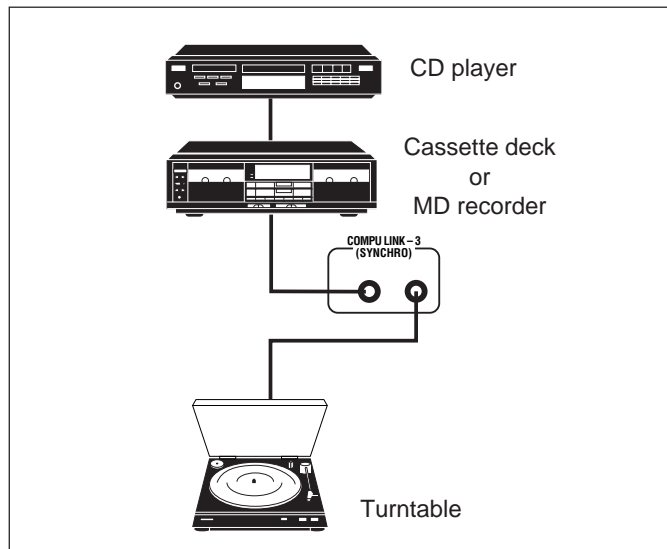
11. When you finish, press EXIT repeatedly until the menu disappears from the TV.

COMPU LINK Remote Control System

The COMPU LINK remote control system allows you to operate JVC audio components through the remote sensor on the receiver.

To use this remote control system, you need to connect JVC audio components through the COMPU LINK-3 (SYNCHRO) jacks (see below) in addition to the connections using cables with RCA pin plugs (see pages 5 and 6).

- Make sure that the AC power cords of these components are unplugged before connection. Plug the AC power cords only after all connections are complete.



Notes:

- If your audio component has two COMPU LINK-3 (SYNCHRO) jacks, you can use either one. If it has only one COMPU LINK-3 (SYNCHRO) jack, connect it so that it is the last item in the series of components. (For example, the turntable or CD player in the diagram above.)
- To operate the cassette deck or MD recorder using the COMPU LINK remote control system, set the source name correctly. (See page 13.)
- Refer also to the manuals supplied with your audio components.

This remote control system allows you to use four functions listed below.

Remote Control through the Remote Sensor on the Receiver

You can control the connected audio components through the remote sensor on the receiver using this remote control. Aim the remote control directly at the remote sensor on the receiver. For details, see pages 43 and 44.

Automatic Source Selection

When you press the play (▶) button on a connected component or on its own remote control, the receiver automatically turns on and changes the source to the component. On the other hand, if you select a new source on the receiver or on the remote control, the selected component begins playing immediately.

In both cases, the previously selected source continues playing without sound for a few seconds.

Automatic Power On/Off (Standby): only possible with the COMPU LINK-3 connection

Both the CD player and cassette deck (or MD recorder) turn on and off (standby) along with the receiver.

When you turn on the receiver, the CD player or cassette deck (or MD recorder) will turn on automatically, depending on which component has been previously selected.

When you turn off the receiver, both the CD player and cassette deck (or MD recorder) will turn off (standby).

Synchronized Recording

Synchronized recording means the cassette deck (or MD recorder) starts recording as soon as a CD or a record begins playing.

To use synchronized recording, follow these steps:

1. Put a tape in the cassette deck (or an MD in the MD recorder), and a disc in the CD player (or a record on the turntable).
2. Press the record (●) button and the pause (||) button on the cassette deck (or MD recorder) at the same time.

This puts the cassette deck (or MD recorder) into recording pause.

If you do not press the record (●) button and pause (||) button at the same time, the synchronized recording feature will not operate.

3. Press the play (▶) button on the CD player or on the turntable.

The source changes on the receiver, and as soon as play starts, the cassette deck (or MD recorder) starts recording. When the play ends, the cassette deck (or MD recorder) enters recording pause, and stops about 4 seconds later.

Notes:

- During synchronized recording, the selected source cannot be changed.
- If the power of any component is shut off during synchronized recording, the COMPU LINK remote control system may not operate properly. In this case, you must start again from the beginning.

TEXT COMPU LINK Remote Control System

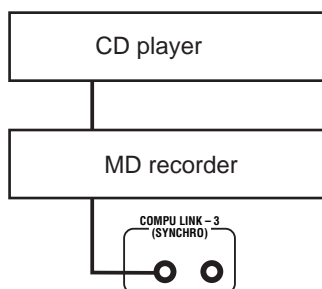
The TEXT COMPU LINK remote control system has been newly developed to deal with the disc information recorded in the CD Text* and MDs. Using these information in the discs, you can operate the CD player or MD recorder equipped with the TEXT COMPU LINK remote control system through the receiver.

CONNECTIONS:

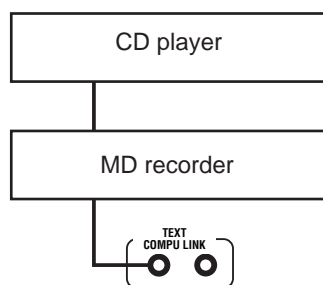
To use this remote control system, you need to connect the CD player and/or MD recorder you want to operate, following the procedures below.

1. If you have already plugged your CD player, MD recorder, and this receiver into the AC outlets, unplug their AC power cords first.
2. Connect your CD player, MD recorder, and this receiver as follows, through the COMPU LINK-3 (SYNCHRO) jacks and TEXT COMPU LINK jacks.

- 1) **COMPU LINK-3 (SYNCHRO) jacks:** Use the cables with the monaural mini-plugs (not supplied with this receiver).



- 2) **TEXT COMPU LINK jacks:** Use the cables with the stereo mini-plugs (not supplied with this receiver).



3. Connect your CD player, MD recorder and this receiver, using the cables with RCA pin plugs (see pages 5 and 6).
4. Plug the AC power cords of these components above into the AC outlets.
5. When turning on these components for the first time, turn on the connected components first, then turn on this receiver.

FUNCTIONS:

This remote control system allows you to use the functions listed below.

Displaying the Disc Information on the TV screen

Disc information such as its performer and disc title (and track titles only when a CD Text is selected) is shown on the TV screen.

Disc Search: Only for CD Player

This remote control system can allow you to search discs by the performer, disc title, and music genre. With this disc search, you can easily find the disc you want to play.

Disc Title Input:

If your CD player or MD recorder has the disc memory function, you can input the following information about the normal audio CDs or MDs on the TV screen.

- For CDs: Performer, disc title, and music genre
- For MDs: Disc title and song titles

***What is a CD Text?**

In a CD Text, some information about the disc (its disc title, performer, composer, arranger, etc.) is recorded.

Notes:

- If your audio component has two COMPU LINK-3 (SYNCHRO) jacks, you can use either one. If it has only one COMPU LINK-3 (SYNCHRO) jack, connect it so that it is the last item in the series of components. (For example, the CD player in the diagram to the left.)
- If your audio component has two TEXT COMPU LINK jacks, you can use either one. If it has only one TEXT COMPU LINK jack, connect it so that it is the last item in the series of components. (For example, the CD player in the diagram to the left.)
- "TEXT COMPULINK SOURCE NOT CONNECTED" appears on the display in the following cases:
 - When the connections explained to the left are not correctly done.
 - When you try to use the TEXT COMPU LINK function a few seconds after you turn on the connected equipment. This is not a malfunction of the units.
- Refer also to the manuals supplied with your CD player or MD recorder.

IMPORTANT:

If you turn on the receiver before turning on the other components after connecting the components, the TEXT COMPU LINK remote control system does not work correctly.

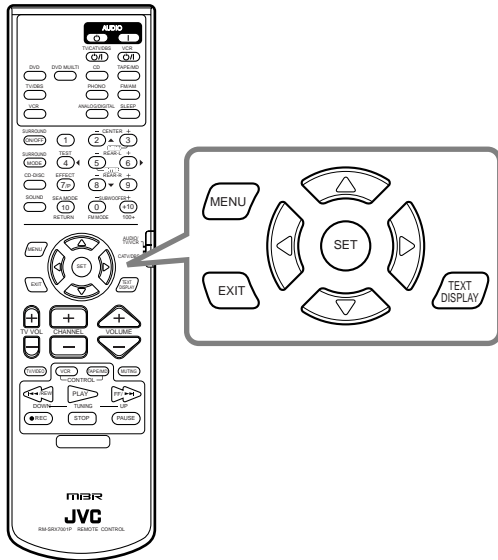
If this happens:

1. Turn off all the components including this receiver.
2. Turn on the connected components.
3. Turn on this receiver.

OPERATIONS

To use this remote control system, you need to connect the TV to the MONITOR OUT jack on the rear panel (see page 7), and set the TV's input mode to the proper position to which the receiver is connected. **Make sure you have connected the CD player or MD recorder equipped with the TEXT COMPU LINK remote control system. If not, you cannot use the following functions.**

On-Screen Operation buttons (on the remote control)



- ① Source name: CD or MD
- ② Select **▲** or **▼**, then press SET to change the disc.
- ③ Track numbers and track titles.
 - The current playing (selected) track is indicated in yellow.
 - When you move **⇐** to a track number, you can change the track information by pressing **◀/▶**. Each time you press the button, track information alternates between its track title and its performer. (You can also start playing the track by pressing SET.)
- ④ Select this (move **⇐** in front), then press SET to go to the DISC SEARCH screen (see page 38).
- ⑤ Select this (move **⇐** in front), then press SET to go to the TITLE INPUT screen (see page 39).
- ⑥ This appears only when a CD Text is selected.
- ⑦ Disc information such as the disc title, performer, and music genre.

When this is selected (**⇐** in front), you can change the disc information by pressing **◀/▶**. Each time you press the button, disc information (see “Note on ⑦”) changes.
- ⑧ Select **▲** or **▼**, then press SET to change the track.
- ⑨ Usable buttons and their functions for the current selection.

Indication here will be changed according to what is currently selected (**⇐** in front) on the screen. See “Note on ⑨.”

Note on ⑦:

The following information will appear on the display:

- For CD Texts — Disc title, Performer, Genre, Song writer, Composer, Arranger, Message
Only recorded information will be shown. If there is no data, “NO DATA” will appear.
- For MDs — Disc title
If there is no data, “NO DATA” will appear.

Note on ⑨:

For example, the SET button will be used to start play (PLAY), to go to the next screen (ENTER), and to determine the selection (ENTER).

To exit from the Disc information screen:

Press EXIT.

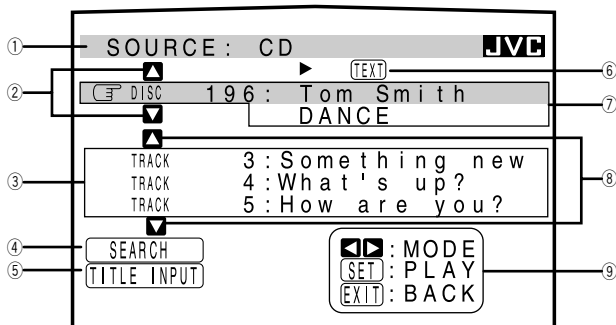
Notes:

- The on-screen display will disappear in the following cases:
 - if no operation is done for about 10 minutes.
 - if you do any operation other than explained in this section.
- To control the MD recorder using the TEXT COMPU LINK remote control system, you have to change the source name shown on the display from “TAPE” to “MD.” (See page 13.)
- Some special characters and marks cannot be displayed correctly.

Showing the Disc Information on the TV Screen

Press TEXT DISPLAY while “CD” or “MD” is selected as the source.

The Disc Information screen appears on the TV.



Searching for a Disc (Only for the CD player)

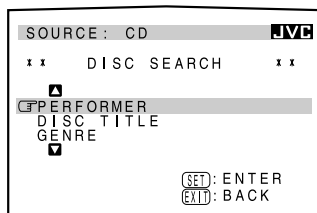
Search for a disc by its performer:

1. Press TEXT DISPLAY while “CD” is selected as the source.

The Disc Information screen appears on the TV.

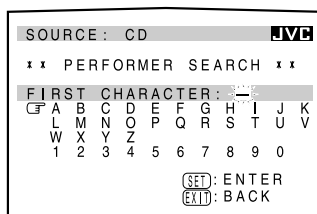
2. Press Δ / ∇ to move \square to “SEARCH,” then press SET.

The DISC SEARCH screen appears.



3. Press Δ / ∇ to move \square to “PERFORMER”, then press SET.

The PERFORMER SEARCH screen appears.



4. Press Δ / ∇ / \triangleleft / \triangleright to move \square in front of the first character of the performer you want to search, then press SET.

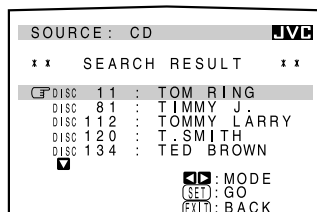
To correct the incorrect entry, press Δ / ∇ / \triangleleft / \triangleright to move \square in front of the correct character, then press SET.

Note:

Symbols such as @, # or \$ cannot be available for search.

5. Press SET again.

Disc search starts, then the SEARCH RESULT screen, showing the performers, appears.



6. On the SEARCH RESULT screen, you can do the following:

- **Changing the indication of the disc information:** Press Δ / ∇ to move \square to a searched disc, then press \triangleleft / \triangleright . Each time you press \triangleleft / \triangleright , the disc information alternates between its performer and its disc title.
- **Starting a disc play and going to the Disc Information screen (see page 37):** Press Δ / ∇ to move \square to a searched disc, then press SET.
- **Showing unseen disc information (if more than 5 discs are listed as a result of the search):** Press Δ / ∇ until they appear.
- **Going back to the PERFORMER SEARCH screen:** Press EXIT.

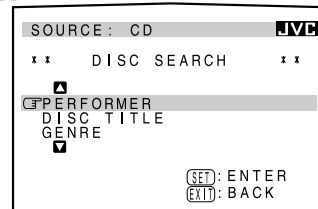
Search for a disc by its disc title:

1. Press TEXT DISPLAY while “CD” is selected as the source.

The Disc Information screen appears on the TV.

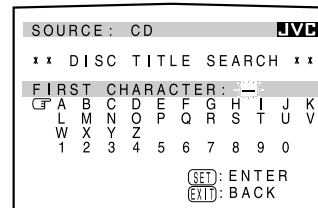
2. Press Δ / ∇ to move \square to “SEARCH,” then press SET.

The DISC SEARCH screen appears.



3. Press Δ / ∇ to move \square to “DISC TITLE,” then press SET.

The DISC TITLE SEARCH screen appears.



4. Press Δ / ∇ / \triangleleft / \triangleright to move \square in front of the first character of the disc title you want to search, then press SET.

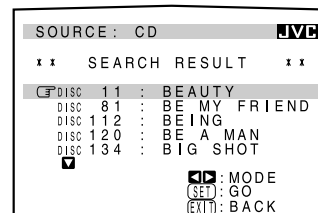
To correct the incorrect entry, press Δ / ∇ / \triangleleft / \triangleright to move \square in front of the correct character, then press SET.

Note:

Symbols such as @, # or \$ cannot be available for search.

5. Press SET again.

Disc search starts, then the SEARCH RESULT screen, showing the disc titles, appears.



6. On the SEARCH RESULT screen, you can do the following:

- **Changing the indication of the disc information:** Press Δ / ∇ to move \square to a searched disc, then press \triangleleft / \triangleright . Each time you press \triangleleft / \triangleright , the disc information alternates between its disc title and its performer.
- **Starting a disc play and going to the Disc Information screen (see page 37):** Press Δ / ∇ to move \square to a searched disc, then press SET.
- **Showing unseen disc information (if more than 5 discs are listed as a result of the search):** Press Δ / ∇ until they appear.
- **Going back to the DISC TITLE SEARCH screen:** Press EXIT.

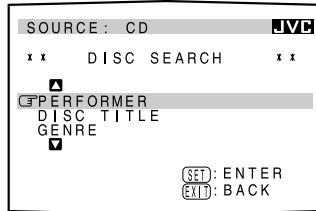
Search for a disc by its genre:

1. Press **TEXT DISPLAY** while “CD” is selected as the source.

The Disc Information screen appears on the TV.

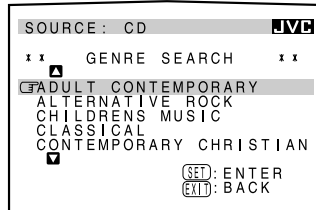
2. Press Δ / ∇ to move \leftarrow to “SEARCH,” then press **SET**.

The DISC SEARCH screen appears.



3. Press Δ / ∇ to move \leftarrow to “GENRE,” then press **SET**.

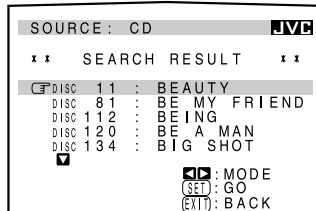
The GENRE SEARCH screen appears.



4. Press Δ / ∇ to move \leftarrow to the genre you want to search, then press **SET**.

To show the unseen genres, press Δ / ∇ until they appear.

Disc search starts, then the SEARCH RESULT screen, showing the disc titles, appears.



5. On the SEARCH RESULT screen, you can do the following:

- **Changing the indication of the disc information:** Press Δ / ∇ to move \leftarrow to a searched disc, then press $\leftarrow / \triangleright$. Each time you press $\leftarrow / \triangleright$, the disc information alternates between its disc title and its performer.
- **Starting a disc play and going to the Disc Information screen (see page 37):** Press Δ / ∇ to move \leftarrow to a searched disc, then press **SET**.
- **Showing unseen disc information (if more than 5 discs are listed as a result of the search):** Press Δ / ∇ until they appear.
- **Going back to the GENRE SEARCH screen:** Press **EXIT**.

Entering the Disc Information**For the CD Player with the disc memory function:**

You can use the disc memory function through this receiver.

The disc information (its performer, disc title, and music genre) of normal audio CDs will be stored into the memory built in the CD player.

For the disc memory function, refer to the manual supplied with your CD player.

- The performer, disc title, and music genre information are usually recorded in a CD Text. However, if a CD Text has no genre information recorded in the disc itself, you can input its music genre by yourself.

Note:

You can enter the TITLE INPUT screens for a CD Text and input its titles. However, you cannot store the titles you have input for a CD Text.

Example: Entering the following information for Disc 1

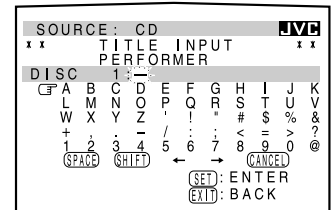
Performer: “MICHAEL”
Disc title: “MY FAVORITE”

1. Press **TEXT DISPLAY** while “CD” is selected as the source.

The Disc Information screen appears on the TV.

2. Press Δ / ∇ to move \leftarrow to “TITLE INPUT,” then press **SET**.

The TITLE INPUT:
PERFORMER screen appears.



3. Press $\Delta / \nabla / \leftarrow / \triangleright$ to move \leftarrow in front of a character you want, then press **SET** to enter the character.

- If the current CD is a CD Text, go to step 5 without entering the performer.

To use the lower case letters, press $\Delta / \nabla / \leftarrow / \triangleright$ to move \leftarrow to **(SHIFT)**, then press **SET**.

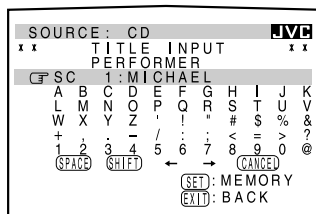
To use the upper case letters again, press $\Delta / \nabla / \leftarrow / \triangleright$ to move \leftarrow to **(SHIFT)**, then press **SET**.

4. Repeat step 3 until you finish putting a performer name (up to 32 characters).

To insert a space, press Δ / ∇ / $\triangleleft / \triangleright$ to move C to SPACE , then press SET.

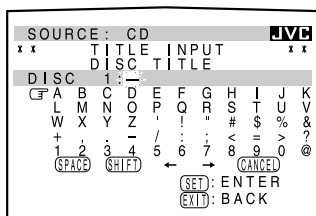
To correct an incorrect character:

- 1) Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to \leftarrow or \rightarrow , then press SET until the incorrect character is selected.
- 2) Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to CANCELED , then press SET to erase the character.
- 3) Press Δ / ∇ / $\triangleleft / \triangleright$ to move C in front of the correct character, then press SET to enter the correct character.



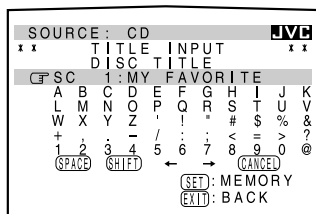
5. Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to "DISC 1: MICHAEL (in this example)," then press SET.

The TITLE INPUT: DISC TITLE screen appears.



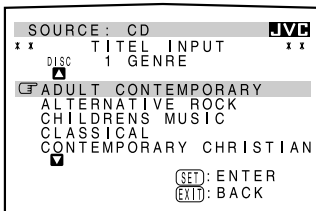
6. Enter the disc title, referring to steps 3 and 4.

If the current CD is a CD Text, go to the next step without entering the disc title.



7. Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to "DISC 1: MY FAVORITE (in this example)," then press SET.

The TITLE INPUT: DISC 1 GENRE screen appears.



8. Press Δ / ∇ to move C to the genre you want, then press SET.

The Disc Information screen appears again.

To show the unseen genres, press Δ / ∇ until they appear.

For the MD recorder:

You can write the disc information (disc title and song titles) into the disc. You can only write the song title for the song currently selected.

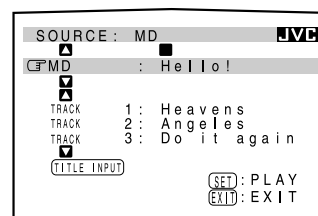
- If you have the CD-MD combination deck, you can also enter the disc information (its performer, disc title, and its music genre) of normal audio CDs into the memory built in the CD-MD combination deck. (To do this, follow the procedure of "For the CD Player with the disc memory function" on page 39.)
- If you change the disc or song title with more than 32 characters, the characters following 32nd will be erased from the title.

1. Press TEXT DISPLAY while "MD" is selected as the source.

The Disc Information screen appears on the TV.

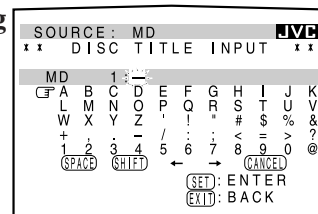
2. Press Δ / ∇ to move C to "TITLE INPUT," then press SET.

The DISC TITLE INPUT screen appears.



3. Enter the title, referring to steps 3 and 4 of "For the CD Player with the disc memory function" on page 39.

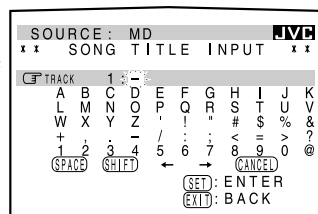
You can enter up to 32 characters for the disc title.



4. Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to the disc title you have just entered, then press SET.

The disc title is stored into the memory, and the SONG TITLE INPUT screen for the currently selected song appears.

You can enter a song title for the song currently selected (indicated in yellow on the TV screen).



5. Enter the song title, referring to steps 3 and 4 of "For the CD Player with the disc memory function" on page 39.

You can enter up to 32 characters for the song title.

6. Press Δ / ∇ / $\triangleleft / \triangleright$ to move C to the song title you have just entered, then press SET.

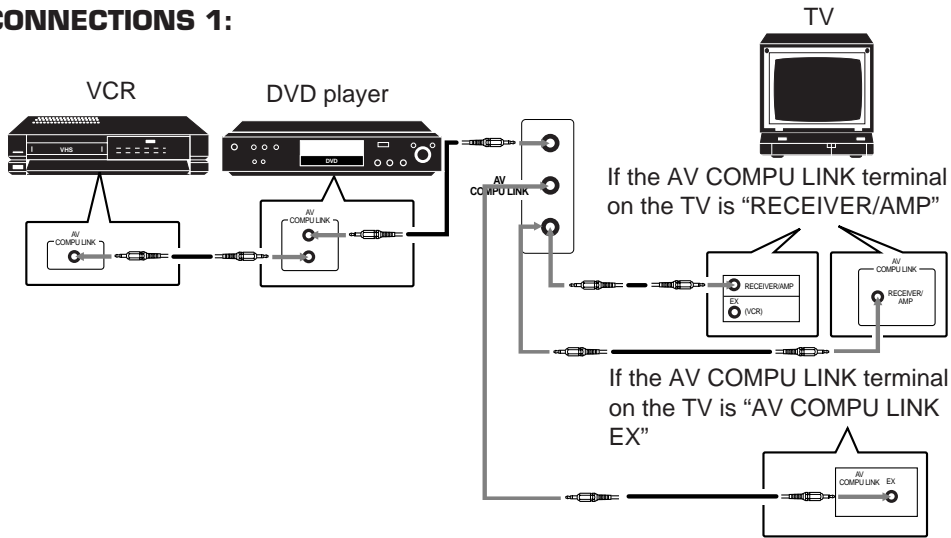
The song title is stored into the memory, and the Disc Information screen appears again.

AV COMPU LINK Remote Control System

The AV COMPU LINK remote control system allows you to operate JVC video components (TV, VCR, and DVD player) through the receiver.

To use this remote control system, you need to connect the video components you want to operate, following the diagrams below and the procedure on the next page.

CONNECTIONS 1:



CAUTION:

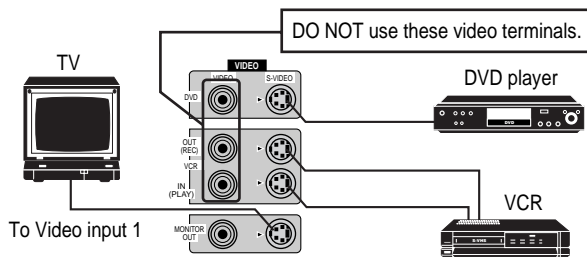
The AV COMPU LINK remote control system cannot control the DBS tuner connected to the TV SOUND/DBS jacks.

Notes:

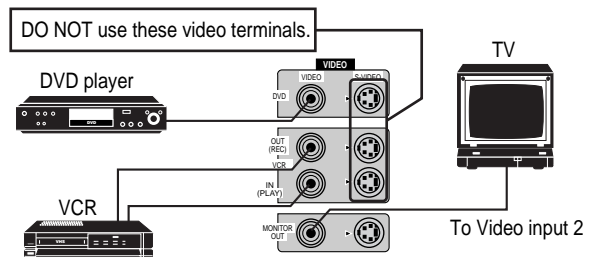
- When connecting only the VCR or DVD player to this receiver, connect it directly to the receiver using cable with the monaural mini-plugs.
- Refer also to the manuals supplied with your video components.

CONNECTIONS 2:

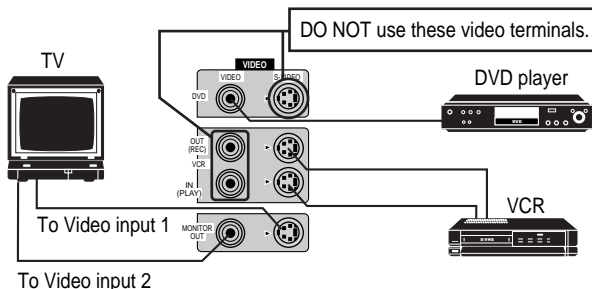
CASE 1: If the components are equipped with the S-video terminals



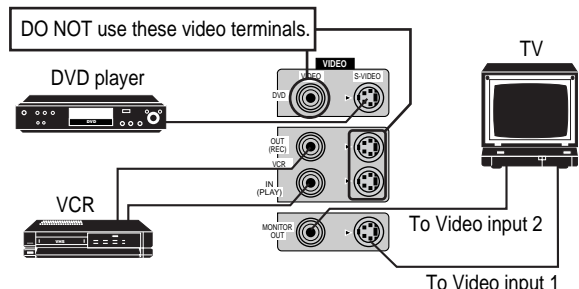
CASE 2: If the components are not equipped with the S-video terminals




CASE 3: If only the VCR is equipped with the S-video terminal



CASE 4: If only the DVD player is equipped with the S-video terminal



1. **If you have already plugged your VCR, DVD player, TV, and this receiver into the AC outlets, unplug their AC power cords first.**
2. **Connect your VCR, DVD player, TV, and this receiver, using the cables with the monaural mini-plugs (not supplied).**
 - See “CONNECTIONS 1” on the previous page.
3. **Connect the audio input/output jacks on VCR, DVD player, TV, and this receiver using the cables with RCA pin plug.**
 - See pages 6 and 7.
4. **Connect the video input/output jacks on VCR, DVD player, TV, and this receiver, using the cables with RCA pin plug or with S-video plug.**
 - See “CONNECTIONS 2” on the previous page.
5. **Plug the AC power cords of the components into the AC outlets.**
6. **When turning on the TV for the first time after the AV COMPU LINK connection, turn the TV volume to the minimum using the TV volume control on the TV.**
7. **Turn on the other connected components first, then turn on this receiver.**
 - When turning on the VCR, use the remote control supplied with this receiver (press VCR )

The AV COMPU LINK remote control system allows you to use the five basic functions listed below.

Remote Control of the TV, DVD player, and VCR Using This Remote Control

See page 45 for details.

For the DVD player and the VCR:

- Aim the remote control directly at **the remote sensor on each component.**

For the TV having AV COMPU LINK terminal “RECEIVER/AMP”:

- Aim the remote control directly at **the remote sensor on the receiver.**


For the TV having AV COMPU LINK terminal “AV COMPU LINK EX”:

- Aim the remote control directly at **the remote sensor on the TV.**

One-Touch Video Play

Simply by inserting a video cassette without its safety tab into the VCR, you can enjoy the video playback without setting other switches manually. The receiver automatically turns on and changes the source to “VCR.”

The TV automatically turns on and changes the input mode to the position so that you can view the playback picture.

When you insert a video cassette with its safety tab, press the play () button on the VCR or on the remote control. So, you can get the same result.

One-Touch DVD Play

Simply by starting playback on the DVD player, you can enjoy the DVD playback without setting other switches manually.

- When the DVD player is connected through the analog input jacks on this receiver (and analog input is selected), the receiver automatically turns on and changes the source to “DVD” or “DVD MULTI.”
- When the DVD player is connected through the digital input terminal on this receiver (and digital input is selected), the receiver automatically turns on and changes the source to “DVD DIGITAL.”

The TV automatically turns on and changes the input mode to the position so that you can view the playback picture.

Automatic Selection of TV's Input Mode

- When you select “TV SOUND” (or “TV DIGITAL”) as the source to play on the receiver, the TV automatically changes the input mode to the TV tuner so that you can watch TV.
- When you select “DVD” (or “DVD DIGITAL”), “DVD MULTI,” “VCR,” or “DBS” (or “DBS DIGITAL”) as the source to play on the receiver, the TV automatically changes the input mode to the appropriate position (either Video Input 1 or Video Input 2) so that you can view the playback picture.

Note:

When you select “TV SOUND” (or “TV DIGITAL”) as the source on the receiver, you cannot see the menu on the TV screen since the AV COMPU LINK remote control system automatically changes the TV's input mode to the TV tuner.

If you do not mind stopping listening to the TV sounds, you can then show the on-screen displays after changing the TV's input mode to the appropriate position (either Video Input 1 or Video Input 2) the receiver is connected to.

Automatic Power On/Off

The TV, VCR, and DVD player turn on and off along with the receiver.

When you turn on the receiver;

- If the previously selected source is “VCR,” the TV and VCR will turn on automatically.
- If the previously selected source is “TV SOUND” (or “TV DIGITAL”) or “DBS” (or “DBS DIGITAL”), only the TV will turn on automatically.
- If the previously selected source is “DVD” (or “DVD DIGITAL”) or “DVD MULTI,” the TV and DVD player will turn on automatically.

When you turn off the receiver, the TV, VCR and the DVD player will turn off.

Note:

If you turn off the receiver while recording on the VCR, the VCR will not turn off, but continue recording.

Operating JVC's Audio/Video Components

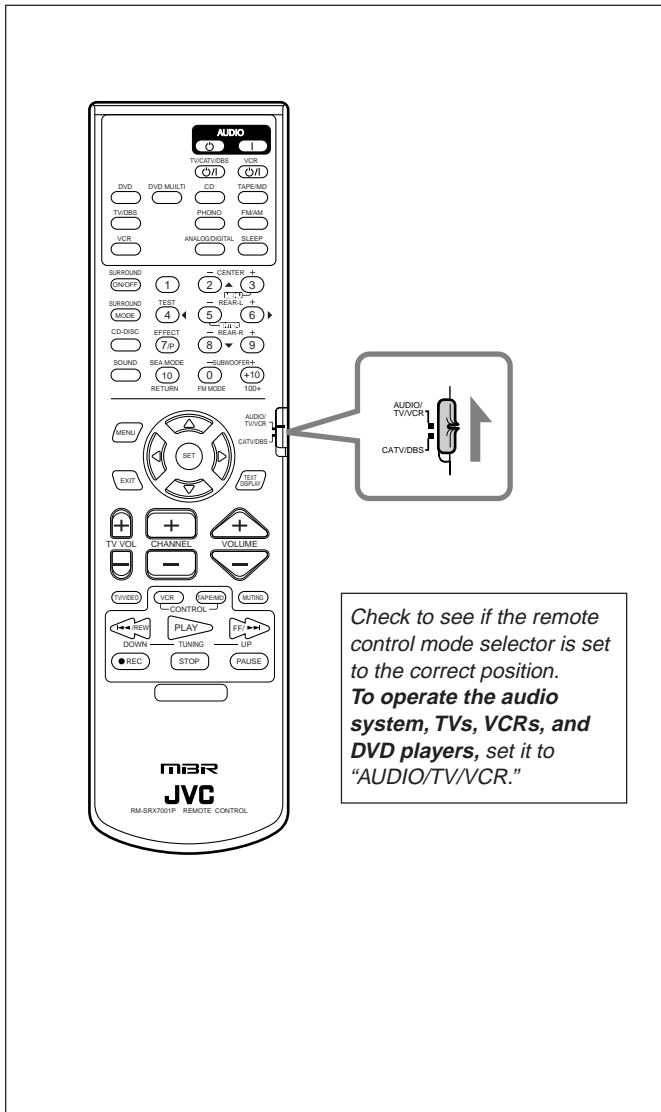
You can operate JVC's audio and video components with this receiver's remote control, since control signals for JVC components are preset in the remote control.

Operating Audio Components

IMPORTANT:

To operate JVC's audio components using this remote control:

- You need to connect JVC audio components through the COMPU LINK-3 (SYNCHRO) jacks (see page 35) in addition to the connections using cables with RCA pin plugs (see pages 5 and 6).
- Aim the remote control directly at the remote sensor on the receiver.
- If you use the buttons on the front panel or the menu function to choose a source, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using source selecting buttons on the remote control.
- To operate the cassette deck or MD recorder using the COMPU LINK remote control system, set the source name correctly. (See page 13.)
- Refer also to the manuals supplied with your components.



Tuner

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

FM/AM: Alternates between FM and AM.

After pressing FM/AM (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations:

- 1 - 10, +10: Selects a preset channel number directly.
 For channel number 5, press 5.
 For channel number 15, press +10, then 5.
 For channel number 20, press +10, then 10.

TUNING UP/TUNING DOWN:

Tunes into stations.

FM MODE: Changes the FM reception mode.

Sound control section (Amplifier)

You can always perform the following operations (with the remote control mode selector set to "AUDIO/TV/VCR"):

SURROUND ON/OFF: Turns on or off the Surround modes — Dolby Pro Logic, Dolby Digital, DTS Digital Surround and MPEG Multichannel.

SURROUND MODE: Selects the DSP modes.

After pressing SOUND (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations:

- SEA MODE: Changes the SEA modes.
 SUBWOOFER - / +: Adjusts the subwoofer output level.
 CENTER - / +: Adjusts the center speaker output level.
 REAR•L - / +: Adjusts the left rear speaker output level.
 REAR•R - / +: Adjusts the right rear speaker output level.
 EFFECT: Selects the effect level.
 TEST: Turns on or off the test tone output.

Note:

After adjusting sounds, press the corresponding source selecting button or CD-DISC to operate your target source by using the 10 keys; otherwise, the 10 keys cannot be used for operating your target source.

CD player

After pressing CD (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the CD player:

- PLAY: Starts playing.
 ⏮: Returns to the beginning of the current (or previous) track.
 ⏭: Skips to the beginning of the next track.
 STOP: Stops playing.
 PAUSE: Pauses playing. To release it, press PLAY.
 1 - 10, +10: Selects a track number directly.
 For track number 5, press 5.
 For track number 15, press +10, then 5.
 For track number 20, press +10, then 10.
 For track number 30, press +10, +10, then 10.

CD player-changer

After pressing CD-DISC (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a CD player-changer:

PLAY:	Starts playing.
◀◀:	Returns to the beginning of the current (or previous) track.
▶▶:	Skips to the beginning of the next track.
STOP:	Stops playing.
PAUSE:	Pauses playing. To release it, press PLAY.
1 – 6, 7/P:	Selects the number of a disc installed in a CD player-changer.

After pressing CD (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the CD player-changer:

1 – 10, +10:	Selects a track number directly. For track number 5, press 5. For track number 15, press +10, then 5. For track number 20, press +10, then 10. For track number 30, press +10, +10, then 10.
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Turntable

After pressing PHONO (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a turntable:

PLAY:	Starts playing.
STOP:	Stops operations.

Cassette deck

After pressing TAPE/MD or TAPE/MD CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a cassette deck:

PLAY:	Starts playing.
◀◀:	Fast winds the tape from right to left.
▶▶:	Fast winds the tape from left to right.
STOP:	Stops operations.
PAUSE:	Pauses playing. To release it, press PLAY.
● REC:	Press this button with the PLAY button to start recording. Press this button with the PAUSE button to enter recording pause.

MD recorder

After pressing TAPE/MD or TAPE/MD CONTROL (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on the MD recorder:

PLAY:	Starts playing.
◀◀:	Returns to the beginning of the current (or previous) track.
▶▶:	Skips to the beginning of the next track.
STOP:	Stops playing.
PAUSE:	Pauses playing. To release it, press PLAY.
● REC:	Press this button with the PLAY button to start recording. Press this button with the PAUSE button to enter recording pause.

Note:

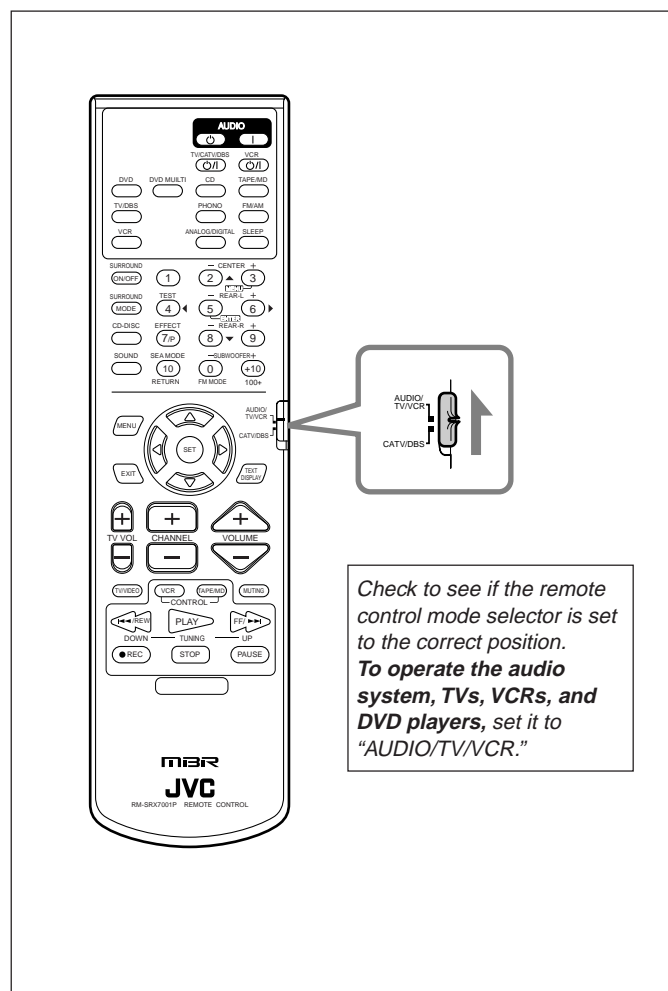
You can use either TAPE/MD button or the TAPE/MD CONTROL button to activate the buttons listed above. If you press TAPE/MD, the playing source also changes. On the other hand, if you press TAPE/MD CONTROL, the playing source does not change.

Operating Video Components

IMPORTANT:

To operate JVC's video components using this remote control:

- You need to connect JVC video components through the AV COMPU LINK terminals (see page 41) in addition to the connections using cables with RCA pin plugs (see pages 6 and 7).
- Some JVC VCRs can accept two types of the control signals — remote code “A” and “B.” Before using this remote control, make sure that the remote control code of the VCR is set to code “A.”
- When using the remote control:
 - For the DVD player and VCR operations, aim the remote control directly at the remote sensor on each component, not on the receiver.
 - For the TV operations:
 - If the TV has the AV COMPU LINK terminal “RECEIVER/AMP,” aim the remote control directly at the remote sensor on the receiver.
 - If the TV has the AV COMPU LINK terminal “AV COMPU LINK EX,” aim the remote control directly at the remote sensor on the TV.



VCR

You can always perform the following operations (with the remote control mode selector set to “AUDIO/TV/VCR”):

VCR \odot/I : Turns on or off the VCR.

After pressing VCR or VCR CONTROL (with the remote control mode selector set to “AUDIO/TV/VCR”), you can perform the following operations on the VCR:

- 1 – 9, 0: Selects the TV channels on VCR.
- PLAY: Starts playing.
- ◀◀: Rewinds a tape.
- ▶▶: Fast winds a tape.
- STOP: Stops operations.
- PAUSE: Pauses playing. To release it, press PLAY.
- REC: Press this button with the PLAY button to start recording. Press this button with the PAUSE button to enter recording pause.
- CHANNEL +/-: Changes the TV channels on the VCR.

Note:

You can use either VCR button or the VCR CONTROL button to activate the buttons listed above. If you press VCR, the playing source also changes. On the other hand, if you press VCR CONTROL, the playing source does not change.

DVD player

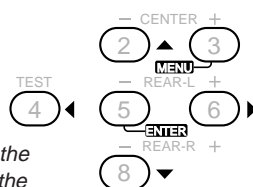
After pressing DVD or DVD MULTI (with the remote control mode selector set to “AUDIO/TV/VCR”), you can perform the following operations on a DVD player:

- PLAY: Starts playing.
- ◀◀: Returns to the beginning of the current (or previous) track.
- ▶▶: Skips to the beginning of the next track.
- STOP: Stops playing.
- PAUSE: Stops playing temporarily. To release it, press PLAY.

After pressing DVD or DVD MULTI, these buttons can be used for the DVD menu operations.

Note:

For detailed menu operations, refer to the instructions supplied with the discs or the DVD player.



TV

You can always perform the following operations (with the remote control mode selector set to “AUDIO/TV/VCR”):

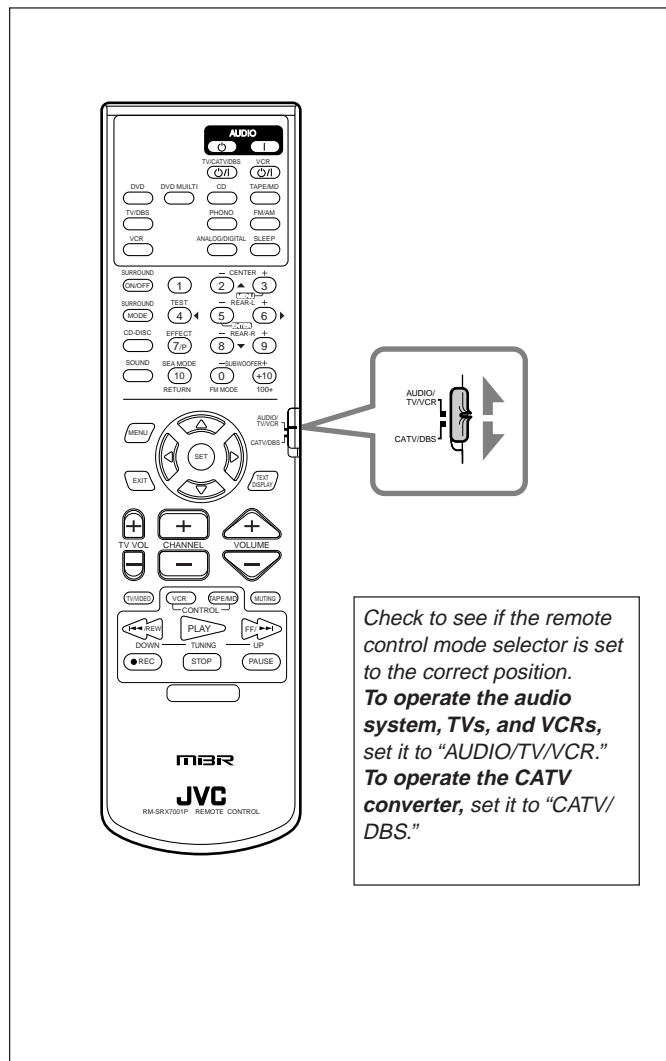
- TV/CATV/DBS \odot/I : Turns on or off the TV.
- TV VOL +/-: Adjusts the volume.
- TV/VIDEO: Sets the input mode (either TV or VIDEO).

After pressing TV/DBS (with the remote control mode selector set to “AUDIO/TV/VCR”), you can perform the following operations on a TV:

- CHANNEL +/-: Changes the channels.
- 1 – 9, 0, 100+: Selects the channels.
- RETURN: Alternates between the previously selected channel and the current channel.

This remote control supplied with the receiver can transmit control signals for other manufacturers' VCRs, TVs, CATV converters and DBS tuners. By changing the transmittable signals from preset ones to the other manufacturers', you can operate the other manufacturer's components using this remote control.

When operating the other manufacturers' components, refer also to the manuals supplied with them. To operate these components with the remote control, first you need to set the manufacturer's code each for VCR, TV, CATV converters and DBS tuners.



To change the transmittable signals for operating another manufacturer's TV

1. Set the remote control mode to "AUDIO/TV/VCR."
2. Press and hold TV/CATV/DBS $\odot/|$.
3. Press TV/DBS.
4. Enter manufacturer's code (three digits) using buttons 1 – 9, and 0.

See the list on pages 48 and 49 to find the code.

Examples: For a JVC product, press 0, 3, then 6.

For a Sony product, press 0, 0, then 0.

5. Release TV/CATV/DBS $\odot/|$.

The following buttons can be used for operating the TV (with the remote control mode selector set to "AUDIO/TV/VCR"):

TV/CATV/DBS $\odot/|$: Turns on and off the TV.

TV VOL +/-: Adjusts the volume.

TV/VIDEO: Sets the input mode (either TV or VIDEO).

After pressing TV/DBS (with the remote control mode selector set to "AUDIO/TV/VCR"), you can perform the following operations on a TV:

CHANNEL +/-: Changes the channels.

1 – 10, 0, 100+ (+10): Selects the channels.

The 100+ (+10) button will function as the ENTER button if your TV requires pressing ENTER after selecting a channel number.

Note:


Refer to the manual supplied with your TV.

6. Try to operate your TV by pressing TV/CATV/DBS $\odot/|$.

When your TV turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of TV, try each one until the correct one is entered.

To change the transmittable signals for operating a CATV converter or DBS tuner


1. Set the remote control mode to “CATV/DBS.”
2. Press and hold TV/CATV/DBS .
3. Press TV/DBS.
4. Enter manufacturer’s code (three digits) using buttons 1 – 9, and 0.

See the list on pages 49 and 50 to find the code.

Examples: For a Toshiba product, press 0, 0, then 0.
For a Samsung product, press 7, 0, then 2.

5. Release TV/CATV/DBS .

After setting the remote control mode selector to “CATV/DBS,” you can perform the following operations on the CATV converter or on the DBS tuner:

TV/CATV/DBS 	Turns on and off the CATV converter or the DBS tuner.
CHANNEL +/-:	Changes the channels.
1 – 10, 0, 100+ (+10):	Selects the channels. The 100+ (+10) button will function as the ENTER button if your equipment requires pressing ENTER after selecting a channel number.

Note:


Refer to the manual supplied with your CATV converter or DBS tuner.

6. Try to operate your CATV converter or DBS tuner by pressing TV/CATV/DBS .

When your CATV converter or DBS tuner turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of CATV converter or DBS tuner, try each one until the correct one is entered.

To change the transmittable signals for operating another manufacturer’s VCR

1. Set the remote control mode to “AUDIO/TV/VCR.”
2. Press and hold VCR .
3. Press VCR.
4. Enter manufacturer’s code (three digits) using buttons 1 – 9, and 0.

See the list on pages 50 and 51 to find the code.

Examples: For a JVC product, press 0, 0, then 8.
For an NEC product, press 0, 3, then 8.

5. Release VCR .

The following button can be used for operating the VCR (with the remote control mode selector set to “AUDIO/TV/VCR”):

VCR : Turns on and off the VCR.

After pressing VCR or VCR CONTROL (with the remote control mode selector set to “AUDIO/TV/VCR”), you can perform the following operations on the VCR:

CHANNEL +/-:	Changes the TV channels on the VCR.
1 – 10, 0, 100+ (+10):	Selects the TV channels. The 100+ (+10) button will function as the ENTER button if your VCR requires pressing ENTER after selecting a channel number.
PLAY:	Starts playback.
◀◀:	Rewinds a video tape.
▶▶:	Fast winds a video tape.
STOP:	Stops operation.
PAUSE:	Pauses.
● REC:	Starts recording or enters recording pause.

Notes:

- Refer to the manual supplied with your VCR.
- You can use either VCR button or the VCR CONTROL button to activate the buttons listed above. If you press VCR, the playing source also changes. On the other hand, if you press VCR CONTROL, the playing source does not change.

6. Try to operate your VCR by pressing VCR .

When your VCR turns on or off, you have entered the correct code.

If there are more than one code listed for your brand of VCR, try each one until the correct one is entered.

Manufacturers' codes for TV

A-Mark	003	Finlux	037
Acura	009	Firstline	009, 216
Admiral	093	Fisher	154, 208
Aiko	092	Formenti	037
Akai	030, 208	Fortress	093
Akura	264	Frontech	264
Alaron	216	Funai	264, 342
Alba	009, 036, 037	GE	047, 093, 178, 451
Amstrad	009, 037	GEC	037
Anam	003, 004, 009, 068, 161, 250, 425, 426	Geloso	009
Anam National	161, 250, 425	General	186
Anitech	009, 068	Gibraltar	030
AOC	003, 030	GoldStar	001, 002, 030, 037, 039, 178, 283, 409, 457, 467
Arcam	216	Goodmans	036, 037
Archer	003	Gradiente	053, 170
Audinac	391	Granada	037, 208, 502
Audiosonic	037	Grundig	037, 535, 554
Audiovox	003, 092, 451	Hallmark	178
Basic Line	009	Hanseatic	037
Baur	037, 535, 554	Harman/Kardon	054
Bell & Howell	154	Harvard	068
Beon	037	HCM	009
Blaupunkt	535, 554	Hinari	009, 036, 037, 283
Britannia	216	Hitachi	036, 145, 409, 576
Broksonic	003, 426	Huanyu	216
Bush	009, 036, 037	Hypson	037, 264
Candle	030, 186	ICE	264
Carnivale	030	Indiana	037
Carrefour	036	Infinity	054
Carver	054, 170	Inkel	571
Cascade	009	Interbuy	068
Cathay	037	Interfunk	037
CCE	037	Intervision	037, 068, 264
Celebrity	000	ITT	283
Centurion	037	JBL	054
Cimline	009	JCB	000
Cineral	092, 451	JEC	502
Citizen	030, 039, 060, 092, 186	JVC	036, 053, 069, 160
Clarivox	037	Kaisui	009, 216
Contec	009, 036, 216	Kamp	216
Continental Edison	489	Kawasho	216
Craig	161	Kendo	037
Crosley	054	Kenwood	030
Crown	009, 037, 039	Kingsley	216
CS Electronics	216	Korpel	037
Curtis Mathes	030, 039, 047, 054, 060, 093, 145, 154, 166, 451	Koyoda	009
Daewoo	009, 037, 039, 066, 092, 154, 391, 402, 451	KTV	030, 039
Dansai	037	Leyco	037, 264
Dayton	009	Liesenk & Tter	037
De Graaf	208	Logik	001
Decca	037	LXI	047, 054, 154, 156, 178
Denon	145	M Electronic	009, 037, 068
Dixi	004, 009, 037	Magnavox	030, 036, 054, 186
ECE	037	Manesth	264
Ectec	391	Marantz	030, 037, 054
Electroband	000	Mark	037
Electrohome	409	Maruman	391
Elin	037	Matsui	009, 036, 037, 208
Elta	009	Matsushita	250
Emerson	039, 154, 178	Mediator	037
Envision	030	Megatron	003, 145, 178
Erres	037	Memorex	009, 150, 154, 178, 250
Etron	009, 283	Metz	535
Ferguson	037, 560	MGA	030, 150, 178
Fidelity	216	Midland	039, 047
Finlandia	208	Minerva	535, 554
		Mitsubishi	036, 093, 150, 178, 535

Mivar	216
Motorola	093
MTC	030, 060, 216
Multitech	009, 216
NAD	156, 166, 178
National	226
NEC	030, 036, 170
Neckermann	037, 554
NEI	037
Nicamagic	216
Nikkai	037, 216, 264
Nikko	030, 092, 178
Nisato	391
Nordmende	560
NTC	092
Optimus	154, 166, 250
Optonica	093
Orion	037
Osaki	264
Otto Versand	036, 037, 535, 554
Panama	264
Panasonic	161, 226, 250
Pathe Cinema	216
Pausa	009
Penney	002, 003, 030, 039, 047, 060, 156, 178
Philco	030, 054, 145
Philips	037, 054, 554
Phonola	037
Pilot	030, 039
Pioneer	166
Portland	039, 092
Profex	009
Proscan	047
Protech	009, 037, 264
Proton	003, 178
Quasar	250
Quelle	037, 252, 535, 554
Questa	036
R-Line	037
Radio Shack	030, 039, 047, 154, 178, 409
Radiola	037
Rank Arena	036
RCA	047, 090, 093
Realistic	030, 039, 154, 178
Revox	037
Rex	264
Rhapsody	216
Roadstar	009, 264
Runco	030
Saisho	009, 264
Sampo	030, 039
Samsung	009, 030, 037, 039, 060, 090, 178, 264, 427
Samsux	039
Sandra	216
Sansei	451
Sanyo	036, 154, 208, 376, 424
SBR	037
Schneider	037
Scotch	178
Scott	178
Sears	047, 054, 154, 156, 178
SEG	036, 264
Semp	156
Sentra	283
Sharp	036, 039, 093, 256
Siemens	037, 535, 554
Silver	036

Simpson	186
Sky-Worth	037
Sonitron	208
Sonoko	009, 037
Sonolor	208
Sontec	037
Sony	000, 036
Soundesign	178, 186
Soundwave	037
Spectricon	003
Standard	009
SuperTech	216
Supreme	000
Sylvania	030, 054
Sysline	037
Tandy	093
Tashiko	036
Tatung	003, 037
Technics	250
Techwood	003
Teknika	039, 054, 060, 092, 150, 186
Telefunken	252
Teletch	009
Teleton	186
Texet	216
Thomson	489, 560
Thorn	037, 535
TMK	178
Toshiba	036, 060, 154, 156, 241, 502
Totevision	039
Ultra	391
Universum	037, 264, 535
Vector Research	030
Vestel	037
Victor	036, 053, 160, 250, 376
Vidikron	054
Vidtech	036, 178
Wards	030, 054, 178
Watson	037
Wega	036
White Westinghouse	037, 216
Yamaha	030
Yoko	037, 264
Zenith	092
Zonda	003

Manufacturers' codes for CATV converters

ABC	008
Daeryung	008
GoldStar	838
LG Alps	779
Memorex	000
Now	776
Panasonic	000
Paragon	000
Pulsar	000
Quasar	000
Runco	000
Samsung	702
Scientific Atlanta	008
Seawoo	780
TongKook	777, 840
Toshiba	000
Zenith	000

Manufacturers' codes for DBS tuner

Cyrus	200
Dae Young	735
DNT	200
DX Antenna	752
Kathrein	200
Marantz	200
Panasonic	739
Pantech	747
Philips	200
Radiola	200
RFT	200
Samsung	773
Sony	661
Toshiba	486
Ventana	200

Manufacturers' codes for VCR

Admiral	048
Adventura	000
Aiko	278
Aiwa	000, 037
Akai	041, 061, 281, 288
Akiba	072
Alba	020, 072, 278
Ambassador	020
Amstrad	000, 278
Anam	037, 162, 226, 240, 278, 553
Anam National	162, 226
Anitech	072
ASA	037, 081
Asha	240
Asuka	037
Audiovox	037
Baird	000, 041, 104
Basic Line	020, 072, 278
Beaumarck	240
Bell & Howell	104
Blaupunkt	034, 162, 195, 226, 227
Brandt	187, 320
Brandt Electronic	041
Bush	072, 278
Calix	037
Capehart	020
Carver	081
Catron	020
CCE	072, 278
CGE	000
Cimline	072
Cineral	278
Citizen	037, 278
Clatronic	020
Colt	072
Condor	020
Craig	037, 072, 240
Crown	020, 072, 278
Curtis Mathes	041, 162
Cybernex	240
Cyrus	081
Daewoo	020, 045, 046, 278, 368
Dansai	072
Daytron	020
De Graaf	042, 166
Decca	000, 081
Denon	042

Dual	041
Dumont	000, 081, 104
Dynatech	000
Elbe	038
Elcatech	072
Electrohome	037
Electroponic	037
Emerex	032
Emerson	000, 037, 043, 061, 278
ESC	240, 278
Ferguson	041, 320
Fidelity	000
Finlandia	081, 104
Finlux	000, 042, 081, 104
Firstline	037, 043, 045, 072
Fisher	046, 104
Frontech	020
Fuji	033
Funai	000
Garrard	000
GE	048, 240
GEC	081
General	020, 052
Go Video	432
GoldHand	072
GoldStar	037, 038, 225, 471
Goodmans	000, 020, 037, 062, 072, 278
Gradiente	000, 008
Graetz	041, 104, 240
Granada	046, 081, 104
Grandin	000, 037, 072
Grundig	072, 081, 195, 226
Hanseatic	037
Harley Davidson	000
Harman/Kardon	038, 081
Harwood	072
HCM	072
Headquarter	046
Hinari	072, 240
Hitachi	000, 041, 042, 166, 235, 240
Hypson	072
Imperial	000
Interfunk	081
ITT	041, 046, 104, 240, 384
ITV	037, 278
Jensen	041
JVC	008, 041, 067, 384
Kaisui	072
KEC	037, 278
Kenwood	038, 041, 067, 384
KLH	072
Kodak	037
Korpel	072
Lenco	278
Leyco	072
Lloyd's	000
Loewe	037, 081, 162
Logik	072, 240
Luxor	043, 046, 048, 062, 104
LXI	037
M Electronic	000
Magnasonic	278
Magnavox	000, 081
Magnin	240
Manesth	045, 072
Marantz	062, 081
Marta	037
Matsushita	162, 227



Melectronic	038
Memorex	000, 037, 046, 048, 104, 162, 240
Memphis	072
Metz	037, 162, 195, 227
MGA	043, 061, 240
MGN Technology	240
Minerva	195
Minolta	042
Mitsubishi	043, 048, 061, 067, 081, 173, 196
Motorola	048
MTC	000, 240
Multitech	000, 072
Murphy	000
NAD	058
National	226
NEC	038, 040, 041, 067, 104, 370
Neckermann	081
Nesco	072
Nikko	037
Nikon	034
Noblex	240
Nokia	041, 046, 104, 240
Nordmende	041, 320, 384
Oceanic	000, 041
Olympus	226
Optimus	037, 048, 058, 104, 162, 432
Optonica	062
Osaki	000, 037, 072
Otto Versand	081
Palladium	037, 041, 072
Panasonic	162, 225, 226, 227, 367
Pathe Marconi	041
Penney	037, 038, 040, 042, 240
Pentax	042
Perdio	000
Philco	038
Philips	062, 081, 384
Phonola	081
Pilot	037
Pioneer	058, 067, 081, 162, 235
Portland	020
Profitronic	240
Proline	000
Protec	072
Pye	081
Quarter	046
Quartz	046
Quasar	162
Quelle	081
Radio Shack	000, 037
Radiola	081
Radix	037
Randex	037
RCA	042, 048, 240
Realistic	000, 037, 046, 048, 062, 104
Rex	041, 384
Ricoh	034
Roadstar	037, 072, 240, 278
Saba	041, 320, 384
Salora	043, 046
Samsung	045, 240, 426, 432
Sanky	048
Sansui	000, 041, 067
Sanyo	046, 104, 240, 368, 369
SBR	081
Schaub Lorenz	000, 041, 104
Schneider	000, 072, 081
Scott	043, 045

Sears	000, 037, 042, 046, 104
SEG	240
SEI	081
Seleco	041
Semp	045
Sentra	020
Sharp	048, 062, 363
Shintom	072, 104
Shogun	240
Siemens	037, 081, 104, 195
Silva	037
Singer	045, 072
Sinudyne	081
Solavox	020
Sonolor	046
Sontec	037
Sony	000, 032, 033, 034
STS	042
Sunstar	000
Suntronic	000
Sylvania	000, 043, 081
Symphonic	000
Tashiko	000
Tatung	000, 041, 081
Teac	000, 041
Tec	020
Technics	162, 226
Teknika	000, 037, 052
Teleavia	041
Telefunken	041, 187, 320, 384
Tenosal	072
Tensai	000
Thomas	000
Thomson	041, 320, 384
Thorn	041, 104
TMK	240
Toshiba	041, 043, 045, 081, 366, 384
Totevision	037, 240
Uher	240
Unitech	240
Universum	000, 037, 081, 195, 240
Vector	045
Vector Research	038, 040
Victor	008, 041, 067, 384
Video Concepts	040, 045, 061
Videosonic	240
Wards	000, 042, 048, 062, 072, 081, 240
White Westinghouse	278
XR-1000	000, 072
Yamaha	038
Yamishi	072
Yokan	072
Yoko	020, 240
Zenith	000, 033, 034

Manufacturers' codes listed on pages 48 to 51 are subject to change without notice. If they are changed, this remote control cannot operate the equipment.

Troubleshooting

Use this chart to help you solve daily operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display does not light up.	The power cord is not plugged in.	Plug the power cord into an AC outlet.
No sound from speakers.	Speaker signal cables are not connected.	Check speaker wiring and reconnect if necessary.
	The SPEAKERS 1 and 2 buttons are not set correctly.	Press SPEAKERS 1 and 2 correctly.
	An incorrect source is selected.	Select the correct source.
	Muting is activated.	Press MUTING to cancel the mute.
Sound from one speaker only.	Speaker signal cables are not connected properly.	Check speaker wiring and reconnect if necessary.
	The balance is set to one extreme.	Adjust the balance properly (see page 13).
Continuous hiss or buzzing during FM reception.	Incoming signal is too weak.	Connect an outdoor FM antenna or contact your dealer.
	The station is too far away.	Select a new station.
	An incorrect antenna is used.	Check with your dealer to be sure you have the correct antenna.
	Antennas are not connected properly.	Check connections.
Occasional cracking noise during FM reception.	Ignition noise from automobiles.	Move the antenna farther from automobile traffic.
No colors on the on-screen display.	The color system of the connected TV is not PAL.	Connect a PAL- or multi-color system TV.
Howling during record playing.	Your turntable is too close to speakers.	Move speakers away from the turntable.
"OVERLOAD" starts flashing on the display.	Speakers are overloaded because of high volume.	<ol style="list-style-type: none"> 1. Press STANDBY/ON  on the front panel to turn off the receiver. 2. Stop the playback source. 3. Turn on the receiver again, and adjust the volume.
	Speakers are overloaded because of short circuit of speaker terminals.	Press STANDBY/ON  on the front panel, then check the speaker wiring. If "OVERLOAD" does not disappear, unplug the AC power cord, then plug it back again. If speaker wiring is not short-circuited, contact your dealer.
Remote control does not work.	The remote control mode selector is not set correctly.	Set the selector correctly either to "AUDIO/TV/VCR" or to "CATV/DBS."
	There is an obstruction in front of the remote sensor on the receiver.	Remove the obstruction.
	Batteries are weak.	Replace batteries.

Amplifier

Output Power

At Stereo operation:

Front channels: 100 W* per channel, min. RMS, both channels driven into 8 Ω at 1 kHz with no more than 0.9% total harmonic distortion. (IEC268-3/DIN)

At Surround operation:

Front channels: 100 W* per channel, min. RMS, driven into 8 Ω at 1 kHz with no more than 0.8% total harmonic distortion.

Center channel: 100 W*, min. RMS, driven into 8 Ω at 1 kHz, with no more than 0.8% total harmonic distortion.

Rear channels: 100 W* per channel, min. RMS, driven into 8 Ω at 1 kHz, with no more than 0.8% total harmonic distortion.

(* Measured on AC 110 V, 127 V, 220 V and 240 V)

Audio

Audio Input Sensitivity/Impedance (1 kHz):	PHONO (MM):	2.5 mV/47 kΩ
	CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:	200 mV/47 kΩ
Audio Input (DIGITAL IN)*:	Coaxial: DIGITAL 1 (DVD):	0.5 V(p-p)/75 Ω
	Optical: DIGITAL 2 (CD), DIGITAL 3 (TV):	-21 dBm to -15 dBm (660 nm ±30 nm)
	*Corresponding to Linear PCM, Dolby Digital, DTS Digital Surround and MPEG Multichannel (with sampling frequency — 32 kHz, 44.1 kHz, 48 kHz).	
Audio Output Level:	TAPE/MD, VCR:	200 mV
Digital output:	Optical: DIGITAL OUTPUT	
	Signal wave length:	660 nm
	Output level:	-21 dBm to -15 dBm
Signal-to-Noise Ratio (*66 IHF/DIN):	PHONO:	70 dB/66 dB (at REC OUT)
	CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:	87 dB/67 dB
Frequency Response (8 Ω):	PHONO:	20 Hz to 20 kHz (±1 dB)
	CD, TAPE/MD, TV SOUND/DBS, VCR, DVD:	20 Hz to 20 kHz (±1 dB)
RIAA Phono Equalization:	±1.0 dB (20 Hz to 20 kHz)	
Bass boost:	+6 dB ±1.0 dB at 100 Hz (Volume control at -30 dB)	
SEA:	Center frequencies:	100 Hz, 1 kHz, 10 kHz
	Control range:	±10 dB ±2 dB

Video

Video Input Sensitivity/Impedance:		
Composite video:	TV SOUND/DBS, VCR, DVD:	1 V(p-p)/75 Ω
S-video:	TV SOUND/DBS, VCR, DVD: (Y: luminance):	1 V(p-p)/75 Ω
	(C: chrominance, burst):	0.286 V(p-p)/75 Ω
Video Output Level:		
Composite video:	VCR, MONITOR OUT:	1 V(p-p)/75 Ω
S-video:	VCR, MONITOR OUT: (Y: luminance):	1 V(p-p)/75 Ω
	(C: chrominance, burst):	0.286 V(p-p)/75 Ω
Synchronization:	Negative	
Signal-to-Noise Ratio:	45 dB	
On-Screen Color System:	PAL	

FM tuner (IHF)

Tuning Range:	87.50 MHz to 108.00 MHz	
Usable Sensitivity:	Monaural:	12.8 dBf (1.2 μ V/75 Ω)
50 dB Quieting Sensitivity:	Monaural:	21.3 dBf (3.2 μ V/75 Ω)
	Stereo:	41.3 dBf (31.5 μ V/75 Ω)
Signal-to-Noise Ratio (IHF-A weighted):	Monaural:	78 dB at 85 dBf
	Stereo:	73 dB at 85 dBf
Total Harmonic Distortion:	Monaural:	0.4% at 1 kHz
	Stereo:	0.6% at 1 kHz
Stereo Separation at REC OUT:	35 dB at 1 kHz	
Alternate Channel Selectivity:	45 dB: (\pm 400 kHz)	
Frequency Response:	30 Hz to 15 kHz: (+0.5 dB, -3 dB)	

AM tuner

Tuning Range:	531 kHz to 1 602 kHz (at 9 kHz intervals) 530 kHz to 1 600 kHz (at 10 kHz intervals)	
Usable Sensitivity:	Loop antenna	400 μ V/m
Signal-to-Noise Ratio	50 dB (100 mV/m)	

General

Power Requirements:	AC 110 V/127 V/220 V/230 V – 240 V \sim , adjustable with the voltage selector, 50 Hz/60 Hz	
Power Consumption:	200 W(at operation) 5 W (in standby mode)	
Dimensions (W x H x D):	435 mm x 157 mm x 412.5 mm	
Mass:	11.3kg	

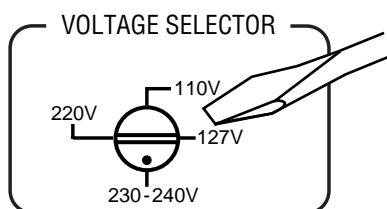
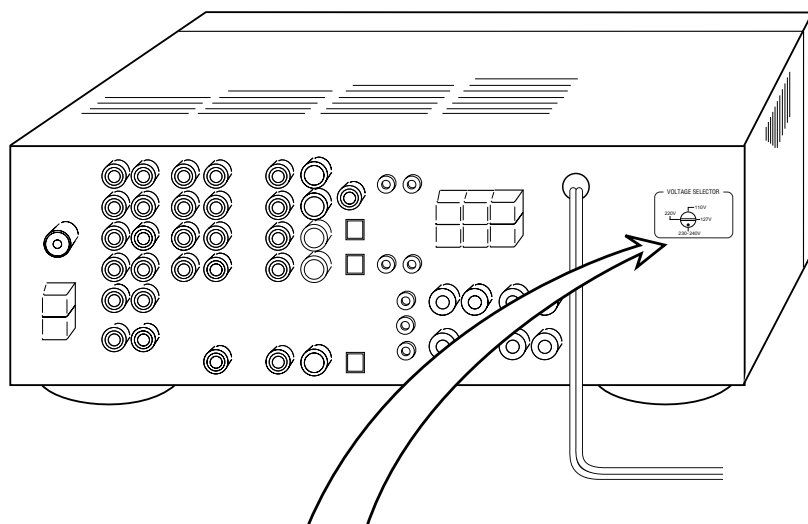
Designs & specifications are subject to change without notice.

Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia and U.K.)

Instrucción sobre la línea de la red (CA) (no aplicable para Europa, EE.UU., Canadá, Australia, ni el Reino Unido)

Instrução sobre a tensão da rede eléctrica (CA) (não aplicável para a Europa, os E.U.A., o Canadá, a Austrália e o Reino Unido)

主 (AC) 电源线路说明 (不适用于欧洲、美国、加拿大、澳洲及英国型号)



CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

PRECAUCIÓN para la línea de la red (CA)

ANTES DE ENCHUFAR EL EQUIPO, compruebe si la tensión de la línea de la red (CA) corresponde con la posición del selector de tensión situado en la parte exterior del equipo, y si es diferente, reajuste el selector de tensión para evitar el riesgo de incendios/ descargas eléctricas.

PRECAUÇÃO para a ligação à tensão da rede (CA)

ANTES DE LIGAR O APARELHO A UMA TOMADA DA REDE, verifique se a tensão da rede CA corresponde à posição do selector de voltagem localizado na parte externa deste equipamento. Caso não corresponda, reajuste o selector de voltagem a fim de evitar avarias ou riscos de incêndio e choque eléctrico.

有关主(AC)电源线路的注意事项

接插电源以前, 务请检查当地的主 (AC) 电源线路电压是否和位于本机外面的电压选择开关设定的位置一致。如果不一致, 即重新设定电压选择开关使符合当地电压, 以免损坏机器或引起火灾/触电的危险。

JVC
VICTOR COMPANY OF JAPAN, LIMITED