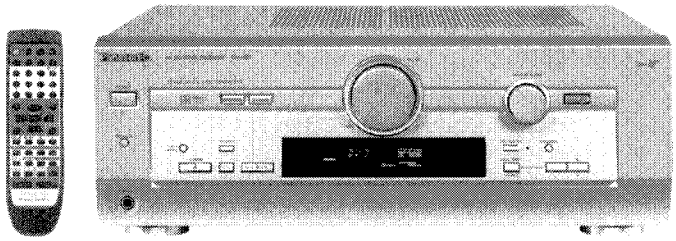
Order No. MD0104064C1
A2

Service Manual

AV Control Stereo Receiver

*DOLBY DIGITAL



SA-HE7

Colour

(S) ... Silver Type

PP ... U.S.A. and Canada

n FM Tuner Section

Frequency range	87.9-107.9 MHz
Sensitivity	11.2 dBf (2 µV, IHF'58)
50 dB quieting sensitivity	
MONO	18.3 dBf (4.5 µV, IHF'58)
STEREO	38.3 dBf (45 µV, IHF'58)
Total harmonic distortion	
MONO	0.2%
STEREO	0.3%
S/N	
MONO	73 dB
STEREO	67 dB
Frequency response	20 Hz-15 kHz, +1 dB, -2 dB
Alternate channel selectivity	65 dB
Capture ratio	1.5 dB
Image rejection at 98 MHz	40 dB
Spurious response rejection at 98 MHz	75 dB
AM suppression	50 dB
Stereo separation	
1 kHz	40 dB
10 kHz	30 dB
Antenna terminal	75 Ω (unbalanced)

n AM Tuner Section

Frequency range	530-1710 kHz
Sensitivity	20 µV, 330 µV/m
Selectivity	55 dB
IF rejection (at 1000 kHz)	50 dB

n Video Section

Output voltage at 1 V input (unbalanced)	1±0.1 Vp-p
Maximum input voltage	1.5 Vp-p
Input/output impedance	75 Ω

n Amplifier Section

Rated minimum sine wave RMS power output	
40 Hz-20 kHz both channels driven	
0.9% total harmonic distortion	100 W per channel (6Ω)
1 kHz continuous power output both channels driven	
0.05% total harmonic distortion	105 W per channel (6Ω)
Total harmonic distortion	
rated power at 40 Hz-20 kHz	0.9% (6Ω)
half power at 1 kHz	0.07% (6Ω)
Power output at 1 kHz each channel driven	
0.9% total harmonic distortion	
Front	2 x 100 W (6Ω)
Center	100 W (6Ω)
Surround	2 x 100 W (6Ω)
Low frequency damping factor	30 (6Ω)
Load impedance	
Front	6-8Ω
Center	6-8Ω
Surround	6-8Ω
Dynamic headroom	2 dB (6Ω)
Frequency response	
CD, TAPE, DVD, TV, VCR	10 Hz-70 kHz, ±3 dB
Input sensitivity	

Panasonic®

CD, TAPE, DVD, TV, VCR	27 mV (200 mV, IHF'66)
S/N (IHF A)	
CD, TAPE, DVD, TV, VCR	75 dB
Input impedance	
CD, TAPE, DVD, TV, VCR	22 kΩ
Tone controls	
BASS	50 Hz, +10 to -10 dB
TREBLE	20 kHz, +10 to -10 dB
Subwoofer frequency response (-6 dB)	7-200 Hz
Digital input	
Optical	2
Coaxicial	1

n General

Power supply	AC 120 V, 60 Hz
Power consumption	410 VA, 320 W
Dimensions (W x H x D)	430 x 158 x 367 mm (16-15/16" x 6-7/32" x 14-15/32")
Mass	9.1 kg (20.1 lb.)
Power consumption in standby mode:	1 W

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater System. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Syatem.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

1 Safety Precaution

(This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

· Insulation Resistance Test

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screw heads, antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts*. (Fig 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig 2)

   *Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

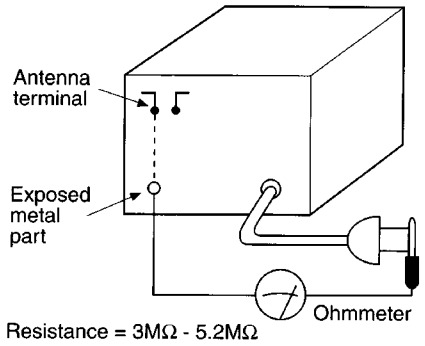


Fig. 1

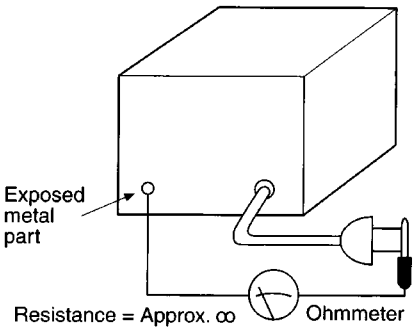


Fig. 2

2 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C1702 through a 10 Ω, 5 W resistor to ground. DO NOT SHORT-CIRCUIT DIRECTLY (with a screw driver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid over current.

Current consumption at AC 120 V, 60 Hz in NO SIGNAL mode should be 400~1200 mA.

3 Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

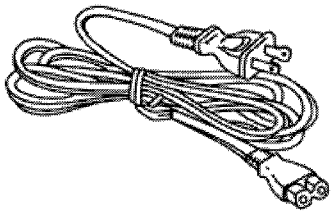
If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

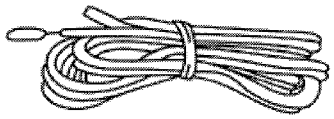
Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

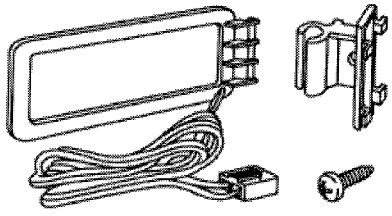
4 Accessories



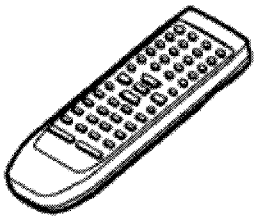
AC power supply cord... 1 pc.



FM Indoor Antenna... 1 pc.



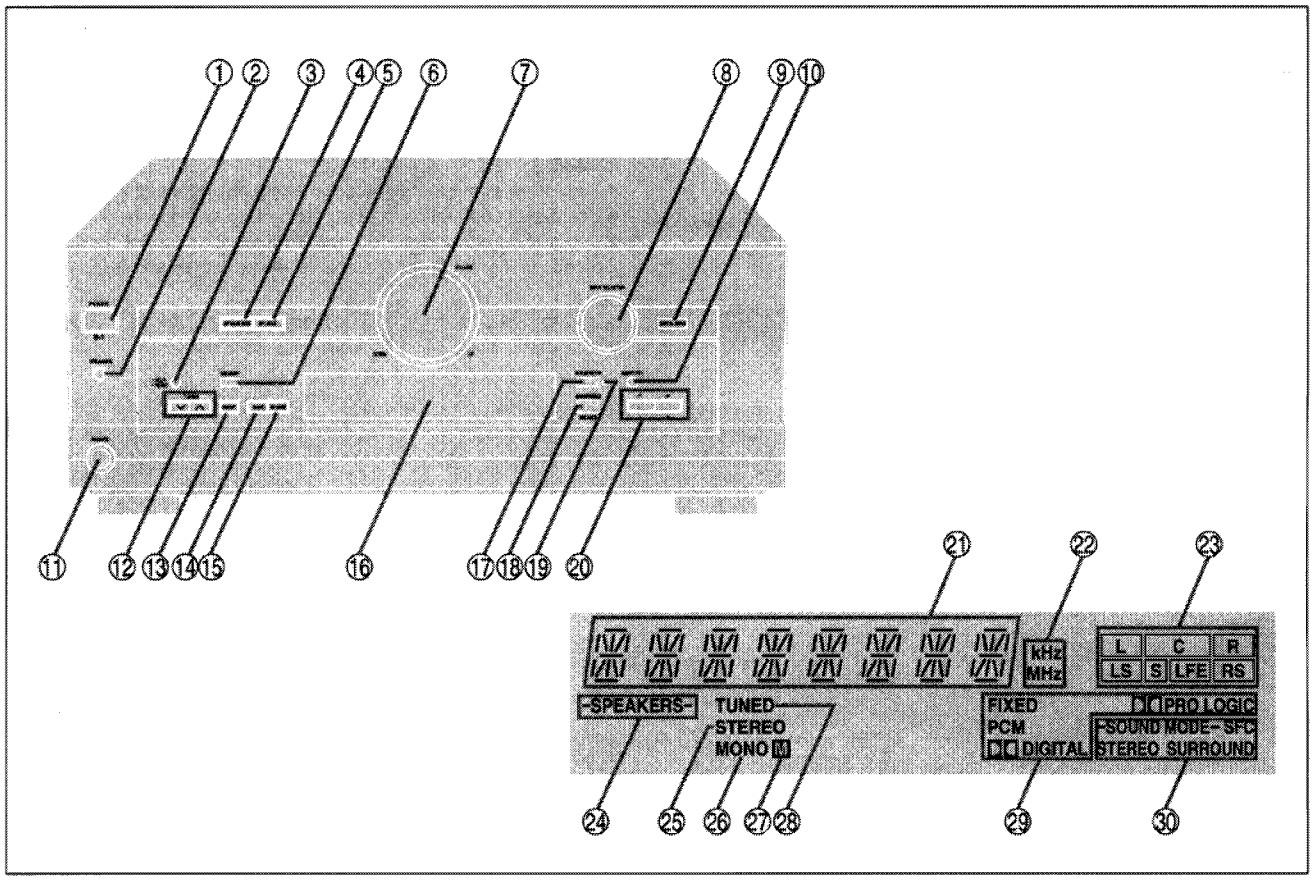
AM Loop Antenna Set
... 1 set.



Remote Control
Transmitter... 1 pc.

5 Front Panel Controls

5.1. Front Panel



Main unit

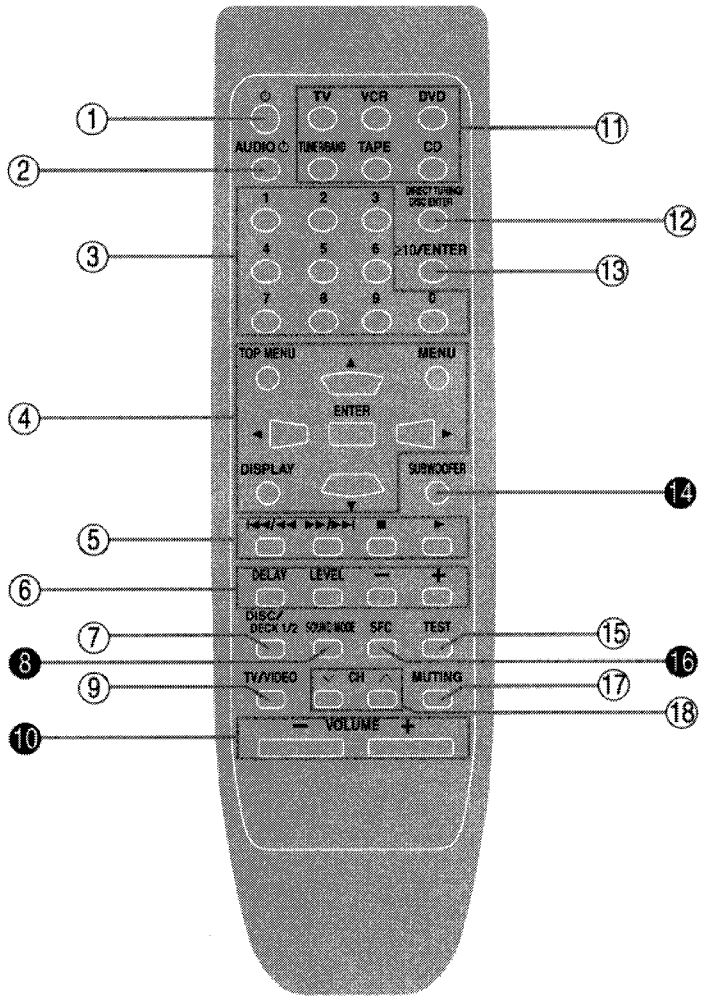
① **Standby/on button [POWER, ⏻/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
② **Speaker on/off button [SPEAKERS]**
③ **Help/reset button [-HELP, –RESET]**
④ **DSP sound mode select button [DSP SOUND MODE]**
⑤ **SFC mode select button [SFC MODE]**
⑥ **Memory button [MEMORY]**
⑦ **Volume control [VOLUME]**
⑧ **Input selector [INPUT SELECTOR]**
⑨ **Digital input select button/indicator [DIGITAL INPUT]**
⑩ **Subwoofer level button [SUBWOOFER]**
⑪ **Headphone jack [PHONES]**
⑫ **Tuning buttons [TUNING, ∨, ∧]**
⑬ **Preset channel button [PRESET]**
⑭ **Band select button [BAND]**
⑮ **FM mode select button [FM MODE]**
⑯ **Display section**
⑰ **Tape monitor button [TAPE MONITOR]**
⑱ **Tone and balance select button [BASS/TREBLE, BALANCE]**
⑲ **Tape monitor indicator**
⑳ **Tone and balance adjust buttons [–, +, L, R]**

Display section

㉑ **Display**
㉒ **Frequency unit indicators [kHz, MHz]**
㉓ **Program format indicators [L, C, R, LS, S, LFE, RS]**
㉔ **Front speaker indicator [-SPEAKERS-]**
㉕ **Stereo indicator [STEREO]**
㉖ **Monaural indicator [MONO]**
㉗ **Memory indicator [M]**
㉘ **Tuned indicator [TUNED]**
㉙ **Signal format indicators [FIXED, PCM, DIGITAL, PRO LOGIC]**
㉚ **DSP sound mode indicators [-SOUND MODE-, SFC, STEREO, SURROUND]**

5.2. Remote Control

Buttons ❽, ❿, ⓭, and ⓲ function in the same way as the controls on the main unit.



① [⏻]
for turning the equipment on and off
..... RCVR, DVD/CD, TV, VCR, TAPE

② [AUDIO ⏻]
for turning audio equipment and DVD player off
..... RCVR

③ [1, 2, 3, 4, 5, 6, 7, 8, 9, 0]
for selecting numbers
..... RCVR, DVD/CD, TV, VCR

④ [TOP MENU, MENU, DISPLAY, ENTER, ▲, ▼, ◀, ▶]
for operating a DVD player..... DVD/CD

⑤ [⏮/◀◀, ▶▶/⏭, ■, ▶]
for controlling disc and tape play
..... DVD/CD, VCR, TAPE

⑥ [DELAY, LEVEL, –, +]
for adjusting speaker delay time and output level ... RCVR

⑦ [DISC/DECK 1/2]
for selecting deck 1 or 2 and disc number
..... DVD/CD, TAPE

❽ [SOUND MODE]
for selecting the DSP sound mode ..... RCVR

⑨ [TV/VIDEO]
for selecting the television's input mode ..... TV

❿ [– VOLUME +]
for adjusting the volume ..... RCVR

⓫ [TV, VCR, DVD, TUNER/BAND, TAPE, CD]
for selecting input source and switching the remote control mode..... RCVR, DVD/CD, TV, VCR, TAPE

⓬ [DIRECT TUNING/DISC ENTER]
for selecting radio stations by frequency and confirming disc selection ..... RCVR, DVD/CD

⓭ [≥10/ENTER] (EUR7702KD0 for SA-HE9)
[≥10] (EUR7702100 for SA-HE7)
for entering two digit numbers and confirming channel selection on some equipment
..... RCVR, DVD/CD, TV, VCR

⓮ [SUBWOOFER]
for adjusting subwoofer output level..... RCVR

⓯ [TEST]
for starting the speaker test signal ..... RCVR

⓰ [SFC]
for selecting SFC mode..... RCVR

⓱ [MUTING]
for muting the volume ..... RCVR

⓲ [∨ CH ∧]
for changing channels sequentially
..... RCVR, TV, VCR

6 Disassembly and Main Component Replacement Procedures

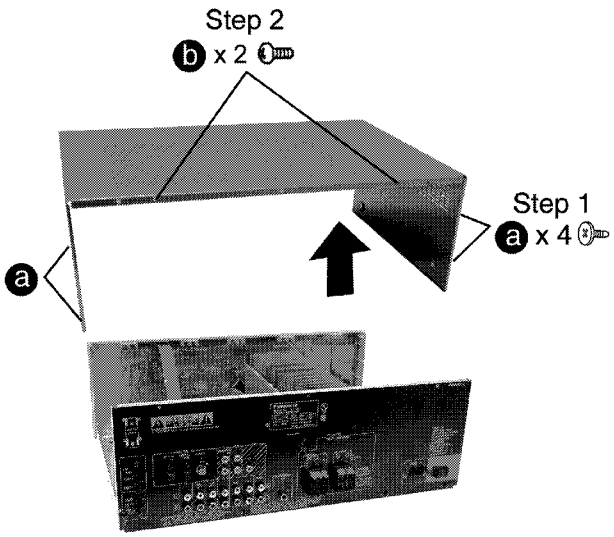
"ATTENTION SERVICER"

Some chassis components maybe have sharp edges. Be careful when diassembling and servicing.

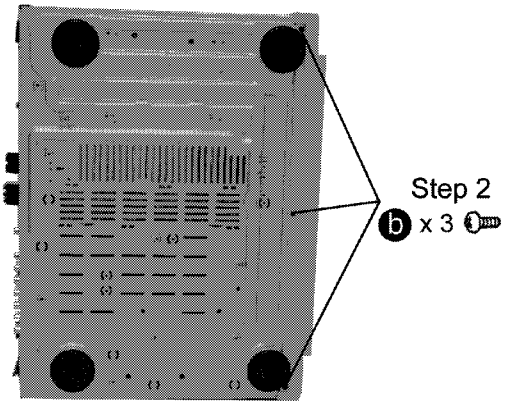
1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures.
   Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.

Content

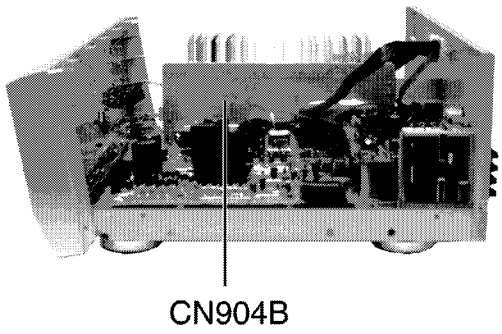
6.1. Disassembly Procedure for each major P.C.B.



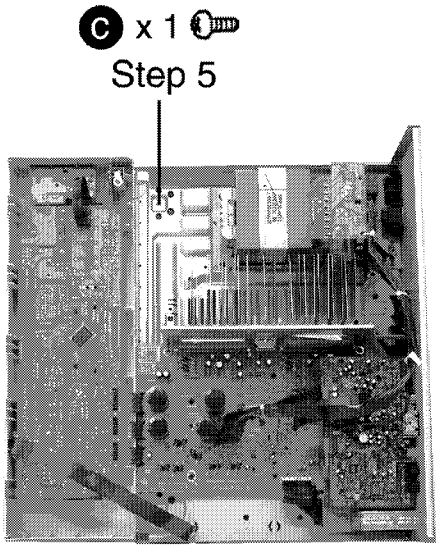
Step 1 & 2 Unscrew and remove top cabinet as shown.



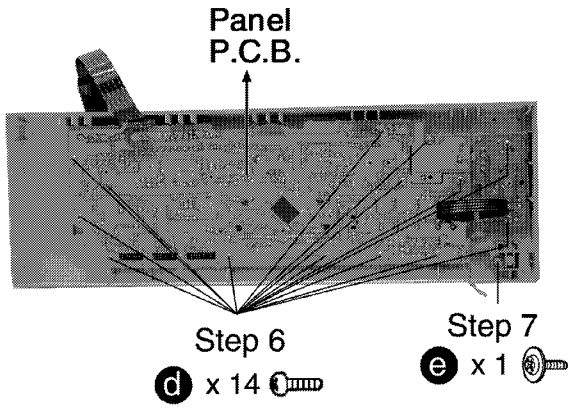
Step 3 Remove all the screws.



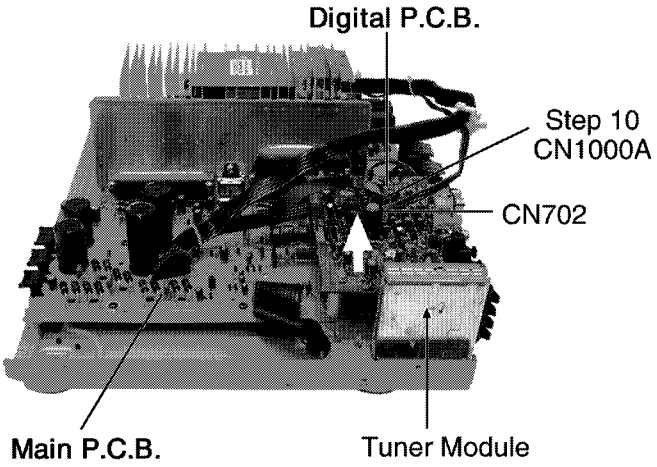
Step 4 Release the connector CN904B.



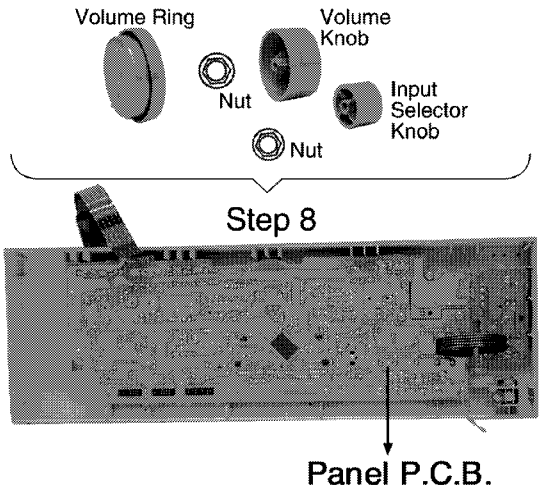
Step 5 Remove the screw.



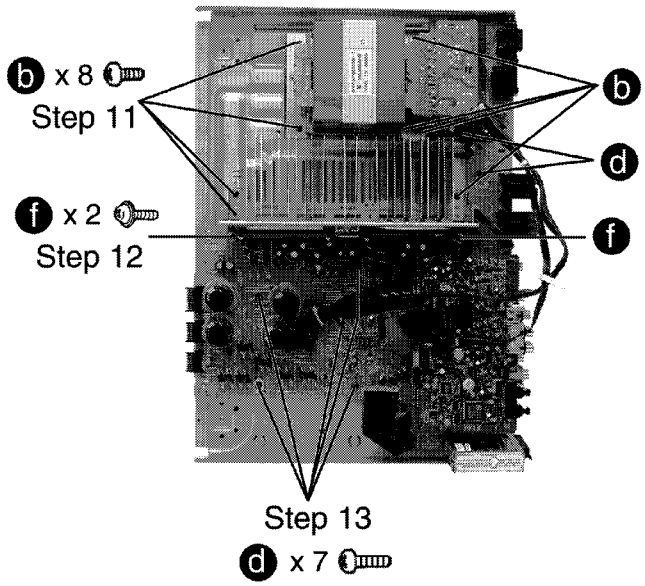
Step 6 & 7 Remove all the screws.



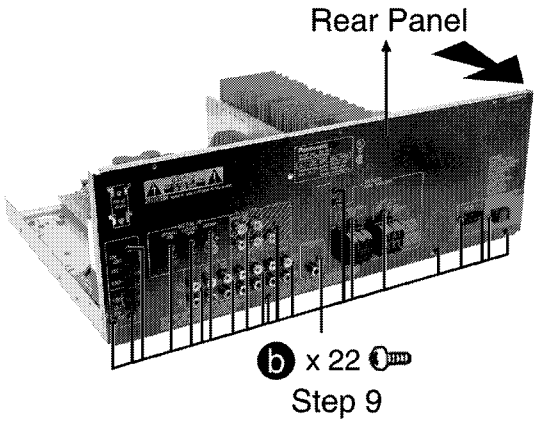
Step 10 Release the connectors CN702 and CN1000A. Pull up the Digital P.C.B. as shown.



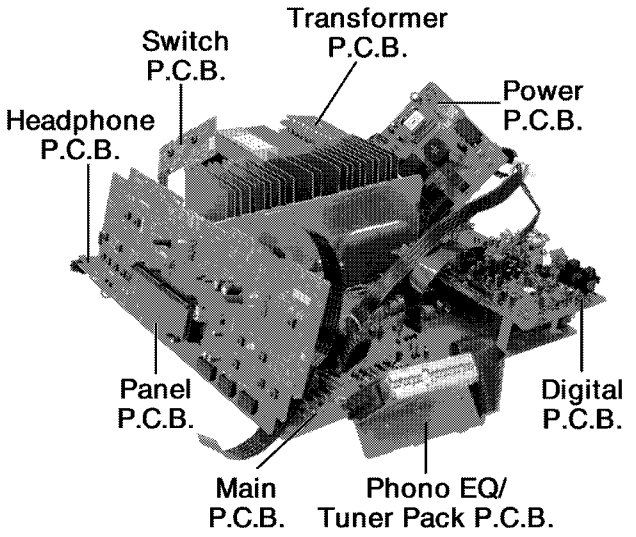
Step 8 Remove the Selector knob and Volume knob, Unscrew the nut and remove the Volume ring.



Step 11, 12 & 13 Remove all the screws.



Step 9 Remove all the screws.



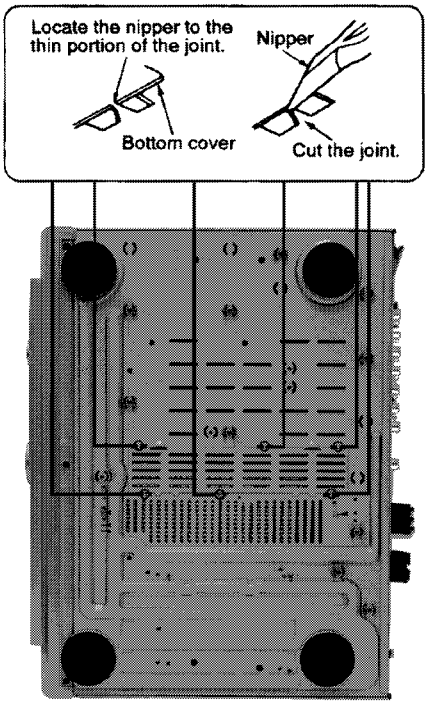
Reconnect all wires and connectors to test all P.C.B..

6.2. Main Component Replacement Procedures

6.2.1. Replacement of the Power IC and Regulator Transistor

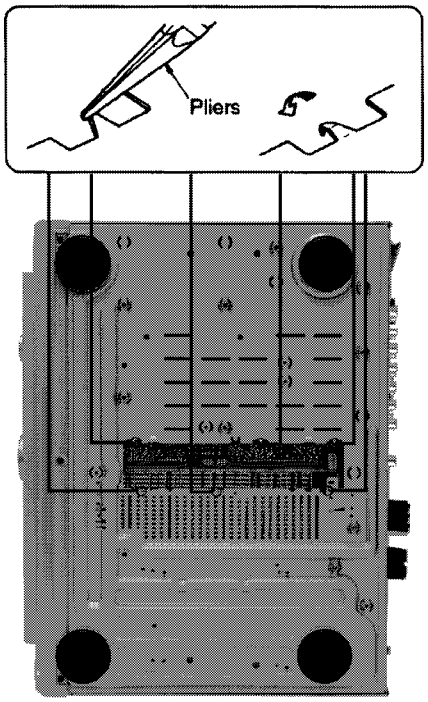
Step 1 Remove the top cabinet.

Step 2



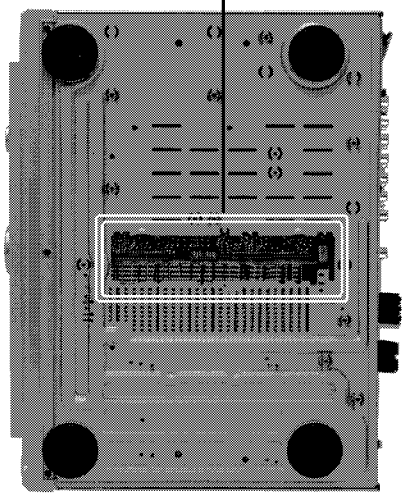
Step 2 Cut the joints as shown below. (6 joints)

Step 3



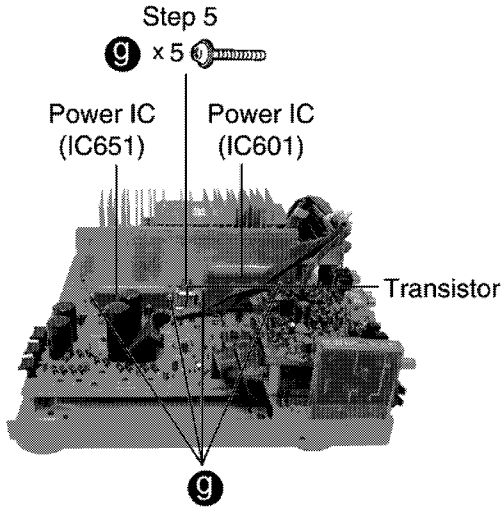
Step 3 Fold the joints. (6 joints)

Step 4



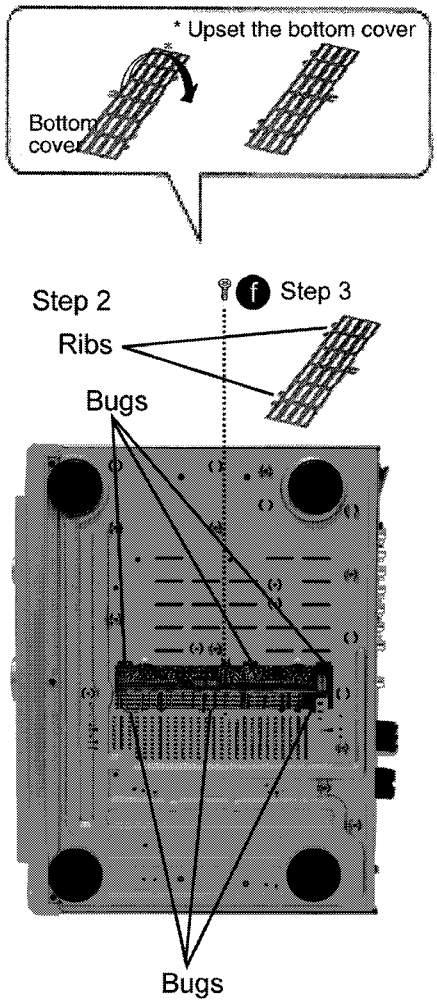
Step 4 Desolder the terminals of Power IC and Regulator Transistor.

Step 5



Step 5 Remove all the screws.

6.2.2. Installation of the bottom cover after replacement

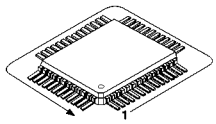
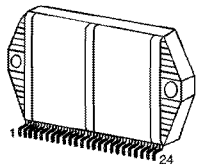
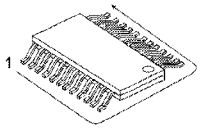
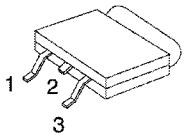
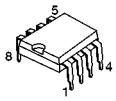
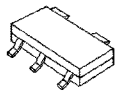
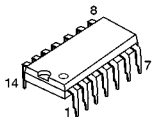
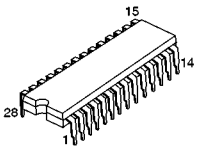
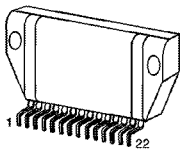
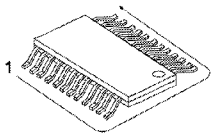
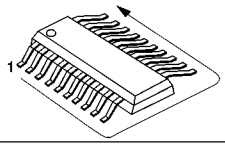
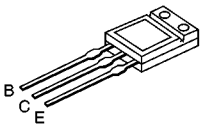
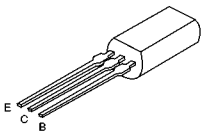
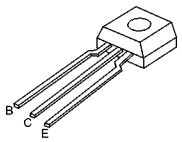
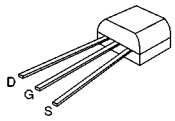
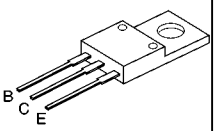
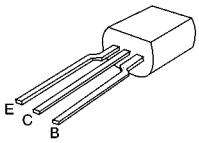
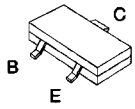
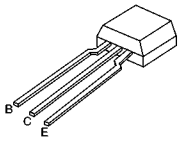
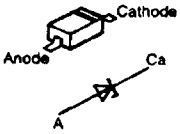
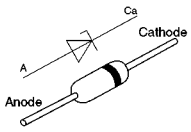
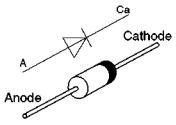
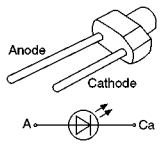


Step 1 Upset the bottom cover.

Step 2 Align the ribs of bottom cover into the bugs.

Step 3 Prepare the screws to fix the bottom cover.

7 Type Illustrations of ICs, Transistors & Diodes

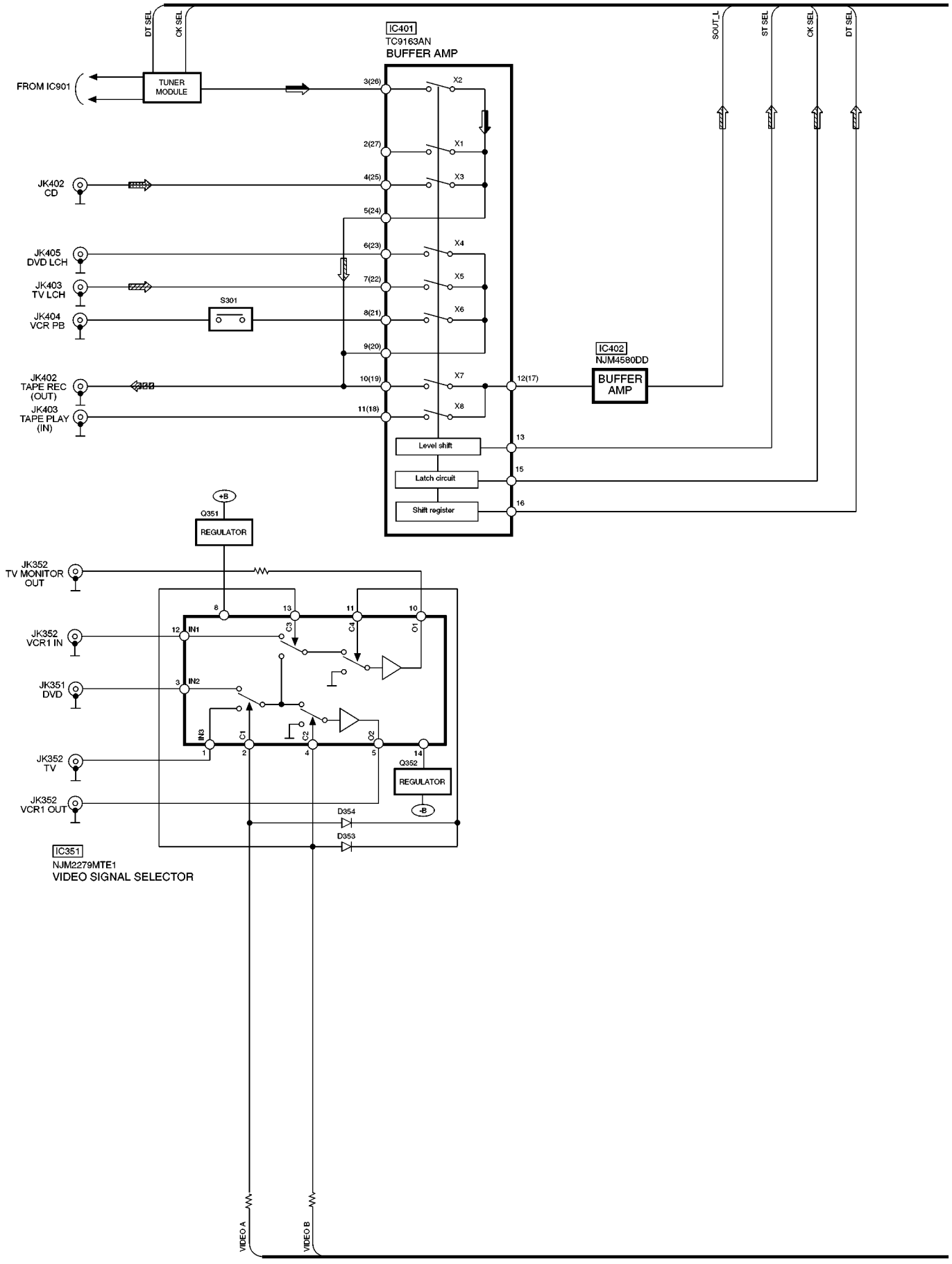
C2BBGF000262 (80p) CS49326-CLR (44p) CS4226-KQG (44p) 	RSN310R36A-P 	NJM2279MTE1 (14p) 	BA25BC0FP 	NJM2115MTE1 NJM4580DD NJM4580MTE1 	SNAHC1U04DBV 
NJM2060MTE1 	TC9163AN 	RSN313H25-P 	TC9482F (28p) TC9214AF (16p) 	SN74LV244APW (20p) SN7AHCT244PW (20p) SN74HCU04APW (14p) 	2SD2137PQTA 
2SA1534AQRTA 2SC3940AQSTA 	2SD1915FTA 	2SK2880CTA 	2SB1548PQAU 2SD2374PQAU 	2SB621AQSTA 2SD592AQSTA 	DTA114YETL 
2SA933SQRSTA 2SC1740SSTA 2SC1740SQSTA RVTDTA114EST RVTDTC114YST RVTDTA143XST RVTDTC143ZST RVTDTC114EST		1SS355TE17 UDZSTE176R2B UDZSTE175R6B 	MTZJ16CTA MTZJ33DTA MTZJ3R9ATA MTZJ5R6BTA MTZJ6R2BTA MTZJ6R8BTA MTZJ7R5CTA MTZJ15CTA	1SS291TA RVD1SS133TA 1SR35400V	
1N5402BM21 RK306LFU1 	SLR325MCT31 SLR325YCT31 				

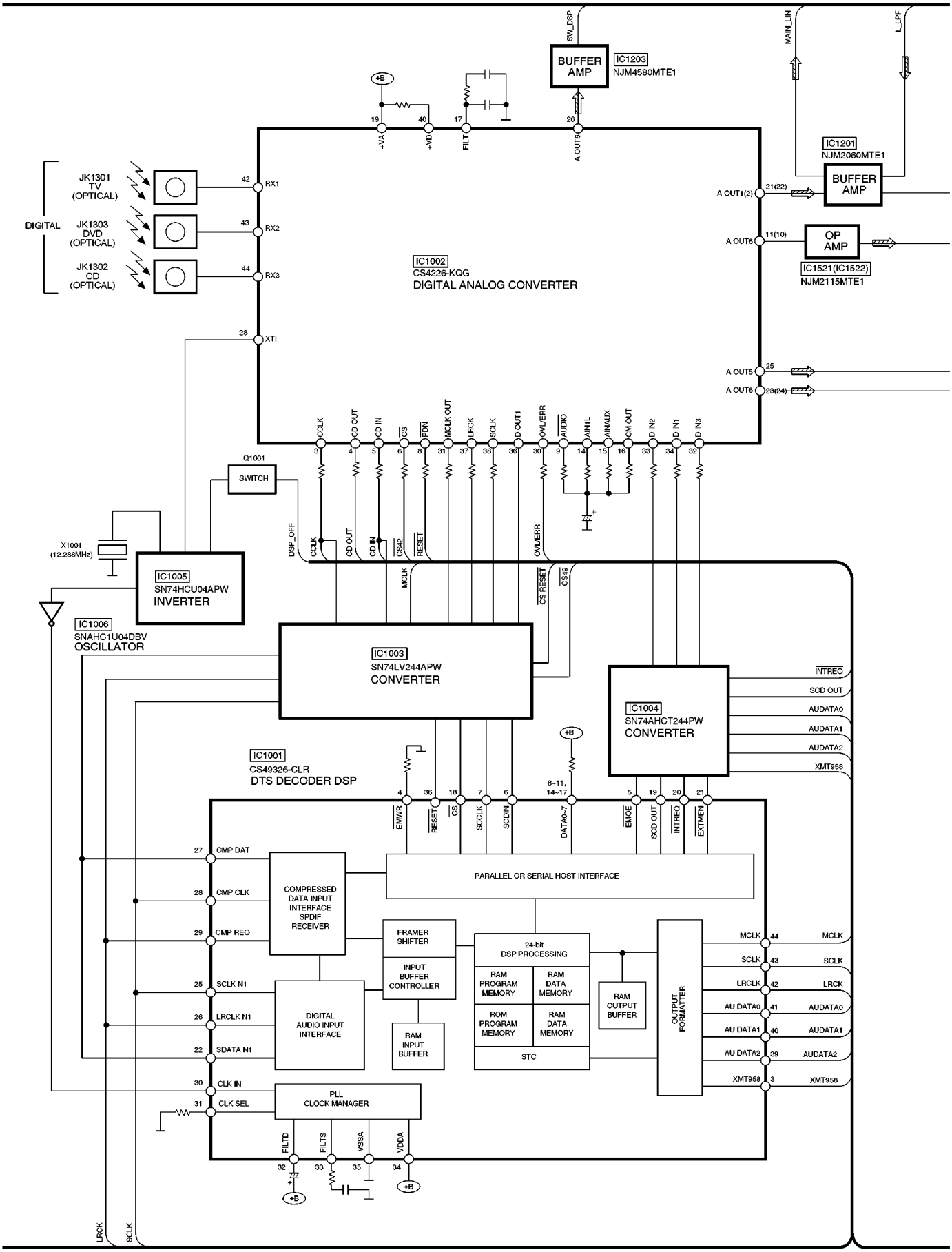
8 Terminal Functions of ICs

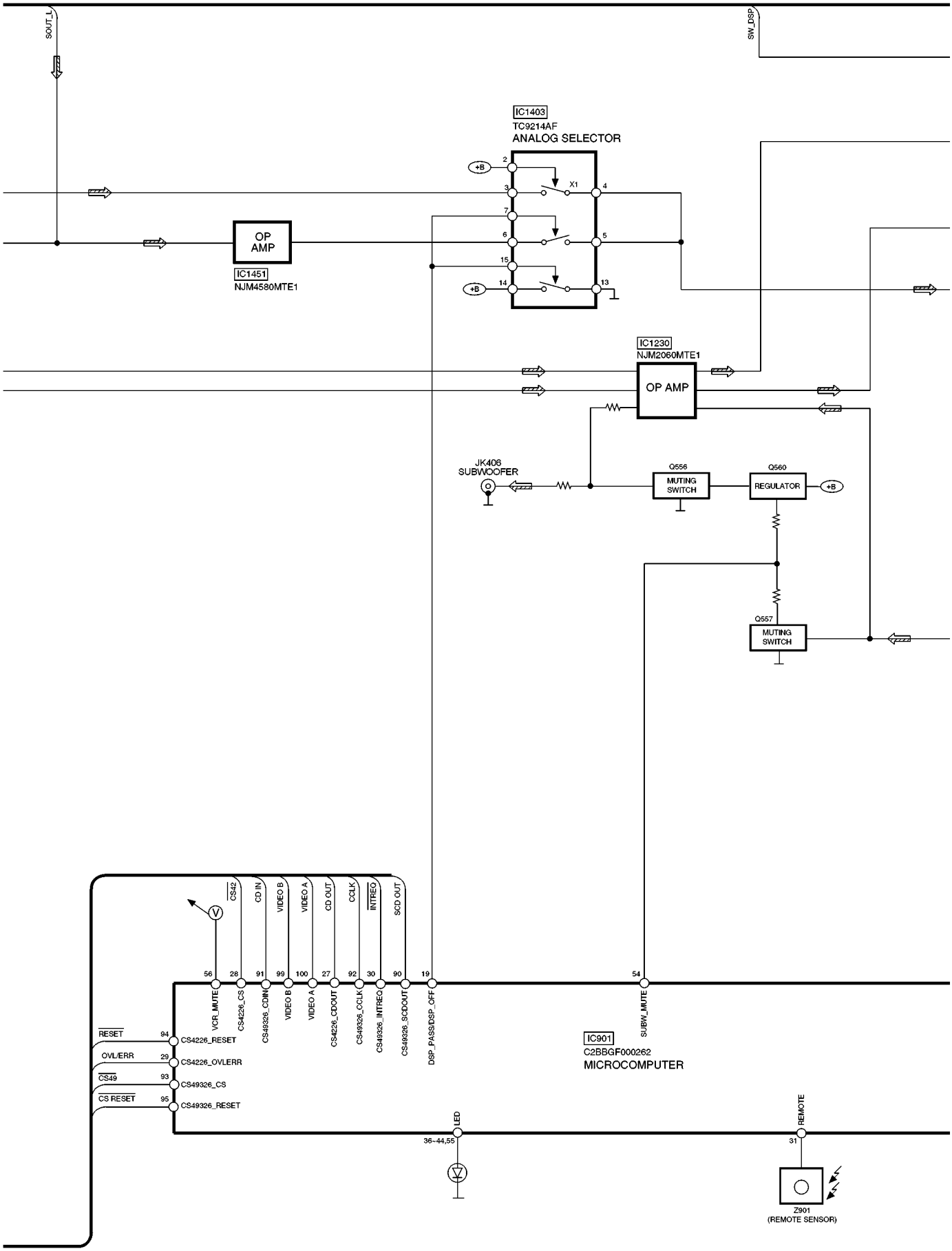
· **IC901 (C2BBGF000262) MICRO COMPUTER**

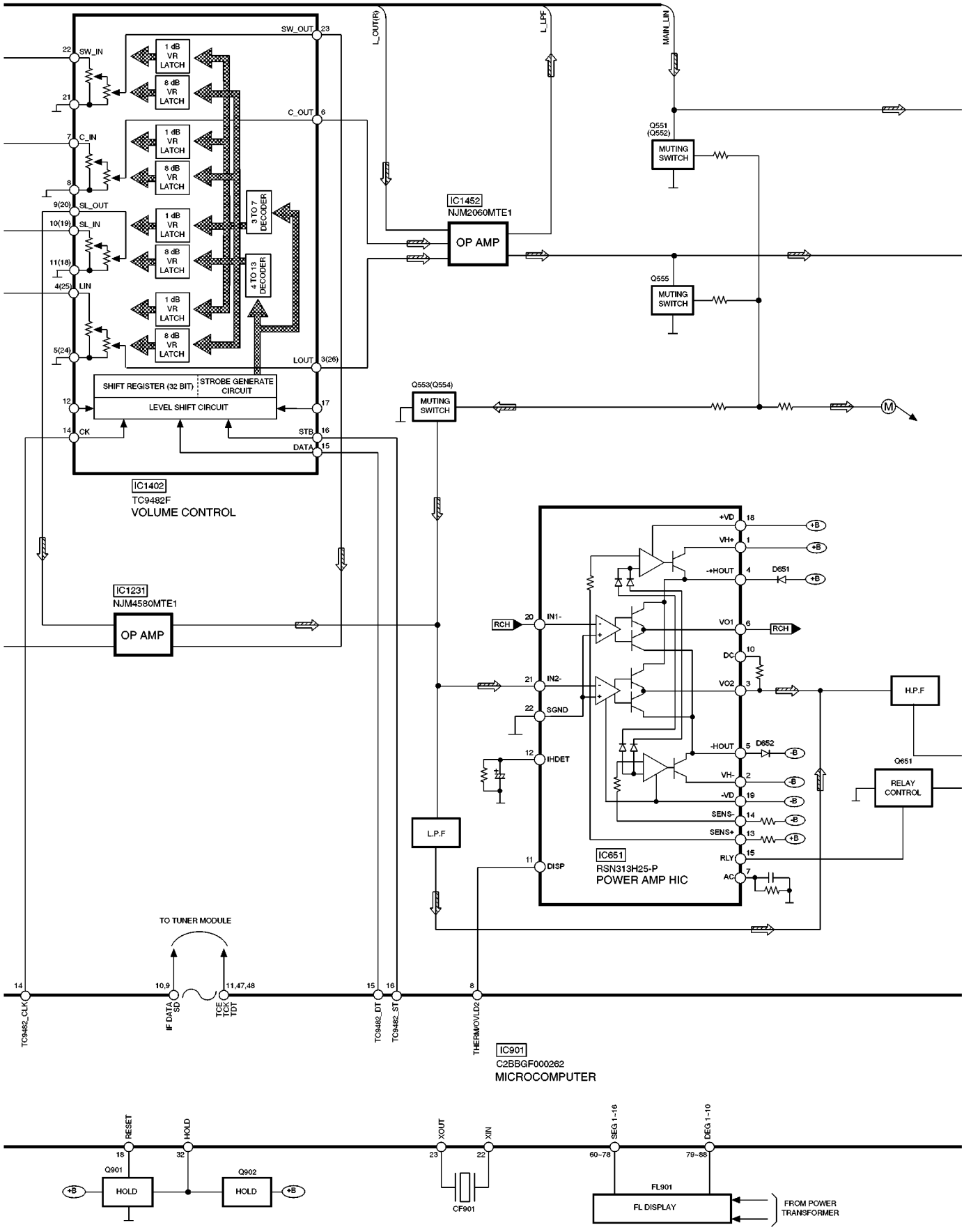
Pin No.	Mark	I/O	Function
1~2	KEY1~KEY2	I	Key Input 1~2
3	RDS_CLK	-	RDS Data IC CLOCK
4	RDS_DO	-	RDS Data IC - DATA OUT
5	RDS_DI	-	RDS Data IC - DATA IN
6	RDS_CE	-	Control of RDS IC(Not used, open)
7	THRM/OVLD1	I	Thermal/Over load input 1
8	THRM/OVLD2	I	Thermal/Over load input 2
9	SD	I	SD signal detect input
10	IF DATA	I	IF DATA input
11	TNR_CE	O	Tuner control (CE) chip enable signal
12	SFC_ENCD_1	I	SFC mode encoder input 1
13	SFC_ENCD_2	I	SFC mode encoder input 2
14	TC9482_CLK	O	Volume control - CLK
15	TC9482_DT	O	Volume control - DT
16	TC9482_ST	O	Volume control - ST
17	CNVSS	-	-
18	RESET	-	Reset detect terminal
19	DSP_PASS /DSP_OFF	O	DSP signal selector
20	MOS_FET_LED	O	MOS FET LED
21	VSS	I	Ground
22	XIN	I	Crystal oscillator terminal (4 MHz)
23	XOUT	O	Crystal oscillator terminal (4 MHz)
24	VCC	I	Power supply terminal
25	VOL_ENCD_1	O	Volume encoder input 1
26	VOL_ENCD_2	O	Volume encoder input 2
27	CS4226_CDOUT	I	CS4226 serial data input
28	CS4226_CS	I	CS4226 chip selector
29	CS4226_ OVLERR	I	CS4226 overload error input
30	CS49326_ INTREQ	I	CS49326 input request
31	REMOTE	I	Remote control terminal
32	HOLD	I	Blackout detection terminal
33	FRONT_VCR2	I	Encoder of surround mode selector input1
34	SEL_ENCD_1	I	Selector encoder for input 1
35	SEL_ENCD_2	I	Selector encoder for input 2
36	TAPE_LED	O	Tape Selector LED
37	VCR_LED	O	VCR Selector LED
38	TV_LED	O	TV Selector LED
39	DVD_LED	O	DVD Selector LED
40	CD_LED	O	CD Selector LED
41	TUNER_LED	O	TUNER Selector LED
42	PHONO_LED	O	PHONO Selector LED
43	DIGITAL_LED	O	DIGITAL INPUT LED
44	DVD_6CH_LED	O	DVD 6CH LED
45	LIMITTER	O	Power limitter control output
46	TC916x_STB	O	Selector/Tuner (CK) clock signal
47	TC916x_ TNR_CK	O	Selector/Tuner/DVD 6CH SW-CK
48	TC916x_ TNR_DT	O	Selector/Tuner/DVD 6CH SW-DT
49	S/C SP	O	Surround/Center speaker control output
50	SP B	O	Speaker B control output
51	SP A	O	Speaker A control output
52	RELAY	O	Relay control output
53	AF_MUTE	O	Muting control output
54	SUBW_MUTE	O	Subwoofer muting
55	WAKE_LED	-	Wake up timer LED (Not used, open)
56	VCR_MUTE	O	VCR RECORD MUTE
57~59	NOT USED	-	NOT USED
60~78	SEG19~ SEG1	O	FL segment signal output
79~88	DEG1~ DEG10	O	FL digit signal output
89	VEE	-	Power supply for FL driver
90	CS49326_ SCDOUT	O	CS49326 serial data power output
91	CS49326_CDIN	I	CS49326 serial data power input
92	CS49326_CCLK	I	CS49326 serial clock
93	CS49326_CS	I	CS49326 chip selector
94	CS4226_RESET	I	CS4226 reset
95	CS49326_ RESET	I	CS49326 reset
96	INIT_IN	I	Diode input intial settings
97	AVSS	-	Ground
98	VREF	-	Reference voltage
99	VIDEO_B	O	Video selector control output B
100	VIDEO_A	O	Video selector control output A

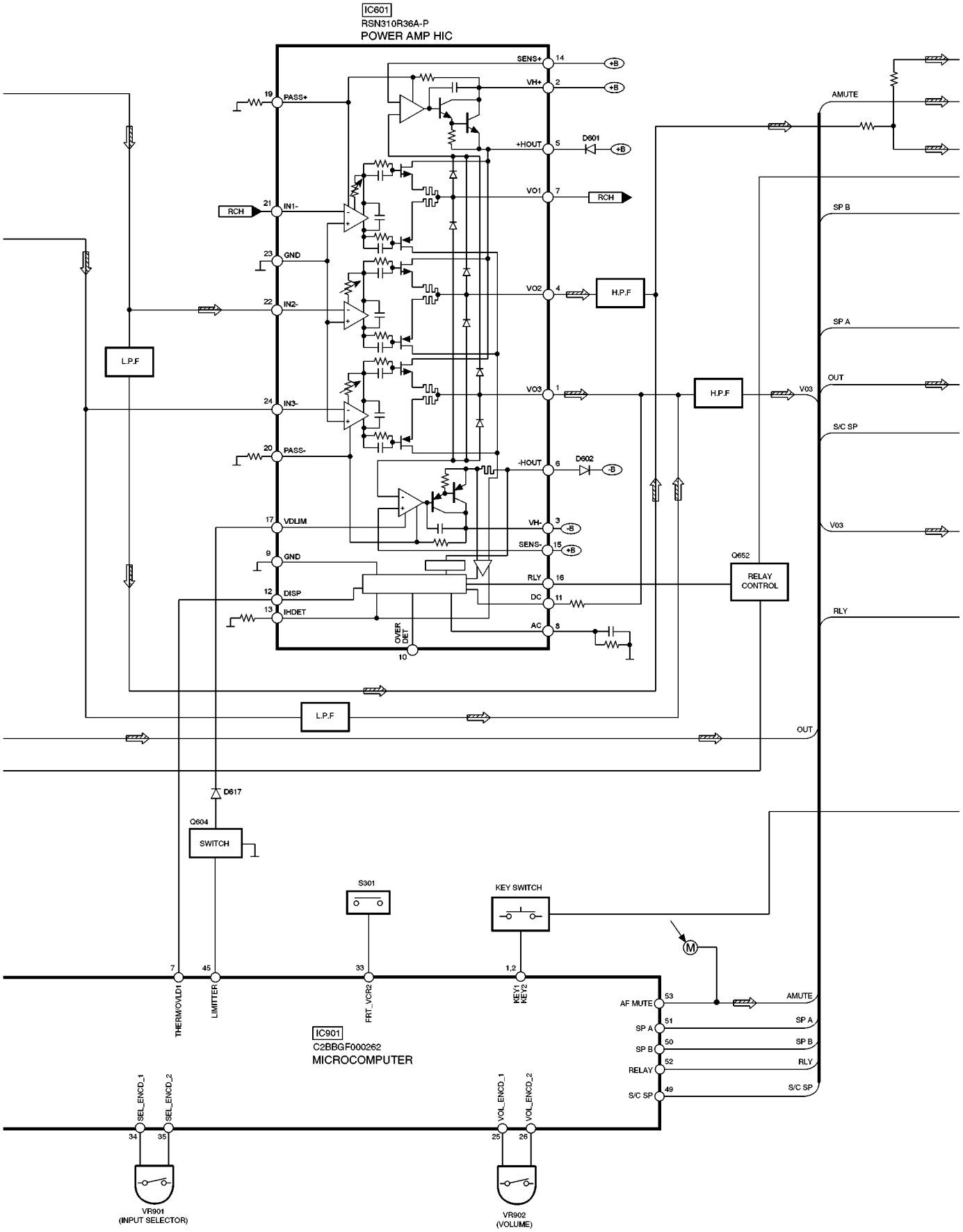
9 Block Diagram

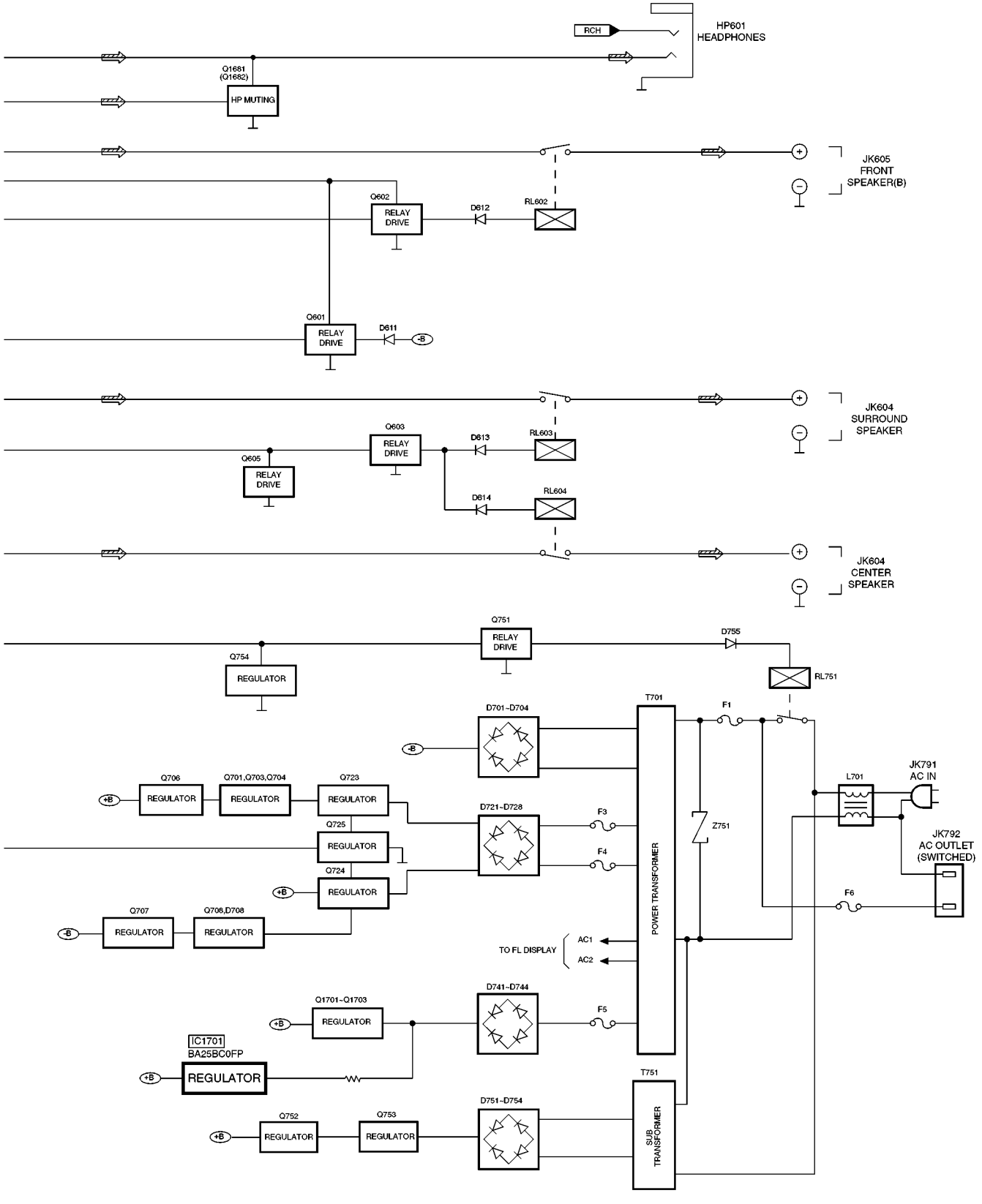



SW_DSP
BUFFER AMP
IC1203
NJM4580MTE1
+B
+VA
+VD
FILT
A OUT6
MAIN_LIN
L_LPF
IC1201
NJM2060MTE1
BUFFER AMP
A OUT1(2)
21(22)
A OUT6
11(10)
OP AMP
IC1521(IC1522)
NJM2115MTE1
DIGITAL
JK1301 TV (OPTICAL)
JK1303 DVD (OPTICAL)
JK1302 CD (OPTICAL)
RX1
RX2
RX3
IC1002
CS4226-KQG
DIGITAL ANALOG CONVERTER
XTI
A OUT5
A OUT6
25
23(24)
CCLK
CD OUT
CD IN
CS
PDN
MCLK OUT
LRCK
SCLK
D OUT1
OVL/ERR
AUDIO
AIN1L
AINAUX
CM OUT
D IN2
D IN1
D IN3
Q1001
SWITCH
X1001
(12.288MHz)
IC1005
SN74HCU04APW
INVERTER
DSP_OFF
CS42
RESET
MCLK
CS RESET
CS49
IC1006
SNAHC1U04DBV
OSCILLATOR
IC1003
SN74LV244APW
CONVERTER
IC1004
SN74AHCT244PW
CONVERTER
INTREQ
SCD OUT
AUDATA0
AUDATA1
AUDATA2
XMT958
IC1001
CS49326-CLR
DTS DECODER DSP
EMWR
RESET
CS
SCCLK
SCDIN
DATA0-7
EMOE
SCD OUT
INTREQ
EXTMEN
CMP DAT
CMP CLK
CMP REQ
SCLK IN1
LRCLK IN1
SDATA IN1
CLK IN
CLK SEL
COMPRESSED DATA INPUT INTERFACE SPDIF RECEIVER
PARALLEL OR SERIAL HOST INTERFACE
FRAMER SHIFTER
INPUT BUFFER CONTROLLER
DIGITAL AUDIO INPUT INTERFACE
RAM INPUT BUFFER
24-bit DSP PROCESSING
RAM PROGRAM MEMORY
RAM DATA MEMORY
ROM PROGRAM MEMORY
RAM DATA MEMORY
STC
RAM OUTPUT BUFFER
OUTPUT FORMATTER
PLL CLOCK MANAGER
FILTD
FILTS
VSSA
VDDA
MCLK
SCLK
LRCK
AU DATA0
AU DATA1
AU DATA2
XMT958
LRCK
SCLK


SOUT_L
SW_DSP
IC1403
TC9214AF
ANALOG SELECTOR
+B
X1
OP AMP
IC1451
NJM4580MTE1
IC1230
NJM2060MTE1
OP AMP
JK406
SUBWOOFER
Q556
MUTING SWITCH
Q560
REGULATOR
+B
Q557
MUTING SWITCH
CS42
CD IN
VIDEO B
VIDEO A
CD OUT
CCLK
INTREQ
SCD OUT
56
28
91
99
100
27
92
30
90
19
54
VCR_MUTE
CS4226_CS
CS49326_CDIN
VIDEO B
VIDEO A
CS4226_CDOUT
CS49326_CCLK
CS49326_INTREQ
CS49326_SCDOUT
DSP_PASS/DSP_OFF
SUBW_MUTE
RESET
94
CS4226_RESET
OVL/ERR
29
CS4226_OVLERR
CS49
93
CS49326_CS
CS RESET
95
CS49326_RESET
IC901
C2BBGF000262
MICROCOMPUTER
LED
36~44,55
REMOTE
31
Z901
(REMOTE SENSOR)


SW_OUT
SW_IN
C_OUT
C_IN
SL_OUT
SL_IN
LIN
LOUT
1 dB VR LATCH
8 dB VR LATCH
3 TO 7 DECODER
4 TO 13 DECODER
SHIFT REGISTER (32 BIT)
STROBE GENERATE CIRCUIT
LEVEL SHIFT CIRCUIT
CK
STB
DATA
IC1402
TC9482F
VOLUME CONTROL
L_OUT(R)
L_LPF
MAIN_LIN
IC1452
NJM2060MTE1
OP AMP
Q551 (Q552)
MUTING SWITCH
Q555
Q553(Q554)
IC1231
NJM4580MTE1
RCH
IN1-
IN2-
SGND
IHDET
DISP
+VD
VH+
+HOUT
VO1
DC
VO2
-HOUT
VH-
-VD
SENS-
SENS+
RLY
AC
D651
D652
IC651
RSN313H25-P
POWER AMP HIC
H.P.F
Q651
RELAY CONTROL
L.P.F
TO TUNER MODULE
IF DATA
SD
TCE
TCK
TDT
TC9482_CLK
TC9482_DT
TC9482_ST
THERM/OVLD2
IC901
C2BBGF000262
MICROCOMPUTER
RESET
HOLD
Q901
Q902
XOUT
XIN
CF901
SEG 1-16
DEG 1-10
FL901
FL DISPLAY
FROM POWER TRANSFORMER


IC601
RSN310R36A-P
POWER AMP HIC
SENS+
VH+
+HOUT
VO1
VO2
VO3
-HOUT
VH-
SENS-
RLY
DC
AC
PASS+
IN1-
GND
IN2-
IN3-
PASS-
VDLIM
GND
DISP
IHDET
OVER DET
D601
D602
RCH
H.P.F
L.P.F
AMUTE
SP B
SP A
OUT
S/C SP
V03
RLY
Q652
RELAY CONTROL
D617
Q604
SWITCH
S301
KEY SWITCH
THERM/OVLD1
LIMITTER
FRT_VCR2
KEY1
KEY2
IC901
C2BBGF000262
MICROCOMPUTER
AF MUTE
SP A
SP B
RELAY
S/C SP
SEL_ENCD_1
SEL_ENCD_2
VOL_ENCD_1
VOL_ENCD_2
VR901
(INPUT SELECTOR)
VR902
(VOLUME)



SIGNAL LINES

MAIN SIGNAL LINE	RECORD SIGNAL LINE
CD SIGNAL LINE	PLAYBACK SIGNAL LINE

( ) indicates Pin No. of right channel.

10 Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology.)

Notes:

S950	Power Switch
S952	Speaker Switch
S953	SFC Mode Swtich
S955	Memory Switch
S956	FM Mode Switch
S957	Band Switch
S958	Preset Switch
S959	Tuning Up Switch
S960	Tuning Down Switch
S962	Help/Reset Switch
S964	DSP Sound Mode Switch
S965	Digital Input Switch
S967	+/Right Switch
S968	-/Left Switch
S969	Tone/Balance Switch
S970	Tape Monitor Switch
S971	Sub. Woofer Level Switch
VR902	Volume Knob
VR901	Input Selector Knob

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

< > ...FM

- **Importance safety notice:**

Components identifed by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution!

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1, F3, F4 8A 125V FUSE, F5 1.6A 125V FUSE. F6 4A 125V FUSE.**

RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

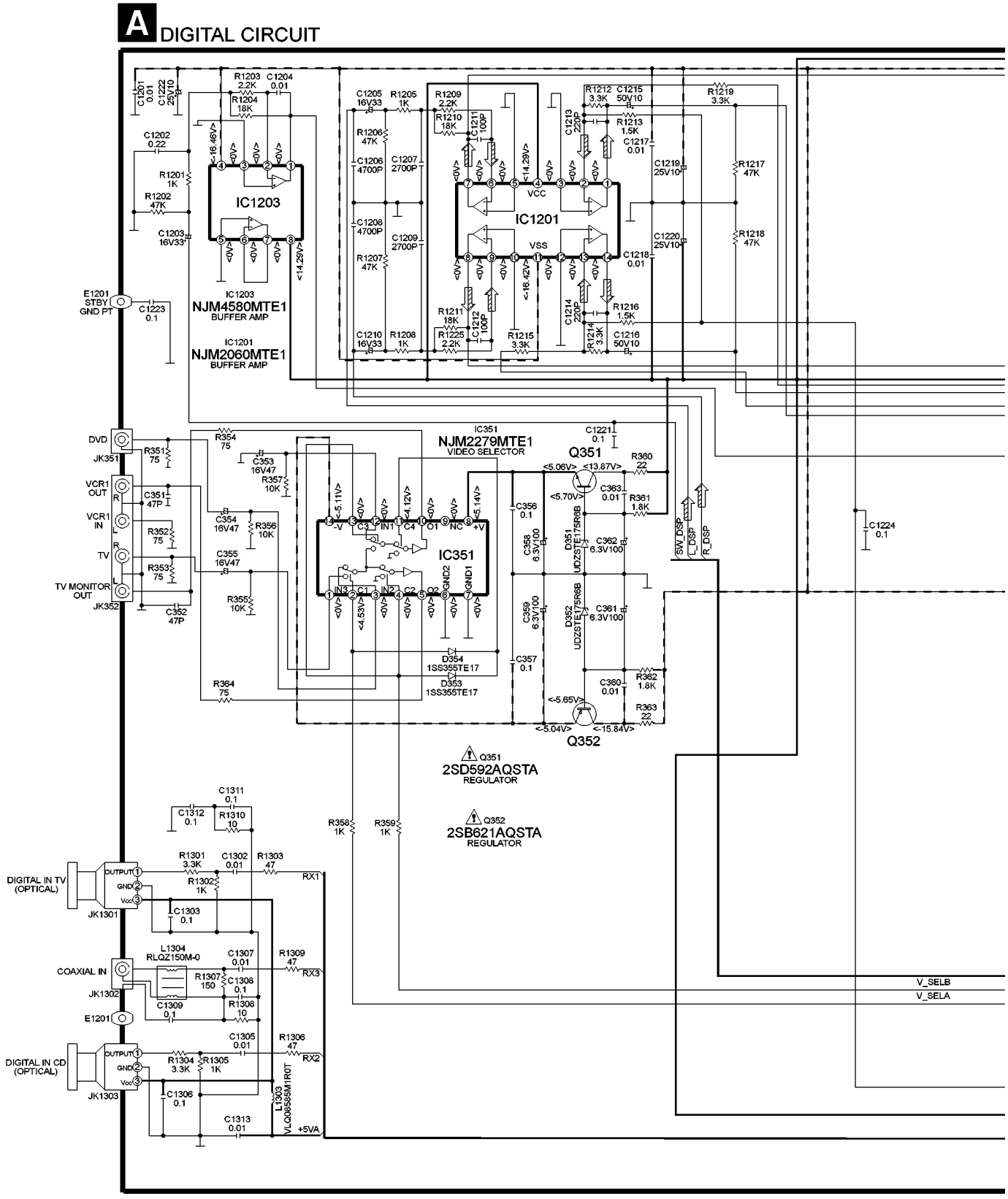
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

SCHEMATIC DIAGRAM - 1

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

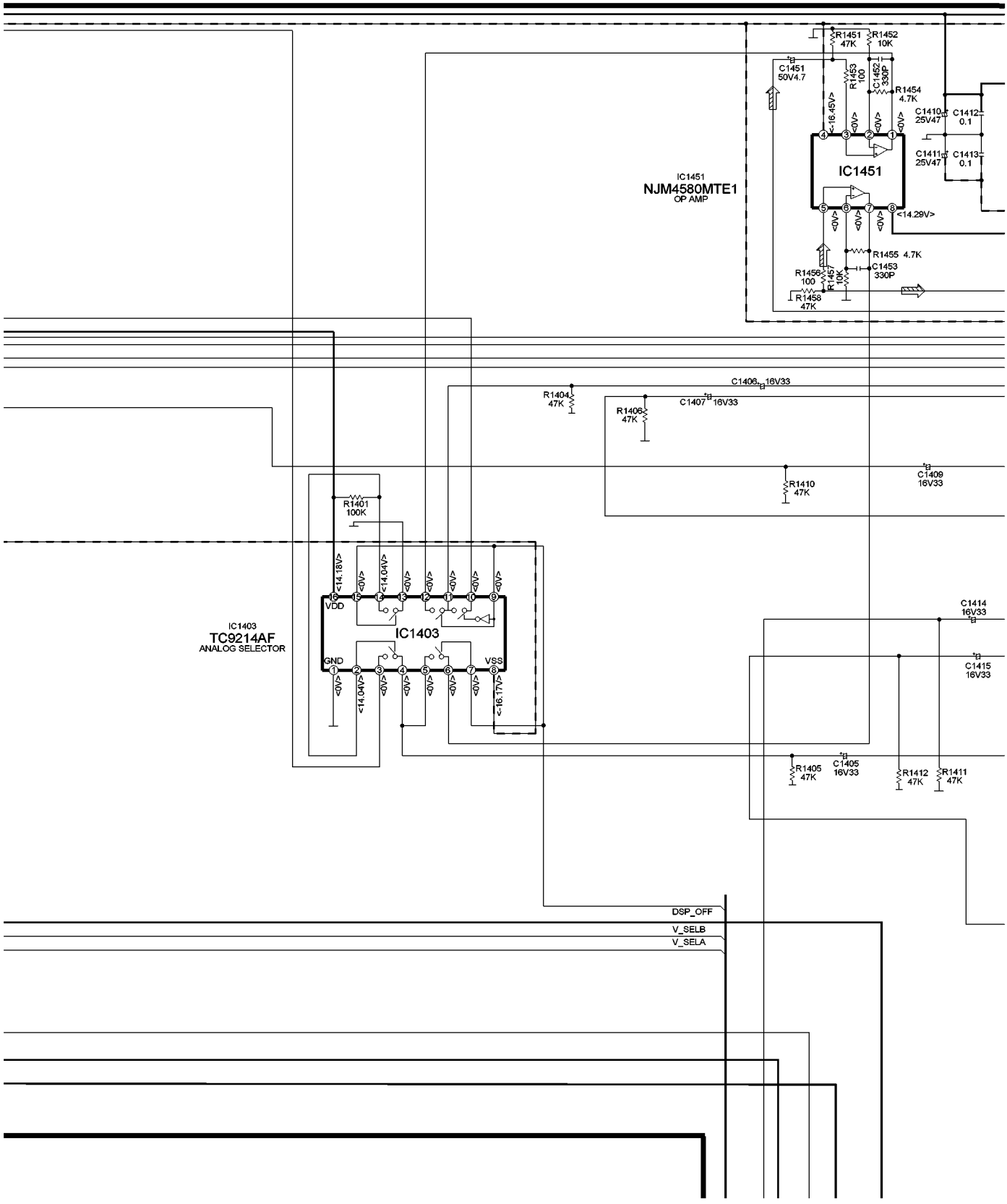
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 2

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

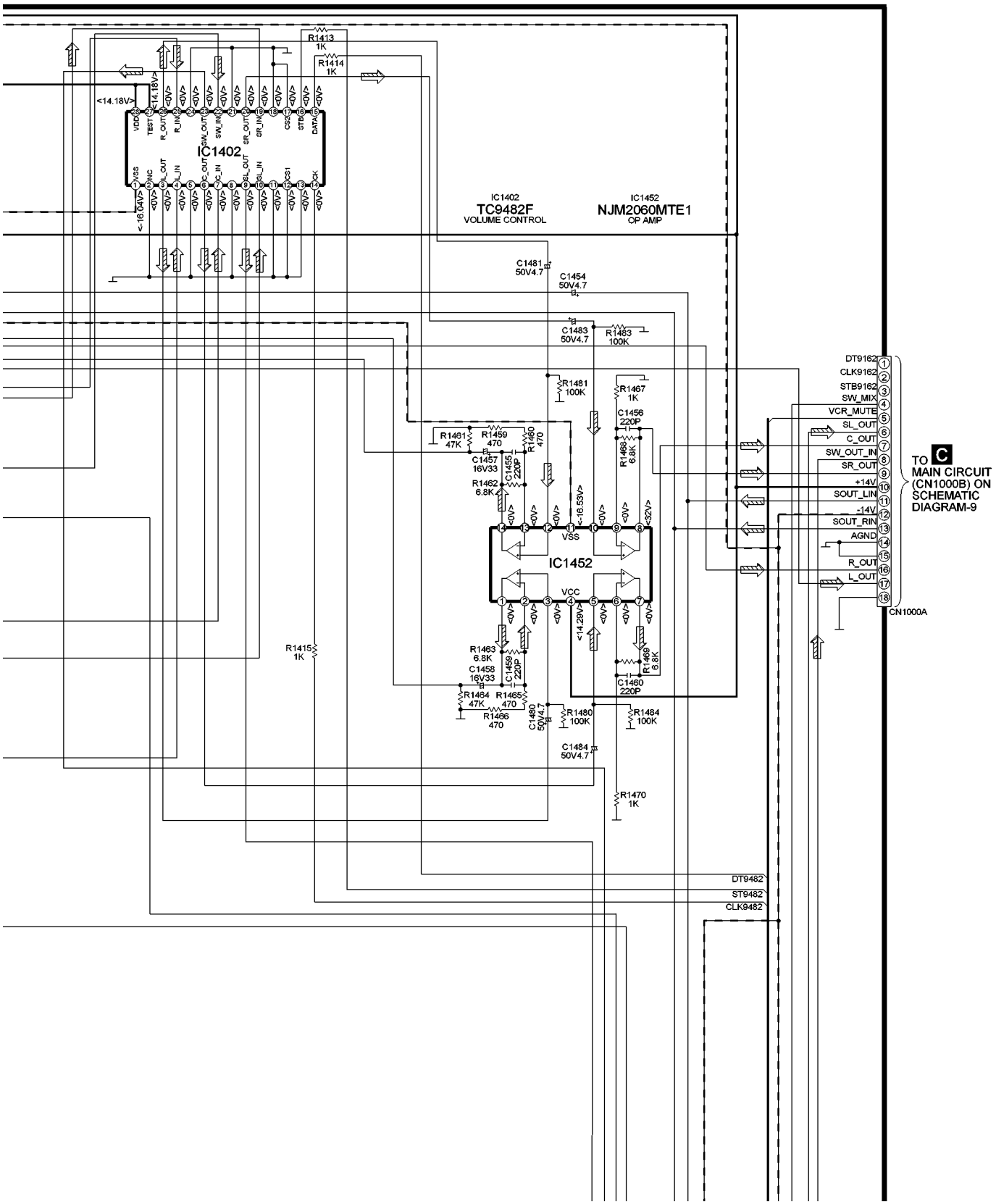
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 3

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

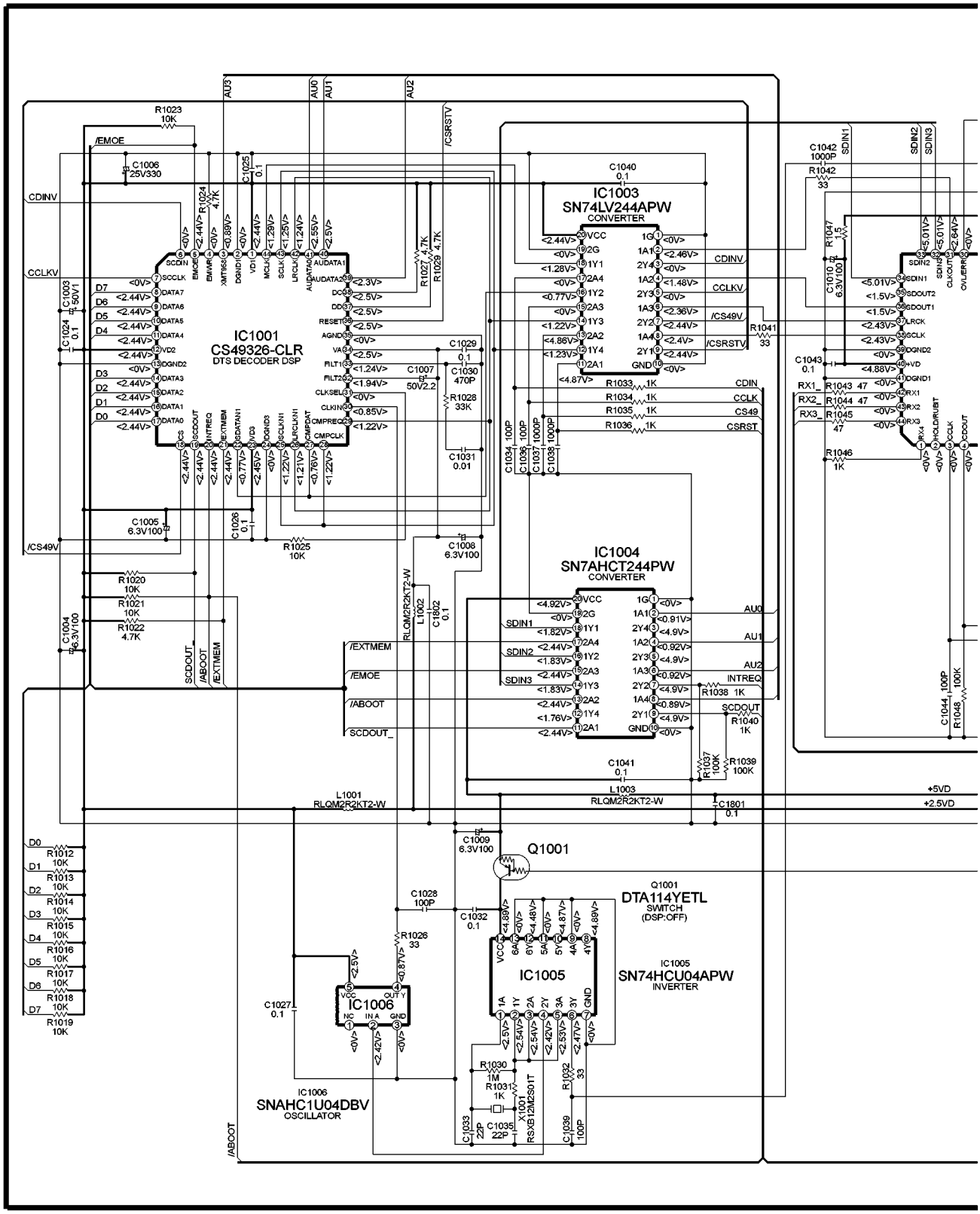
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 4

—— : +B SIGNAL LINE

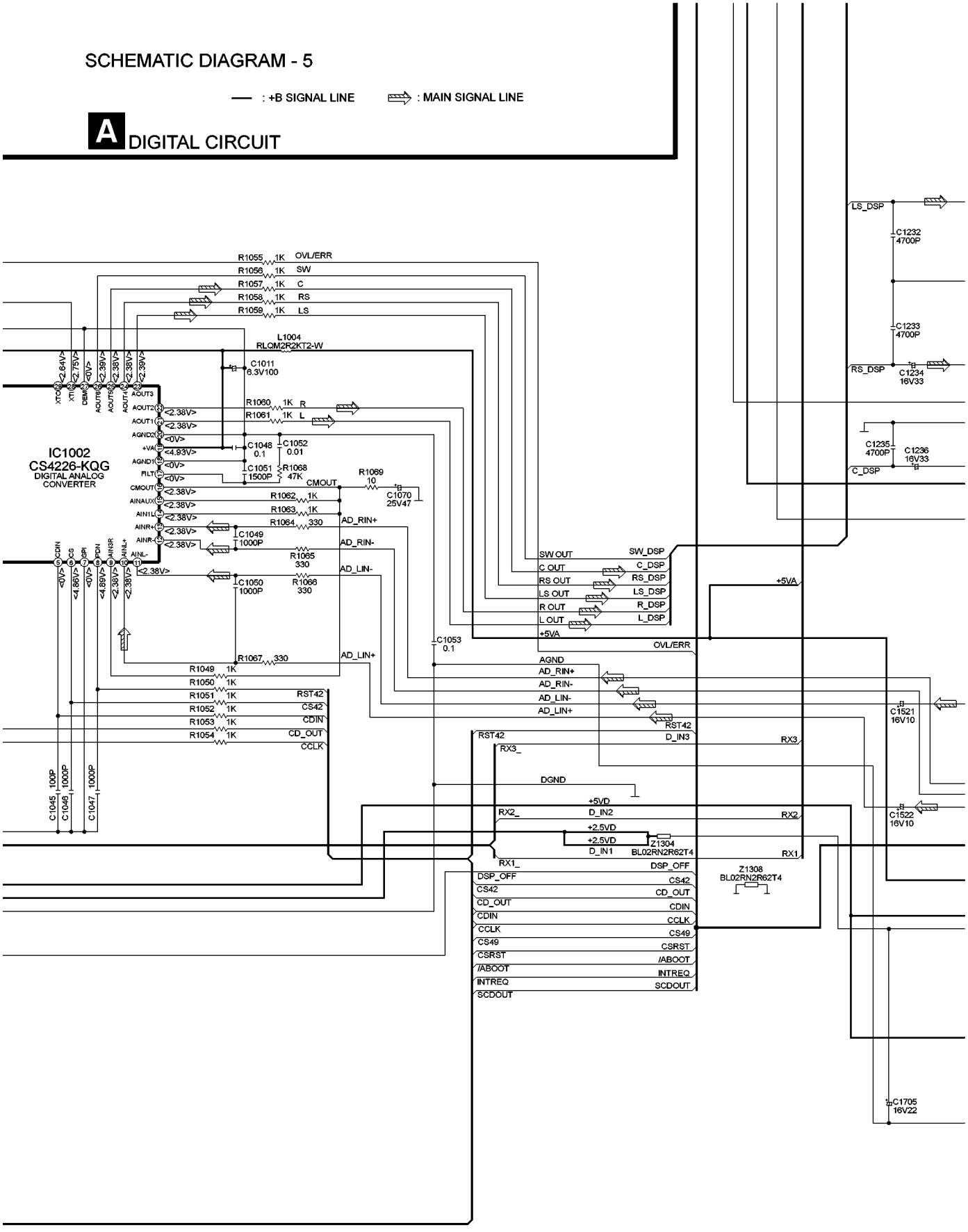
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 5

— : +B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

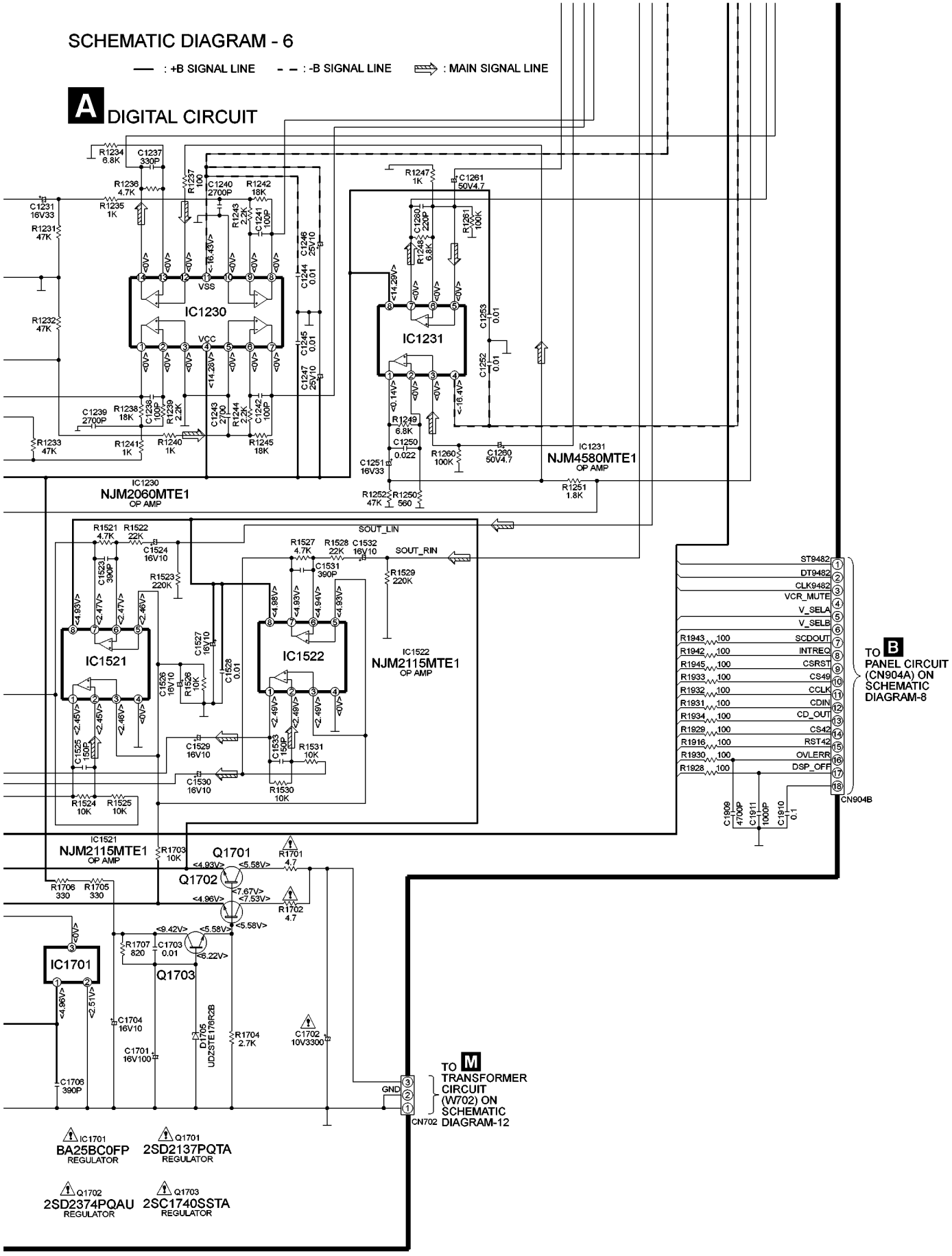
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 6

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

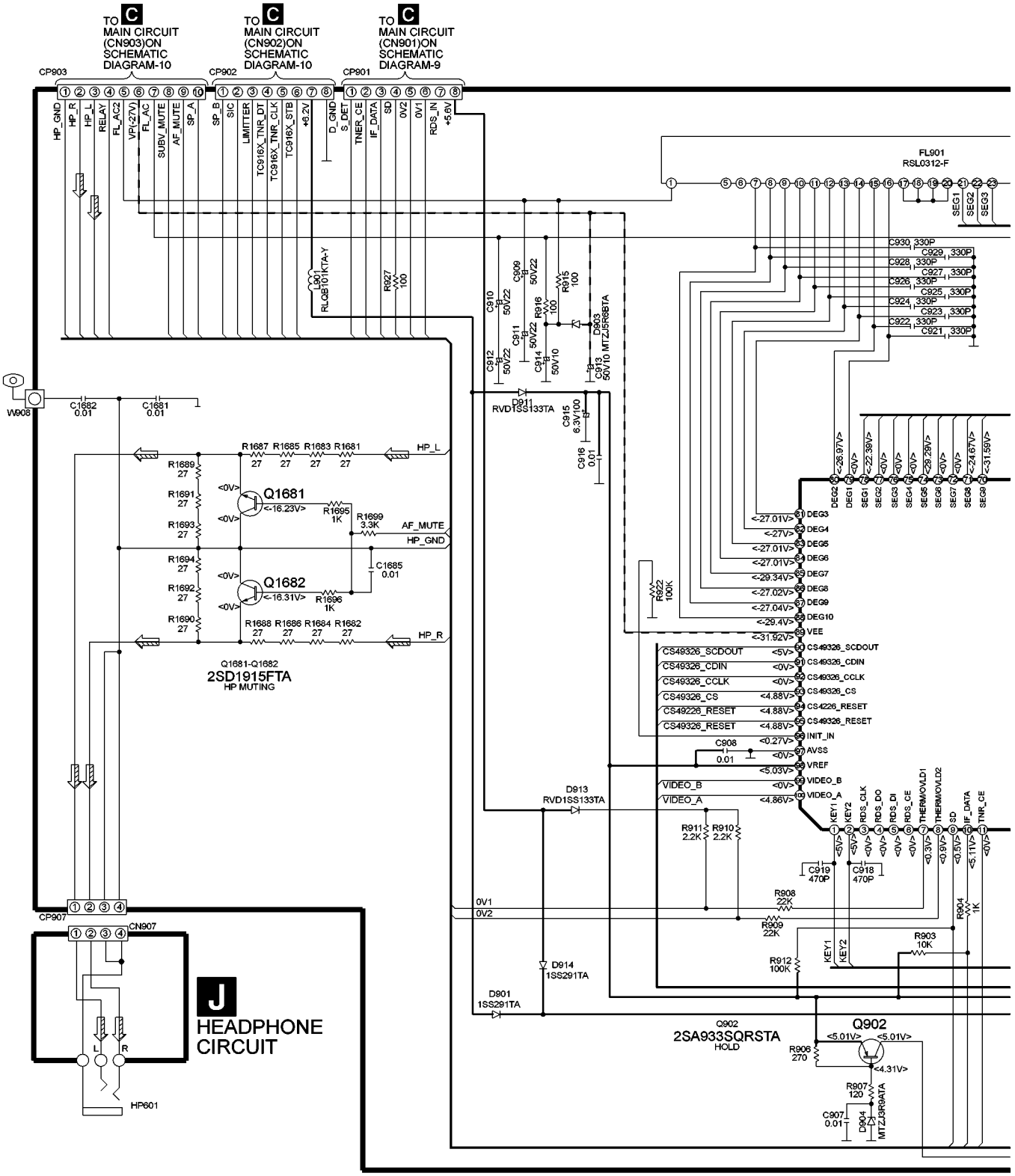
A DIGITAL CIRCUIT



SCHEMATIC DIAGRAM - 7

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

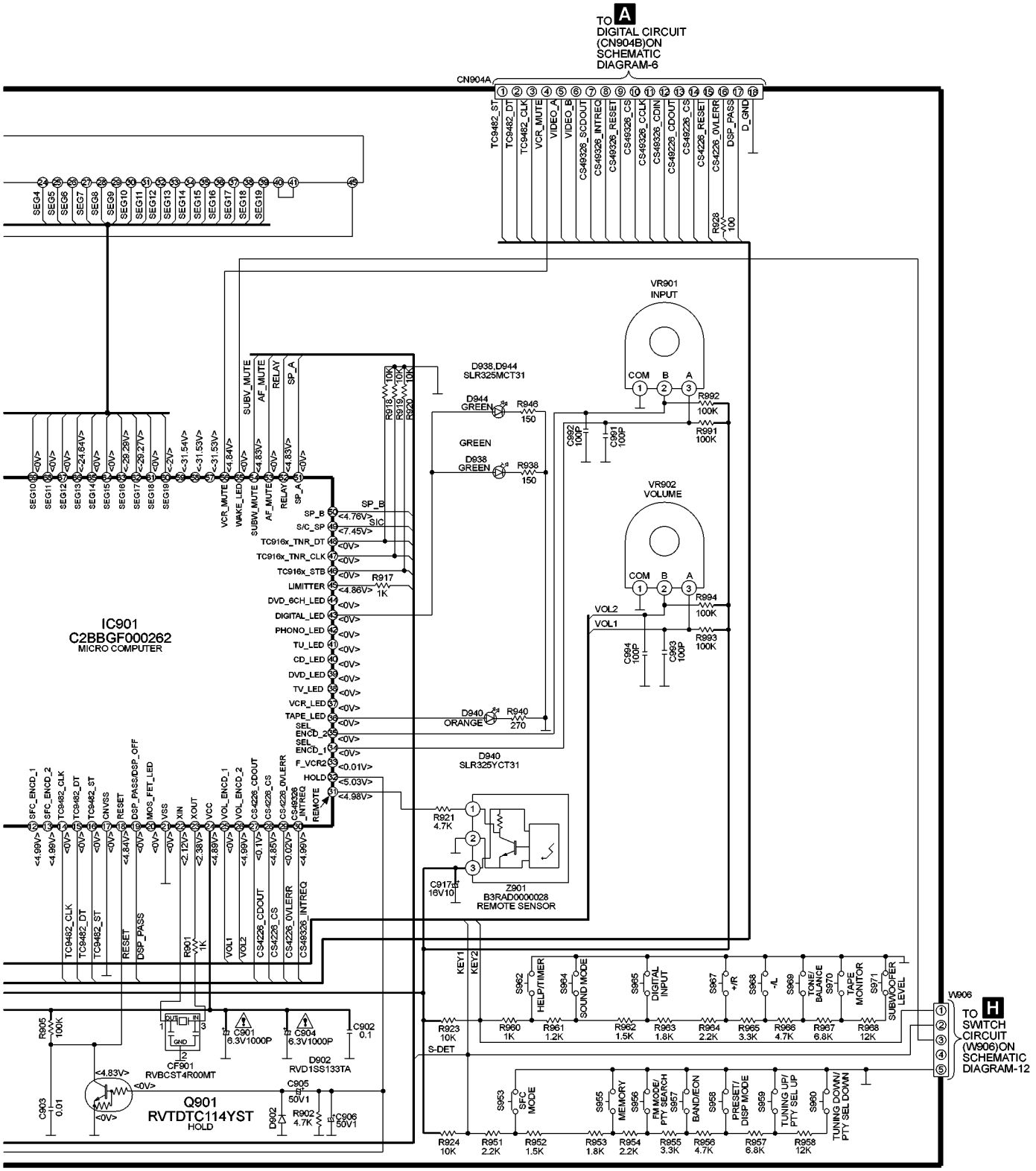
B PANEL CIRCUIT



SCHEMATIC DIAGRAM - 8

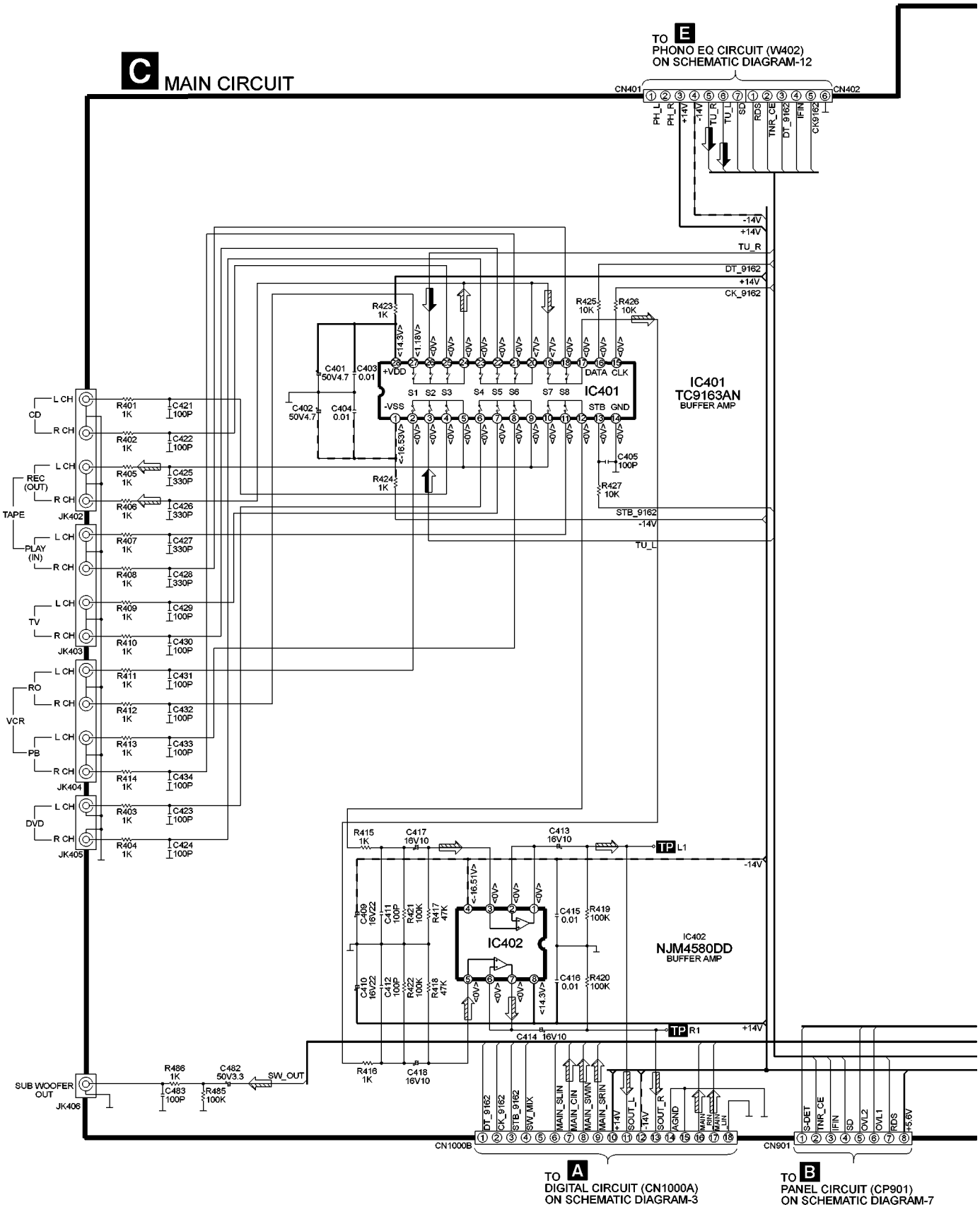
— : +B SIGNAL LINE

B PANEL CIRCUIT



SCHEMATIC DIAGRAM - 9

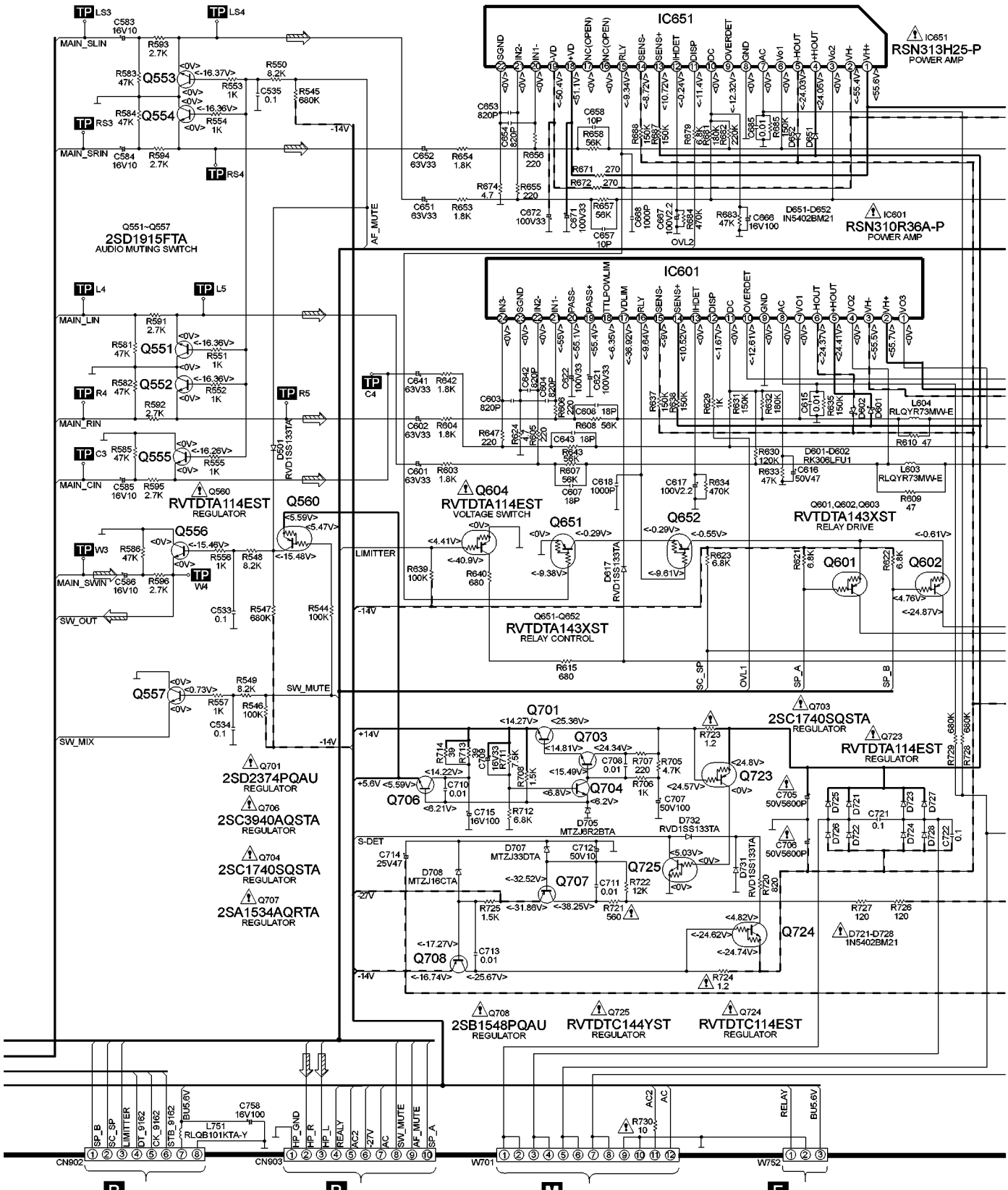
—— : +B SIGNAL LINE – – : -B SIGNAL LINE ➡ : FM/AM SIGNAL LINE ⇨ : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 10

—— : +B SIGNAL LINE - - - : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

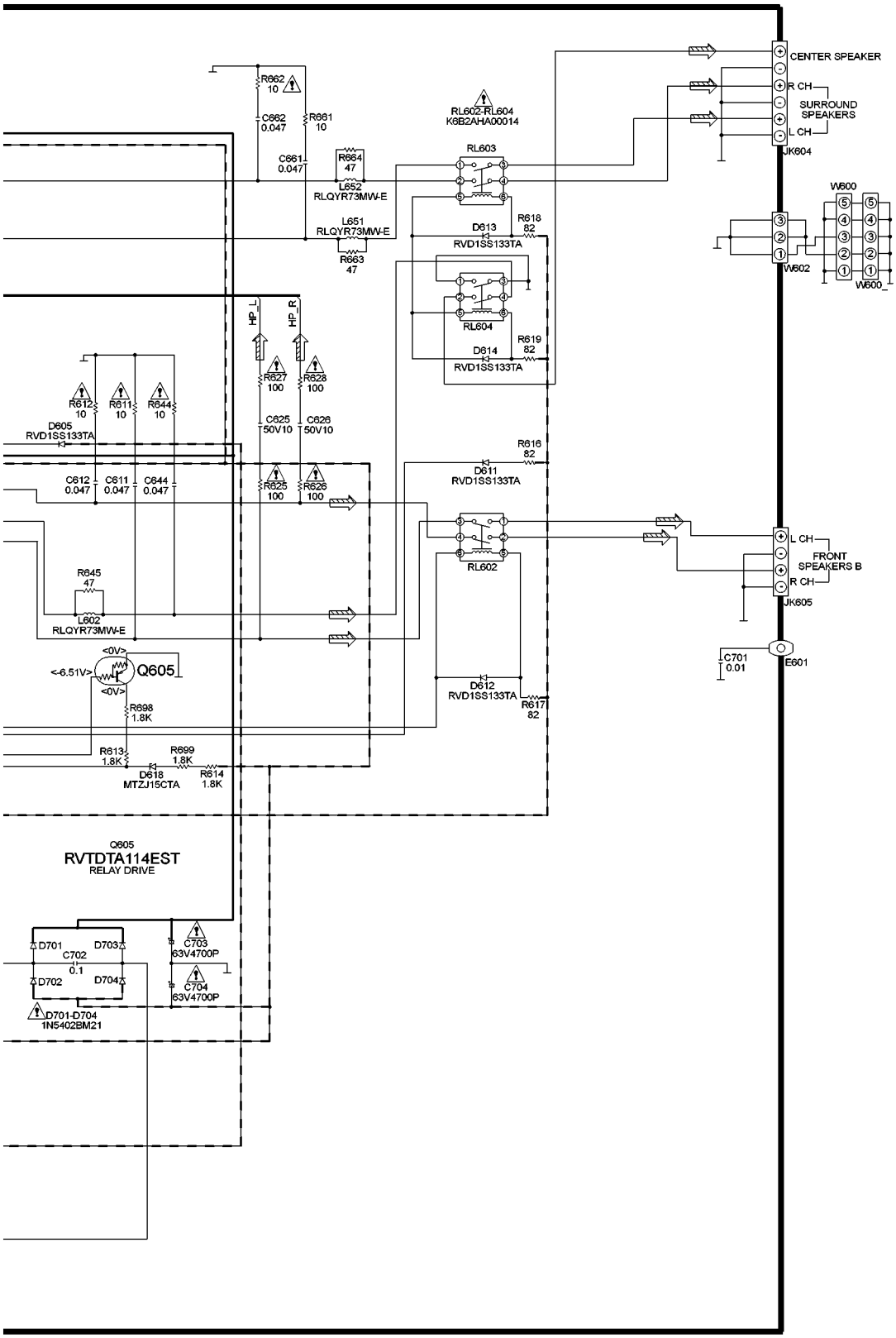
C MAIN CIRCUIT



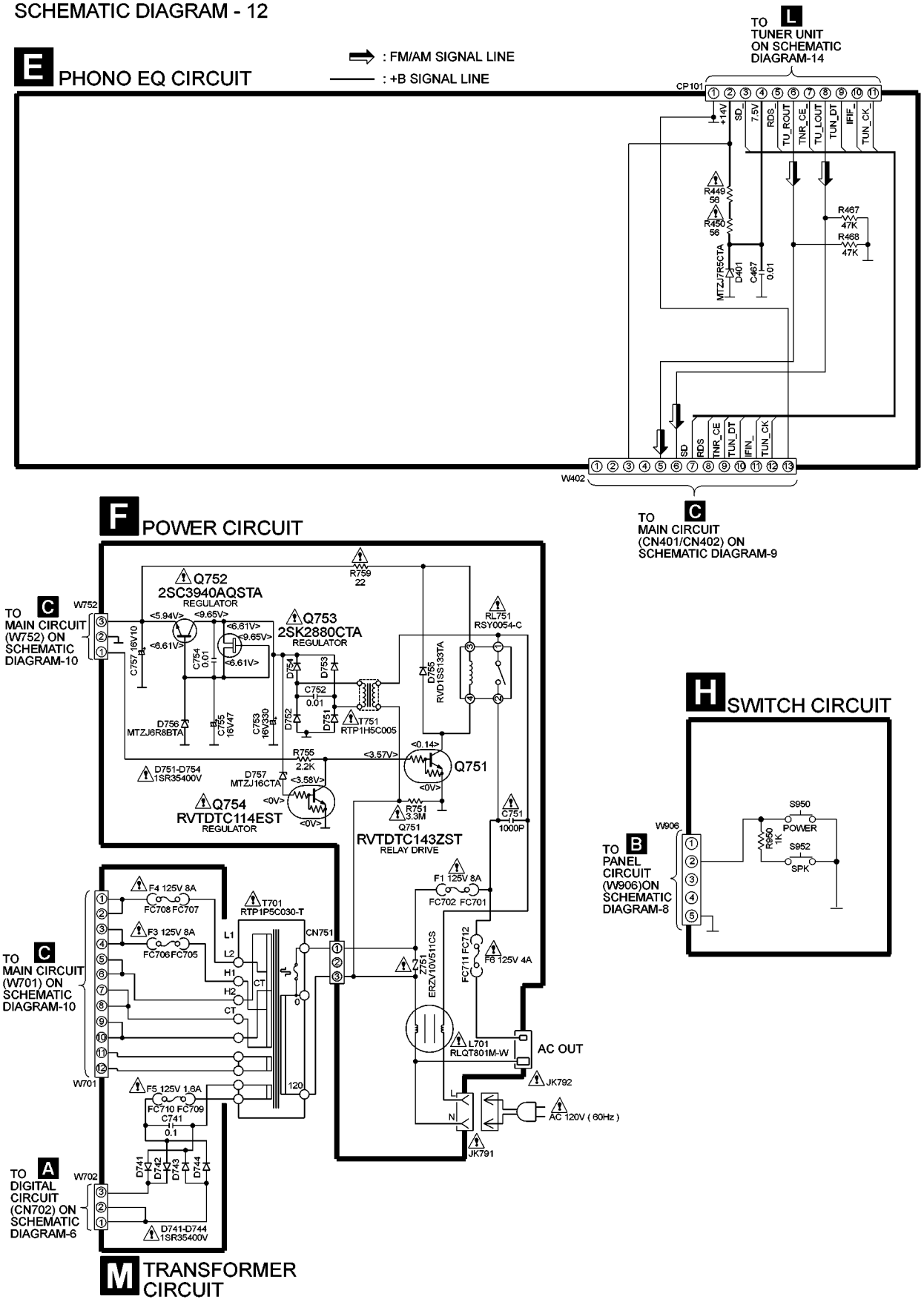
SCHEMATIC DIAGRAM - 11

—— : +B SIGNAL LINE - – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

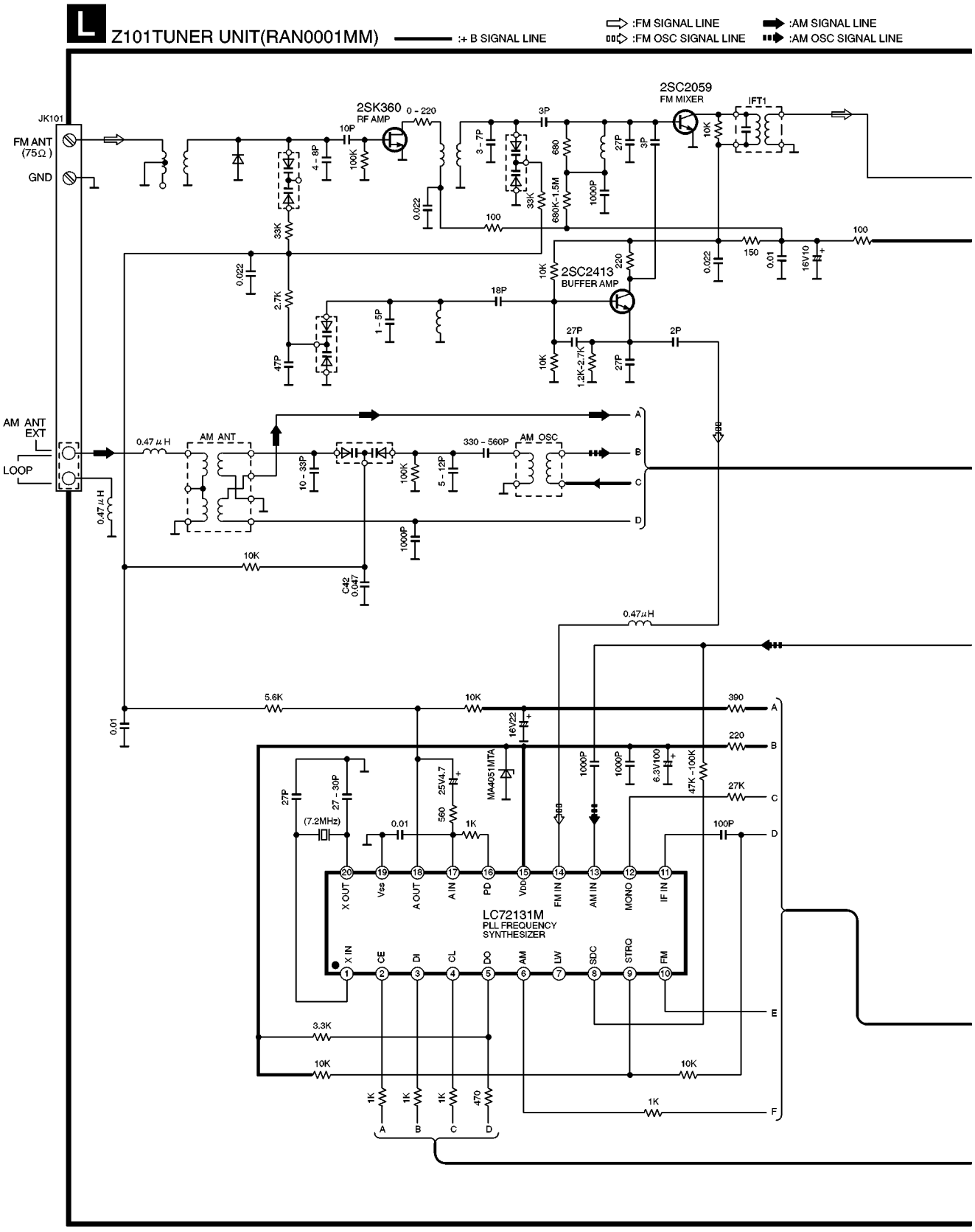
C MAIN CIRCUIT



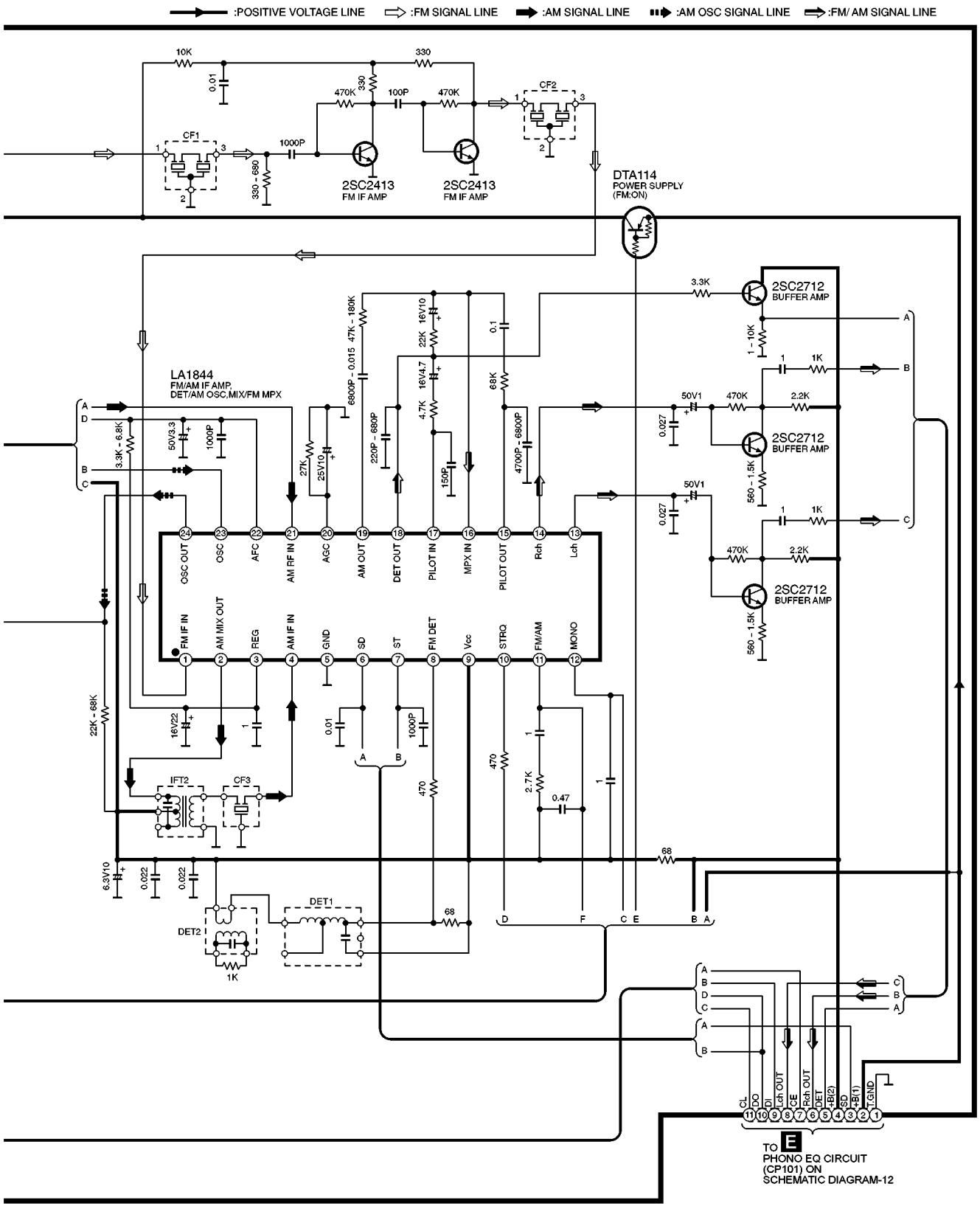
SCHEMATIC DIAGRAM - 12



SCHEMATIC DIAGRAM-13

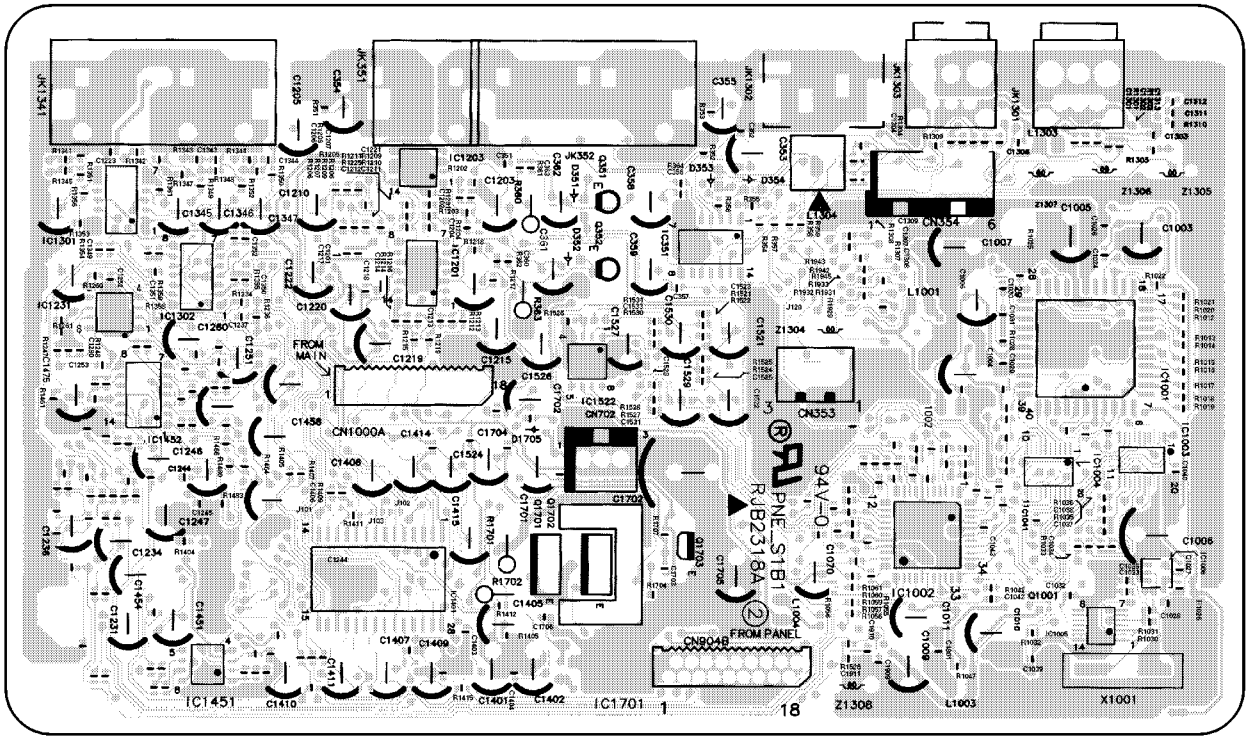


SCHEMATIC DIAGRAM-14

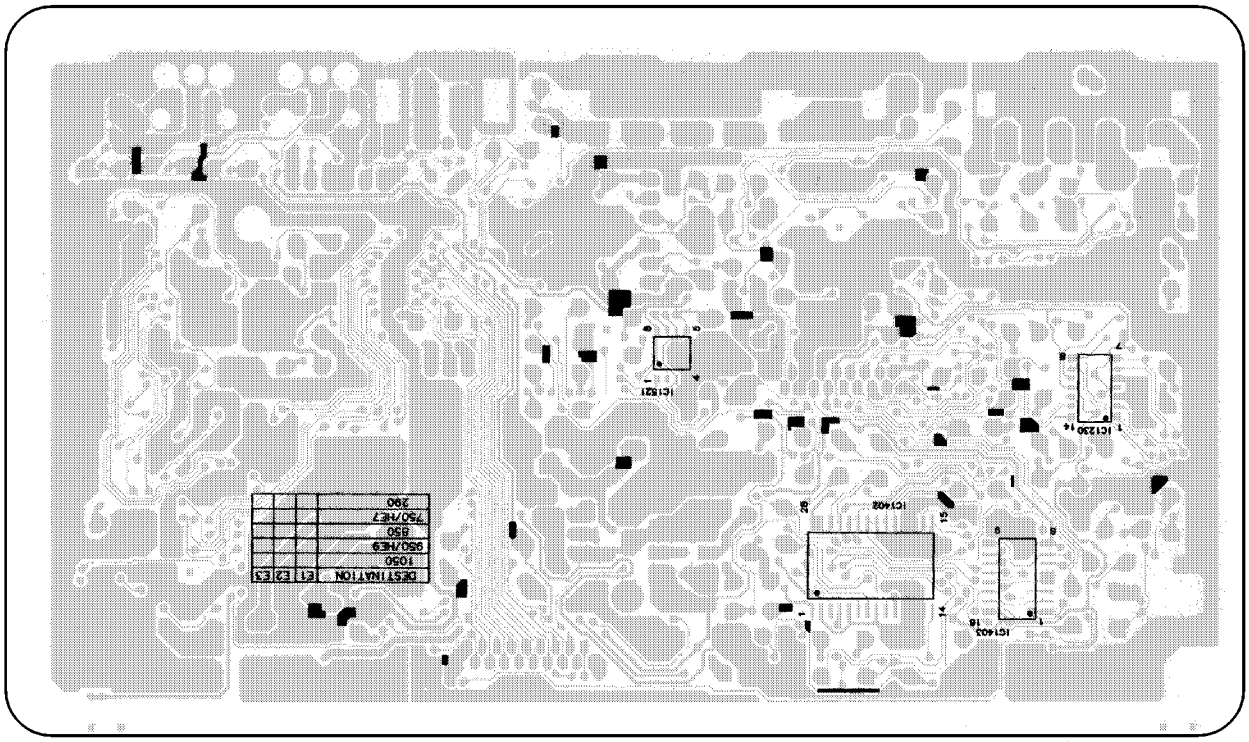


11 Printed Circuit Board

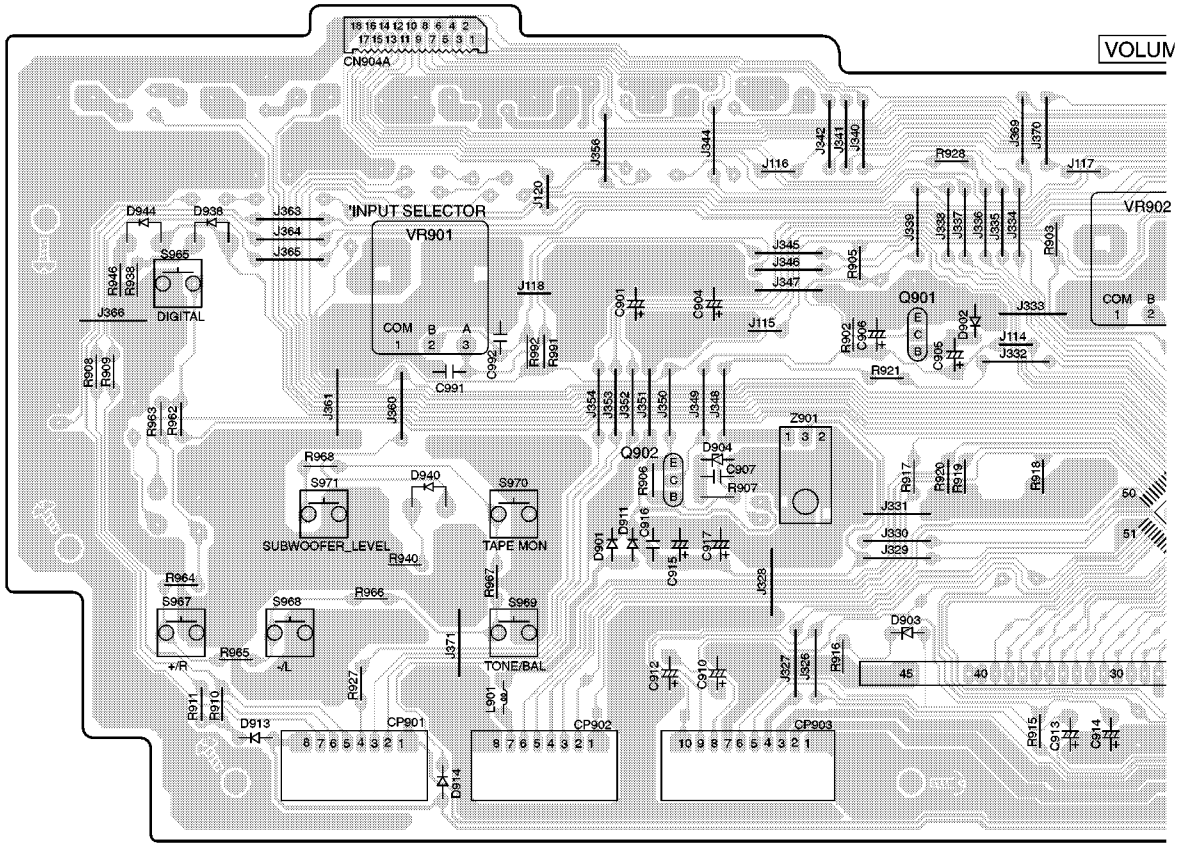
A DIGITAL P.C.B. (REP3107G-T) (SIDE A)



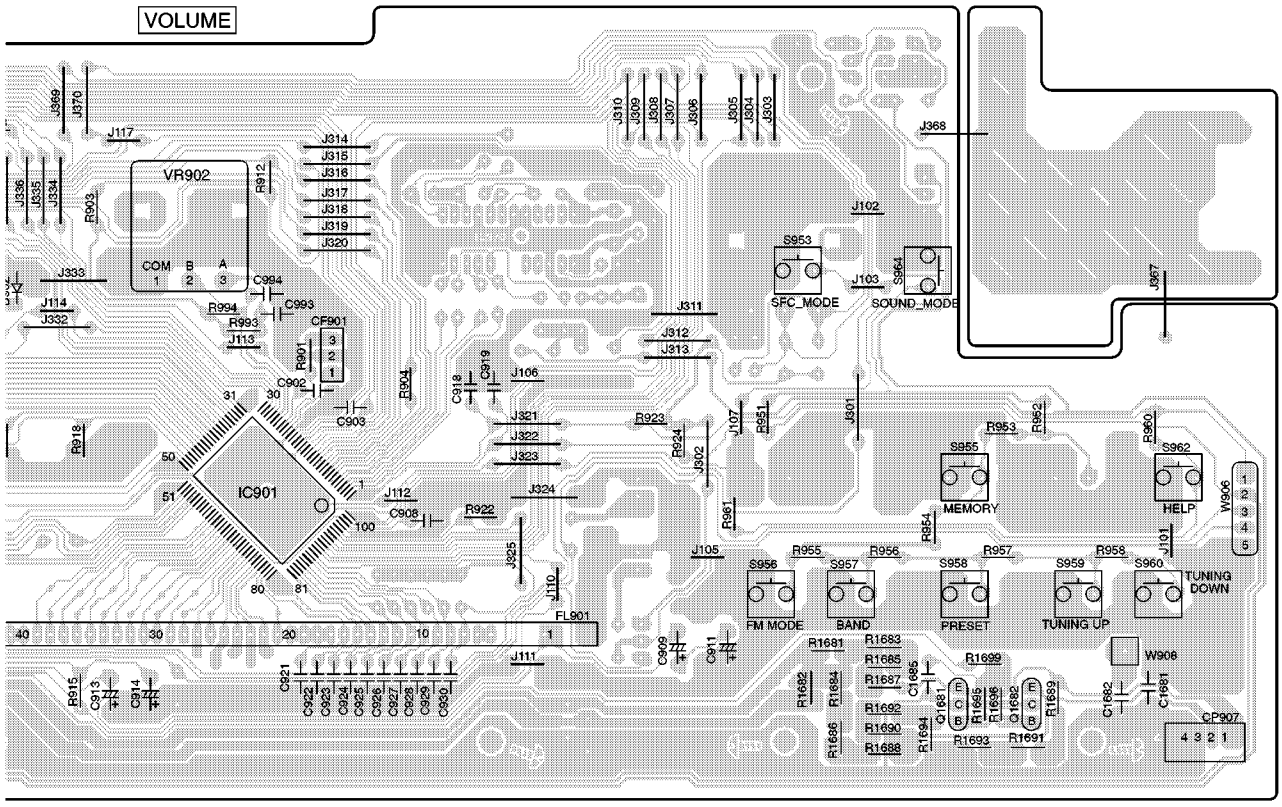
A DIGITAL P.C.B. (REP3107G-T) (SIDE B)



B PANEL P.C.B. (REP3104Q-S)

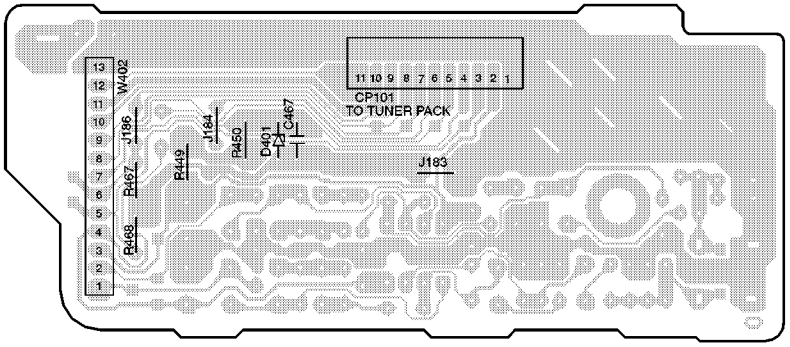


G H I J K L M

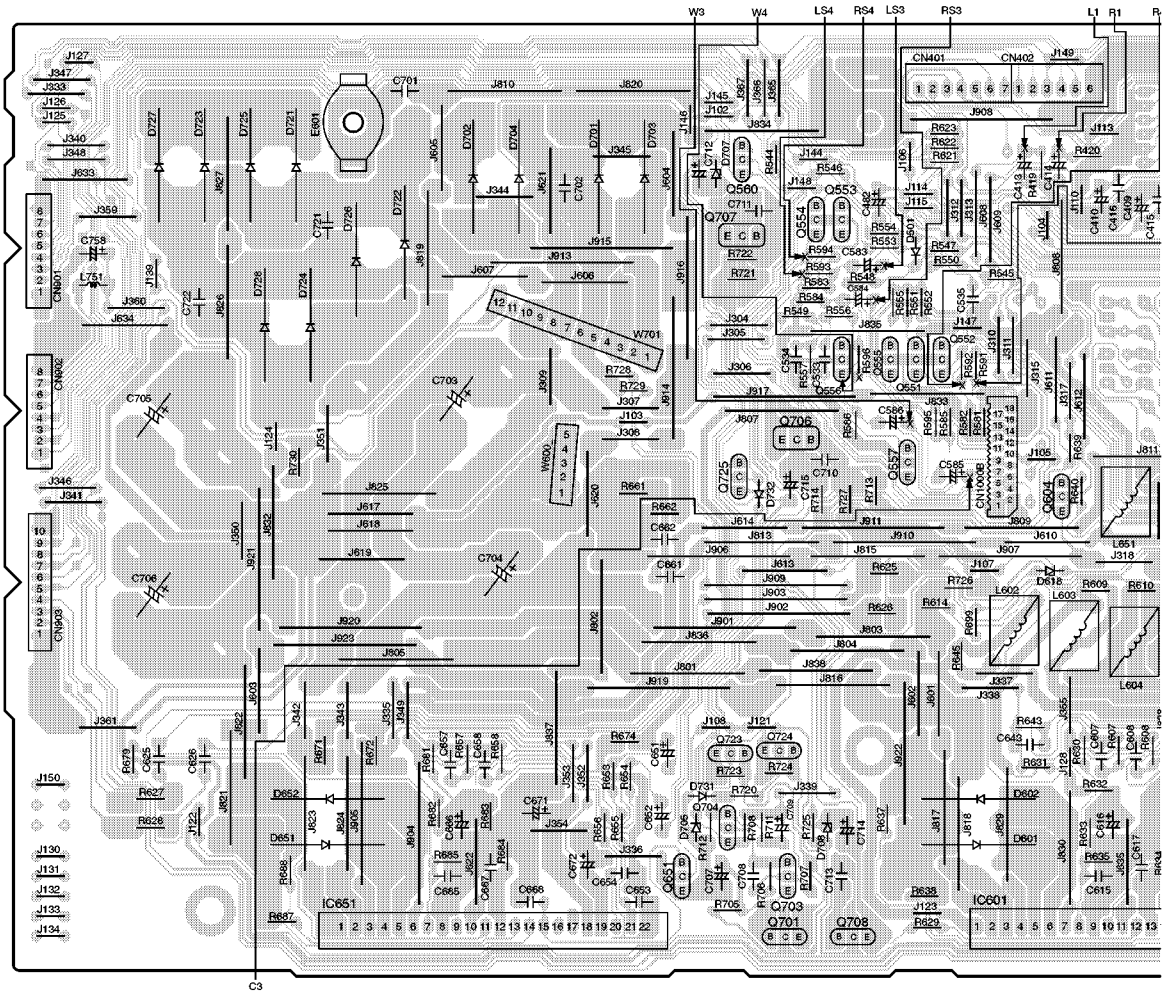


E PHONO EQ P.C.B.
(REP3109B-M)

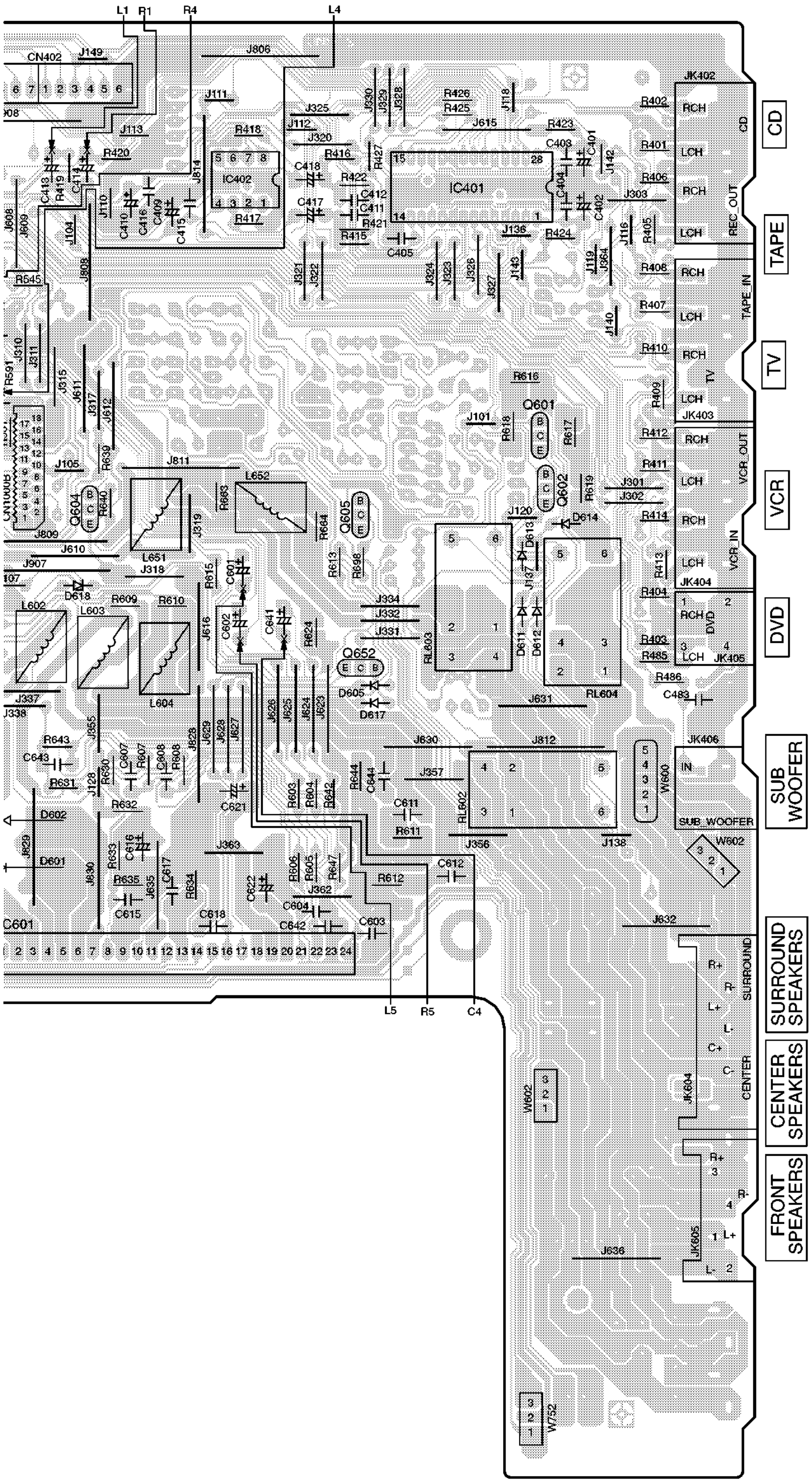
L TUNER PACK P.C.B.
(RAN0001MM)



C MAIN P.C.B. (REP3109B-M)



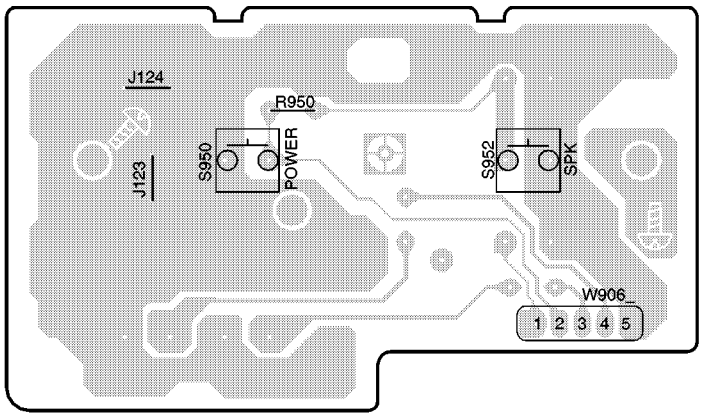
G H I J K L M


CD
TAPE
TV
VCR
DVD
SUB WOOFER
SURROUND SPEAKERS
CENTER SPEAKERS
FRONT SPEAKERS
IC401
IC402
Q601
Q602
Q604
Q605
Q652
JK402
JK403
JK404
JK405
JK406
JK604
JK605
RL602
RL603
RL604
W600
W602
W752
L1
R1
R4
L4
L5
R5
C4

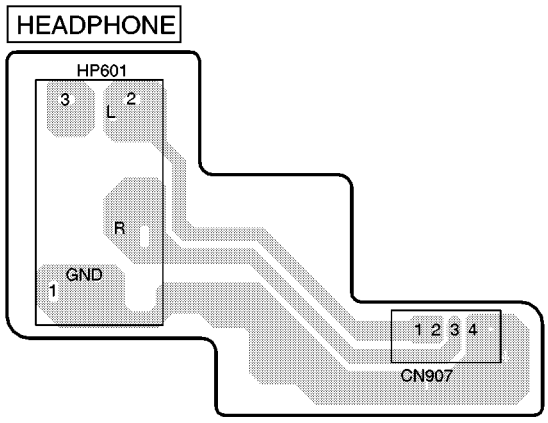
A B C D E F G

1 2 3 4 5 6 7 8 9

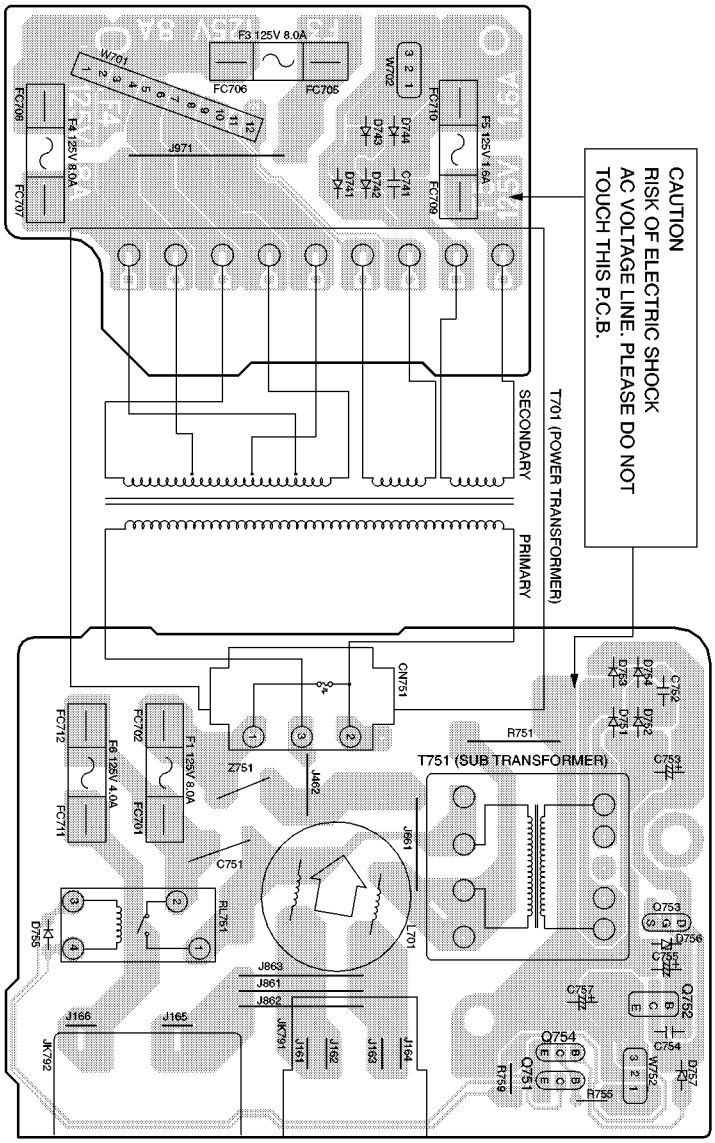
H SWITCH P.C.B. (REP3104Q-S)



J HEADPHONE P.C.B. (REP3104Q-S)

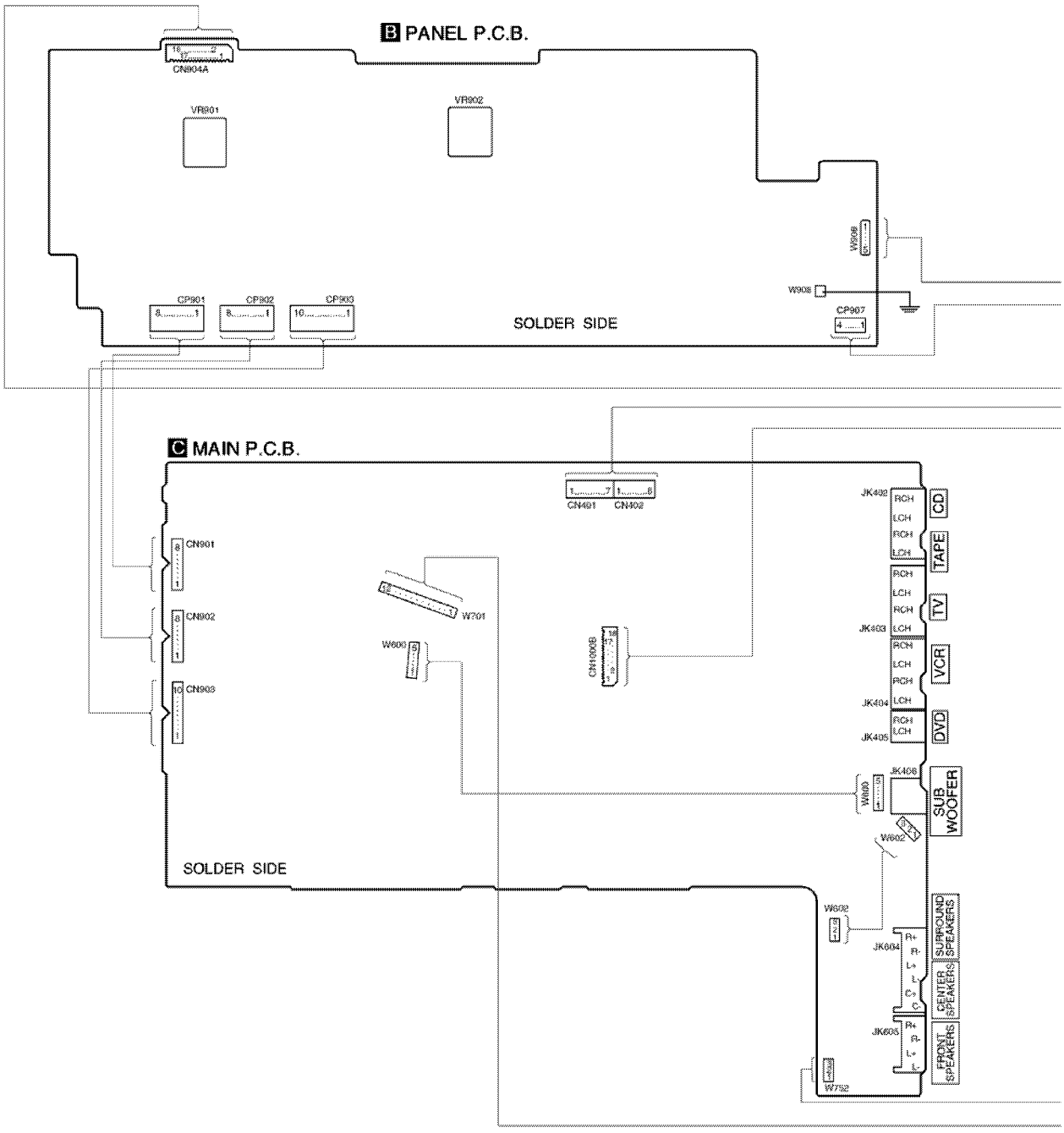


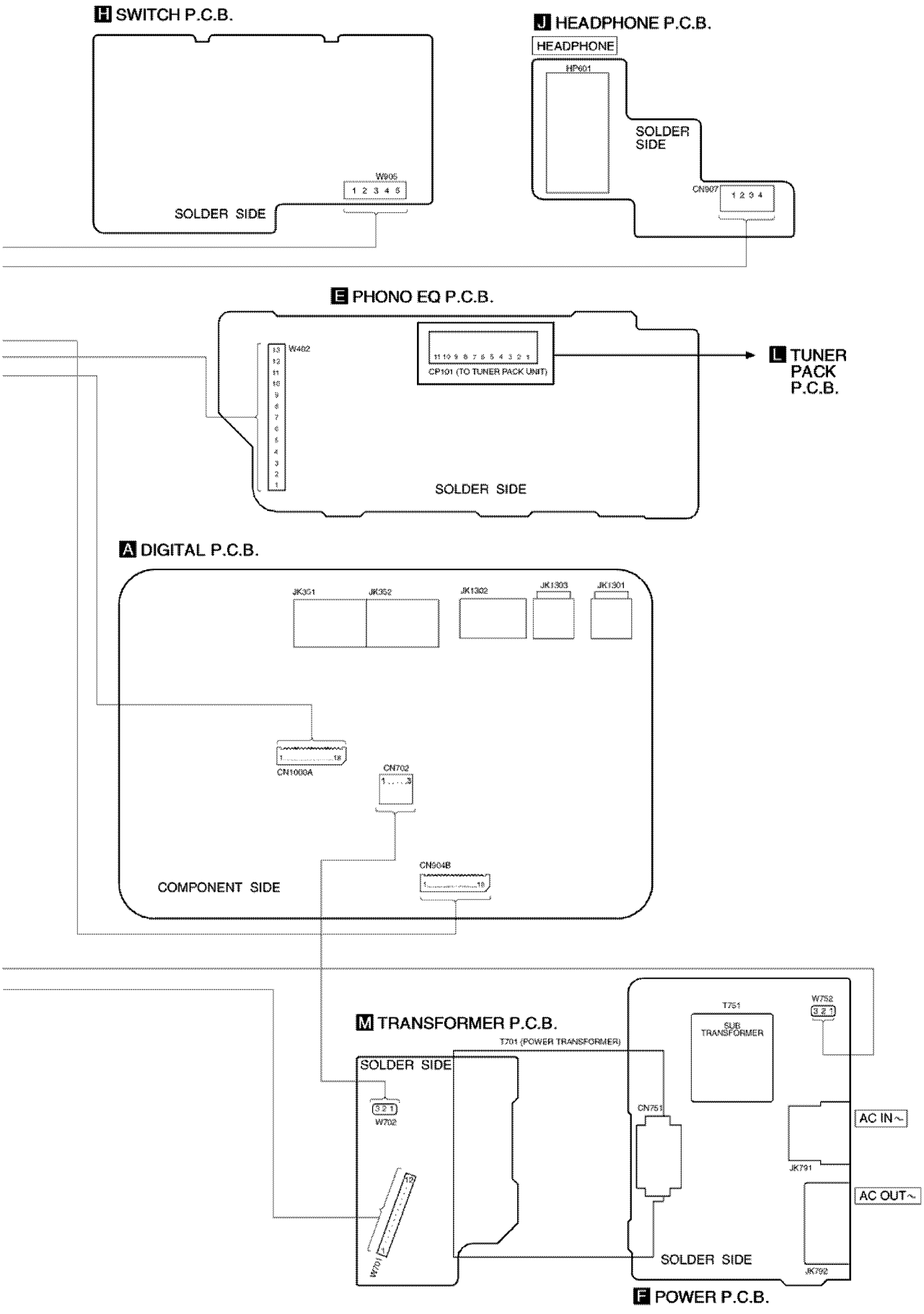
M TRANSFORMER P.C.B. (REP3109B-M)



F POWER P.C.B. (REP3109B-M)

12 Wiring Connection Diagram




H SWITCH P.C.B.
W905
1 2 3 4 5
SOLDER SIDE
J HEADPHONE P.C.B.
HEADPHONE
HP601
SOLDER SIDE
CN907
1 2 3 4
E PHONO EQ P.C.B.
W402
CP101 (TO TUNER PACK UNIT)
L TUNER PACK P.C.B.
SOLDER SIDE
A DIGITAL P.C.B.
JK351
JK352
JK1302
JK1303
JK1301
CN1000A
CN702
CN504B
COMPONENT SIDE
M TRANSFORMER P.C.B.
T701 (POWER TRANSFORMER)
SOLDER SIDE
W702
W701
T751
SUB TRANSFORMER
W752
CN751
AC IN~
JK791
AC OUT~
JK792
SOLDER SIDE
F POWER P.C.B.

13 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

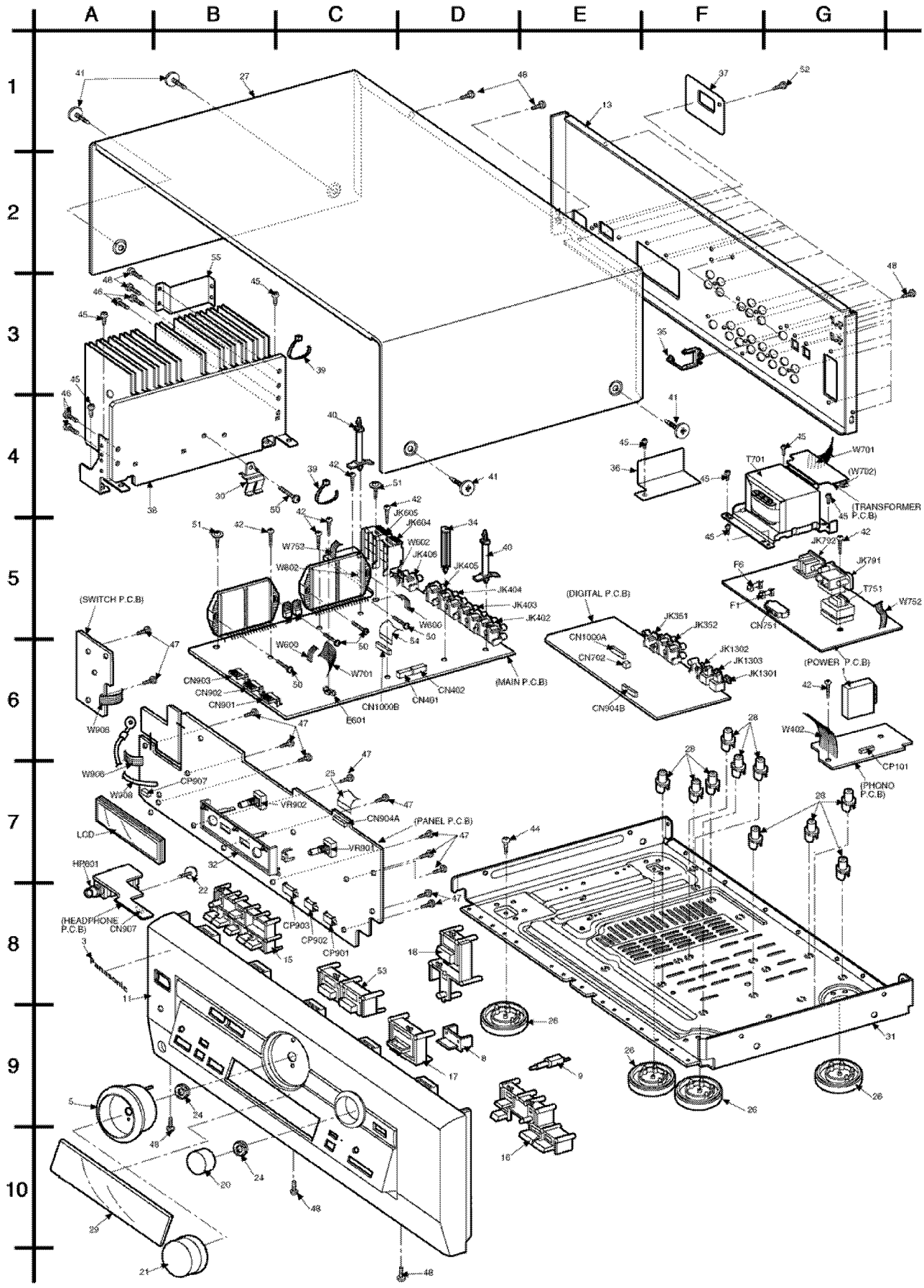
  When replacing any of these components, be sure to use only manufacturers's specified parts shown in the parts list.
- The parenthesized indications in the Remarks column specify the areas or color. (Refer to the cover page for area or color.)

  Parts without these indications can be used for all areas.
- Capacitor values are in microfarad (μF) unless specified otherwise, P=Pico-farads(pF); Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000(ohms).
- The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws govening part and product retention. After the end of this period, the assembly will no longer be available.
- [M] indicates in the Remarks columns indicates parts that are supplied by **MESA**.
- The "(SF)" mark denotes the standard part.
- Remote Control Unit: Supply period for three years from terminal of production.
- Reference for O/I book languages are as follows :

Ar : Arabic	Cf : Canadian French	Cz : Czech	Da : Danish
Du : Dutch	En : English	Fr : French	Ge : German
It : Italian	Ko : Korean	Po : Polish	Ru : Russian
Sp : Spanish	Sw : Swedish	Co : Traditional Chinese	Cn : Simplified Chinese

13.1. Cabinet

13.1.1. Cabinet Parts Location



13.1.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RAN0001MM	TUNER	[M]
3	RGB0036-2N	PANASONIC BADGE	[M]
5	RGKV0001-S	VOLUME RING	[M]
8	RGL0533-Q	DIGITAL LIGHT GUIDE	[M]
9	RGL0534-Q	MONITOR LIGHT GUIDE	[M]
11	RGPV0001A-S	FRONT PANEL	[M]
13	RGR0306A-C	REAR PANEL	[M]
15	RGU1941-S	MODE BUTTON	[M]
16	RGU1942-S	TONE BUTTON	[M]
17	RGU1945-S	DIGITAL BUTTON	[M]
18	RGU1943-S	POWER BUTTON	[M]
20	RGW0280-S	SELECTOR KNOB	[M]
21	RGW0359-S	VOLUME KNOB	[M]
22	RHD26016	SCREW (PHONE JACK)	[M]
24	RHN90001	M9 NUT	[M]
25	REE1071	FCC1 (PANEL-DIGITAL)	[M]
26	RKA0079A-A	LEG UNIT	[M]
27	RKM0373B-S	CABINET	[M]
28	RKQ0089A	PCB SUPPORT	[M]
29	RKWV0001-Q	FL WINDOW	[M]
30	RMC0158-S	TRANSISTOR HOLDER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
31	RMK0320-1	BOTTOM CHASSIS	[M]
32	RMN0628	FL HOLDER	[M]
34	RMN0648	PCB SUPPORT 2	[M]
35	RMN0649	WIRE CLAMPER	[M]
36	RMV0219	BARRIER	[M]
37	RMV0220	AC BARRIER	[M]
38	RXX0233	HEAT SINK UNIT	[M]
39	SHR301	WIRE CRAMPER	[M]
40	SHR9683	PCB SUPPORT 1	[M]
41	SNE2129-2	SCREW (CABINET)	[M]
42	XTB3+20JFZ	SCREW	[M]
44	XTB3+6G	SCREW	[M]
45	XTB3+8FFZ	SCREW	[M]
46	XTB3+8JFZ	SCREW	[M]
47	XTBS26+10J	SCREW	[M]
48	XTBS3+8JFZ1	SCREW	[M]
50	XTW3+15T	SCREW	[M]
51	XTWS3+8T	SCREW	[M]
52	XTW3+8PFZ	SCREW	[M]
53	RGU1944-1S	SFC BUTTON	[M]
54	REE1072	FCC2 (MAIN-DIGITAL)	[M]
55	RMQ1030	HEAT SINK ANGLE	[M]

13.2. Components Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B.	
	REP3107G-T	DIGITAL P.C.B.	[M] RTL
	REP3104Q-S	PANEL/HEADPHONE/SWITCH P.C.B.	[M] RTL
	REP3109B-M	PHONO EQ/MAIN/TRANSFORMER/POWER P.C.B.	[M] RTL
	RAN0001MM	TUNER PACK P.C.B.	[M] RTL
		INTEGRATED CIRCUITS	
IC351	NJM2279MTE1	IC VIDEO SELECTOR	[M]
IC401	TC9163AN	IC SELECTOR	[M]
IC402	NJM4580DD	IC OP AMP	[M]
IC601	RSN310R36A-P	IC HIC	[M] ⚠
IC651	RSN313H25-P	IC HIC	[M] ⚠
IC901	C2BBGF000262	IC MICOM	[M]
IC1001	CS49326-CLR	IC AC-3/DTS DECODER	[M]
IC1002	CS4226-KQG	IC DIR/DAC/VOL	[M]
IC1003	SN74LV244APW	IC LOGIC	[M]
IC1004	SN7AHCT244PW	IC LOGIC	[M]
IC1005	SN74HCU04APW	IC LOGIC	[M]
IC1006	SNAHC1U04DBV	IC SINGLE INVERTER	[M]
IC1201	NJM2060MTE1	IC OP AMP	[M]
IC1203	NJM4580MTE1	IC OP AMP	[M]
IC1230	NJM2060MTE1	IC OP AMP	[M]
IC1231	NJM4580MTE1	IC OP AMP	[M]
IC1402	TC9482F	IC VOLUME	[M]
IC1403	TC9214AF	IC	[M]
IC1451	NJM4580MTE1	IC OP AMP	[M]
IC1452	NJM2060MTE1	IC OP AMP	[M]
IC1521	NJM2115MTE1	IC OP AMP	[M]
IC1522	NJM2115MTE1	IC OP AMP	[M]
IC1701	BA25BC0FP	IC REGULATOR	[M] ⚠
		TRANSISTORS	
Q351	2SD592AQSTA	TRANSISTOR	[M] ⚠
Q352	2SB621AQSTA	TRANSISTOR	[M] ⚠
Q551	2SD1915FTA	TRANSISTOR	[M]
Q552	2SD1915FTA	TRANSISTOR	[M]
Q553	2SD1915FTA	TRANSISTOR	[M]
Q554	2SD1915FTA	TRANSISTOR	[M]
Q555	2SD1915FTA	TRANSISTOR	[M]
Q556	2SD1915FTA	TRANSISTOR	[M]
Q557	2SD1915FTA	TRANSISTOR	[M]
Q560	RVTDTA114EST	TRANSISTOR	[M] ⚠
Q601	RVTDTA143XST	TRANSISTOR	[M]
Q602	RVTDTA143XST	TRANSISTOR	[M]
Q604	RVTDTA114EST	TRANSISTOR	[M] ⚠
Q605	RVTDTA114EST	TRANSISTOR	[M]
Q651	RVTDTA143XST	TRANSISTOR	[M]
Q652	RVTDTA143XST	TRANSISTOR	[M]
Q701	2SD2374PQAU	TRANSISTOR	[M] ⚠
Q703	2SC1740SQSTA	TRANSISTOR	[M] ⚠
Q704	2SC1740SQSTA	TRANSISTOR	[M] ⚠
Q706	2SC3940AQSTA	TRANSISTOR	[M] ⚠
Q707	2SA1534AQRTA	TRANSISTOR	[M] ⚠
Q708	2SB1548PQAU	TRANSISTOR	[M] ⚠
Q723	RVTDTA114EST	TRANSISTOR	[M] ⚠
Q724	RVTDTC114EST	TRANSISTOR	[M] ⚠
Q725	RVTDTC114YST	TRANSISTOR	[M] ⚠
Q751	RVTDTC143ZST	TRANSISTOR	[M]
Q752	2SC3940AQSTA	TRANSISTOR	[M] ⚠
Q753	2SK2880CTA	TRANSISTOR	[M] ⚠
Q754	RVTDTC114EST	TRANSISTOR	[M] ⚠
Q901	RVTDTC114YST	TRANSISTOR	[M]
Q902	2SA933SQRSTA	TRANSISTOR	[M]
Q1001	DTA114YETL	TRANSISTOR	[M]
Q1681	2SD1915FTA	TRANSISTOR	[M]
Q1682	2SD1915FTA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q1701	2SD2137PQTA	TRANSISTOR	[M]
Q1702	2SD2374PQAU	TRANSISTOR	[M]
Q1703	2SC1740SSTA	TRANSISTOR	[M]
		DIODES	
D351	UDZSTE175R6B	DIODE	[M]
D352	UDZSTE175R6B	DIODE	[M]
D353	1SS355TE17	DIODE	[M]
D354	1SS355TE17	DIODE	[M]
D401	MTZJ7R5CTA	DIODE	[M]
D501	RVD1SS133TA	DIODE	[M]
D601	RK306LFU1	DIODE	[M]
D602	RK306LFU1	DIODE	[M]
D605	RVD1SS133TA	DIODE	[M]
D611	RVD1SS133TA	DIODE	[M]
D612	RVD1SS133TA	DIODE	[M]
D613	RVD1SS133TA	DIODE	[M]
D614	RVD1SS133TA	DIODE	[M]
D617	RVD1SS133TA	DIODE	[M]
D618	MTZJ15CTA	DIODE	[M]
D651	1N5402BM21	DIODE	[M]
D652	1N5402BM21	DIODE	[M]
D701	1N5402BM21	DIODE	[M] ⚠
D702	1N5402BM21	DIODE	[M] ⚠
D703	1N5402BM21	DIODE	[M] ⚠
D704	1N5402BM21	DIODE	[M] ⚠
D705	MTZJ6R2BTA	DIODE	[M]
D707	MTZJ33DTA	DIODE	[M]
D708	MTZJ16CTA	DIODE	[M]
D721	1N5402BM21	DIODE	[M] ⚠
D722	1N5402BM21	DIODE	[M] ⚠
D723	1N5402BM21	DIODE	[M] ⚠
D724	1N5402BM21	DIODE	[M] ⚠
D725	1N5402BM21	DIODE	[M] ⚠
D726	1N5402BM21	DIODE	[M] ⚠
D727	1N5402BM21	DIODE	[M] ⚠
D728	1N5402BM21	DIODE	[M] ⚠
D731	RVD1SS133TA	DIODE	[M] ⚠
D732	RVD1SS133TA	DIODE	[M] ⚠
D741	1SR35400V	DIODE	[M] ⚠
D742	1SR35400V	DIODE	[M] ⚠
D743	1SR35400V	DIODE	[M] ⚠
D744	1SR35400V	DIODE	[M] ⚠
D751	1SR35400V	DIODE	[M] ⚠
D752	1SR35400V	DIODE	[M] ⚠
D753	1SR35400V	DIODE	[M] ⚠
D754	1SR35400V	DIODE	[M] ⚠
D755	RVD1SS133TA	DIODE	[M]
D756	MTZJ6R8BTA	DIODE	[M]
D757	MTZJ16CTA	DIODE	[M]
D901	1SS291TA	DIODE	[M]
D902	RVD1SS133TA	DIODE	[M]
D903	MTZJ5R6BTA	DIODE	[M]
D904	MTZJ3R9ATA	DIODE	[M]
D911	RVD1SS133TA	DIODE	[M]
D913	RVD1SS133TA	DIODE	[M]
D914	1SS291TA	DIODE	[M]
D938	SLR325MCT31	DIODE	[M]
D940	SLR325YCT31	DIODE	[M]
D944	SLR325MCT31	DIODE	[M]
D1705	UDZSTE176R2B	DIODE	[M]
		VARIABLE RESISTORS	
VR901	K9AA012A0002	VR ROTARY ENCODER	[M]
VR902	RRV16B24304A	VR ENCORDED VOLUME	[M]
		SWITCHES	
S950	EVQ21405R	SW POWER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S952	EVQ21405R	SW SPEAKER	[M]
S953	EVQ21405R	SW SFC MODE	[M]
S955	EVQ21405R	SW MEMORY	[M]
S956	EVQ21405R	SW FM MODE	[M]
S957	EVQ21405R	SW BAND	[M]
S958	EVQ21405R	SW RESET	[M]
S959	EVQ21405R	SW TUNING UP	[M]
S960	EVQ21405R	SW TUNING DOWN	[M]
S962	EVQ21405R	SW SPEAKER B	[M]
S964	EVQ21405R	SW SOUND MODE	[M]
S965	EVQ21405R	SW DIGITAL	[M]
S967	EVQ21405R	SW + / RIGHT	[M]
S968	EVQ21405R	SW - / LEFT	[M]
S969	EVQ21405R	SW TONE/BALANCE	[M]
S970	EVQ21405R	SW TAPE MONITOR	[M]
S971	EVQ21405R	SW SUB. WOOFER LEVEL	[M]
		CONNECTORS	
CN401	RJS1A6607T1	7P TAPING CONNECTOR	[M]
CN402	RJS1A6606T1	6P TAPING CONNECTOR	[M]
CN702	RJS1A6603T1	3P TAPING CONNECTOR	[M]
CN751	SJS305-1	3P CONNECTOR	[M]
CN901	RJU003K008M1	BOAD IN CONNECTOR	[M]
CN902	RJU003K010M1	10P B/B CONNECTOR	[M]
CN903	RJU003K008M1	BOAD IN CONNECTOR	[M]
CN904A	RJS2A5618	18P FFC CONNECTOR	[M]
CN904B	RJS2A5618	18P FFC CONNECTOR	[M]
CN907	RJU100W04	4P CONNECTOR	[M]
CN1000A	RJS2A5618	18P FFC CONNECTOR	[M]
CN1000B	RJS2A5618	18P FFC CONNECTOR	[M]
CP101	RJT100W11	11P CONNECTOR	[M]
CP901	RJT003K008M1	8P CONNECTOR	[M]
CP902	RJT003K008M1	8P CONNECTOR	[M]
CP903	RJT003K010M1	10P CONNECTOR	[M]
CP907	RJT100W04	4P CONNECTOR	[M]
		COILS & TRANSFORMERS	
L602	RLQYR73MW-E	CHOKE COIL	[M]
L603	RLQYR73MW-E	CHOKE COIL	[M]
L604	RLQYR73MW-E	CHOKE COIL	[M]
L651	RLQYR73MW-E	CHOKE COIL	[M]
L652	RLQYR73MW-E	CHOKE COIL	[M]
L701	RLQT801M-W	CHOKE COIL	[M] ⚠
L751	RLQB101KTA-Y	CHOKE COIL	[M]
L901	RLQB101KTA-Y	CHOKE COIL	[M]
L1001	RLQM2R2KT2-W	CHIP INDUCTOR	[M]
L1002	RLQM2R2KT2-W	CHIP INDUCTOR	[M]
L1003	RLQM2R2KT2-W	CHIP INDUCTOR	[M]
L1004	RLQM2R2KT2-W	CHIP INDUCTOR	[M]
L1303	VLQ0855M1R0T	CHIP INDUCTOR	[M]
L1304	RLQZ150M-0	CHOKE COIL	[M]
T501	RTP1P5C030-T	POWER TRANSFORMER	[M] ⚠
T751	RTP1H5C005	STANDBY TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z751	ERZV10V511CS	ZENER	[M] ⚠
Z901	B3RAD0000028	REMOTE SENSOR	[M]
Z1304	BL02RN2R62T4	EMI BEAD CORE	[M]
Z1308	BL02RN2R62T4	EMI BEAD CORE	[M]
		CERAMIC FILTERS	
CF901	RVBCST4R00MT	CERAMIC OSCILLATOR	[M]
		RELAY	
RL602	K6B2AHA00014	RELAY	[M] ⚠
RL603	K6B2AHA00014	RELAY	[M] ⚠
RL604	K6B2AHA00014	RELAY	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
RL751	RSY0054-C	RELAY	[M] ⚠
		OSCILLATORS	
X1001	RSXB12M2S01T	CYRSTAL OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0312-F	FL DISPLAY	[M]
		FUSES	
F1	XBA1C80NBAL	FUSE	[M] ⚠
F3	XBA1C80NBAL	FUSE	[M] ⚠
F4	XBA1C80NBAL	FUSE	[M] ⚠
F5	XBA1C16NBAU	FUSE	[M] ⚠
F6	XBA1C40NBAL	FUSE	[M] ⚠
		FUSE HOLDERS	
FC701	EYF52BC	FUSE HOLDER	[M]
FC702	EYF52BC	FUSE HOLDER	[M]
FC705	EYF52BC	FUSE HOLDER	[M]
FC706	EYF52BC	FUSE HOLDER	[M]
FC707	EYF52BC	FUSE HOLDER	[M]
FC708	EYF52BC	FUSE HOLDER	[M]
FC709	EYF52BC	FUSE HOLDER	[M]
FC710	EYF52BC	FUSE HOLDER	[M]
FC711	EYF52BC	FUSE HOLDER	[M]
FC712	EYF52BC	FUSE HOLDER	[M]
		JACKS	
HP601	RJJ63TS01	HEADPHONES JACK	[M]
JK351	K4BK01H00001	JK 1P RCA	[M]
JK352	K4BK04H00002	JK 4P RCA	[M]
JK402	K4BK04H00001	JK 4P RCA	[M]
JK403	K4BK04H00001	JK 4P RCA	[M]
JK404	K4BK04H00001	JK 4P RCA	[M]
JK405	K4BK02H00002	JK 2P RCA	[M]
JK406	K2HA101B0003	JK 1P RCA	[M]
JK604	RJH5603-8	JK SPEAKER TERMINAL	[M]
JK605	RJR0054-J	JK SPEAKER TERMINAL	[M]
JK791	SJSD16-1	JK AC INLET	[M]
JK792	RJS1A1602-2S	JK AC OUTLET	[M]
JK1301	GP1FA550RZ	JK OPTICAL MODULE	[M]
JK1302	SJFD7-9	JK 1P RCA	[M]
JK1303	GP1FA550RZ	JK OPTICAL MODULE	[M]
		EARTH TERMINAL	
E601	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W402	RWJ1813120SX	WIRE	[M]
W600	RWJ1805250SS	WIRE	[M]
W602	RWJ1803090SS	WIRE	[M]
W701	RWJ1812520SS	WIRE	[M]
W702	RWJ1803320SX	WIRE	[M]
W752	RWJ1803180SS	WIRE	[M]
W906	RWJ1805150SS	WIRE	[M]
W908	REZ1372	EARTH WIRE	[M]
		RESISTORS	
R351	ERJ3GEYJ750V	75 1/16W	[M]
R352	ERJ3GEYJ750V	75 1/16W	[M]
R353	ERJ3GEYJ750V	75 1/16W	[M]
R354	ERJ3GEYJ750V	75 1/16W	[M]
R355	ERJ3GEYJ103V	10K 1/16W	[M]
R356	ERJ3GEYJ103V	10K 1/16W	[M]
R357	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R358	ERJ3GEYJ102V	1K 1/16W	[M]
R359	ERJ3GEYJ102V	1K 1/16W	[M]
R360	ERD2FCVG220T	22 1/4W	[M]
R361	ERJ3GEYJ182V	1.8K 1/16W	[M]
R362	ERJ3GEYJ182V	1.8K 1/16W	[M]
R363	ERD2FCVG220T	22 1/4W	[M]
R364	ERJ3GEYJ750V	75 1/16W	[M]
R401	ERDS2TJ102T	1K 1/4W	[M]
R402	ERDS2TJ102T	1K 1/4W	[M]
R403	ERDS2TJ102T	1K 1/4W	[M]
R404	ERDS2TJ102T	1K 1/4W	[M]
R405	ERDS2TJ102T	1K 1/4W	[M]
R406	ERDS2TJ102T	1K 1/4W	[M]
R407	ERDS2TJ102T	1K 1/4W	[M]
R408	ERDS2TJ102T	1K 1/4W	[M]
R409	ERDS2TJ102T	1K 1/4W	[M]
R410	ERDS2TJ102T	1K 1/4W	[M]
R411	ERDS2TJ102T	1K 1/4W	[M]
R412	ERDS2TJ102T	1K 1/4W	[M]
R413	ERDS2TJ102T	1K 1/4W	[M]
R414	ERDS2TJ102T	1K 1/4W	[M]
R415	ERDS2TJ102T	1K 1/4W	[M]
R416	ERDS2TJ102T	1K 1/4W	[M]
R417	ERDS2TJ473T	47K 1/4W	[M]
R418	ERDS2TJ473T	47K 1/4W	[M]
R419	ERDS2TJ104T	100K 1/4W	[M]
R420	ERDS2TJ104T	100K 1/4W	[M]
R421	ERDS2TJ104T	100K 1/4W	[M]
R422	ERDS2TJ104T	100K 1/4W	[M]
R423	ERDS2TJ102T	1K 1/4W	[M]
R424	ERDS2TJ102T	1K 1/4W	[M]
R425	ERDS2TJ103T	10K 1/4W	[M]
R426	ERDS2TJ103T	10K 1/4W	[M]
R427	ERDS2TJ103T	10K 1/4W	[M]
R449	ERDS1FVJ560T	56 1/2W	[M] ⚠
R450	ERDS1FVJ560T	56 1/2W	[M] ⚠
R467	ERDS2TJ473T	47K 1/4W	[M]
R468	ERDS2TJ473T	47K 1/4W	[M]
R485	ERDS2TJ104T	100K 1/4W	[M]
R486	ERDS2TJ102T	1K 1/4W	[M]
R544	ERDS2TJ104T	100K 1/4W	[M]
R545	ERDS2TJ684T	680K 1/4W	[M]
R546	ERDS2TJ104T	100K 1/4W	[M]
R547	ERDS2TJ684T	680K 1/4W	[M]
R548	ERDS2TJ822T	8.2K 1/4W	[M]
R549	ERDS2TJ822T	8.2K 1/4W	[M]
R550	ERDS2TJ822T	8.2K 1/4W	[M]
R551	ERDS2TJ102T	1K 1/4W	[M]
R552	ERDS2TJ102T	1K 1/4W	[M]
R553	ERDS2TJ102T	1K 1/4W	[M]
R554	ERDS2TJ102T	1K 1/4W	[M]
R555	ERDS2TJ102T	1K 1/4W	[M]
R556	ERDS2TJ102T	1K 1/4W	[M]
R557	ERDS2TJ102T	1K 1/4W	[M]
R581	ERDS2TJ473T	47K 1/4W	[M]
R582	ERDS2TJ473T	47K 1/4W	[M]
R583	ERDS2TJ473T	47K 1/4W	[M]
R584	ERDS2TJ473T	47K 1/4W	[M]
R585	ERDS2TJ473T	47K 1/4W	[M]
R586	ERDS2TJ473T	47K 1/4W	[M]
R591	ERDS2TJ272T	2.7K 1/4W	[M]
R592	ERDS2TJ272T	2.7K 1/4W	[M]
R593	ERDS2TJ272T	2.7K 1/4W	[M]
R594	ERDS2TJ272T	2.7K 1/4W	[M]
R595	ERDS2TJ272T	2.7K 1/4W	[M]
R596	ERDS2TJ272T	2.7K 1/4W	[M]
R603	ERDS2TJ182T	1.8K 1/4W	[M]
R604	ERDS2TJ182T	1.8K 1/4W	[M]
R605	ERDS2TJ221T	220 1/4W	[M]
R606	ERDS2TJ221T	220 1/4W	[M]
R607	ERDS2TJ563T	56K 1/4W	[M]
R608	ERDS2TJ563T	56K 1/4W	[M]
R609	ERDS2TJ470T	47 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R610	ERDS2TJ470T	47 1/4W	[M]
R611	ERDS1FVJ100T	10 1/2W	[M] ⚠
R612	ERDS1FVJ100T	10 1/2W	[M] ⚠
R613	ERDS2TJ182T	1.8K 1/4W	[M]
R614	ERDS2TJ182T	1.8K 1/4W	[M]
R615	ERDS2TJ681T	680 1/4W	[M]
R616	ERD25FVJ820T	82 1/4W	[M]
R617	ERD25FVJ820T	82 1/4W	[M]
R618	ERD25FVJ820T	82 1/4W	[M]
R619	ERD25FVJ820T	82 1/4W	[M]
R621	ERDS2TJ682T	6.8K 1/4W	[M]
R622	ERDS2TJ682T	6.8K 1/4W	[M]
R623	ERDS2TJ682T	6.8K 1/4W	[M]
R624	ERD25FVJ4R7T	4.7 1/4W	[M]
R625	ERG1SJ101E	100 1W	[M] ⚠
R626	ERG1SJ101E	100 1W	[M] ⚠
R627	ERG1SJ101E	100 1W	[M] ⚠
R628	ERG1SJ101E	100 1W	[M] ⚠
R629	ERDS2TJ102T	1K 1/4W	[M]
R630	ERDS2TJ124T	120K 1/4W	[M]
R631	ERDS2TJ154T	150K 1/4W	[M]
R632	ERDS2TJ184T	180K 1/4W	[M]
R633	ERDS2TJ473T	47K 1/4W	[M]
R634	ERDS2TJ474T	470K 1/4W	[M]
R635	ERDS2TJ154T	150K 1/4W	[M]
R637	ERDS2TJ154T	150K 1/4W	[M]
R638	ERDS2TJ154T	150K 1/4W	[M]
R639	ERDS2TJ104T	100K 1/4W	[M]
R640	ERDS2TJ681T	680 1/4W	[M]
R642	ERDS2TJ182T	1.8K 1/4W	[M]
R643	ERDS2TJ563T	56K 1/4W	[M]
R644	ERDS1FVJ100T	10 1/2W	[M]
R645	ERDS2TJ470T	47 1/4W	[M]
R647	ERDS2TJ221T	220 1/4W	[M]
R653	ERDS2TJ182T	1.8K 1/4W	[M]
R654	ERDS2TJ182T	1.8K 1/4W	[M]
R655	ERDS2TJ221T	220 1/4W	[M]
R656	ERDS2TJ221T	220 1/4W	[M]
R657	ERDS2TJ563T	56K 1/4W	[M]
R658	ERDS2TJ563T	56K 1/4W	[M]
R661	ERDS1FVJ100T	10 1/2W	[M] ⚠
R662	ERDS1FVJ100T	10 1/2W	[M] ⚠
R663	ERDS2TJ470T	47 1/4W	[M]
R664	ERDS2TJ470T	47 1/4W	[M]
R671	ERD25FVJ271T	270 1/4W	[M]
R672	ERDS1FVJ121T	120 1/2W	[M]
R674	ERD25FVJ4R7T	4.7 1/4W	[M]
R679	ERDS2TJ682T	6.8K 1/4W	[M]
R681	ERDS2TJ184T	180K 1/4W	[M]
R682	ERDS2TJ224T	220K 1/4W	[M]
R683	ERDS2TJ473T	47K 1/4W	[M]
R684	ERDS2TJ474T	470K 1/4W	[M]
R685	ERDS2TJ154T	150K 1/4W	[M]
R687	ERDS2TJ154T	150K 1/4W	[M]
R688	ERDS2TJ154T	150K 1/4W	[M]
R698	ERDS2TJ182T	1.8K 1/4W	[M]
R699	ERDS2TJ182T	1.8K 1/4W	[M]
R705	ERDS2TJ472T	4.7K 1/4W	[M]
R706	ERDS2TJ102T	1K 1/4W	[M]
R707	ERD25FVJ221T	220 1/4W	[M]
R708	ERDS2TJ152T	1.5K 1/4W	[M]
R711	ERDS2TJ752T	7.5K 1/4W	[M]
R712	ERDS2TJ682T	6.8K 1/4W	[M]
R713	ERDS2TJ390T	39 1/4W	[M]
R714	ERDS2TJ390T	39 1/4W	[M]
R720	ERDS2TJ821T	820 1/4W	[M]
R721	ERDS1FVJ561T	560 1/2W	[M] ⚠
R722	ERDS2TJ123T	12K 1/4W	[M]
R723	ERDS1FVJ1R2T	1.2 1/2W	[M] ⚠
R724	ERDS1FVJ1R2T	1.2 1/2W	[M] ⚠
R725	ERDS2TJ152T	1.5K 1/4W	[M]
R726	ERD25FVJ121T	120 1/4W	[M]
R727	ERD25FVJ121T	120 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R728	ERDS2TJ684T	680K 1/4W	[M]
R729	ERDS2TJ684T	680K 1/4W	[M]
R730	ERDS1FVJ100T	10 1/2W	[M] ⚠
R751	ERC12UGK335D	3.3M 1/2W	[M] ⚠
R755	ERDS2TJ222T	2.2K 1/4W	[M]
R759	ERDS1FVJ220T	22 1/2W	[M] ⚠
R901	ERDS2TJ102T	1K 1/4W	[M]
R902	ERDS2TJ472T	4.7K 1/4W	[M]
R903	ERDS2TJ103T	10K 1/4W	[M]
R904	ERDS2TJ102T	1K 1/4W	[M]
R905	ERDS2TJ104T	100K 1/4W	[M]
R906	ERDS2TJ271T	270 1/4W	[M]
R907	ERDS2TJ121T	120 1/4W	[M]
R908	ERDS2TJ223T	22K 1/4W	[M]
R909	ERDS2TJ223T	22K 1/4W	[M]
R910	ERDS2TJ222T	2.2K 1/4W	[M]
R911	ERDS2TJ222T	2.2K 1/4W	[M]
R912	ERDS2TJ104T	100K 1/4W	[M]
R915	ERDS2TJ101T	100 1/4W	[M]
R916	ERDS2TJ101T	100 1/4W	[M]
R917	ERDS2TJ102T	1K 1/4W	[M]
R918	ERDS2TJ103T	10K 1/4W	[M]
R919	ERDS2TJ103T	10K 1/4W	[M]
R920	ERDS2TJ103T	10K 1/4W	[M]
R921	ERDS2TJ472T	4.7K 1/4W	[M]
R922	ERDS2TJ104T	100K 1/4W	[M]
R923	ERDS2TJ103T	10K 1/4W	[M]
R924	ERDS2TJ103T	10K 1/4W	[M]
R927	ERDS2TJ101T	100 1/4W	[M]
R928	ERDS2TJ101T	100 1/4W	[M]
R938	ERDS2TJ151T	150 1/4W	[M]
R940	ERDS2TJ271T	270 1/4W	[M]
R946	ERDS2TJ151T	150 1/4W	[M]
R950	ERDS2TJ102T	1K 1/4W	[M]
R951	ERDS2TJ222T	2.2K 1/4W	[M]
R952	ERDS2TJ152T	1.5K 1/4W	[M]
R953	ERDS2TJ182T	1.8K 1/4W	[M]
R954	ERDS2TJ222T	2.2K 1/4W	[M]
R955	ERDS2TJ332T	3.3K 1/4W	[M]
R956	ERDS2TJ472T	4.7K 1/4W	[M]
R957	ERDS2TJ682T	6.8K 1/4W	[M]
R958	ERDS2TJ123T	12K 1/4W	[M]
R960	ERDS2TJ102T	1K 1/4W	[M]
R961	ERDS2TJ122T	1.2K 1/4W	[M]
R962	ERDS2TJ152T	1.5K 1/4W	[M]
R963	ERDS2TJ182T	1.8K 1/4W	[M]
R964	ERDS2TJ222T	2.2K 1/4W	[M]
R965	ERDS2TJ332T	3.3K 1/4W	[M]
R966	ERDS2TJ472T	4.7K 1/4W	[M]
R967	ERDS2TJ682T	6.8K 1/4W	[M]
R968	ERDS2TJ123T	12K 1/4W	[M]
R991	ERDS2TJ104T	100K 1/4W	[M]
R992	ERDS2TJ104T	100K 1/4W	[M]
R993	ERDS2TJ104T	100K 1/4W	[M]
R994	ERDS2TJ104T	100K 1/4W	[M]
R1012	ERJ3GEYJ103V	10K 1/16W	[M]
R1013	ERJ3GEYJ103V	10K 1/16W	[M]
R1014	ERJ3GEYJ103V	10K 1/16W	[M]
R1015	ERJ3GEYJ103V	10K 1/16W	[M]
R1016	ERJ3GEYJ103V	10K 1/16W	[M]
R1017	ERJ3GEYJ103V	10K 1/16W	[M]
R1018	ERJ3GEYJ103V	10K 1/16W	[M]
R1019	ERJ3GEYJ103V	10K 1/16W	[M]
R1020	ERJ3GEYJ103V	10K 1/16W	[M]
R1021	ERJ3GEYJ103V	10K 1/16W	[M]
R1022	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1023	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1025	ERJ3GEYJ103V	10K 1/16W	[M]
R1026	ERJ3GEYJ330V	33 1/16W	[M]
R1027	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1028	ERJ3GEYJ333V	33K 1/16W	[M]
R1029	ERJ3GEYJ472V	4.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1030	ERJ3GEYJ105V	1M 1/16W	[M]
R1031	ERJ3GEYJ102V	1K 1/16W	[M]
R1032	ERJ3GEYJ330V	33 1/16W	[M]
R1033	ERJ3GEYJ102V	1K 1/16W	[M]
R1034	ERJ3GEYJ102V	1K 1/16W	[M]
R1035	ERJ3GEYJ102V	1K 1/16W	[M]
R1036	ERJ3GEYJ102V	1K 1/16W	[M]
R1037	ERJ3GEYJ104V	100K 1/16W	[M]
R1038	ERJ3GEYJ102V	1K 1/16W	[M]
R1039	ERJ3GEYJ104V	100K 1/16W	[M]
R1040	ERJ3GEYJ102V	1K 1/16W	[M]
R1041	ERJ3GEYJ330V	33 1/16W	[M]
R1042	ERJ3GEYJ330V	33 1/16W	[M]
R1043	ERJ3GEYJ470V	47 1/16W	[M]
R1044	ERJ3GEYJ470V	47 1/16W	[M]
R1045	ERJ3GEYJ470V	47 1/16W	[M]
R1046	ERJ3GEYJ102V	1K 1/16W	[M]
R1047	ERJ3GEYJ1R5V	1.5 1/16W	[M]
R1048	ERJ3GEYJ104V	100K 1/16W	[M]
R1049	ERJ3GEYJ102V	1K 1/16W	[M]
R1050	ERJ3GEYJ102V	1K 1/16W	[M]
R1051	ERJ3GEYJ102V	1K 1/16W	[M]
R1052	ERJ3GEYJ102V	1K 1/16W	[M]
R1053	ERJ3GEYJ102V	1K 1/16W	[M]
R1054	ERJ3GEYJ102V	1K 1/16W	[M]
R1055	ERJ3GEYJ102V	1K 1/16W	[M]
R1056	ERJ3GEYJ102V	1K 1/16W	[M]
R1057	ERJ3GEYJ102V	1K 1/16W	[M]
R1058	ERJ3GEYJ102V	1K 1/16W	[M]
R1059	ERJ3GEYJ102V	1K 1/16W	[M]
R1060	ERJ3GEYJ102V	1K 1/16W	[M]
R1061	ERJ3GEYJ102V	1K 1/16W	[M]
R1062	ERJ3GEYJ102V	1K 1/16W	[M]
R1063	ERJ3GEYJ102V	1K 1/16W	[M]
R1064	ERJ3GEYJ331V	330 1/16W	[M]
R1065	ERJ3GEYJ331V	330 1/16W	[M]
R1066	ERJ3GEYJ331V	330 1/16W	[M]
R1067	ERJ3GEYJ331V	330 1/16W	[M]
R1068	ERJ3GEYJ473V	47K 1/16W	[M]
R1069	ERJ3GEYJ100V	10 1/16W	[M]
R1201	ERJ3GEYJ102V	1K 1/16W	[M]
R1202	ERJ3GEYJ473V	47K 1/16W	[M]
R1203	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1204	ERJ3GEYJ183V	18K 1/16W	[M]
R1205	ERJ3GEYJ102V	1K 1/16W	[M]
R1206	ERJ3GEYJ473V	47K 1/16W	[M]
R1207	ERJ3GEYJ473V	47K 1/16W	[M]
R1208	ERJ3GEYJ102V	1K 1/16W	[M]
R1209	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1210	ERJ3GEYJ183V	18K 1/16W	[M]
R1211	ERJ3GEYJ183V	18K 1/16W	[M]
R1212	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1213	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1214	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1215	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1216	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1217	ERJ3GEYJ473V	47K 1/16W	[M]
R1218	ERJ3GEYJ473V	47K 1/16W	[M]
R1219	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1225	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1231	ERJ3GEYJ473V	47K 1/16W	[M]
R1232	ERJ3GEYJ473V	47K 1/16W	[M]
R1233	ERJ3GEYJ473V	47K 1/16W	[M]
R1234	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1235	ERJ3GEYJ102V	1K 1/16W	[M]
R1236	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1237	ERJ3GEYJ101V	100 1/16W	[M]
R1238	ERJ3GEYJ183V	18K 1/16W	[M]
R1239	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1240	ERJ3GEYJ102V	1K 1/16W	[M]
R1241	ERJ3GEYJ102V	1K 1/16W	[M]
R1242	ERJ3GEYJ183V	18K 1/16W	[M]
R1243	ERJ3GEYJ222V	2.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1244	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1245	ERJ3GEYJ183V	18K 1/16W	[M]
R1247	ERJ3GEYJ102V	1K 1/16W	[M]
R1248	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1249	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1250	ERJ3GEYJ561V	560 1/16W	[M]
R1251	ERJ3GEYJ182V	1.8K 1/16W	[M]
R1252	ERJ3GEYJ473V	47K 1/16W	[M]
R1260	ERJ3GEYJ104V	100K 1/16W	[M]
R1261	ERJ3GEYJ104V	100K 1/16W	[M]
R1301	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1302	ERJ3GEYJ102V	1K 1/16W	[M]
R1303	ERJ3GEYJ470V	47 1/16W	[M]
R1304	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1305	ERJ3GEYJ102V	1K 1/16W	[M]
R1306	ERJ3GEYJ470V	47 1/16W	[M]
R1307	ERJ3GEYJ151V	150 1/16W	[M]
R1308	ERJ3GEYJ100V	10 1/16W	[M]
R1309	ERJ3GEYJ470V	47 1/16W	[M]
R1310	ERJ3GEYJ100V	10 1/16W	[M]
R1401	ERJ3GEYJ104V	100K 1/16W	[M]
R1404	ERJ3GEYJ473V	47K 1/16W	[M]
R1405	ERJ3GEYJ473V	47K 1/16W	[M]
R1406	ERJ3GEYJ473V	47K 1/16W	[M]
R1410	ERJ3GEYJ473V	47K 1/16W	[M]
R1411	ERJ3GEYJ473V	47K 1/16W	[M]
R1412	ERJ3GEYJ473V	47K 1/16W	[M]
R1413	ERJ3GEYJ102V	1K 1/16W	[M]
R1414	ERJ3GEYJ102V	1K 1/16W	[M]
R1415	ERJ3GEYJ102V	1K 1/16W	[M]
R1451	ERJ3GEYJ473V	47K 1/16W	[M]
R1452	ERJ3GEYJ103V	10K 1/16W	[M]
R1453	ERJ3GEYJ101V	100 1/16W	[M]
R1454	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1455	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1456	ERJ3GEYJ101V	100 1/16W	[M]
R1457	ERJ3GEYJ103V	10K 1/16W	[M]
R1458	ERJ3GEYJ473V	47K 1/16W	[M]
R1459	ERJ3GEYJ471V	470 1/16W	[M]
R1460	ERJ3GEYJ471V	470 1/16W	[M]
R1461	ERJ3GEYJ473V	47K 1/16W	[M]
R1462	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1463	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1464	ERJ3GEYJ473V	47K 1/16W	[M]
R1465	ERJ3GEYJ471V	470 1/16W	[M]
R1466	ERJ3GEYJ471V	470 1/16W	[M]
R1467	ERJ3GEYJ102V	1K 1/16W	[M]
R1468	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1469	ERJ3GEYJ682V	6.8K 1/16W	[M]
R1470	ERJ3GEYJ102V	1K 1/16W	[M]
R1480	ERJ3GEYJ104V	100K 1/16W	[M]
R1481	ERJ3GEYJ104V	100K 1/16W	[M]
R1483	ERJ3GEYJ104V	100K 1/16W	[M]
R1484	ERJ3GEYJ104V	100K 1/16W	[M]
R1521	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1522	ERJ3GEYJ223V	22K 1/16W	[M]
R1523	ERJ3GEYJ224V	220K 1/16W	[M]
R1524	ERJ3GEYJ103V	10K 1/16W	[M]
R1525	ERJ3GEYJ103V	10K 1/16W	[M]
R1526	ERJ3GEYJ103V	10K 1/16W	[M]
R1527	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1528	ERJ3GEYJ223V	22K 1/16W	[M]
R1529	ERJ3GEYJ224V	220K 1/16W	[M]
R1530	ERJ3GEYJ103V	10K 1/16W	[M]
R1531	ERJ3GEYJ103V	10K 1/16W	[M]
R1681	ERDS2TJ270T	27 1/4W	[M]
R1682	ERDS2TJ270T	27 1/4W	[M]
R1683	ERDS2TJ270T	27 1/4W	[M]
R1684	ERDS2TJ270T	27 1/4W	[M]
R1685	ERDS2TJ270T	27 1/4W	[M]
R1686	ERDS2TJ270T	27 1/4W	[M]
R1687	ERDS2TJ270T	27 1/4W	[M]
R1688	ERDS2TJ270T	27 1/4W	[M]
R1689	ERDS2TJ270T	27 1/4W	[M]
R1690	ERDS2TJ270T	27 1/4W	[M]
R1691	ERDS2TJ270T	27 1/4W	[M]
R1692	ERDS2TJ270T	27 1/4W	[M]
R1693	ERDS2TJ270T	27 1/4W	[M]
R1694	ERDS2TJ270T	27 1/4W	[M]
R1695	ERDS2TJ102T	1K 1/4W	[M]
R1696	ERDS2TJ102T	1K 1/4W	[M]
R1699	ERDS2TJ332T	3.3K 1/4W	[M]
R1701	ERDS1FVJ4R7T	4.7 1/2W	[M] ⚠
R1702	ERDS1FVJ4R7T	4.7 1/2W	[M] ⚠
R1703	ERJ3GEYJ103V	10K 1/16W	[M]
R1704	ERJ3GEYJ272V	2.7K 1/16W	[M]
R1705	ERJ3GEYJ331V	330 1/16W	[M]
R1706	ERJ3GEYJ331V	330 1/16W	[M]
R1707	ERJ3GEYJ821V	820 1/16W	[M]
R1916	ERJ3GEYJ101V	100 1/16W	[M]
R1928	ERJ3GEYJ101V	100 1/16W	[M]
R1929	ERJ3GEYJ101V	100 1/16W	[M]
R1930	ERJ3GEYJ101V	100 1/16W	[M]
R1931	ERJ3GEYJ101V	100 1/16W	[M]
R1932	ERJ3GEYJ101V	100 1/16W	[M]
R1933	ERJ3GEYJ101V	100 1/16W	[M]
R1934	ERJ3GEYJ101V	100 1/16W	[M]
R1942	ERJ3GEYJ101V	100 1/16W	[M]
R1943	ERJ3GEYJ101V	100 1/16W	[M]
R1945	ERJ3GEYJ101V	100 1/16W	[M]
		CAPACITORS	
C351	ECUV1H470JCV	47P 50V	[M]
C352	ECUV1H470JCV	47P 50V	[M]
C353	ECA1CAK470XB	47 16V	[M]
C354	ECA1CAK470XB	47 16V	[M]
C355	ECA1CAK470XB	47 16V	[M]
C356	ECUVNC104ZFV	0.1 16V	[M]
C357	ECUVNC104ZFV	0.1 16V	[M]
C358	ECA0JAK101XB	100 6.3V	[M]
C359	ECA0JAK101XB	100 6.3V	[M]
C360	ECUV1H103KBV	0.01 50V	[M]
C361	ECA0JAK101XB	100 6.3V	[M]
C362	ECA0JAK101XB	100 6.3V	[M]
C363	ECUV1H103KBV	0.01 50V	[M]
C401	ECA1HAK4R7XB	4.7 50V	[M]
C402	ECA1HAK4R7XB	4.7 50V	[M]
C403	ECBT1H103KB5	0.01 50V	[M]
C404	ECBT1H103KB5	0.01 50V	[M]
C405	ECBT1H101KB5	100P 50V	[M]
C409	ECA1CAK220XB	22 16V	[M]
C410	ECA1CAK220XB	22 16V	[M]
C411	ECBT1H101KB5	100P 50V	[M]
C412	ECBT1H101KB5	100P 50V	[M]
C413	ECA1CAK100XB	10 16V	[M]
C414	ECA1CAK100XB	10 16V	[M]
C415	ECBT1H103KB5	0.01 50V	[M]
C416	ECBT1H103KB5	0.01 50V	[M]
C417	ECA1CAK100XB	10 16V	[M]
C418	ECA1CAK100XB	10 16V	[M]
C421	ECBT1H101KB5	100P 50V	[M]
C422	ECBT1H101KB5	100P 50V	[M]
C423	ECBT1H101KB5	100P 50V	[M]
C424	ECBT1H101KB5	100P 50V	[M]
C425	ECBT1H331KB5	330P 50V	[M]
C426	ECBT1H331KB5	330P 50V	[M]
C427	ECBT1H331KB5	330P 50V	[M]
C428	ECBT1H331KB5	330P 50V	[M]
C429	ECBT1H101KB5	100P 50V	[M]
C430	ECBT1H101KB5	100P 50V	[M]
C431	ECBT1H101KB5	100P 50V	[M]
C432	ECBT1H101KB5	100P 50V	[M]
C433	ECBT1H101KB5	100P 50V	[M]
C434	ECBT1H101KB5	100P 50V	[M]
C467	ECBT1H103KB5	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C482	ECA1HAK3R3XB	3.3 50V	[M]
C483	ECBT1H101KB5	100P 50V	[M]
C533	ECBT1H104ZF5	0.1 50V	[M]
C534	ECBT1H104ZF5	0.1 50V	[M]
C535	ECBT1H104ZF5	0.1 50V	[M]
C583	ECA1CAK100XB	10 16V	[M]
C584	ECA1CAK100XB	10 16V	[M]
C585	ECA1CAK100XB	10 16V	[M]
C586	ECA1CAK100XB	10 16V	[M]
C601	ECA1JAM330XB	33 63V	[M]
C602	ECA1JAM330XB	33 63V	[M]
C603	ECBT1H821KB5	820P 50V	[M]
C604	ECBT1H821KB5	820P 50V	[M]
C607	ECCR1H180KC5	18P 50V	[M]
C608	ECCR1H180KC5	18P 50V	[M]
C611	ECQV1H473JZ3	0.047 50V	[M]
C612	ECQV1H473JZ3	0.047 50V	[M]
C615	ECBT1H103KB5	0.01 50V	[M]
C616	ECA1HAM470XB	47 50V	[M]
C617	ECEA2AN2R2SB	2.2 100V	[M]
C618	ECBT1H102KB5	1000P 50V	[M]
C621	ECA2AAM330XB	33 100V	[M]
C622	ECA2AAM330XB	33 100V	[M]
C625	ECEA1HN100SB	10 50V	[M]
C626	ECEA1HN100SB	10 50V	[M]
C641	ECA1JAM330XB	33 63V	[M]
C642	ECBT1H821KB5	820P 50V	[M]
C643	ECCR1H180KC5	18P 50V	[M]
C644	ECQV1H473JZ3	0.047 50V	[M]
C651	ECA1JAM330XB	33 63V	[M]
C652	ECA1JAM330XB	33 63V	[M]
C653	ECBT1H821KB5	820P 50V	[M]
C654	ECBT1H821KB5	820P 50V	[M]
C657	ECCR1H100KC5	10P 50V	[M]
C658	ECCR1H100KC5	10P 50V	[M]
C661	ECQV1H473JZ3	0.047 50V	[M]
C662	ECQV1H473JZ3	0.047 50V	[M]
C666	ECA1EAM101XB	100 16V	[M]
C667	ECEA2AN2R2SB	2.2 100V	[M]
C668	ECBT1H102KB5	1000P 50V	[M]
C671	ECA2AAM330XB	33 100V	[M]
C672	ECA2AAM330XB	33 100V	[M]
C685	ECBT1H103KB5	0.01 50V	[M]
C701	ECBT1H103KB5	0.01 50V	[M]
C702	ECQE2104KF3	0.1 250V	[M]
C703	RCE1J472MHSK	4700P 63V	[M] ⚠
C704	RCE1J472MHSK	4700P 63V	[M] ⚠
C705	RCE1V562MHSK	5600P 50V5	[M] ⚠
C706	RCE1V562MHSK	5600P 50V5	[M] ⚠
C707	ECA1VAM101XB	100 50V5	[M]
C708	ECBT1H103KB5	0.01 50V	[M]
C709	ECA1CAK330XB	33 16V	[M]
C710	ECBT1H103KB5	0.01 50V	[M]
C711	ECBT1H103KB5	0.01 50V	[M]
C712	ECA1HAK100XB	10 50V	[M]
C713	ECBT1H103KB5	0.01 50V	[M]
C714	ECA1EAK470XB	47 25V	[M]
C715	ECA1CAK101XB	100 16V	[M]
C721	ECQE2104KF3	0.1 250V	[M]
C722	ECQE2104KF3	0.1 250V	[M]
C741	ECQV1H104JZ3	0.1 50V	[M]
C751	ECKWRS102MBC	1000P 400V	[M] ⚠
C752	ECKR1H103ZF5	0.01 50V	[M]
C753	ECA1EAM331XB	330 16V	[M]
C754	ECBT1H103KB5	0.01 50V	[M]
C755	ECA1CAK470XB	47 16V	[M]
C757	ECA1CAK100XB	10 16V	[M]
C758	ECA1CAK101XB	100 16V	[M]
C780	ECA1CAM471XB	470 16V	[M]
C901	ECA0JM102B	1000P 6.3V	[M] ⚠
C902	ECBT1H104KB5	0.1 50V	[M]
C903	ECBT1H103KB5	0.01 50V	[M]
C904	ECA0JM102B	1000P 6.3V	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
C905	ECA1HAK010XB	1 50V	[M]
C906	ECA1HAK010XB	1 50V	[M]
C907	ECBT1H103KB5	0.01 50V	[M]
C908	ECBT1H103KB5	0.01 50V	[M]
C909	ECA1HAK220XB	22 50V	[M]
C910	ECA1HAK220XB	22 50V	[M]
C911	ECA1HAK220XB	22 50V	[M]
C912	ECA1HAK220XB	22 50V	[M]
C913	ECA1HAK100XB	10 50V	[M]
C914	ECA1HAK100XB	10 50V	[M]
C915	ECA0JAK101XB	100 6.3V	[M]
C916	ECBT1H103KB5	0.01 50V	[M]
C917	ECA1CAK100XB	10 16V	[M]
C918	ECBT1H471KB5	470P 50V	[M]
C919	ECBT1H471KB5	470P 50V	[M]
C921	ECBT1H331KB5	330P 50V	[M]
C922	ECBT1H331KB5	330P 50V	[M]
C923	ECBT1H331KB5	330P 50V	[M]
C924	ECBT1H331KB5	330P 50V	[M]
C925	ECBT1H331KB5	330P 50V	[M]
C926	ECBT1H331KB5	330P 50V	[M]
C927	ECBT1H331KB5	330P 50V	[M]
C928	ECBT1H331KB5	330P 50V	[M]
C929	ECBT1H331KB5	330P 50V	[M]
C930	ECBT1H331KB5	330P 50V	[M]
C991	ECBT1H101KB5	100P 50V	[M]
C992	ECBT1H101KB5	100P 50V	[M]
C993	ECBT1H101KB5	100P 50V	[M]
C994	ECBT1H101KB5	100P 50V	[M]
C1003	ECA1HAK010XB	1 50V	[M]
C1004	ECA0JAK101XB	100 6.3V	[M]
C1005	ECA0JAK101XB	100 6.3V	[M]
C1006	ECA1EAM331XB	330 25V	[M]
C1007	ECA1HAK2R2XB	2.2 50V	[M]
C1008	ECA0JAK101XB	100 6.3V	[M]
C1009	ECA0JAK101XB	100 6.3V	[M]
C1010	ECA0JAK101XB	100 6.3V	[M]
C1011	ECA0JAK101XB	100 6.3V	[M]
C1024	ECUVNC104ZFV	0.1 16V	[M]
C1025	ECUVNC104ZFV	0.1 16V	[M]
C1026	ECUVNC104ZFV	0.1 16V	[M]
C1027	ECUVNC104ZFV	0.1 16V	[M]
C1028	ECUV1H101KCV	100P 50V	[M]
C1029	ECUVNC104ZFV	0.1 16V	[M]
C1030	ECUV1H471KBV	470P 50V	[M]
C1031	ECUV1E103KBV	0.01 25V	[M]
C1032	ECUVNC104ZFV	0.1 16V	[M]
C1033	ECUV1H220JCV	22P 50V	[M]
C1034	ECUV1H101KCV	100P 50V	[M]
C1035	ECUV1H220JCV	22P 50V	[M]
C1036	ECUV1H101KCV	100P 50V	[M]
C1037	ECUV1H102KBV	1000P 50V	[M]
C1038	ECUV1H102KBV	1000P 50V	[M]
C1039	ECUV1H101KCV	100P 50V	[M]
C1040	ECUVNC104ZFV	0.1 16V	[M]
C1041	ECUVNC104ZFV	0.1 16V	[M]
C1042	ECUV1H102KBV	1000P 50V	[M]
C1043	ECUVNC104ZFV	0.1 16V	[M]
C1044	ECUV1H101KCV	100P 50V	[M]
C1045	ECUV1H101KCV	100P 50V	[M]
C1046	ECUV1H102KBV	1000P 50V	[M]
C1047	ECUV1H102KBV	1000P 50V	[M]
C1048	ECUVNC104ZFV	0.1 16V	[M]
C1049	ECUV1H102KBV	1000P 50V	[M]
C1050	ECUV1H102KBV	1000P 50V	[M]
C1051	ECUV1H152KBV	1500P 50V	[M]
C1052	ECUV1E103KBV	0.01 25V	[M]
C1053	ECUVNC104ZFV	0.1 16V	[M]
C1070	ECA1EPXS470B	47 25V	[M]
C1201	ECUV1H103KBV	0.01 50V	[M]
C1202	ECUV1A224KBV	0.22 10V	[M]
C1203	ECA1CAK330XB	33 16V	[M]
C1204	ECUV1H103KBV	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1205	ECA1CAK330XB	33 16V	[M]
C1206	ECUV1H472KBV	4700P 50V	[M]
C1207	ECUV1H272KBV	2700P 50V	[M]
C1208	ECUV1H472KBV	4700P 50V	[M]
C1209	ECUV1H272KBV	2700P 50V	[M]
C1210	ECA1CAK330XB	33 16V	[M]
C1211	ECUV1H101KCV	100P 50V	[M]
C1212	ECUV1H101KCV	100P 50V	[M]
C1213	ECUV1H221KBV	220P 50V	[M]
C1214	ECUV1H221KBV	220P 50V	[M]
C1215	ECA1HAK100XB	10 50V	[M]
C1216	ECA1HAK100XB	10 50V	[M]
C1217	ECUV1H103KBV	0.01 50V	[M]
C1218	ECUV1H103KBV	0.01 50V	[M]
C1219	ECA1EAK100XB	10 25V	[M]
C1220	ECA1EAK100XB	10 25V	[M]
C1221	ECUVNC104ZFV	0.1 16V	[M]
C1222	ECA1EAK100XB	10 25V	[M]
C1223	ECUVNC104ZFV	0.1 16V	[M]
C1224	ECQV1H104JZ3	0.1 50V	[M]
C1231	ECA1CAK330XB	33 16V	[M]
C1232	ECUV1H472KBV	4700P 50V	[M]
C1233	ECUV1H472KBV	4700P 50V	[M]
C1234	ECA1CAK330XB	33 16V	[M]
C1235	ECUV1H472KBV	4700P 50V	[M]
C1236	ECA1CAK330XB	33 16V	[M]
C1237	ECUV1H331KBV	330P 50V	[M]
C1238	ECUV1H101KCV	100P 50V	[M]
C1239	ECUV1H272KBV	2700P 50V	[M]
C1240	ECUV1H272KBV	2700P 50V	[M]
C1241	ECUV1H101KCV	100P 50V	[M]
C1242	ECUV1H101KCV	100P 50V	[M]
C1243	ECUV1H272KBV	2700P 50V	[M]
C1244	ECUV1H103KBV	0.01 50V	[M]
C1245	ECUV1H103KBV	0.01 50V	[M]
C1246	ECA1EAK100XB	10 25V	[M]
C1247	ECA1EAK100XB	10 25V	[M]
C1250	ECUV1E223KBV	0.022 25V	[M]
C1251	ECA1CAK330XB	33 16V	[M]
C1252	ECUV1H103KBV	0.01 50V	[M]
C1253	ECUV1H103KBV	0.01 50V	[M]
C1260	ECA1HAK4R7XB	4.7 50V	[M]
C1261	ECA1HAK4R7XB	4.7 50V	[M]
C1280	ECUV1H221KBV	220P 50V	[M]
C1302	ECUV1H103KBV	0.01 50V	[M]
C1303	ECUVNC104ZFV	0.1 16V	[M]
C1305	ECUV1H103KBV	0.01 50V	[M]
C1306	ECUVNC104ZFV	0.1 16V	[M]
C1307	ECUV1H103KBV	0.01 50V	[M]
C1308	ECUVNC104ZFV	0.1 16V	[M]
C1309	ECUVNC104ZFV	0.1 16V	[M]
C1311	ECUVNC104ZFV	0.1 16V	[M]
C1312	ECUVNC104ZFV	0.1 16V	[M]
C1313	ECUV1H103KBV	0.01 50V	[M]
C1405	ECA1CAK330XB	33 16V	[M]
C1406	ECA1CAK330XB	33 16V	[M]
C1407	ECA1CAK330XB	33 16V	[M]
C1409	ECA1CAK330XB	33 16V	[M]
C1410	ECA1EAK470XB	47 25V	[M]
C1411	ECA1EAK470XB	47 25V	[M]
C1412	ECUVNC104ZFV	0.1 16V	[M]
C1413	ECUVNC104ZFV	0.1 16V	[M]
C1414	ECA1CAK330XB	33 16V	[M]
C1415	ECA1CAK330XB	33 16V	[M]
C1451	ECA1HAK4R7XB	4.7 50V	[M]
C1452	ECUV1H331KBV	330P 50V	[M]
C1453	ECUV1H331KBV	330P 50V	[M]
C1454	ECA1HAK4R7XB	4.7 50V	[M]
C1455	ECUV1H221KBV	220P 50V	[M]
C1456	ECUV1H221KBV	220P 50V	[M]
C1457	ECA1CAK330XB	33 16V	[M]
C1458	ECA1CAK330XB	33 16V	[M]
C1459	ECUV1H221KBV	220P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1460	ECUV1H221KBV	220P 50V	[M]
C1480	ECA1HAK4R7XB	4.7 50V	[M]
C1481	ECA1HAK4R7XB	4.7 50V	[M]
C1483	ECA1HAK4R7XB	4.7 50V	[M]
C1484	ECA1HAK4R7XB	4.7 50V	[M]
C1521	ECEA1CKN100B	10 16V	[M]
C1522	ECEA1CKN100B	10 16V	[M]
C1523	ECUV1H391JCV	390P 50V	[M]
C1524	ECA1CAK100XB	10 16V	[M]
C1525	ECUV1H151JCV	150P 50V	[M]
C1526	ECA1CAK100XB	10 16V	[M]
C1527	ECA1CAK100XB	10 16V	[M]
C1528	ECUV1H103KBV	0.01 50V	[M]
C1529	ECEA1CKN100B	10 16V	[M]
C1530	ECEA1CKN100B	10 16V	[M]
C1531	ECUV1H391JCV	390P 50V	[M]
C1532	ECA1CAK100XB	10 16V	[M]
C1533	ECUV1H151JCV	150P 50V	[M]
C1681	ECBT1H103KB5	0.01 50V	[M]
C1682	ECBT1H103KB5	0.01 50V	[M]
C1685	ECBT1H103KB5	0.01 50V	[M]
C1701	ECA1CAK101XB	100 16V	[M]
C1702	ECA1AM332E	3300 10V	[M] ⚠
C1703	ECUV1H103KBV	0.01 50V	[M]
C1704	ECA1CAK100XB	10 16V	[M]
C1705	ECA1CAK220XB	22 16V	[M]
C1706	ECUV1H391JCV	390P 50V	[M]
C1801	ECUVNC104ZFV	0.1 16V	[M]
C1802	ECUVNC104ZFV	0.1 16V	[M]
C1909	ECUV1H472KBV	4700P 50V	[M]
C1910	ECUVNC104ZFV	0.1 16V	[M]
C1911	ECUV1H102KBV	1000P 50V	[M]

13.3. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPG5428	PACKING CASE	[M]
P2	RPN1384	POLYFOAM	[M]
P3	RPFX0005	MIRAMAT BAG	[M]
		ACCESSORIES	

Ref. No.	Part No.	Part Name & Description	Remarks
A1	EUR7702100	REMOTE CONTROL	[M]
A1-1	UR64EC2337D	R/C BATTERY COVER	[M]
A2	RJA0065-A	AC CORD	[M] ⚠
A3	RQCA0839	OPERATION GUIDE	[M]
A3	RQT5908-Y	O/I BOOK (En/Cf)	[M]
A3	RQT5914-Y	O/I BOOK REMOCON (En/Cf)	[M]
A4	RSA0006-L	FM ANTENNA WIRE	[M]
A5	RSA0012	AM LOOP ANTENNA	[M]

13.4. Packaging

ACCESSORY CASE

A1 : REMOTE CONTROL

A2 : AC CORD

A3 : O/I BOOK

A4 : FM ANTENNA WIRE

A5 : AM LOOP ANTENNA