

JVC

SERVICE MANUAL

D-ILA PROJECTION TELEVISION

**HD-52FA97,
HD-56FB97,
HD-61FB97**

BASIC CHASSIS

RA3



HD-ILA™
Powered by D-ILA
GENESSA
D.I.S.T.
Digital Image Scaling Technology
HDTV
HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE
DOLBY DIGITAL

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SPECIFICATION

Items		Contents		
		HD-52FA97	HD-56FB97	HD-61FB97
Dimensions (W × H × D)		122.9 cm × 91.1 cm × 41.5 cm (48-1/2" × 35-7/8" × 16-3/8")	129.2 cm × 94.4 cm × 45.0 cm (50-7/8" × 37-1/8" × 17-3/4")	140.3 cm × 101.6 cm × 48.4 cm (55-1/4" × 40" × 19")
Mass		39 kg (86 lbs)	41 kg (91 lbs)	45 kg (99 lbs)
TV RF System (Analog / Digital)	Analog Digital	CCIR (M) ATSC terrestrial / Digital cable		
Color System (Analog)		NTSC		
Stereo System (Analog)		BTSC (Multi Channel Sound)		
Teletext System (Analog)		Closed caption (T1-T4 / CC1-CC4)		
TV Receiving Channels and Frequency (Analog)	VHF Low VHF High UHF CATV	02ch - 06ch : 54MHz - 88MHz 07ch - 13ch : 174MHz - 216MHz 14ch - 69ch : 470MHz - 806MHz 54MHz - 804MHz Low Band : 02 - 06 High Band : 07 - 13 Mid Band : 14 - 22 Super Band : 23 - 36 Hyper Band : 37 - 64 Ultra Band : 65 - 94, 100 - 135 Sub Mid Band : 01, 96 - 99		
TV / CATV Total Channel		191 Channels		
Intermediate Frequency (Analog)	Video IF Sound IF	45.75 MHz 41.25 MHz (4.5MHz)		
Color Sub Carrier Frequency (Analog)		3.58 MHz		
Power Input		AC120V, 60Hz		
Power Consumption		220W		
Projection Source		110W High-pressure mercury lamp		
Projection Device		D-ILA device (Reflection active matrix type LCD) x 3(R / G /B)		
Resolution		Total=H:1952 × V:1088 [Effective =H:1920 × V:1080]		
Screen		Transparent screen (unitized fresnel lens / lenticular lens), aspect ratio 16:9		
Screen Size		52" (132 cm) Measured diagonally H:115.1 cm × V:64.8 cm	56" (142cm) Measured diagonally H:124 cm × V:69.8cm	61" (155cm) Measured diagonally H:135 cm × V:76.0cm
Audio Power Output		10W + 10W		
Speaker		10 cm round type × 2 (Oblique corn)	8.5cm × 12.5cm oval type × 2 (Oblique corn)	
Antenna Terminal (VHF/UHF, ATSC / DIGITAL CABLE IN)		F-type connector, 75Ω unbalanced, coaxial × 1		
Video / Audio Input [INPUT-1/2/3/4]	Component Video [INPUT-1/2] 1125i / 750p 525p / 525i S-Video [INPUT-1] Video [INPUT-1/2/4] Audio	RCA pin jack × 6 Y : 1V (p-p) (Sync signal: 0.35V(p-p), 3-value sync.), 75 Ω Pb/Pr : ±0.35V(p-p), 75 Ω Y : 1V (p-p), positive (Negative sync provided), 75 Ω Pb/Pr : 0.7V(p-p), 75 Ω Mini-DIN 4 pin × 1 Y: 1V (p-p), positive (Negative sync provided), 75 Ω C: 0.286V (p-p) (Burst signal), 75 Ω 1V (p-p), positive (Negative sync provided), 75 Ω, RCA pin jack × 3 500mV (rms), high impedance, RCA pin jack × 8		
Digital Input	Video Audio	HDMI 2-row 19pin connector × 2 (Digital-input terminal is not compatible with picture signals of personal computer) Digital: HDMI 2-row 19pin connector × 2 Analog: 500mV(rms) (-4dBs), high impedance, RCA pin jack × 2		
PC (RGB) Input		D-sub 3-row 15pin × 1 R/G/B : 0.7V (p-p), 75Ω HD / VD : 2V (p-p) to 5V (p-p), high impedance < Available signal > VGA : 640 pixels × 480 pixels (Horizontal : 31.5kHz / Vertical : 60Hz) XGA : 1024 pixels × 768 pixels (Horizontal : 48.4kHz / Vertical : 60Hz)		
Audio Output	Fix	RCA pin jack × 2 500mV(rms) (-4dBs), low impedance (1000Hz when modulated 100%)		
Digital Audio Optical Output		Digital SPDIF × 1		
Remote Control Unit		RM-C18G (AA/R6 / UM-3 battery × 2)		

Design & specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 SAFETY PRECAUTIONS

- (1) The design of this product contains special hardware, 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. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer 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 (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND, the ISOLATED (NEUTRAL) : ($\equiv$) side GND and EARTH : ($\oplus$) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.
- (5) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(6) Isolation Check (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) Dielectric Strength Test

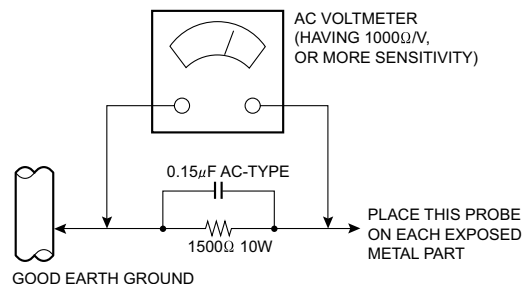
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

b) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 Ω per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). 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. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



1.2 INSTALLATION

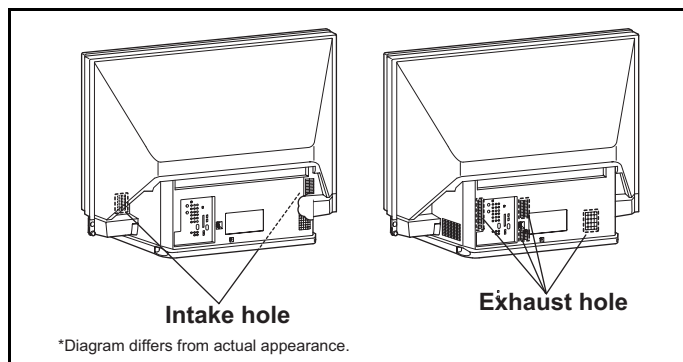
1.2.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the predetermined level and power will be turned off automatically.

Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.

Do not put foreign objects near the ventilation holes as this can result in fire or electrical hazards.

Do not block the ventilation holes as this may cause the internal temperature to rise and possibly result fire.



1.2.2 INSTALLATION REQUIREMENTS

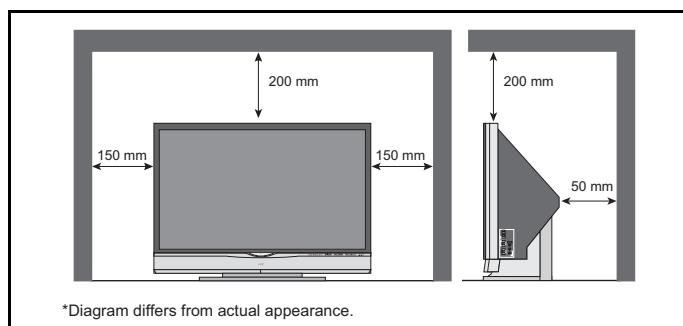
Ensure that the minimal distance is maintained, as specified figure, between the unit with and the surrounding walls, as well as the floor etc.

Install the unit on stable flooring.

Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.

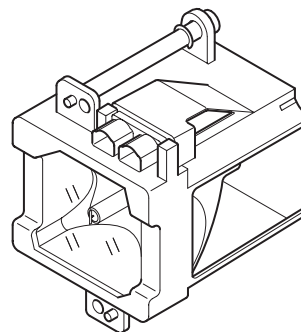
CAUTION FOR INSTALLATION

- Do not tilt the TV towards the left or right, or toward the back.
- Install the TV in a corner on the floor so as to keep cords out of the way.
- The TV will generate a slight amount of heat during operation. Ensure that sufficient space is available around the TV to allow satisfactory cooling.



1.3 LAMP UNIT HANDLING CAUTION

LAMP UNIT : TS-CL110UAA



1.3.1 PRECAUTION FOR LAMP UNIT

The lamp emits high intensity white, ultraviolet and infrared light. Do not look directly at the light during service.

Also, do not touch the lamp directly as it presents a burn hazard.

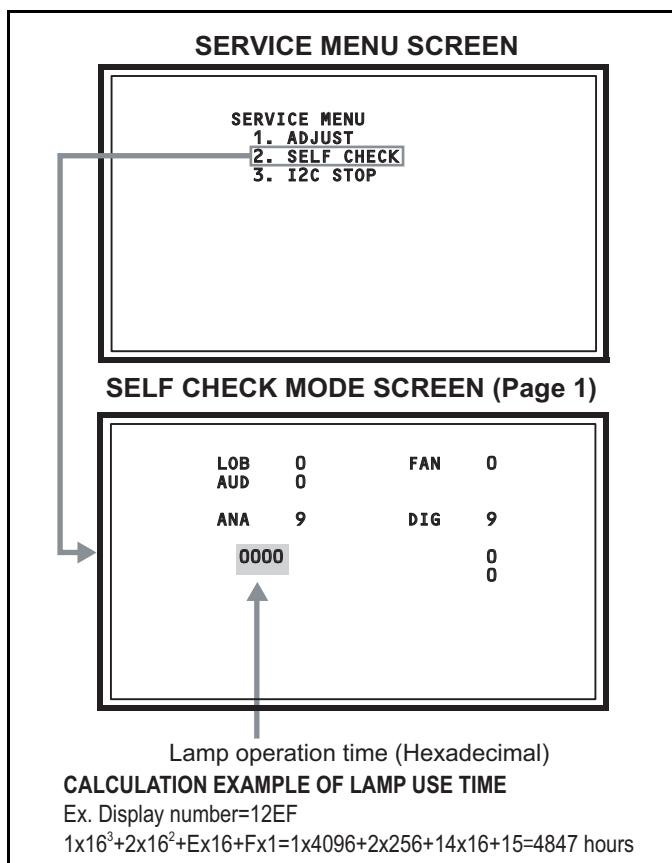
Handle with extra care. This lamp emits high heat and contains high-pressure during use.

Do not give any impact as this may cause the broken lamp.

1.3.2 HOW TO CONFIRM LAMP OPERATING TIME

- MAXIMUM COUNT TIME= 65535 hours

- (1) Set to "0 minutes" using the [SLEEP TIMER] key.
- (2) Press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, then enter the SERVICE MODE.
- (3) When the SERVICE MENU SCREEN is displayed, press [2] key to enter the SELF CHECK MODE.
- (4) The use time of a lamp is displayed on middle of the screen by the hexadecimal number of 4 figures.



1.3.3 LAMP UNIT REPLACEMENT

- (1) The lamp replacement message will appear when need to change the lamp. After replace the lamp, need to reset the timer which is built into TV.
- (2) Lamp use time can be check at the lamp message MENU. If lamp use time exceeds **5000 hours**, the message of Fig.1 will be displayed on a screen.
- (3) If Fig.1 message appears when turn the TV on, need to replace the lamp.
- (4) Use the lamp timer reset only after replacing the lamp.

NOTE:

- This message will appear every time turn on the TV, when the lamp needs to be replaced. Press the **[OK]** key to make the message disappear, or replace the lamp.

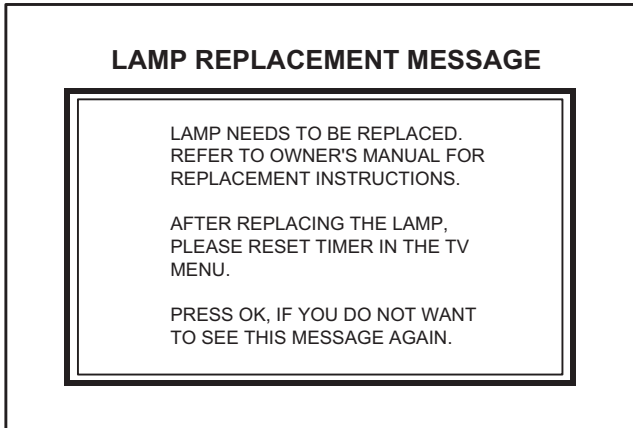


Fig.1

1.3.4 HOW TO REPLACE THE LAMP UNIT

- Refer to the "USERS GUIDE" for a detailed operating description.
 - (1) Turn off the TV power.
 - (2) After the LAMP LED light has stopped blinking, disconnect the power cord from the AC outlet.
 - (3) Loosen 1 screw then take out the lamp cover below the left side of the TV.
 - (4) Loosen 2 screws then take out the lamp unit.
 - (5) Install the new lamp unit.
 - (6) Re-install the lamp cover.

NOTE:

- After installing the new lamp unit, do not forget to reset the lamp timer.

1.3.5 HOW TO RESET THE LAMP TIMER

- Refer to the "USERS GUIDE" for a detailed operating description.
 - (1) Press the **[MENU]** key to select CLOCK / TIMERS.
 - (2) Select the <LAMP TIMER RESET> with **[▲]** / **[▼]** keys.
 - (3) Enter the <LAMP TIMER RESET> mode, the following message will appears.

PRESS OK TO RESET THE LAMP TIMER

- (4) Press the **[OK]** key while the above message appears on the screen.
- (5) The lamp timer has now been reset, and the following message will appear.

THE LAMP TIMER IS RESET SUCCESSFULLY

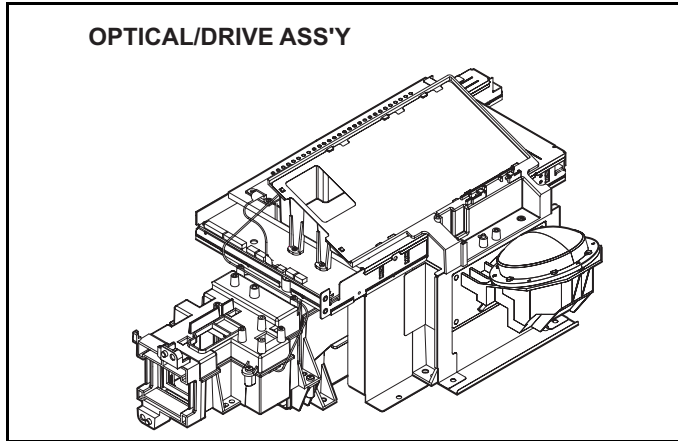
1.3.6 PRECAUTION FOR REPLACEMENT

- Do not replace the LAMP UNIT immediately after the projector has been used.
- The temperature of the LAMP UNIT is still high and could cause a burn.
- Allow a cooling period of 1 hour or more before performing replacement.
- Before starting LAMP UNIT replacement work, turn off the MAIN POWER switch, and disconnect the AC power cord plug from the wall outlet.
- If touched, the lamp glass surface may rupture and burns may result. Do not touch the glass portion or metal portion. Handle only plastic handle.
- The replaced old lamp can be discarded in the same manner as a fluorescent lamp. Check local ordinances and dispose of the used lamp as prescribed.

1.4 SERVICE PARTS KIT INSTRUCTIONS

Due to the character of this product, these **OPTICAL /DRIVE ASS'Y** are prepared.

Please note these **OPTICAL/DRIVE ASS'Y** when replacing or ordering the parts.



1.4.1 PART NUMBER AND CONSTRUCTION

Kit parts number	Kit part name
TS-COP14A-SAA	OPTICAL / DRIVE ASS'Y

1.4.2 OPTICAL / DRIVE ASS'Y CONSTRUCTION

- (1) OPTICAL BLOCK
(Included D-ILA DEVICE, PROJECTION LENS)
 - (2) OPTICAL BASE
 - (3) DRIVE PWB ASS'Y
This PWB is mounted with 1 memory IC saved with adjustment, setting data of the drive circuit.
 - (4) SHIELD COVER
- *The following parts without the kits part.
- REMOTE SENSOR PWB ASS'Y
 - LAMP UNIT
 - LAMP FAN DUCT
 - THERMOSTAT

1.4.3 PRECAUTION FOR USING

- (1) In the case of the following defects/problems, replace this kit (OPTICAL/DRIVE ASS'Y)
 - a) Picture defect caused by optical system/D-ILA device related parts.
 - b) Picture defect caused by drive circuit.
- (2) The DRIVE PWB ASS'Y is mounted with a memory IC [\[IC3753\]](#) saved with adjustment/setting data(GAMMA, SHADING, etc.) of the drive circuit.
The data of this memory IC is in the optimal state according to individual D-ILA devices and each section of the OPTICAL BLOCK.
- (3) When replace the DRIVE PWB ASS'Y, take off the 1 memory IC from the original board and replace with new one. When replace the DRIVE PWB ASS'Y, do same manner. Replace 1 memory IC.
- (4) After the replacement of the OPTICAL BLOCK, projection lens focus adjustment and drive convergence / projection adjustment are required.

1.5 SCREEN HANDLING CAUTIONS

1.5.1 SCREEN STORAGE

Store the SCREEN ASS'Y in a standing position in order to avoid deformation. If the screen is stored horizontally, there is risk of deforming the screen face.

When necessary to place the SCREEN ASS'Y horizontally, position the screen side upwards and sure to place spacers between the screen and resting site (floor or stand etc.) to prevent the screen from sagging.

1.5.2 SCREEN SURFACE

Since the screen surface is easily scratched or soiled, use ample care when handling.

1.5.3 PRECAUTIONS FOR CLEANING AND REPLACEMENT

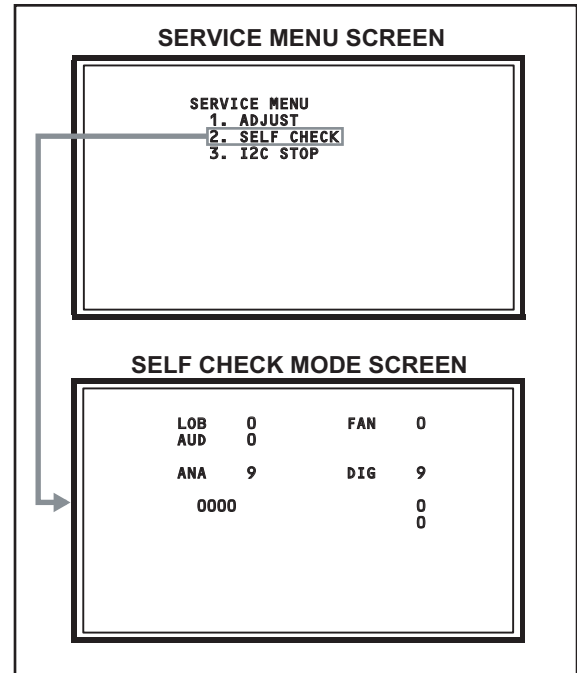
- The SCREEN ASS'Y is made from the lenticular lens and fresnel lens. The anti static proceeding and the surface of the lenticular lens. Rubbing the surface with something hard, the coating may peel off.
- When the screen is dirty, gently wipe it with a soft cloth.
If the screen is very dirty, wipe it down with a cloth dipped in a diluted kitchen cleaner (neutrality detergent) and thoroughly wrung-out. Then wipe immediately after with clean, dry cloth. Never use the organic solvent such as the alcohol or benzine.
- The SCREEN ASS'Y replacement is required if the coating was peel off. Alkaline detergent or acidity detergent can not be used.
- The notched side of the lenticular lens and the fresnel lens are faced each other.
- Do not rub the screen when cleaning it or replacing it. Rubbing the screen may cause of the scratch of the screen by its notch.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

2.1 SYSTEM SETTING

Be sure to carry out the following operation at the end of the procedure.

- (1) Set to "**0 minutes**" using the **[SLEEP TIMER]** key.
- (2) While "**0 minutes**" is displayed, press the **[VIDEO STATUS]** key and **[DISPLAY]** key simultaneously, then enter the SERVICE MODE.
- (3) When the SERVICE MENU SCREEN is displayed, press **[2]** key to enter the self check mode.
- (4) Turn off the power by pressing the **[POWER]** key on the remote control unit.



2.2 FEATURES

Built in ATSC (Advanced Television Systems Committee) TUNER

This TV can receive both Digital broadcasting (ATSC) and Analogue broadcasting.

D.I.S.T. (Digital Image Scaling Technology)

This system uses line interpolation to double the number of scanning lines and achieve high resolution, flicker-free picture.

SMART CAPTION

Smart caption will appear when you press the MUTING button, only on channels where the broadcast contains CLOSED CAPTION information.

VIDEO STATUS

Expression of a favorite screen can be chosen by the VIDEO STATUS function.

DIGITAL INPUT

Digital-in will display when any picture signal in Digital-in is displayed.

V-CHIP

Since the V-CHIP is built in, it can choose, view and listen to a healthy program.

MTS STEREO

The voice multiplex function of the MTS system is built in. (MTS = Multi channel Television Sound system)

MPEG Noise Reduction

This function effects the block noise removal and mosquito NR simultaneously.

A.H.S.+

Adds a more spacious surround sound. Music gives basic effect, and movie for more effect.

NATURAL CINEMA

Watching the movie or animation, press the Natural Cinema to adjust the out line of the images to make thin more sharp.

VIDEO INPUT LABEL

This function is used to label video input connections for the onscreen displays.

2.3 MAIN DIFFERENCE LIST

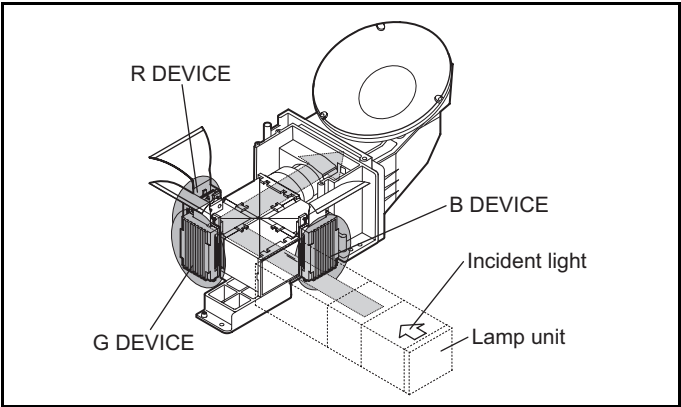
Item	HD-52FA97	HD-56FB97	HD-61FB97
DIGITAL PWB	SRA-0D161A-M2	SRA-0D160A-M2	SRA-0D159A-M2
FRONT LED PWB	SRA-0L111A-M2	SRA-0L113A-M2	←

2.4 TECHNICAL INFORMATION

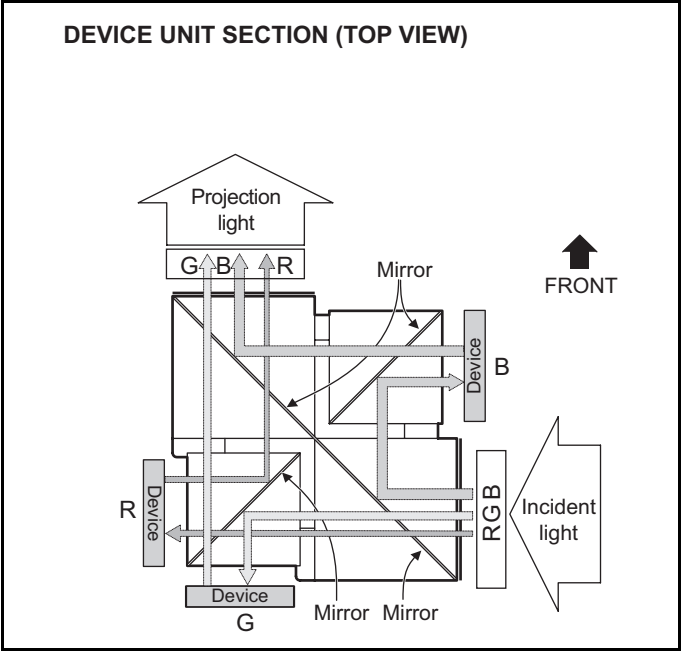
2.4.1 D-ILA DEVICE SPECIFICATION

Item	Content
Resolution	H: 1952 × V:1088
Pixel number	about 2123776
Pixel size	H : 8.1μm × V :8.1μm
Aspect ratio	16 : 9
Contrast ratio	5000 : 1
Aperture ratio	89% or more
Effective pixel measurement	0.7 inch

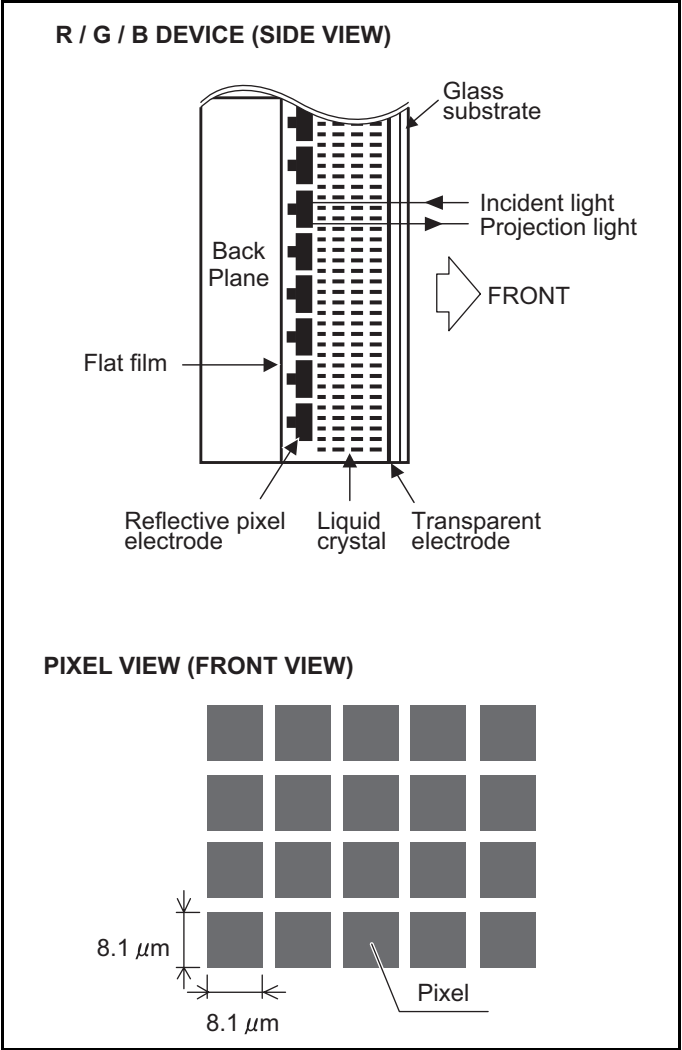
2.4.2 PROJECTION UNIT



2.4.3 IMAGE LIGHT FLOW



2.4.4 D-ILA DEVICE STRUCTURE



2.4.5 MAIN CPU PIN FUNCTION [IC7601 : DIGITAL PWB ASS'Y]

Pin	Pin name	I/O	Function	Pin	Pin name	I/O	Function
1	VHOLD1	I	Data slice for main screen closed caption	51	NC	O	Not used
2	HFLT1	I/O	LPF for main screen closed caption video input	52	NC	O	Not used
3	NC	O	Not used	53	NC	O	Not used
4	NC	O	Not used	54	NC	O	Not used
5	DIGR0	O	R [0] for OSD	55	NC	O	Not used
6	TB1in	I	AC power for timer clock	56	NC	O	Not used
7	REMO	I	Remote control	57	NC	O	Not used
8	BYTE	I	Data bus width select [L = 16bit (fixed)]	58	NC	O	Not used
9	CNVss	I	CPU programming mode select [Normal = L]	59	NC	O	Not used
10	DIGG0	O	G [0] for OSD	60	NC	O	Not used
11	DIGB0	O	B [0] for OSD	61	NC	O	Not used
12	RESET	I	Reset for main CPU [Reset = L]	62	HSYNC	I	H. sync for OSD
13	Xout	O	System clock oscillation (crystal) : 16MHz	63	NC	O	Not used
14	Vss	-	GND	64	VSYNC	I	V. sync for OSD
15	Xin	I	System clock oscillation (crystal) : 16MHz	65	NC	O	Not used
16	Vcci	I	3.3V stand-by power supply	66	NC	O	Not used
17	OSC1	I	Clock for OSD	67	NC	O	Not used
18	OSC2	O	Not used : Clock for OSD	68	NC	O	Not used
19	INT1	I	Not used: AV COMPULINK control	69	NC	O	Not used
20	INT0	I	Request for sub(chassis) CPU communication (serial data)	70	NC	O	Not used
21	OUT1	O	Ys (blanking) for OSD	71	P2.1	O	Not used: Clock for Inter IC (serial) bus control
22	OUT2	O	YM (transparence) for OSD	72	P2.0	I/O	Not used: Data for Inter IC (serial) bus control
23	NC	O	Not used	73	NC	O	Not used
24	NC	O	Not used	74	NC	O	Not used
25	NC	O	Not used	75	NC	O	Not used
26	NC	O	Not used	76	NC	O	Not used
27	CTA2/RTS2	O	Not used	77	NC	O	Not used
28	CLK2	O	Not used	78	NC	O	Not used
29	RxD2	I	Digital tuner control	79	NC	O	Not used
30	TxD2	O	Digital tuner control	80	P1.0	O	Not used: Function LED lighting
31	SDA2	I/O	Not used	81	P0.7	O	Not used: Communication LED lighting
32	DIGR1	O	R [1] for OSD	82	P0.6	O	Test point
33	DIGG1	O	G [1] for OSD	83	NC	O	Not used
34	DIGB1	O	B [1] for OSD	84	WAKE	O	Reset for sub(chassis) CPU
35	TxD0	I	Data receive (serial) for external programming	85	CARD_DET	I	Not used
36	RxD0	O	Data transmission (serial) for external programming	86	POWER_SW	I	Power switch (mechanical) detection
37	CLK0	I	Clock for external programming	87	SDA	I/O	Data for Inter IC (serial) bus control : memory
38	RTS0	O	Busy for external programming [Operation = H]	88	SLC	O	Clock for Inter IC (serial) bus control : memory
39	P5.7	I	Not used	89	DIGR2	O	R [2] for OSD
40	P5.6	O	Not used	90	DIGG2	O	G [2] for OSD
41	HOLD	I	CPU programming mode select [Normal = H]	91	DIGB2	O	B [2] for OSD
42	P5.4	O	Not used	92	NC	O	Not used
43	P5.3	O	Not used	93	KEY2	I	Key scan data for front control button (MENU/CH+/CH-) KEY2
44	P5.2	O	Not used	94	KEY1	I	Key scan data for front control button (INPUT/VOL+/VOL-) KEY1
45	P5.1	O	Not used	95	VHOLD2	I	Data slice for sub screen closed caption
46	WR	O	CPU programming mode select [Normal = L]	96	HLF2	I/O	LPF for sub screen closed caption video input
47	P4.7	O	Data transmission for sub(chassis) CPU communication (serial)	97	CVIN2	I	Video(Y) for sub screen closed caption
48	P4.6	I	Data receive for sub(chassis) CPU communication (serial)	98	TVSETB	I	Test terminal [L Fixed]
49	P4.5	I	Clock for sub(chassis) CPU communication (serial)	99	VCCE	I	5V stand-by power supply
50	P4.4	O	Not used	100	CVIN1	I	Video(Y) for main screen closed caption

SECTION 3

DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

CAUTION AT DISASSEMBLY:

- **Be sure to perform the SYSTEM SETTING, at the end of the procedure.**
- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- When removing each board, remove the connectors as required. Taking notes of the connecting points (connector numbers) makes service procedure manageable.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.
- Wait until the LAMP UNIT has cool down is completely.
- While not in repair service, place the chassis back its original position.

3.1.1 FRONT SIDE DISASSEMBLY [HD-52FA97]

3.1.1.1 REMOVING THE SPEAKER GRILL (Fig.1)

- (1) Remove the 2 screws [A].
- (2) Remove the SPEAKER GRILL by pressing it downward.

3.1.1.2 REMOVING THE FRONT LED PWB (Fig.1)

- Remove the SPEAKER GRILL.
 - (1) Remove the 1 screw [B].
 - (2) Remove the FRONT LED PWB.

3.1.1.3 REMOVING THE CENTER COVER (Fig.1)

- Remove the SPEAKER GRILL.
 - (1) Remove the 2 screws [C].
 - (2) Remove the CENTER COVER.

3.1.1.4 REMOVING THE FRONT PANEL (Fig.1)

- Remove the SPEAKER GRILL.
 - (1) Remove the 10 screws [D].
 - (2) Remove the 12 screws [E].
 - (3) Remove the FRONT PANEL.

3.1.1.5 REMOVING THE SPEAKER (Fig.1)

- Remove the SPEAKER GRILL.
 - (1) Remove the 4 screws [F].
 - (2) Remove the SPEAKER.
 - (3) Remove the opposite SPEAKER by the same method.

3.1.1.6 REMOVING THE SCREEN BLOCK(Fig.1)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
 - (1) Remove the 8 screws [G].
 - (2) Remove the SCREEN BLOCK.

CAUTION:

- Place the SCREEN BLOCK on a flat table without fail.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.
- Use care not to scratch the screen during work.
- During assembly, be sure to engage the left and right tabs with the cabinet mounting positions.
- When supporting the SCREEN BLOCK, avoid grasping the top of the screen panel, instead grasp the left and right areas.
- Do not leave the SCREEN BLOCK removed for long time to prevent soiling from dust.

3.1.1.7 REMOVING THE SCREEN ASS'Y (Fig.1)

- When replacing the SCREEN ASS'Y, confirm each SPACER is fit on the SCREEN BRACKET without fail.
- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
 - (1) Remove the 12 screws [H].
 - (2) Remove the SCREEN ASS'Y.

NOTE:

- When replacing the SCREEN ASS'Y, confirm each SPACER is fit on the SCREEN BRACKET without fail.
- Do not touch the front of the SCREEN ASS'Y.
- Do not shock the SCREEN ASS'Y.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.

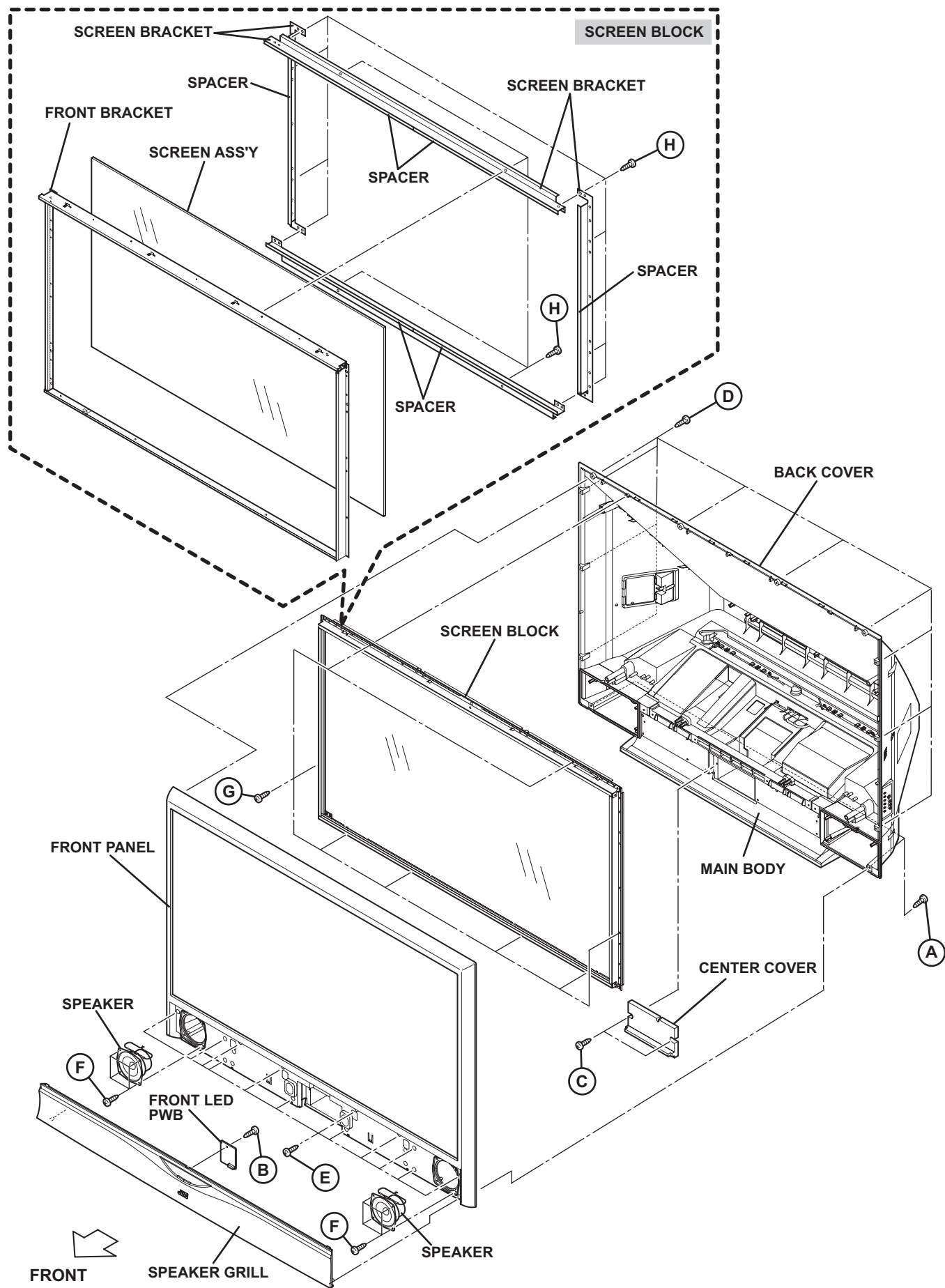


Fig.1

3.1.1.8 REMOVING THE MIRROR (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
 - (1) Remove the 4 screws **[A]** attaching the MIRROR HOLDER of the upper side.
 - (2) Remove the 6 screws **[B]** attaching the MIRROR HOLDER of left and right side.
 - (3) Raise slightly to disengage of the MIRROR from the bottom MIRROR HOLDER
 - (4) Remove the MIRROR.

NOTE :

- Do not touch the front of the MIRROR.
- Do not shock the the MIRROR.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.

3.1.1.9 REMOVING THE SIDE CONTROL PWB (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
 - (1) Remove the 2 screws **[C]**.
 - (2) Remove the SIDE CONTROL BASE.
 - (3) Remove the 2 screws **[D]**.
 - (4) Remove the SIDE CONTROL PWB.

3.1.1.10 REMOVING THE SUPPORT HOLDER (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
 - (1) Remove the 2 screws **[E]**.
 - (2) Remove the SUPPORT HOLDER.

3.1.1.11 REMOVING THE SHADE COVER (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
 - (1) Remove the 2 screws **[F]**.
 - (2) Remove the SHADE COVER.

3.1.1.12 REMOVING THE BACK COVER (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
- Remove the SUPPORT HOLDER.
 - (1) Remove the 6 screws **[G]**.
 - (2) Remove the 2 screws **[H]** from rear side.
 - (3) Remove the 2 screws **[J]** attach the SPEAKER BOX.
 - (4) Remove the BACK COVER with the SPEAKER BOX

CAUTION :

- Because of the large size, at least 2 persons are recommended for removal and reassemble.

3.1.1.13 REMOVING THE SPEAKER BOX (Fig.2)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL.
- Remove the SCREEN BLOCK.
- Remove the SUPPORT HOLDER.
- Remove the BACK COVER with the SPEAKER BOX.
 - (1) Remove the 1 screw **[K]**.
 - (2) Remove the SPEAKER BOX.
 - (3) Remove the opposite SPEAKER BOX by the same method.

3.1.1.14 REMOVING THE FILTER (Fig.2)

- (1) Remove the 1 screw **[L]**.
- (2) Remove the FILTER COVER with the FILTER.
- (3) Remove the FILTER.
- (4) Remove the opposite FILTER by the same method.

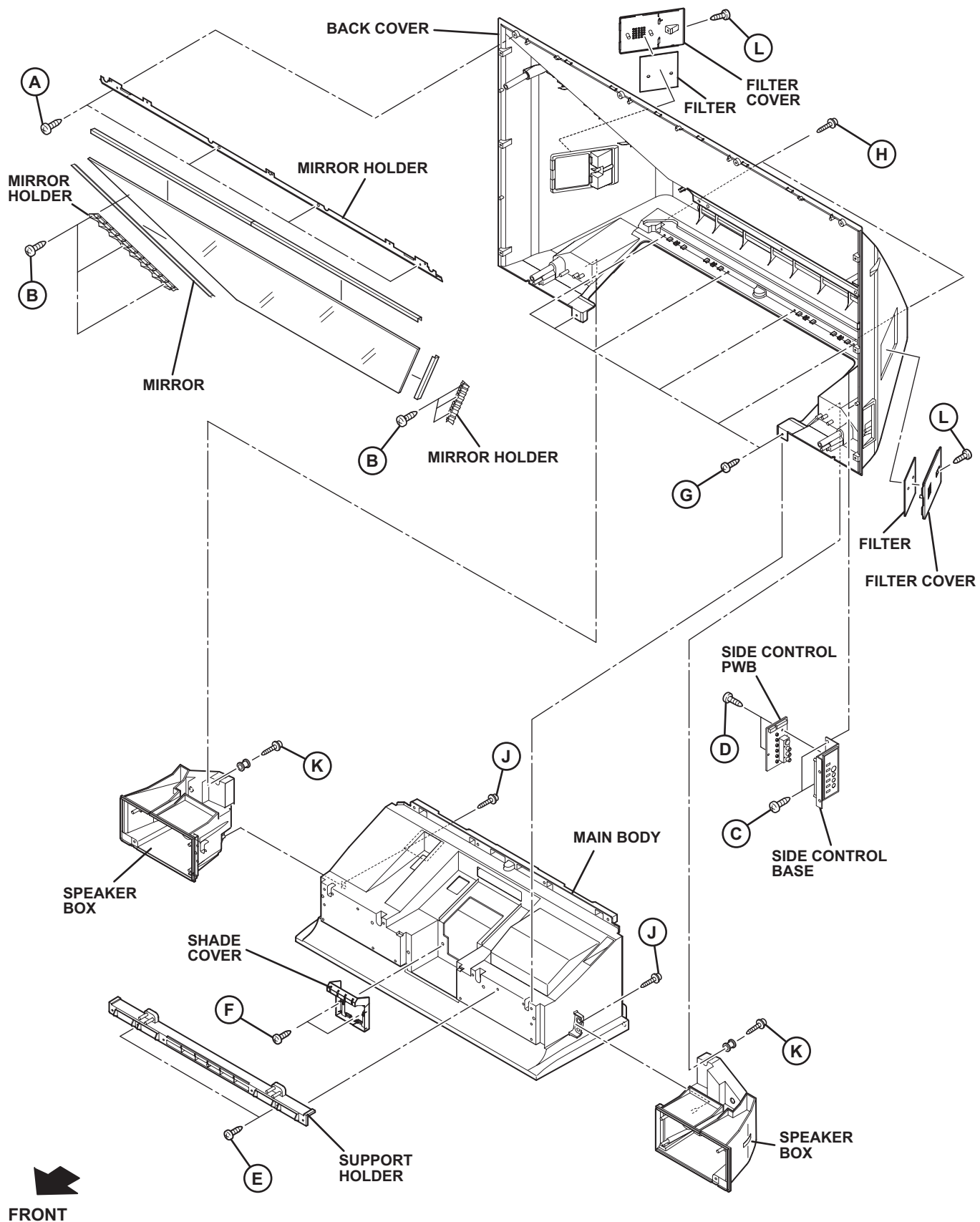


Fig.2

3.1.2 FRONT SIDE DISASSEMBLY [HD-56FB97, HD-61FB97]

3.1.2.1 REMOVING THE SPEAKER GRILL (Fig.3)

- (1) Remove the 4 screws [A].
- (2) Remove the 2 claws under the SPEAKER GRILL.
- (3) Remove the SPEAKER GRILL by pressing it downward.

3.1.2.2 REMOVING THE FRONT LED PWB (Fig.3)

- Remove the SPEAKER GRILL.
 - (1) Remove the 2 screws [B].
 - (2) Remove the FRONT LED PWB.

3.1.2.3 REMOVING THE CENTER COVER (Fig.3)

- Remove the SPEAKER GRILL.
 - (1) Remove the 2 screws [C].
 - (2) Remove the CENTER COVER.

3.1.2.4 REMOVING THE FRONT PANEL WITH SCREEN ASS'Y (Fig.3)

- Remove the SPEAKER GRILL.
 - (1) Remove the 8 screws [D].
 - (2) Remove the 10 screws [E].
 - (3) Remove the FRONT PANEL with SCREEN ASS'Y.

CAUTION:

- Place the FRONT PANEL with SCREEN ASS'Y on a flat table without fail.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.
- Use care not to scratch the screen during work.
- Do not leave the FRONT PANEL with SCREEN ASS'Y removed for long time to prevent soiling from dust.

3.1.2.5 REMOVING THE SCREEN ASS'Y (Fig.3)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with SCREEN ASS'Y.
 - (1) Remove the 10 screws [F].
 - (2) Remove the 8 screws [G].
 - (3) Remove the SCREEN BRACKET.
 - (4) Remove the SCREEN ASS'Y from the FRONT PANEL

NOTE:

- When replacing the SCREEN ASS'Y, confirm each SPACER is fit on the SCREEN BRACKET and the FRONT PANEL without fail.
- Do not touch the front of the SCREEN ASS'Y.
- Do not shock the SCREEN ASS'Y.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.

3.1.2.6 REMOVING THE SPEAKER (Fig.3)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with SCREEN ASS'Y.
 - (1) Remove the 4 screws [H].
 - (2) Remove the SPEAKER.
 - (3) Remove the opposite SPEAKER by the same method.

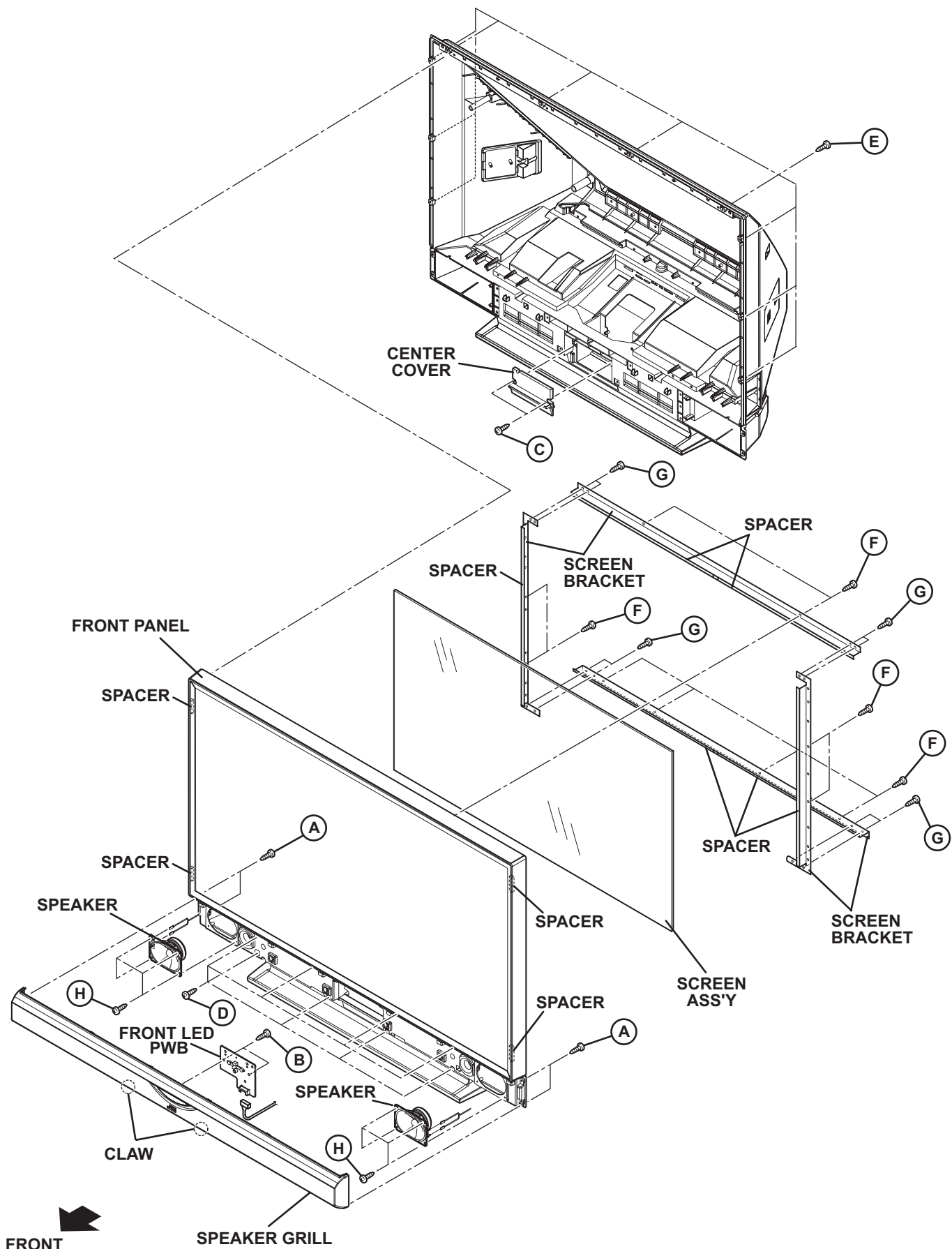


Fig.3

3.1.2.7 REMOVING THE MIRROR (Fig.4)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with the SCREEN ASS'Y.
 - (1) Remove the 4 screws **[A]** attaching the MIRROR HOLDER of the upper side.
 - (2) Remove the 6 screws **[B]** attaching the MIRROR HOLDER of left and right side.
 - (3) Loosen the 4 screws **[C]** attaching the MIRROR HOLDER of bottom side.
 - (4) Raise slightly to disengage of the MIRROR from the bottom MIRROR HOLDER.
 - (5) Remove the MIRROR.

NOTE:

- Do not touch the front of the MIRROR.
- Do not shock the MIRROR.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.

3.1.2.8 REMOVING THE SIDE CONTROL PWB (Fig.4)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with the SCREEN ASS'Y.
 - (1) Remove the 3 screws **[D]**.
 - (2) Remove the SIDE CONTROL PWB from the SIDE CONTROL BASE.

NOTE:

The SIDE CONTROL BASE is taken out by removing 6 claws.

3.1.2.9 REMOVING THE SUPPORT BRACKET (Fig.4)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with the SCREEN ASS'Y.
 - (1) Remove the 3 screws **[E]**.
 - (1) Remove the SUPPORT BRACKET.
 - (2) Remove the opposite SUPPORT BRACKET by the same method.

3.1.2.10 REMOVING THE BACK COVER (Fig.4)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with the SCREEN ASS'Y.
- Remove the SUPPORT BRACKET.
 - (1) Remove the 2 screws **[F]** and 2 screws **[G]** from rear side.
 - (2) Remove the 4 screws **[H]**.
 - (3) Remove the BACK COVER.

CAUTION :

Because of the large size, at least 2 persons are recommended for removal and reassemble.

3.1.2.11 REMOVING THE SHADE COVER (Fig.4)

- Remove the SPEAKER GRILL.
- Remove the FRONT PANEL with the SCREEN ASS'Y.
- Remove the SUPPORT BRACKET.
- Remove the BACK COVER.
 - (1) Remove the 2 screws **[J]**.
 - (2) Remove the SHADE COVER.

3.1.2.12 REMOVING THE FILTER (Fig.4)

- (1) Remove the 1 screw **[K]**.
- (2) Remove the FILTER COVER.
- (3) Remove the FILTER from FILTER COVER.
- (4) Remove the opposite FILTER by the same method.

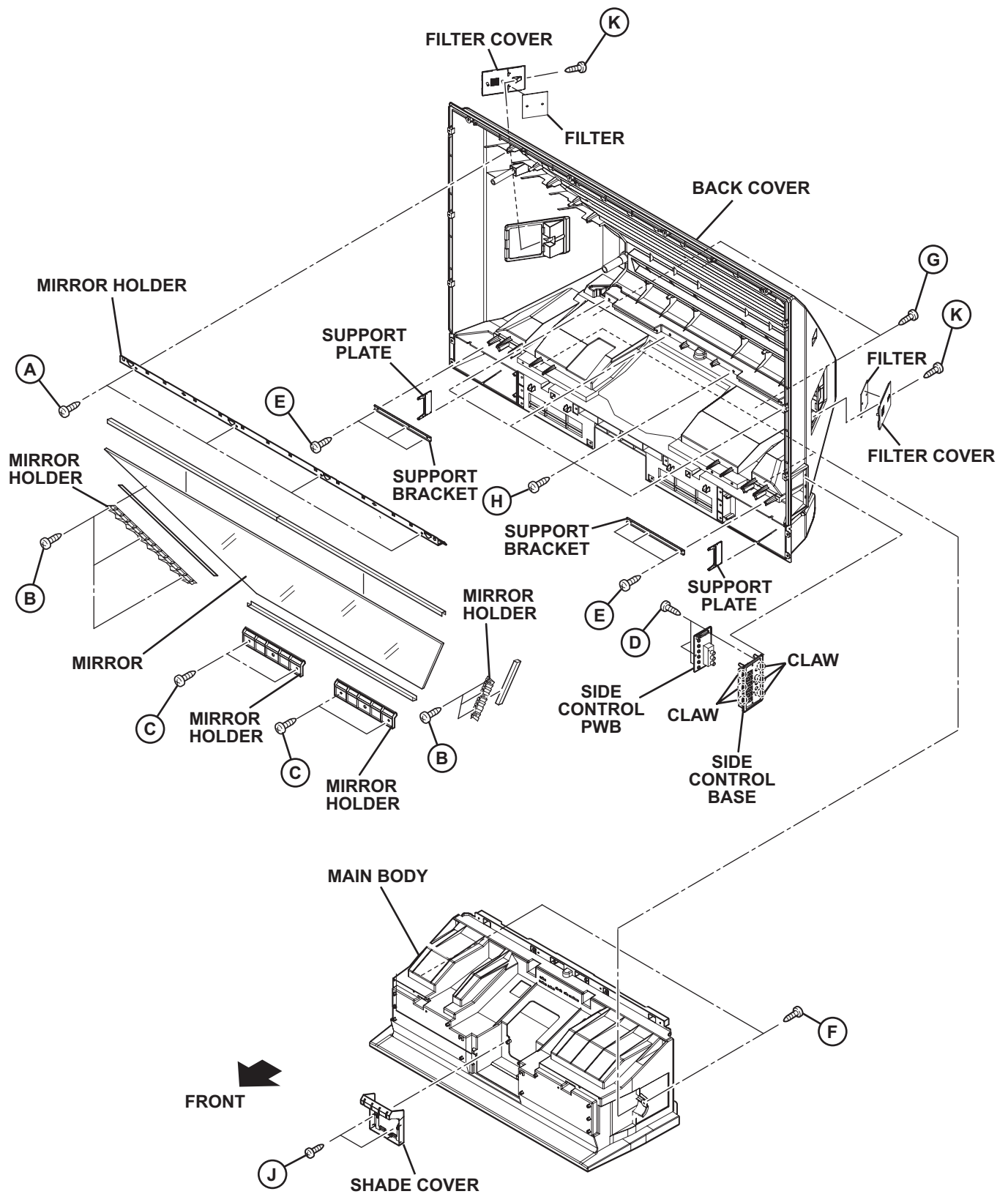


Fig.4

3.1.3 REAR SIDE DISASSEMBLY

3.1.3.1 REMOVING THE LAMP UNIT (Fig.5)

- (1) Remove the 1 screw [A].
- (2) Remove the LAMP COVER.
- (3) Remove the 2 screws [B]
- (4) Pull out the LAMP UNIT.

NOTE :

- Do not leave the LAMP COVER removed for long time to prevent dirt and dust from covering the lens.
- Make sure that the LAMP COVER is completely installed.

3.1.3.2 REMOVING THE BODY COVER (Fig.5)

- (1) Remove the 7 screws [C].
- (2) Remove the 4 screws [D]. [only HD-52FA97]
- (3) Remove the 5 screws [E].
- (4) Remove the BODY COVER.

NOTE :

- Do not leave the BODY COVER removed for long time to prevent soiling from dust.

3.1.3.3 REMOVING THE MAIN UNIT (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
 - (1) Remove the 4 screws [F]
 - (2) Remove the BODY BRACKET.
 - (3) Remove the 2 screws [G]
 - (4) The MAIN UNIT is pulled out to the back side.

CAUTION :

- Except for confirmation of projection images on the screen and audio output through the speakers, the removed MAIN UNIT is still workable in the same state as if it is still built-in the TV set. Therefore, the MAIN UNIT can be removed, if necessary, for board diagnosis, electric testing, etc. apart from confirmation of screen images and audio output. Do not leave the MAIN UNIT removed for long time to prevent soiling from dust.
- Because of the large size, at least 2 persons are recommended for removal and reassemble.
- When carrying the MAIN UNIT, use care not to drop, shock or shake it.
- Do not stain or damage the projection lens.
- Do not look directly at the light during service.
- Do not touch the lamp directly as it presents a burn hazard.

NOTE :

- When not performing repair work, attach the cap on the lens to preventing dust from covering.
- When mounting to the set, make sure the front of the lens is in contact with the cushion on the set (body) side.
- Make sure that FRONT LED PWB connector is completely connect to the ANALOG PWB connector.
- When wire clamps are removed during work, use care to restore them precisely to their original positions. Performance can be affected if these are not returned to the original positions.

3.1.3.4 REMOVING THE AV TERMINAL BOARD (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 3 screws [H], 5 screws [J] and the 7 screws [K].
 - (2) Remove the 2 hex screws [L].
 - (3) Remove the nut attaching the ANTENNA TERMINAL.
 - (4) Remove the AV TERMINAL BOARD.

3.1.3.5 REMOVING THE POWER PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the POWER CORD.
 - (2) Remove the 7 screws [M].
 - (3) Remove the POWER PWB.

3.1.3.6 REMOVING THE TUNER PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
 - (1) Remove the 1 screw [N].
 - (2) Remove the HANGER BRACKET with TUNER PWB.
 - (3) Remove the 3 screws [P].
 - (4) Remove the TUNER PWB.

3.1.3.7 REMOVING THE ANALOG PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
- Remove the POWER PWB and TUNER PWB.
 - (1) Remove the 4 screws [Q].
 - (2) Remove the ANALOG PWB.

3.1.3.8 REMOVING THE DIGITAL PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
- Remove the POWER PWB and TUNER PWB.
- Remove the ANALOG PWB.
 - (1) Remove the 1 screw [R].
 - (2) Remove the DIGITAL PWB BRACKET with DIGITAL PWB and ATSC TUNER PWB.
 - (3) Remove the 7 screws [S].
 - (4) Remove the DIGITAL PWB SHIELD COVER.
 - (5) Remove the 9 screws [T].
 - (6) Remove the DIGITAL PWB.

CAUTION :

- **Make sure to perform the "SYSTEM SETTING" , when DIGITAL PWB is replaced.**
- **Especially, because the value of F001 (DD) might be changed, go through next steps to confirm the setting value with the remote control unit.**
 - (1) **Set to "0 minutes" using the [SLEEP TIMER] key.**
 - (2) **While "0 minutes" is displayed, press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, then enter the SERVICE MODE.**
 - (3) **Press [1] key to enter the ADJUSTMENT MODE.**
 - (4) **Select < F001 >.**
 - (5) **Confirm the value to "000", and set it to "000" when not "000".**
 - (6) **Press [MUTING] key to memorize the data.**
 - (7) **Press [BACK] key twice to exit the SERVICE MODE.**

3.1.3.9 REMOVING THE ATSC TUNER COOLING FAN (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
- Remove the POWER PWB and TUNER PWB.
- Remove the ANALOG PWB.
 - (1) Remove the 1 screw [R].
 - (2) Remove the DIGITAL PWB BRACKET with ATSC TUNER PWB.
 - (3) Remove the 4 screws [U].
 - (4) Remove the ATSC TUNER COOLING FAN.

3.1.3.10 REMOVING THE ATSC TUNER PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
- Remove the POWER PWB and TUNER PWB.
- Remove the ANALOG PWB.
- Remove the ATSC TUNER COOLING FAN.
 - (1) Remove the 7 screws [V].
 - (2) Remove the ATSC TUNER SHIELD COVER.
 - (3) Remove the 4 screws [W].
 - (4) Remove the ATSC TUNER PWB.

3.1.3.11 REMOVING THE USB PWB (Fig.5)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the AV TERMINAL BOARD.
- Remove the POWER PWB and TUNER PWB.
- Remove the ANALOG PWB.
- Remove the ATSC TUNER COOLING FAN.
 - (1) Remove the 7 screws [V].
 - (2) Remove the ATSC TUNER SHIELD COVER.
 - (3) Remove the 3 screws [X] and 1 screw [Y].
 - (4) Remove the USB PWB.

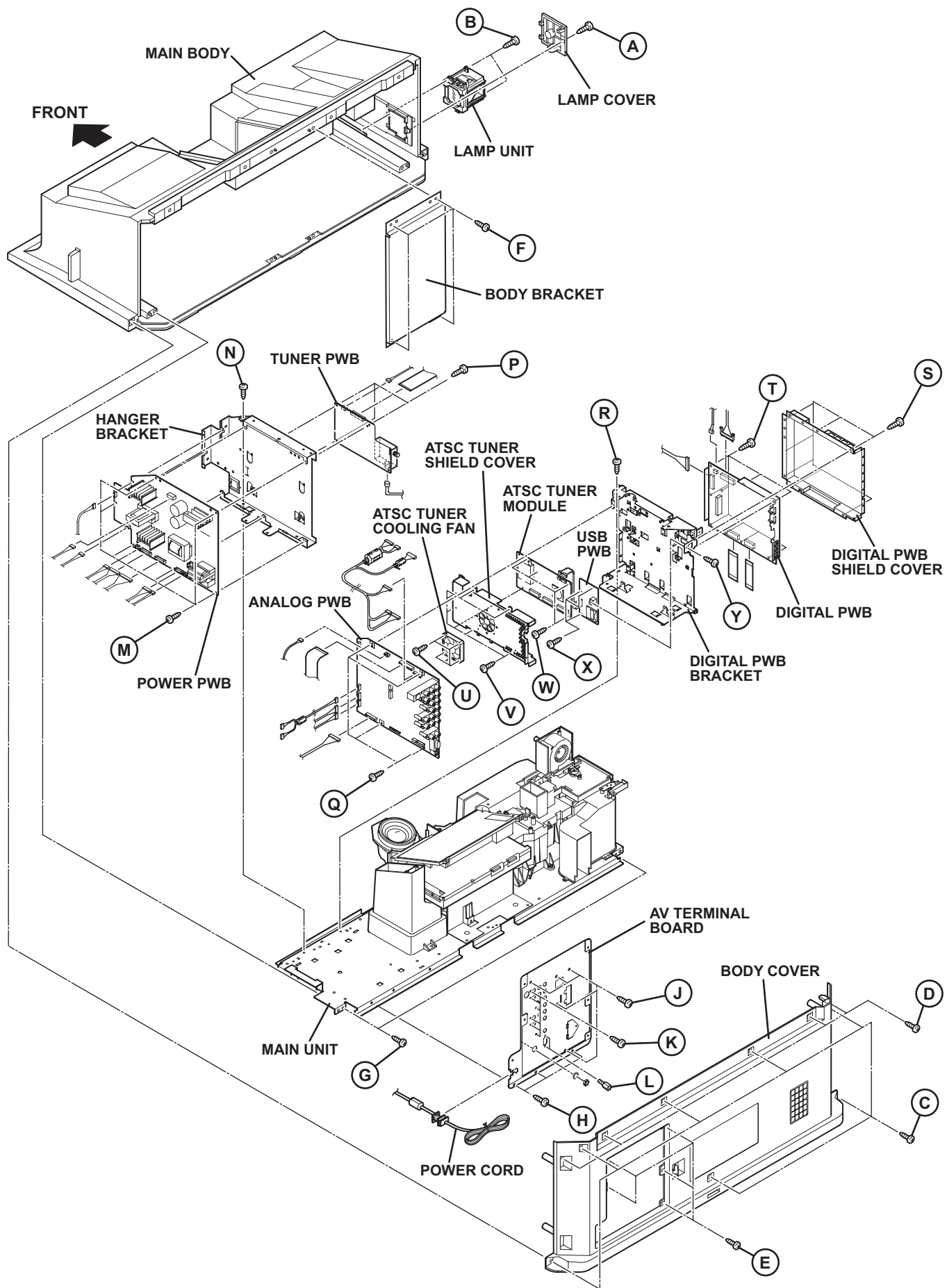


Fig.5

3.1.3.12 REMOVING THE LAMP COVER SW PWB (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 2 screws **[A]**.
 - (2) Remove the LAMP COVER SW BRACKET with LAMP COVER SW PWB.
 - (3) Remove the 1 screw **[B]**.
 - (4) Remove the LAMP COVER SW PWB.

3.1.3.13 REMOVING THE THERMOSTAT (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 2 screws **[C]**.
 - (2) Remove the THERMOSTAT.

3.1.3.14 REMOVING THE LAMP FAN DUCT (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the THERMOSTAT.
 - (1) Remove the 5 screws **[D]**.
 - (2) Remove the LAMP FAN DUCT.

3.1.3.15 REMOVING THE LAMP COOLING FAN -1 (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the LAMP FAN DUCT.
 - (1) Remove the 2 screws **[E]**.
 - (2) Remove the COOLING FAN BRACKET by pulling transversally.
 - (3) Remove the 2 screws **[F]**.
 - (4) Remove the LAMP COOLING FAN-1.

3.1.3.16 REMOVING THE LAMP COOLING FAN -2 (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the LAMP FAN DUCT.
- Remove the COOLING FAN BRACKET.
 - (1) Remove the 2 screws **[G]**.
 - (2) Remove the LAMP COOLING FAN -2.

3.1.3.17 REMOVING THE LAMP BALLAST BLOCK (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 2 screws **[H]**.
 - (2) Remove the LAMP BALLAST UNIT.
 - (3) Remove the 1 screw **[J]**.
 - (4) Remove the LAMP BALLAST BRACKET.

3.1.3.18 REMOVING THE REMOCON PWB(Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 1 screw **[L]**.
 - (2) Remove the REMOCON PWB.

3.1.3.19 REMOVING THE OPTICAL / DRIVE ASS'Y (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the LAMP FAN DUCT.
 - (1) Remove the 7 screws **[M]**, 6 screws **[N]** and 1 screw **[P]**.
 - (2) Remove the OPTICAL / DRIVE ASS'Y.
 - OPTICAL BLOCK (D-ILA device, PBS, Field lens, Integrater, Mirror etc.)
 - PROJECTION LENS
 - Optical base
 - DRIVE PWB
 - TOP DUCT
 - SHIELD COVER

NOTE :

- The OPTICAL / DRIVE ASS'Y contains precision optical components.
- Handle carefully and avoid imparting strong shock.
- OPTICAL / DRIVE ASS'Y construction
- When not performing repair work, attach the cap on the lens to preventing dust from covering.
- When mounting to the set, make sure the front of the lens side is in contact with the cushion on the body side.
- Do not leave the OPTICAL / DRIVE ASS'Y removed for long time to prevent soiling from dust.

3.1.3.20 REMOVING THE DRIVE PWB (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Slide the TOP DUCT PLATE and remove it.
 - (2) Remove the 1 screw **[Q]** and the 1 screw **[R]**.
 - (3) Remove the TOP DUCT.
 - (4) Remove the 2 screws **[S]**.
 - (5) Remove the DEVICE SHIELD.
 - (6) Remove the SHIELD TOP CASE.
 - (7) Remove the 3 screws **[T]** and the 1 screw **[U]**.
 - (8) Remove the DRIVE PWB.

3.1.3.21 REMOVING THE OPTICAL BLOCK COOLING FAN (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
- Remove the LAMP FAN DUCT.
- Remove the OPTICAL / DRIVE ASS'Y
 - (1) Remove the 2 screws **[V]**.
 - (2) Remove the SIROCCO TOP CASE.
 - (3) Remove the 2 screws **[W]**.
 - (4) Remove the OPTICAL BLOCK COOLING FAN.

3.1.3.22 REMOVING THE PROJECTION LENS (Fig.6)

- Remove the LAMP COVER.
- Remove the BODY COVER.
- Remove the BODY BRACKET.
- Remove the MAIN UNIT.
 - (1) Remove the 4 screws **[X]**.
 - (2) Remove the PROJECTION LENS.

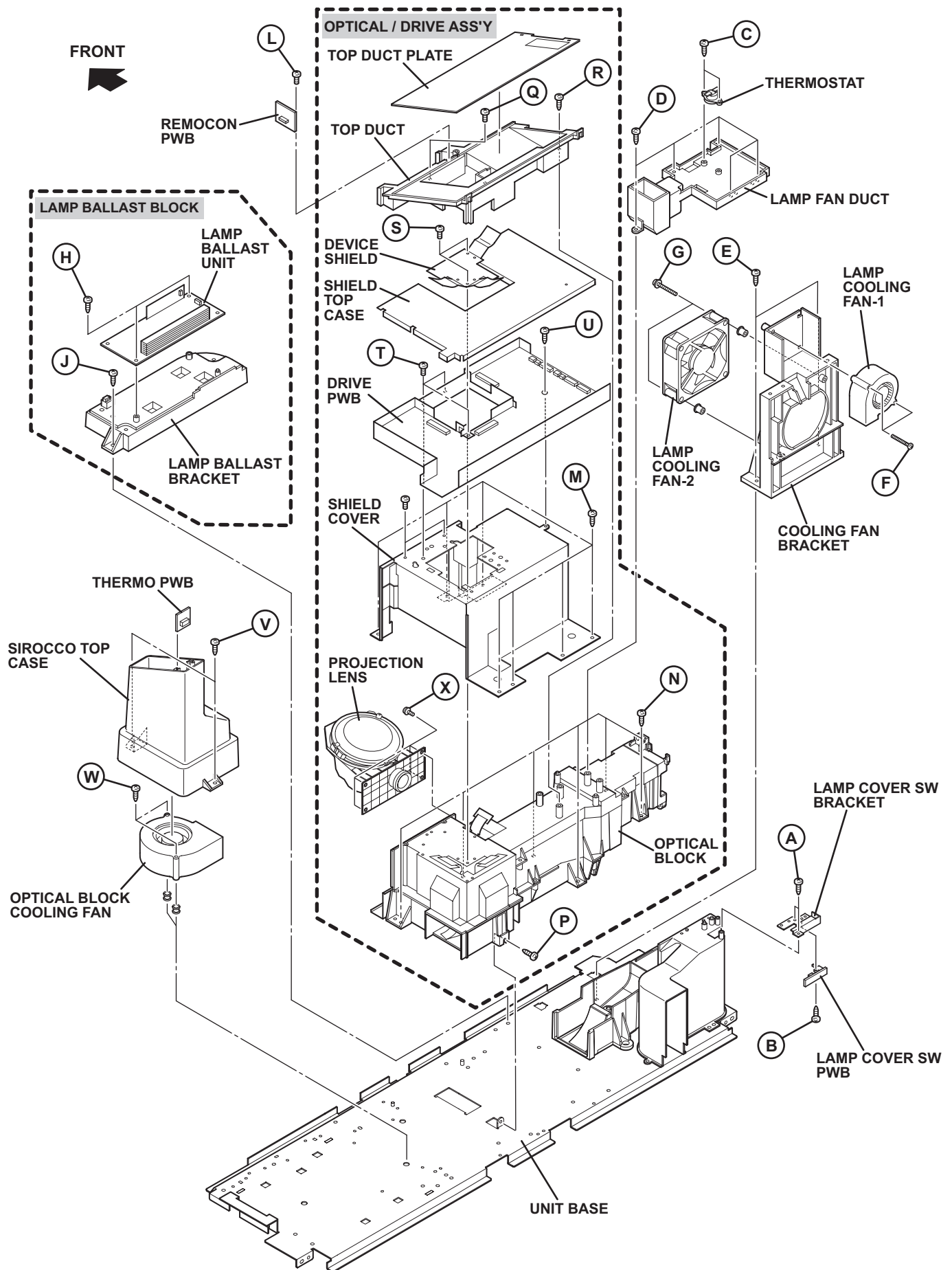


Fig.6

3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 MEMORY IC TABLE

Simbol	Number of pins	Mounting PWB	Main content of data
IC3753	8-pin	DRIVE PWB	Adjustment and setting data (GAMMA, SHADING, etc.) of IC3701 (DRIVE CPU) are memorized.
IC7201	48-pin	DIGITAL PWB	Program(Video process) of IC6001 (System CPU) is memorized.
IC7602	8-pin	DIGITAL PWB	Setting value of IC7601 (MAIN CPU) is memorized.

3.2.2 MEMORY IC REPLACEMENT PROCEDURE

1. Power off

Switch off the power and disconnect the power plug from the AC outlet.

2. Replace the memory IC

Be sure to use the memory IC written with the initial setting values.

3. Power on

Connect the power plug to the AC outlet and switch on the power.

4. Receiving channel setting

Refer to the OPERATING INSTRUCTIONS and set the receive channels (Channels Preset) as described.

5. User setting

Check the user setting items according to the given in page later. Where these do not agree, refer to the OPERATING INSTRUCTIONS and set the items as described.

6. SERVICE MODE setting

Verify what to set in the SERVICE MODE, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.

3.2.3 SERVICE MODE SETTING

■SERVICE MODE SCREEN

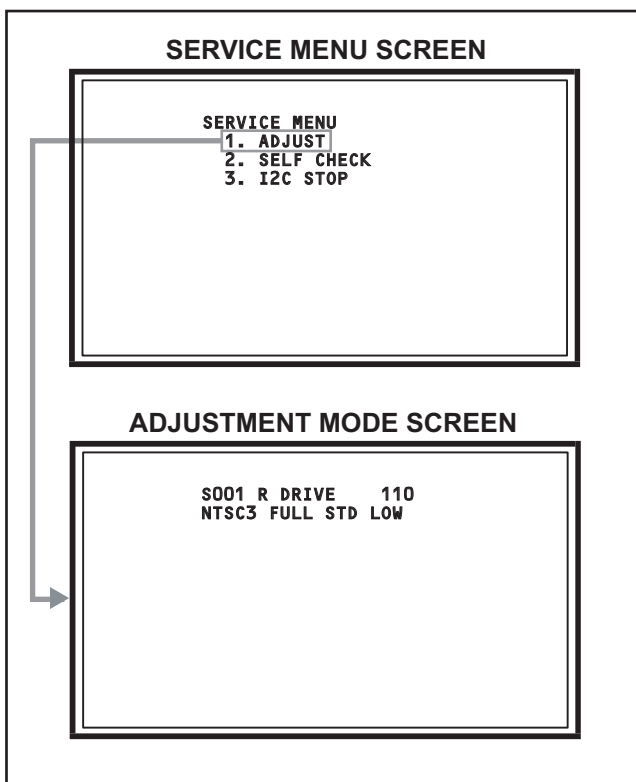


Fig.1

■SETTING ITEM

Setting items	Settings	Item No.
Video system setting	Adjust	S001 - S009
Audio system setting	Adjust	T001 - T003
Main CPU system setting	Fixed	M001 - M224
Drive system setting	Fixed	F001 - F002
(NOT USED)	Fixed	D001
(NOT USED)	Fixed	Z001

3.2.4 SETTINGS OF FACTORY SHIPMENT

3.2.4.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	CABLE-02
VOLUME	10
INPUT	TV

3.2.4.2 REMOTE CONTROL DIRECT OPERATION

Setting item		Setting position
INPUT		TV
CHANNEL		CABLE-02
VOLUME		10
MUTING		OFF
DISPLAY		OFF
ASPECT	NTSC, SD	PANORAMA
	ATSC(525i, 525p)	PANORAMA ZOOM
	ATSC(750p, 1125i), HD, 1125p	FULL
	PC	REGULAR
SLEEP TIMER		OFF
THEATER PRO		OFF
NATURAL CINEMA		AUTO
C.C.		OFF
MTS		STEREO
TWIN SOURCE	LEFT SIDE	CABLE-02
	RIGHT SIDE	INPUT-1
SOUND	A.H.S.+	OFF
	A.T.C.	ON
	SMART SOUND	OFF
	HYPER BASS	OFF
VIDEO STATUS		DYNAMIC

3.2.4.3 REMOTE CONTROL MENU OPERATION

■ PICTURE ADJUST

Customers can adjust the picture setting of menu screen as their own like but the picture standard value during factory shipment is as below.

[NTSC MODE]

Setting item	DYNAMIC	STANDARD	GAME	THEATER
TINT	-02	00	00	00
COLOR	+08	00	00	00
PICTURE	+10	00	-10	00
BRIGHT	00	00	00	00
DETAIL	+06	00	00	00
COLOR TEMPERATURE	HIGH	LOW	HIGH	HIGH
COLOR MANAGEMENT	ON	ON	ON	ON
DYNAMIC GAMMA	ON	ON	ON	ON
SMART PICTURE	OFF	ON	ON	ON
DIGITAL VNR	AUTO	AUTO	AUTO	AUTO
MPEG NR	OFF	OFF	OFF	OFF

[HD MODE]

Setting item	DYNAMIC	STANDARD	GAME	THEATER
TINT	-02	00	00	00
COLOR	+08	00	00	00
PICTURE	+13	00	-10	00
BRIGHT	-05	00	00	00
DETAIL	+12	00	00	00
COLOR TEMPERATURE	HIGH	LOW	HIGH	LOW
COLOR MANAGEMENT	ON	ON	ON	ON
DYNAMIC GAMMA	ON	ON	ON	ON
SMART PICTURE	OFF	ON	ON	ON
DIGITAL VNR	AUTO	AUTO	AUTO	AUTO
MPEG NR	OFF	OFF	OFF	OFF

■ SOUND ADJUST

Setting item	Setting position
BASS	00
TREBLE	00
BALANCE	00
TURN ON VOLUME	CURRENT
VOLUME LIMIT	50

■ CLOCK / TIMERS

Setting item	Setting position
ON / OFF TIMER	NO

■ INITIAL SETUP

Setting item	Setting position
VIDEO-1 MONITOR OUT	OFF
TV SPEAKER	ON
DIGITAL-IN	AUTO
DIGITAL-IN1 AUDIO	AUTO
NOISE MUTING	ON
FRONT PANEL LOCK	OFF
V1 SMART INPUT	OFF
VIDEO INPUT LABEL	All blank
POSITION ADJUSTMENT	Center
POWER INDICATOR	HIGH
LANGUAGE	ENG.
CLOSED CAPTION	OFF
AUTO SHUT OFF	OFF
XDS ID	ON
AUTO TUNER SETUP	Unnecessary to set
V-CHIP	OFF

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

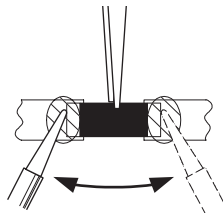
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

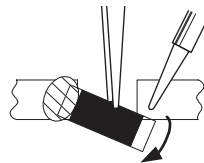
1. How to remove Chip parts

[Resistors, capacitors, etc.]

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with the tweezers and remove the chip part.

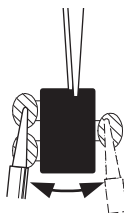


[Transistors, diodes, variable resistors, etc.]

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



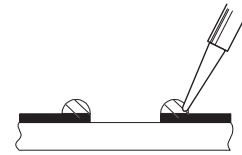
NOTE :

After removing the part, remove remaining solder from the pattern.

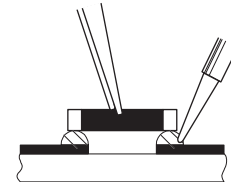
2. How to install Chip parts

[Resistors, capacitors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.

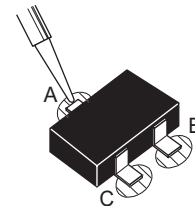


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

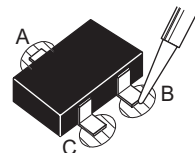


[Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead **A** as indicated in the figure.



- (4) Then solder leads **B** and **C**.



SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) There are 2 ways of adjusting this TV : One is with the **REMOTE CONTROL UNIT** and the other is the conventional method using adjustment parts and components.
- (2) The adjustment using the **REMOTE CONTROL UNIT** is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warning up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

4.2 PRESET SETTING BEFORE ADJUSTMENTS

Unless otherwise specified in the adjustment items, preset the following functions with the **REMOTE CONTROL UNIT**.

Setting item	Settings
VIDEO STATUS	STANDARD
Picture adjustments	00
COLOR TEMPERATURE	LOW
COLOR MANAGEMENT	ON
DYNAMIC GAMMA	ON
SMART PICTURE	OFF
DIGITAL VNR	OFF
MPEG NR	OFF
NATURAL CINEMA	AUTO
Sound adjustments	00
A.H.S.+	OFF
HYPER BASS	OFF
SMART SOUND	OFF
ASPECT	FULL

4.3 MEASURING INSTRUMENT AND FIXTURES

- Oscilloscope
- Signal generator (Pattern generator)
[NTSC / 525i / 525p / 750p / 1125i]
- TV audio multiplex signal generator
- Remote control unit

4.4 ADJUSTMENT ITEMS

■ FOCUS

- LENS FOCUS adjustment

■ DRIVE CIRCUIT

- DRIVE CONVERGENCE adjustment
- DRIVE CENTER POSITION adjustment

■ VIDEO CIRCUIT

- WHITE BALANCE (HIGHLIGHT) adjustment

■ MTS CIRCUIT

- MTS INPUT LEVEL adjustment
- MTS SEPARATION adjustment

4.5 BASIC OPERATION OF SERVICE MODE

4.5.1 HOW TO ENTER THE SERVICE MODE

- (1) Set to "0 minutes" using the [SLEEP TIMER] key.
- (2) While "0 minutes" is displayed, press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, then enter the SERVICE MODE (Fig.1)

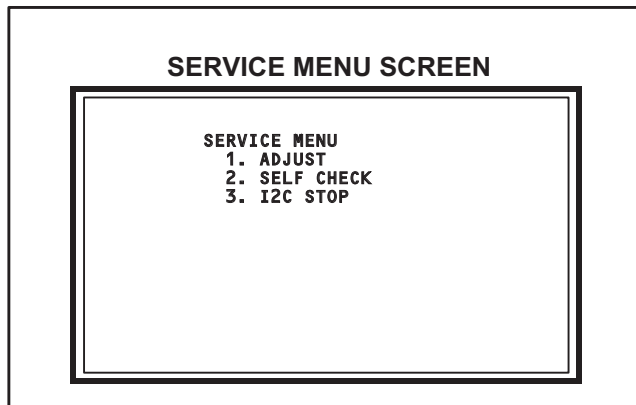


Fig.1

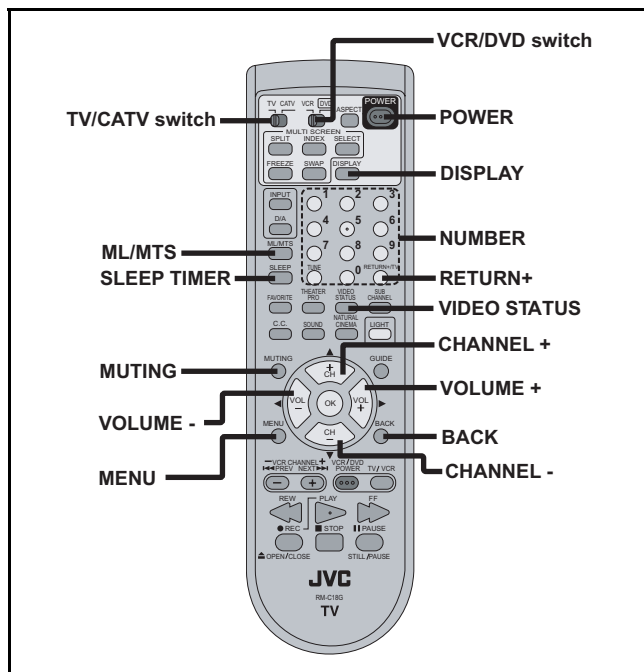
NOTE:

- Before entering the SERVICE MODE, confirm that the setting of **TV/CATV** switch of the REMOTE CONTROL UNIT is at the "TV" side and the setting of **VCR/DVD** switch is at the "VCR" side. If the switches have not been properly set, you cannot enter the SERVICE MODE.
- When a number key other than the [1] or [9] keys is pressed in the SERVICE MENU SCREEN, the other relevant screen may be displayed. This is not used in the adjustment procedure. Press the [MENU] key to return to the SERVICE MENU SCREEN.

4.5.2 HOW TO EXIT THE SERVICE MODE

Press the [BACK] key to exit the Service mode.

4.5.3 SERVICE MODE SELECT KEY LOCATION



4.5.4 ADJUSTMENT MODE

This mode is used to adjust the VIDEO CIRCUIT and the MTS CIRCUIT.

4.5.4.1 HOW TO ENTER THE ADJUSTMENT MODE

When the SERVICE MENU SCREEN of SERVICE MODE is displayed, press [1] key to enter the **ADJUSTMENT MODE** (Fig.2).

4.5.4.2 DESCRIPTION OF STATUS DISPLAY OF ADJUSTMENT MODE

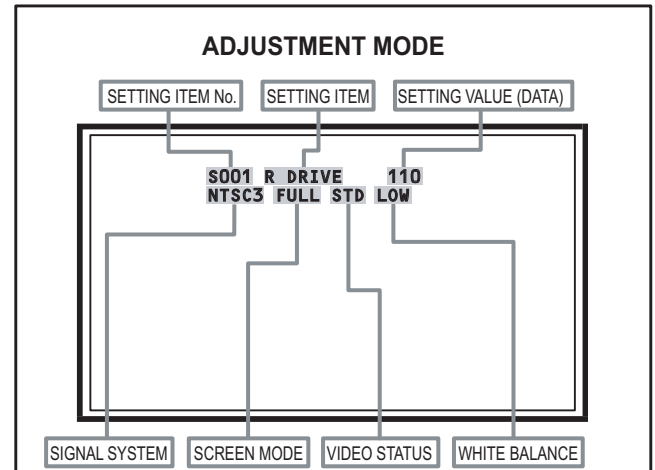


Fig.2

(1) SIGNAL SYSTEM

The signal displayed on the screen is displayed.

NTSC3	: 525i (Composite / S-video input)
525I	: 525i (Component input)
525P	: 525p
1125I6	: 1125i
750P6	: 750p
PCVGA	: PC (VGA)
PCXGA	: PC (XGA)
PCNG	: PC (except VGA/XGA)
H525I	: HDMI 525i
H525P	: HDMI 525p
H1125I6	: HDMI 1125i
H1125P6	: HDMI 1125p
H750P6	: HDMI 750p
D525I	: ATSC 525i
D525P	: ATSC 525p
D1125I6	: ATSC 1125i
D750P	: ATSC 750p

(2) SCREEN MODE

State of the SCREEN SIZE or MULTI PICTURE is displayed.

SINGLE SCREEN

FULL	: FULL
1609	: CINEMA, CINEMA ZOOM
PANO	: PANORAMA, PANORAMA ZOOM
REGU	: REGULAR, SLIM

MULTI SCREEN

M2	: TWIN, FREEZE screen
M12	: INDEX screen

(3) VIDEO STATUS

STD : STANDARD
DYN : DYNAMIC
TH : THEATER
GAME : GAME

(4) WHITE BALANCE

HIGH : HIGH
LOW : LOW

(5) SETTING ITEM NAME

Setting item name are displayed. The setting item numbers to be displayed are listed below.

Item No.	Setting item
S001 - S009	Video system setting
T001 - T003	Audio system setting
M001 - M224	Main CPU system setting
F001 - F002	Drive system setting
D001	(NOT USED)
Z001	(NOT USED)

(6) SETTING ITEM NO.

Setting item numbers are displayed. For the setting item names to be displayed, refer to "Initial setting value of adjustment mode".

(7) SETTING VALUE (DATA)

The SETTING VALUE is displayed.

4.5.4.3 CHANGE AND MEMORY OF SETTING VALUE

■SELECTION OF SETTING ITEM

- **[CH+]** / **[CH-]** key.
Change the setting items up/ down.

S001... ↔ T001... ↔ M001... ↔ F001... ↔ D001... ↔ Z001...

- **[SLEEP TIMER]** key.
Switches to the next items.

S001 → T001 → M001... → F001... → D001 → Z001

■CHANGE OF SETTING VALUE (DATA)

- **[VOL+]** / **[VOL-]** key.
Change the setting values up/down.

■MEMORY OF SETTING VALUE (DATA)

Changed setting value is memorized by pressing **[MUTING]** key.

4.5.5 RGB BOX PATTERN MODE

This mode is used to adjust the DRIVE CIRCUIT.

4.5.5.1 HOW TO ENTER THE RGB BOX PATTERN MODE

When the SERVICE MENU SCREEN of SERVICE MODE is displayed, press **[9]** key to enter the **RGB BOX PATTERN MODE** (Fig3).

4.5.5.2 DESCRIPTION OF STATUS DISPLAY OF RGB BOX PATTERN MODE

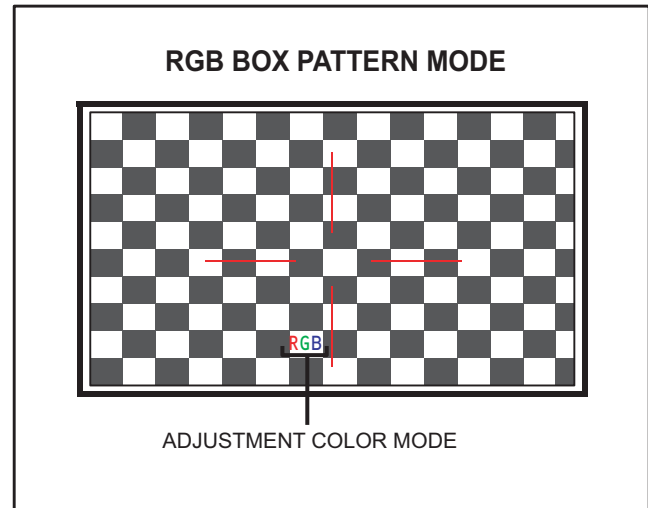


Fig.3

(1) RGB BOX PATTERN

The checkered pattern is displayed. White is a synthesis of RGB.

(2) ADJUSTMENT COLOR MODE

Presently selected ADJUSTMENT COLOR MODE is displayed.

■SELECTION OF SETTING ITEM

- **[CH+]** / **[CH-]** key.
Move the selected RGB BOX PATTERN up/ down pixel by pixel.
- **[VOL+]** / **[VOL-]** key.
Move the selected RGB BOX PATTERN left/ right pixel by pixel.
- **[SLEEP TIMER]** key.
Adjusts the data reset.
- **[DISPLAY]** key.
Adjusts the selected COLOR BOX PATTERN.

R → B → RGB

- **[BACK]** key.
Returns to the SERVICE MENU SCREEN from the RGB BOX PATTERN MODE.

■MEMORY OF SETTING VALUE (DATA)

With the RGB BOX PATTERN MODE, the changed date is written in the MEMORY instantly.

4.6 INITIAL SETTING VALUES IN THE SERVICE MODE

- Perform fine-tuning based on the "initial values" using the remote control when in the Service mode.
- The "initial values" serve only as an indication rough standard and therefore the values with which optimal display can be achieved may be different from the default values. But, don't change the values that are not written in "ADJUSTMENT PROCEDURE". They are fixed values.

4.6.1 VIDEO SYSTEM SETTING

Item No.	Item	Variable range	Setting value
S001	R DRIVE	000 - 255	110
S002	G DRIVE	000 - 255	138
S003	B DRIVE	000 - 255	127
S004	RESREV	000 - 255	000
S005	RESREV	000 - 255	002
S006	RESREV	000 - 255	002
S007	RESREV	000 - 255	002
S008	RESREV	000 - 255	002
S009	RESREV	000 - 255	002

4.6.2 AUDIO SYSTEM SETTING

Item No.	Item	Variable range	Setting value
T001	INPLEVEL	000 - 015	007
T002	LOWSEPA	000 - 063	028
T003	HIGHSEPA	000 - 063	018

4.6.3 MAIN CPU SYSTEM SETTING (Fixed values)

Item No.	Item	Variable range	Setting value
M001	1E00	00 - FF	00
M002	1E01	00 - FF	00
M003	1E02	00 - FF	0A
M004	1E03	00 - FF	20
M005	1E04	00 - FF	10
M006	1E05	00 - FF	00
M007	1E06	00 - FF	00
M008	1E07	00 - FF	00
M009	1E08	00 - FF	00
M010	1E09	00 - FF	00
M011	1E0A	00 - FF	01
M012	1E0B	00 - FF	00
M013	1E0C	00 - FF	01
M014	1E0D	00 - FF	00
M015	1E0E	00 - FF	00
M016	1E0F	00 - FF	00
M017	1E10	00 - FF	01
M018	1E11	00 - FF	00
M019	1E12	00 - FF	00
M020	1E13	00 - FF	01
M021	1E14	00 - FF	01
M022	1E15	00 - FF	00
M023	1E16	00 - FF	00
M024	1E17	00 - FF	00
M025	1E18	00 - FF	00
M026	1E19	00 - FF	00
M027	1E1A	00 - FF	00

Item No.	Item	Variable range	Setting value
M028	1E1B	00 - FF	00
M029	1E1C	00 - FF	00
M030	1E1D	00 - FF	00
M031	1E1E	00 - FF	00
M032	1E1F	00 - FF	00
M033	1E20	00 - FF	00
M034	1E21	00 - FF	00
M035	1E22	00 - FF	00
M036	1E23	00 - FF	00
M037	1E24	00 - FF	00
M038	1E25	00 - FF	00
M039	1E26	00 - FF	00
M040	1E27	00 - FF	00
M041	1E28	00 - FF	00
M042	1E29	00 - FF	00
M043	1E2A	00 - FF	00
M044	1E2B	00 - FF	00
M045	1E2C	00 - FF	00
M046	1E2D	00 - FF	00
M047	1E2E	00 - FF	00
M048	1E2F	00 - FF	00
M049	1E30	00 - FF	00
M050	1E31	00 - FF	00
M051	1E32	00 - FF	00
M052	1E33	00 - FF	00
M053	1E34	00 - FF	00
M054	1E35	00 - FF	00
M055	1E36	00 - FF	02
M056	1E37	00 - FF	00
M057	1E38	00 - FF	01
M058	1E39	00 - FF	02
M059	1E3A	00 - FF	10
M060	1E3B	00 - FF	83
M061	1E3C	00 - FF	00
M062	1E3D	00 - FF	00
M063	1E3E	00 - FF	00
M064	1E3F	00 - FF	00
M065	1E40	00 - FF	00
M066	1E41	00 - FF	00
M067	1E42	00 - FF	00
M068	1E43	00 - FF	03
M069	1E44	00 - FF	03
M070	1E45	00 - FF	03
M071	1E46	00 - FF	3F
M072	1E47	00 - FF	01

Item No.	Item	Variable range	Setting value
M073	1E48	00 - FF	00
M074	1E49	00 - FF	00
M075	1E4A	00 - FF	00
M076	1E4B	00 - FF	00
M077	1E4C	00 - FF	00
M078	1E4D	00 - FF	00
M079	1E4E	00 - FF	00
M080	1E4F	00 - FF	00
M081	1E50	00 - FF	00
M082	1E51	00 - FF	00
M083	1E52	00 - FF	00
M084	1E53	00 - FF	00
M085	1E54	00 - FF	00
M086	1E55	00 - FF	00
M087	1E56	00 - FF	00
M088	1E57	00 - FF	00
M089	1E58	00 - FF	00
M090	1E59	00 - FF	00
M091	1E5A	00 - FF	00
M092	1E5B	00 - FF	00
M093	1E5C	00 - FF	00
M094	1E5D	00 - FF	00
M095	1E5E	00 - FF	00
M096	1E5F	00 - FF	00
M097	1E60	00 - FF	00
M098	1E61	00 - FF	00
M099	1E62	00 - FF	00
M100	1E63	00 - FF	00
M101	1E64	00 - FF	00
M102	1E65	00 - FF	00
M103	1E66	00 - FF	00
M104	1E67	00 - FF	00
M105	1E68	00 - FF	04
M106	1E69	00 - FF	03
M107	1E6A	00 - FF	02
M108	1E6B	00 - FF	00
M109	1E6C	00 - FF	00
M110	1E6D	00 - FF	00
M111	1E6E	00 - FF	00
M112	1E6F	00 - FF	00
M113	1E70	00 - FF	00
M114	1E71	00 - FF	00
M115	1E72	00 - FF	00
M116	1E73	00 - FF	00
M117	1E74	00 - FF	00
M118	1E75	00 - FF	00
M119	1E76	00 - FF	00
M120	1E77	00 - FF	00
M121	1E78	00 - FF	03
M122	1E79	00 - FF	00

Item No.	Item	Variable range	Setting value
M123	1E7A	00 - FF	00
M124	1E7B	00 - FF	00
M125	1E7C	00 - FF	00
M126	1E7D	00 - FF	00
M127	1E7E	00 - FF	01
M128	1E7F	00 - FF	00
M129	1E80	00 - FF	01
M130	1E81	00 - FF	00
M131	1E82	00 - FF	01
M132	1E83	00 - FF	00
M133	1E84	00 - FF	00
M134	1E85	00 - FF	00
M135	1E86	00 - FF	00
M136	1E87	00 - FF	00
M137	1E88	00 - FF	00
M138	1E89	00 - FF	00
M139	1E8A	00 - FF	00
M140	1E8B	00 - FF	00
M141	1E8C	00 - FF	00
M142	1E8D	00 - FF	00
M143	1E8E	00 - FF	00
M144	1E8F	00 - FF	00
M145	1E90	00 - FF	00
M146	1E91	00 - FF	00
M147	1E92	00 - FF	00
M148	1E93	00 - FF	00
M149	1E94	00 - FF	00
M150	1E95	00 - FF	00
M151	1E96	00 - FF	00
M152	1E97	00 - FF	00
M153	1E98	00 - FF	00
M154	1E99	00 - FF	00
M155	1E9A	00 - FF	01
M156	1E9B	00 - FF	00
M157	1E9C	00 - FF	03
M158	1E9D	00 - FF	00
M159	1E9E	00 - FF	00
M160	1E9F	00 - FF	00
M161	1EA0	00 - FF	00
M162	1EA1	00 - FF	00
M163	1EA2	00 - FF	01
M164	1EA3	00 - FF	00
M165	1EA4	00 - FF	00
M166	1EA5	00 - FF	00
M167	1EA6	00 - FF	00
M168	1EA7	00 - FF	00
M169	1EA8	00 - FF	00
M170	1EA9	00 - FF	00
M171	1EAA	00 - FF	00
M172	1EAB	00 - FF	00

Item No.	Item	Variable range	Setting value
M173	1EAC	00 - FF	0A
M174	1EAD	00 - FF	00
M175	1EAE	00 - FF	00
M176	1EAF	00 - FF	00
M177	1EB0	00 - FF	0A
M178	1EB1	00 - FF	00
M179	1EB2	00 - FF	01
M180	1EB3	00 - FF	00
M181	1EB4	00 - FF	00
M182	1EB5	00 - FF	00
M183	1EB6	00 - FF	00
M184	1EB7	00 - FF	00
M185	1EB8	00 - FF	00
M186	1EB9	00 - FF	00
M187	1EBA	00 - FF	00
M188	1EBB	00 - FF	00
M189	1EBC	00 - FF	00
M190	1EBD	00 - FF	00
M191	1EBE	00 - FF	00
M192	1EBF	00 - FF	00
M193	1EC0	00 - FF	00
M194	1EC1	00 - FF	00
M195	1EC2	00 - FF	01
M196	1EC3	00 - FF	00
M197	1EC4	00 - FF	00
M198	1EC5	00 - FF	00
M199	1EC6	00 - FF	00
M200	1EC7	00 - FF	00
M201	1EC8	00 - FF	00
M202	1EC9	00 - FF	00
M203	1ECA	00 - FF	00
M204	1ECB	00 - FF	00

Item No.	Item	Variable range	Setting value
M205	1ECC	00 - FF	02
M206	1ECD	00 - FF	00
M207	1ECE	00 - FF	00
M208	1ECF	00 - FF	00
M209	1ED0	00 - FF	10
M210	1ED1	00 - FF	00
M211	1ED2	00 - FF	00
M212	1ED3	00 - FF	00
M213	1ED4	00 - FF	00
M214	1ED5	00 - FF	00
M215	1ED6	00 - FF	00
M216	1ED7	00 - FF	00
M217	1ED8	00 - FF	00
M218	1ED9	00 - FF	00
M219	1EDA	00 - FF	00
M220	1EDB	00 - FF	00
M221	1EDC	00 - FF	00
M222	1EDD	00 - FF	00
M223	1EDE	00 - FF	00
M224	1EDF	00 - FF	00

4.6.4 DRIVE SYSTEM SETTING (Fixed values)

Item No.	Item	Variable range	Setting value
F001	DD	000 - 001	000
F002	RAM REF	000 - 001	000

4.6.5 NOT USED (Fixed values)

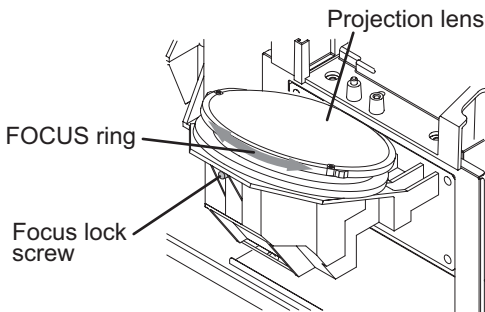
Item No.	Item	Variable range	Setting value
D001	RESREV	000 - 255	002

4.6.6 NOT USED (Fixed values)

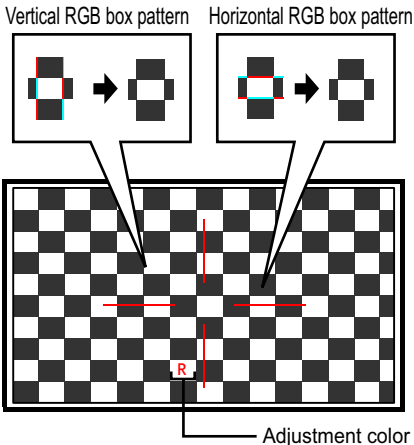
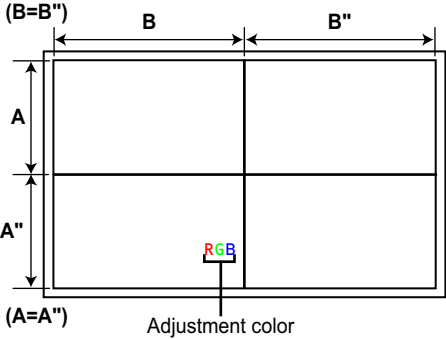
Item No.	Item	Variable range	Setting value
Z001	RESREV	000 - 255	002

4.7 ADJUSTMENT PROCEDURE

4.7.1 FOCUS

Item	Measuring instrument	Test point	Adjustment part	Description
LENS FOCUS	Hexagon wrench (2.5mm)		FOCUS ring [PROJECTION LENS]	(1) Remove the SPEAKER GRILL and CENTER COVER. (2) Display the MENU screen. (3) Loosen the focus lock screw. (4) Adjust the FOCUS ring so that the center screen may become the best focus. (5) Fix the focus lock screw by using the Hexagon wrench. • On this occasion, hold the FOCUS ring with your left hand. (6) Confirm the whole focus of the best screen. (7) Install the CENTER COVER and SPEAKER GRILL.
 The diagram shows a cross-section of the projection lens assembly. A hexagonal wrench is shown adjusting the FOCUS ring. The Focus lock screw is also indicated. The Projection lens is at the top of the assembly.				

4.7.2 DRIVE CIRCUIT

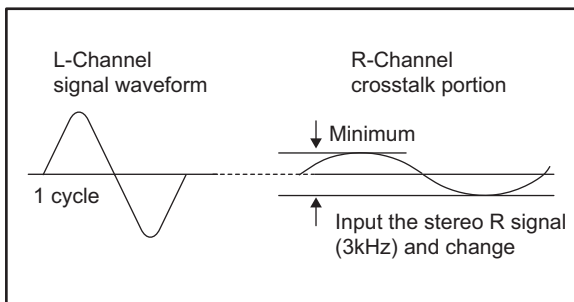
Item	Measuring instrument	Test point	Adjustment part	Description
DRIVE CONVERGENCE 	Remote control unit		[9.RGB BOX PATTERN]	(1) Set to "0 minutes" using the [SLEEP TIMER] key. (2) Press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, to enter the SERVICE MODE. (3) Press the [9] key, to select "RGB BOX PATTERN MODE" from the SERVICE MODE. (4) Set the adjustment color mode to "R" to set the red color adjustment mode. (5) At Horizontal RGB box pattern, adjust the top edge position as same or less than 0.5 pixel high as green. (6) At Vertical RGB box pattern, adjust the right edge position as same or less than 0.5 pixel high as green. (7) Set the adjustment color mode to "B" to set the blue color adjustment mode. (8) At Horizontal RGB box pattern, adjust the top edge position as same or less than 0.5 pixel high as green. (9) At Vertical RGB box pattern, adjust the right edge position as same or less than 0.5 pixel high as green. (10) Check to see that the cross pattern is white. If the cross pattern is not white, repeat the step 4. to 9. as above. NOTE: - Green is fixed. (It can not be removed.) - With this adjustment mode, the changed data is written in the MEMORY instantly.
DRIVE CENTER POSITION 	Remote control unit Signal generator		[9.RGB BOX PATTERN]	(1) Receive a center cross (or crosshatch) pattern. (2) Set to "0 minutes" using the [SLEEP TIMER] key. (3) Press the [VIDEO STATUS] key and [DISPLAY] key simultaneously, to enter the SERVICE MODE. (4) Press the [9] key, to select "RGB BOX PATTERN MODE" from the SERVICE MODE. (5) Set the adjustment color mode to "RGB" to set the display position adjustment mode. (6) Adjust the top and the bottom width to make A and A'' even. (7) Adjust the left and the right width to make B and B'' even. NOTE: With this adjustment mode, the changed data is written in the MEMORY instantly.

4.7.3 VIDEO CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (HIGHLIGHT)	Remote control unit Signal generator		[1.ADJUST] S001: R DRIVE (Red drive) S002: G DRIVE (Green drive) S003: B DRIVE (Blue drive)	(1) Receive a NTSC 75% all white pattern. (2) Set "VIDEO STATUS" to "STANDARD". (3) Set "ASPECT" to "FULL". (4) Select "COLOR TEMPERATURE" to "LOW". (5) Select "1.ADJUST" from the SERVICE MODE. (6) Adjust to keep one of < S001 > (Red drive), < S002 > (Green drive) or < S003 > (Blue drive) unchanged, then lower the other two so that the all-white screen is equally white throughout. NOTE: Set one or more of < S001 >, < S002 >, and < S003 > to "138". (7) Check that white balance is properly tracked from low light to high light. If the white balance tracking is deviated, adjust to correct it. (8) Press the [MUTING] key to memoirize the set value.

4.7.4 MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL	Remote control unit		[1.ADJUST] T001: INPLEVEL	(1) Receive any broadcast. (2) Select "1.ADJUST" from the SERVICE MODE. (3) Verify that the < T001 > (INPLEVEL) is set at its initial setting value. (4) Press the [MUTING] key to memorize the set value.
MTS SEPARATION	TV audio multiplex signal generator Oscilloscope Remote control unit	L OUT R OUT	[1.ADJUST] T002: LOWSEPA T003: HIGHSEPA	(1) Input the stereo L signal (300Hz) from the TV audio multiplex signal generator to the antenna terminal. (2) Connect an oscilloscope to L OUT pin of the AUDIO OUT, and display one cycle portion of the 300Hz signal. (3) Change the connection of the oscilloscope to R OUT pin of the AUDIO OUT, and enlarge the voltage axis. (4) Select "1.ADJUST" from the SERVICE MODE. (5) Set the initial setting value of the < T002 > (LOWSEPA). (6) Adjust the < T002 > so that the stroke element of the 300Hz signal will become minimum. (7) Press the [MUTING] key to memorize the set value. (8) Input the stereo R signal (3kHz) and change the connection of the oscilloscope to L OUT pin of the AUDIO OUT. (9) Similarly adjust < T003 > (HIGHSEPA). (10) Press the [MUTING] key to memorize the set value.



SECTION 5 TROUBLESHOOTING

5.1 SELF CHECK FEATURE

5.1.1 OUTLINE

This unit comes with the "Self check" feature, which checks the operational state of the circuit and displays/saves it during failure. Diagnosis is performed when power is turned on, and information input to the main microcomputer is monitored at all time. Diagnosis is displayed in 2 ways via screen display and LED flashes. Failure detection is based on input state of I²C bus and the various control lines connected to the main microcomputer.

5.1.2 HOW TO ENTER THE SELF CHECK MODE

Before entering the Self check mode, confirm that the setting of **TV/CATV** SW of the REMOTE CONTROL UNIT is at the "**TV**" side and the setting of **VCR/DVD** SW is at the "**VCR**" side. If the switches have not been properly set, you cannot enter the Self check mode.

- (1) Set to "**0 minutes**" using the **[SLEEP TIMER]** key.
 - (2) While "**0 minutes**" is displayed, press the **[VIDEO STATUS]** key and **[DISPLAY]** key simultaneously, then enter the service mode.
 - (3) Press the **[2]** key (SELF CHECK) before the service mode screen disappears.
 - (4) Self check mode screen is displayed.
 - (5) Press the **[ML/MTS]** key to enter Page 2 of the SELF CHECK MODE.
- When the **[RETURN+]** key pressed, the first page change screen.

NOTE:

When a number key other than the **[2]** key is pressed in the SERVICE MENU SCREEN, the other relevant screen may be displayed.

This is not used in the SELF CHECK. Press the **[MENU]** key to return to the SERVICE MENU SCREEN.

5.1.3 HOW TO EXIT THE SELF CHECK MODE

TO SAVE FAILURE HISTORY:

Turn off the power by unplugging the AC power cord plug when in the Self check mode.

TO CLEAR (RESET) FAILURE HISTORY:

Turn off the power by pressing the **[POWER]** key on the remote control unit when in the Self check mode.

5.1.4 FAILURE HISTORY

Failure history can be counted up to 9 times for each item. When the number exceeds 9, display will remain as 9. Failure history will be stored in the memory unless it has been deleted.

5.1.5 POINTS TO NOTE WHEN USING THE SELF CHECK FEATURE

In addition to circuit failures (abnormal operation), the following cases may also be diagnosed as "Abnormal" and displayed and counted as "NG".

- (1) Temporary defective transmissions across circuits due to pulse interruptions
- (2) Misalignment in the on/off timing of power for I²C bus (VCC) when turning on/off the main power.

Diagnosis may be impeded if a large number of items are displayed as "NG". As such, start Self check check only after 3 seconds in the case of receivers and 5 seconds in the case of panels upon turning on the power. If recurrences are expected, ensure to clear (reset) the failure history and record the new diagnosis results.

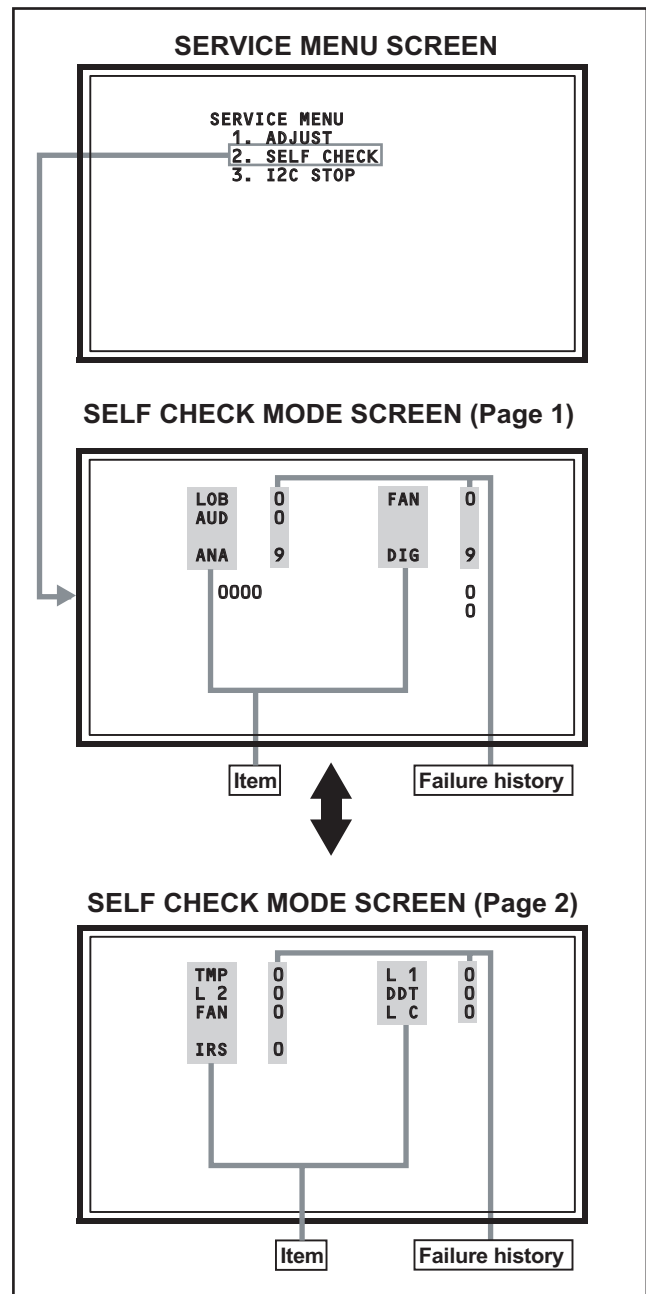


Fig.1

5.1.6 DETAILS

Self check is performed for the following items:

< Page 1 of screen >

Detection item	Display	Detection content	Diagnosis signal (line)	Detection timing
Low bias line short protection	LOB	Detection of the low bias line (2.5V/3.3V/5V/9V/12V) short. Q9821 , Q9831 , Q9841 , Q9842 , Q9861 [POWER PWB]	LB_PRO	Detection starts 3 seconds after the power is turned on. If error continues between 1000ms the power is turned off.
Fan lock	FAN	Not used	----	----
Audio	AUD	Not used	----	----
Devices on the ANALOG PWB and the TUNER PWB	ANA	Confirmation of reply of ACK signal which uses I ² C communication. IC101 , IC102 , IC601 , IC606 [ANALOG PWB] IC061 , TU001 [TUNER PWB]	SDA	Detection starts 3 seconds after the power is turned on. If it checks whenever I ² C communication is performed and no reply of ACK signal an error will be counted.
Devices on the DIGITAL PWB	DIG	Not used	----	----

< Page 2 of screen >

Detection item	Display	Detection content	Diagnosis signal (line)	Detection timing
Temp. sensor	TMP	Confirmation of the abnormal inner cabinet temperature. (53°C) IC2001 [THERMO PWB]	TXD	It will count if the serial communication from a DD MICOM is always supervised and an error occurs.
Lamp does not light up	L1	Confirm that the lamp dose not light up. CNBCT1 [DRIVE PWB]	TXD	It will count if the serial communication from a DD MICOM is always supervised and an error occurs.
Lamp goes out	L2	Confirm that the lamp dose not goes out. CNBCT1 [DRIVE PWB]	TXD	It will count if the serial communication from a DD MICOM is always supervised and an error occurs.
Abnormal DD CPU circuit	DDT	Confirmation of the serial communication error between DRIVE PWB and DIGITAL PWB. IC3701 [DRIVE PWB]	TXD	It will count if the serial communication error is error occurs.
Fan lock	FAN	Confirmation of the lock signals outputting the operation(circuit) status of the cooling fan. IC8005 [DRIVE PWB]	TXD	It will count if the serial communication from a DD MICOM is always supervised and an error occurs.
Lamp cover open	LC	Confirmation of the interlock switch status for the lamp cover. S0861 [LAMP COVER SW PWB]	TXD	It will count if the serial communication from a DD MICOM is always supervised and an error occurs.
Abnormal of optical iris	IRS	Not used	---	---

5.1.7 DISPLAY METHOD WHEN RASTER IS NOT AVAILABLE

In a state where a display screen does not appear due to the failure of this unit, the POWER LED (blue) and LAMP/PROGRAM LED (orange) can be flashing and display a trouble mode.

The factors in case the power is forcibly shut down at the time of failure are memorized and those are displayed.

Check item	Contents	Classifications	LED flash cycle	
			POWER LED (BLUE)	LAMP/ PROGRAM LED (ORANGE)
Low bias line short protection	Detection of the low bias line (2.5V/3.3V/5V/9V/12V) short. Q9821 , Q9831 , Q9841 , Q9842 , Q9861 [POWER PWB]	1	---	1 sec interval
Fan lock (stop) for ATSC tuner	Detection of the Fan lock (stop). CN9FAN [POWER PWB]	1	---	1 sec interval
Lamp cover open	Detection of the interlock switch status for the lamp cover. (H = Abnormal) S0861 [LAMP COVER SW PWB]	2	0.1 sec interval Simultaneously	
Lamp goes out	Detection of lamp return (LAMP_RTN) signals output depending on the status of the lamp supply electric current monitored constantly within the lamp ballast unit. (H = Off) CNBCT1 [DRIVE PWB]	5	0.1 sec interval Simultaneously	
Lamp does not light up	Detection of lamp return (LAMP_RTN) signals output depending on the status of the lamp supply electric current monitored constantly within the lamp ballast unit. (H = Off) CNBCT1 [DRIVE PWB]	5	0.1 sec interval Simultaneously	
Fan lock (stop) for optical system	Detection of LOCK signals outputting the operation (circuit) status of the cooling fan. (H=Abnormal) IC8005 [DRIVE PWB]	3	0.5 sec interval Alternately	
Abnormal DD CPU circuit	Detection of serial communication error between MAIN DRIVE PWB and RECEIVER PWB. IC3701 [DRIVE PWB]	4	0.5 sec interval Alternately	
Abnormal D-ILA DEVICE temperature	Detection of abnormal inner cabinet temperature. (53°C) IC2001 [THERMO PWB]	6	0.5 sec interval Alternately	

EXPLANATION ON ACTION

If NG is detected on an item being diagnosed, turn off the power on this unit. As soon as the power goes off, turn on and off POWER LED and LAMP LED immediately. After the power is shut down, it becomes impossible to turn on the power until the power cable is either plugged in or unplugged from the AC outlet.

- When the error of [1] occurs, [2], [3], [4], [5], [6] are no longer recognized.



Victor Company of Japan, Limited
ILA Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA463)



Printed in Japan
VPT

JVC

SCHEMATIC DIAGRAMS

D-ILA PROJECTION TELEVISION

**HD-52FA97,
HD-56FB97,
HD-61FB97**

CD-ROM No.SML200610

BASIC CHASSIS

RA3



HD-ILA™
Powered by D-ILA
GENESSA
D.I.S.T.
Digital Image Scaling Technology

HDTV

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

DOLBY
DIGITAL

HD-52FA97, HD-56FB97, HD-61FB97

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the $\triangle$ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Colour bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester : DC 20k Ω /V
- (4)Oscilloscope sweeping time : H $\Rightarrow$ 20 μ s / div
: V $\Rightarrow$ 5ms / div
: Others $\Rightarrow$ Sweeping time is specified
- (5)Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R209 $\rightarrow$ R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [k Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/16 [W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflammable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]

● Type

- No indication : Ceramic capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3)Coils

- No unit : [μ H]
- Others : As specified

(4)Power Supply

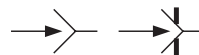
-  : B1
-  : B2 (12V)
-  : 9V
-  : 5V

* Respective voltage values are indicated

(5)Test point

-  : Test point
-  : Only test point display

(6)Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7)Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND and the ISOLATED(NEUTRAL) : ($\downarrow$) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

- ◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list. When ordering parts, please use the numbers that appear in the Parts List.

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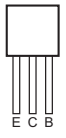
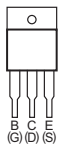
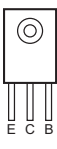
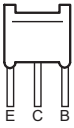
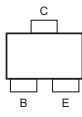
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USING P.W. BOARD

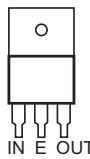
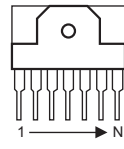
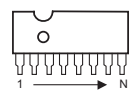
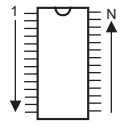
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REMOCON P.W. BOARD	SRA-8011A-M2	←	←
TEMP P.W. BOARD	SRA-8211A-M2	←	←
USB P.W. BOARD	SRA-8521A-M2	←	←
POWER P.W. BOARD	SRA-9017A-M2	←	←
DIGITAL P.W. BOARD	SRA0D161A-M2	SRA0D160A-M2	SRA0D159A-M2
SIDE CONTROL P.W. BOARD	SRA0L013A-M2	←	←
FRONT LED P.W. BOARD	SRA0L111A-M2	SRA0L113A-M2	←
LAMP COVER SW P.W. BOARD	SRA0L211A-M2	←	←
TUNER P.W. BOARD	SRA0R012A-M2	←	←

SEMICONDUCTOR SHAPES

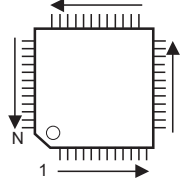
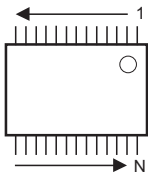
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

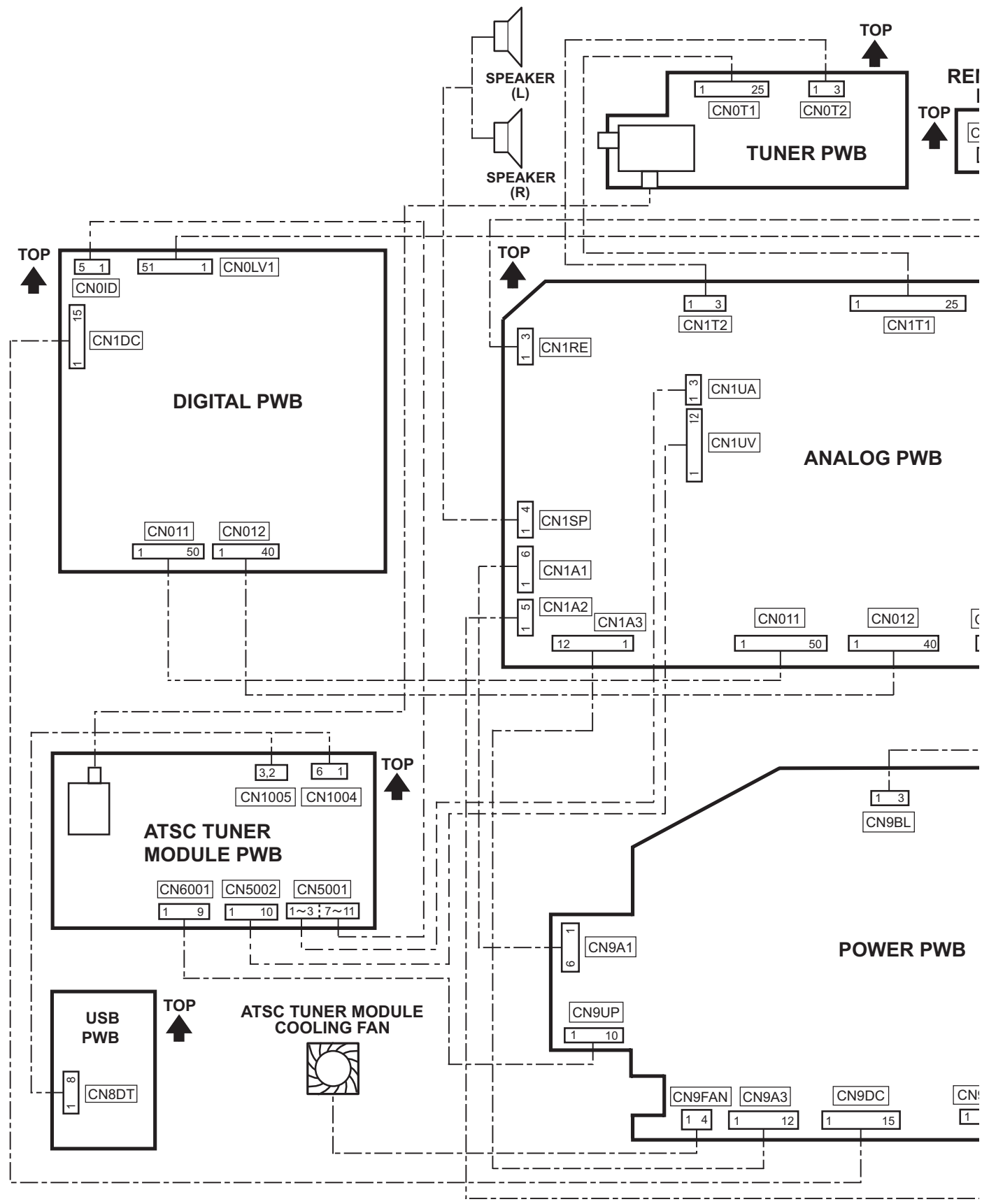
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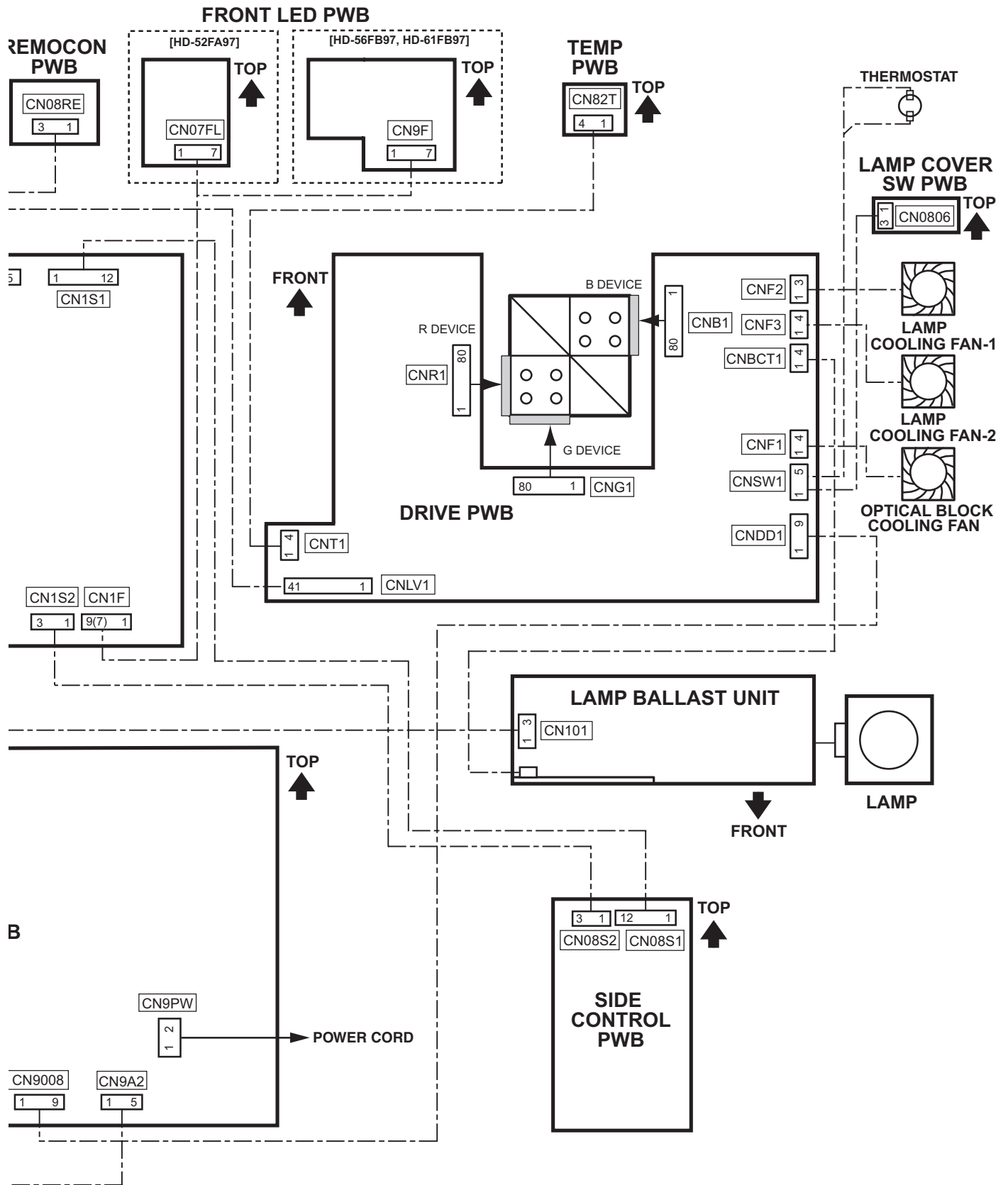
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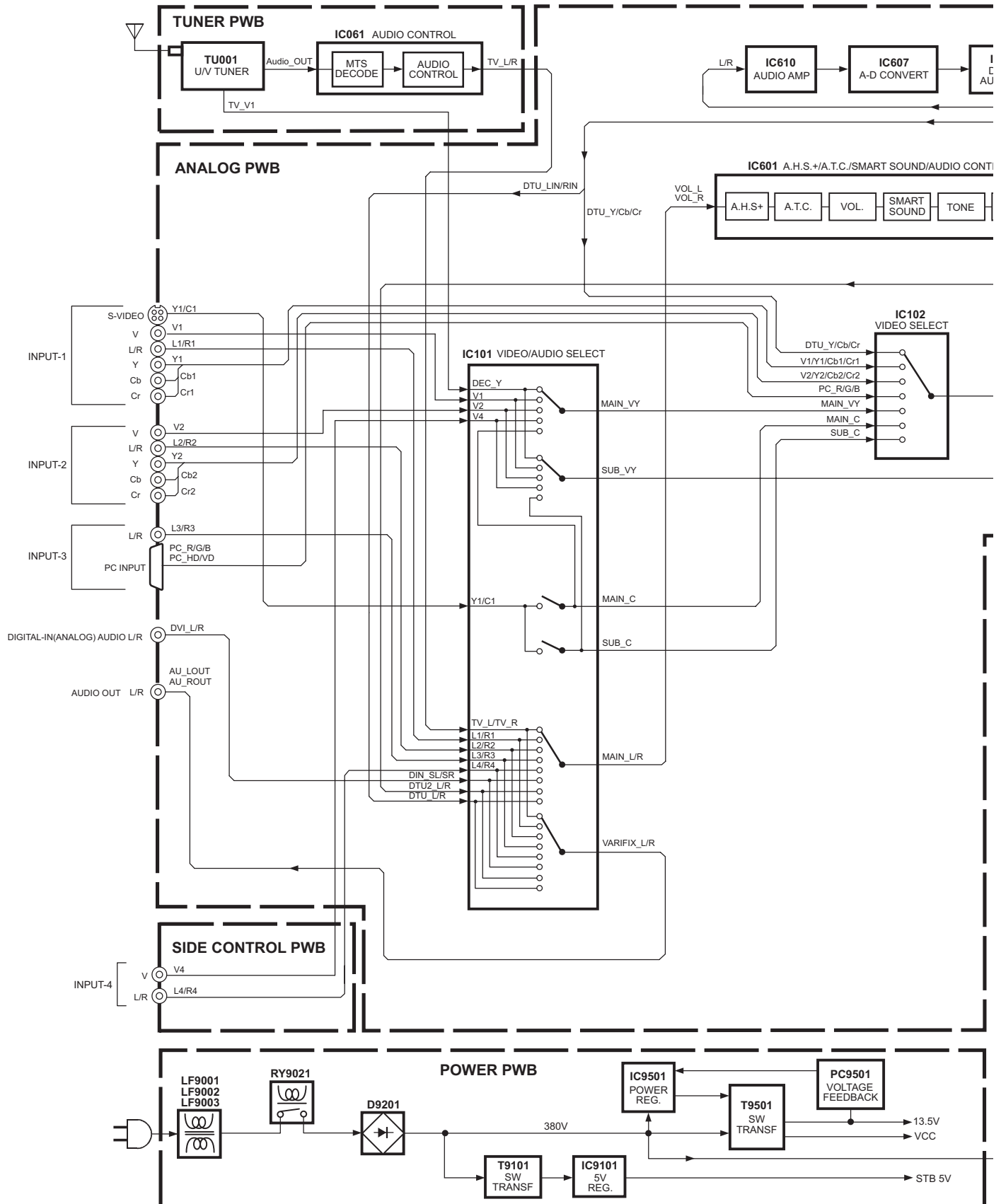
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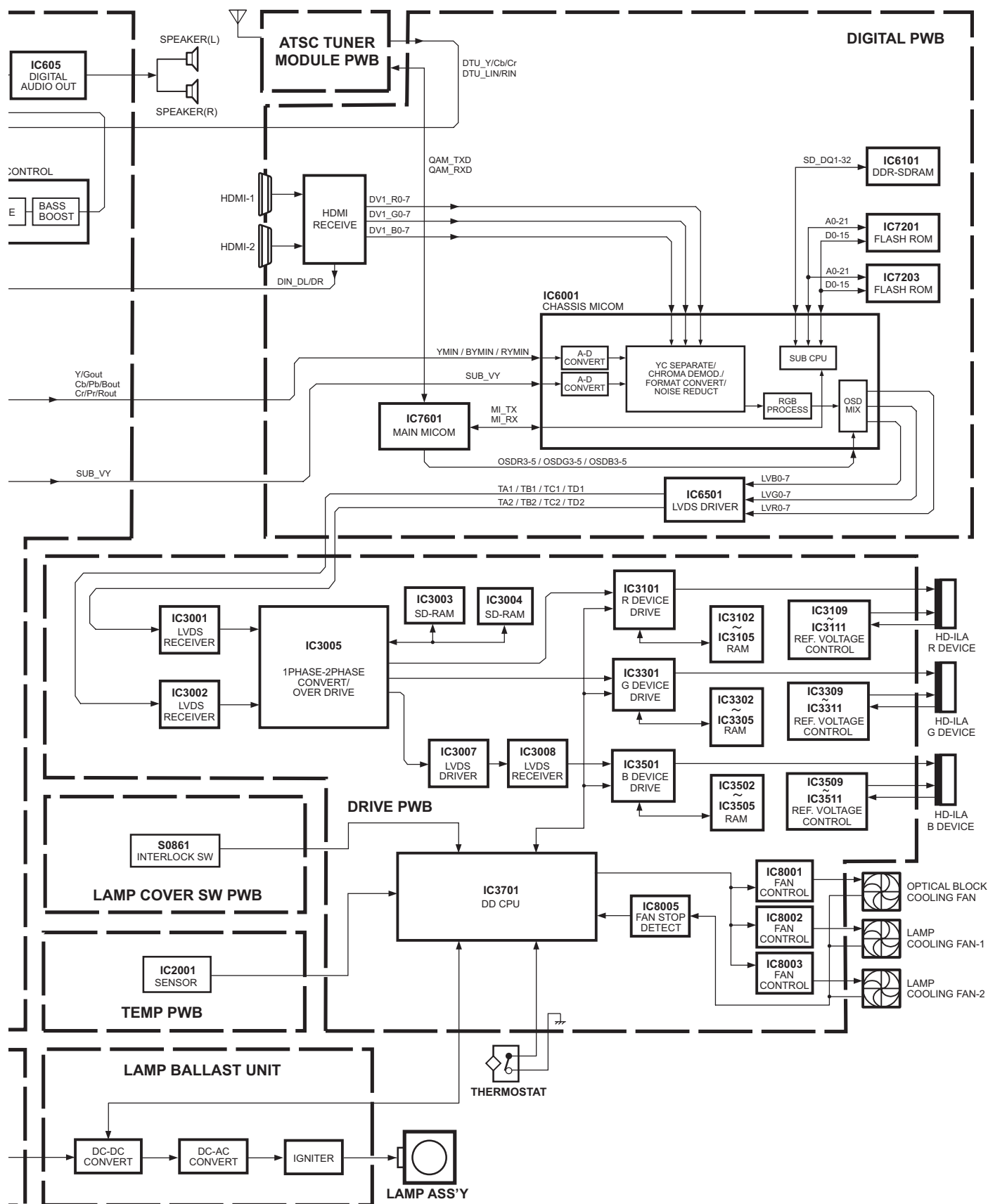
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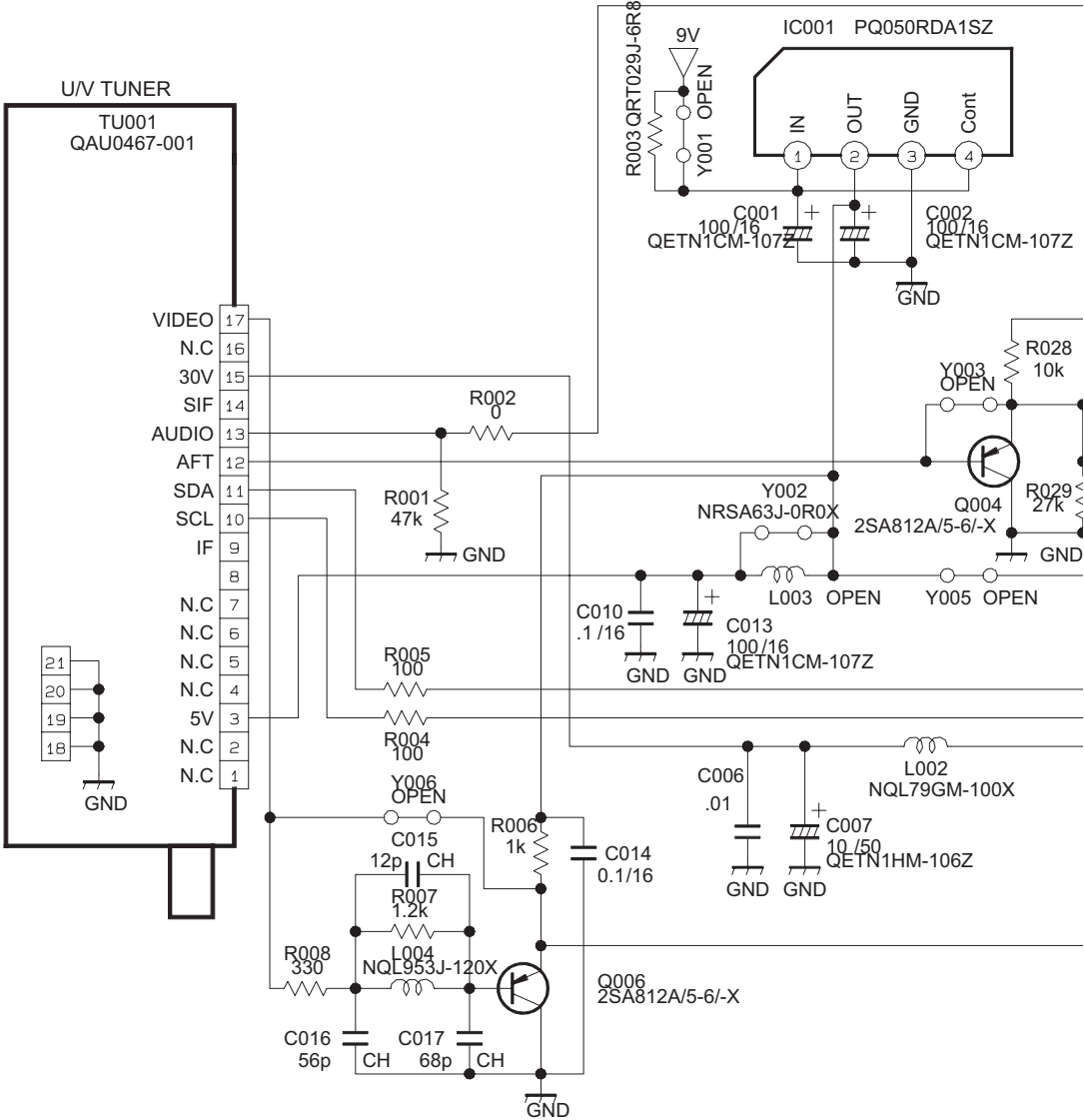


BLOCK DIAGRAM

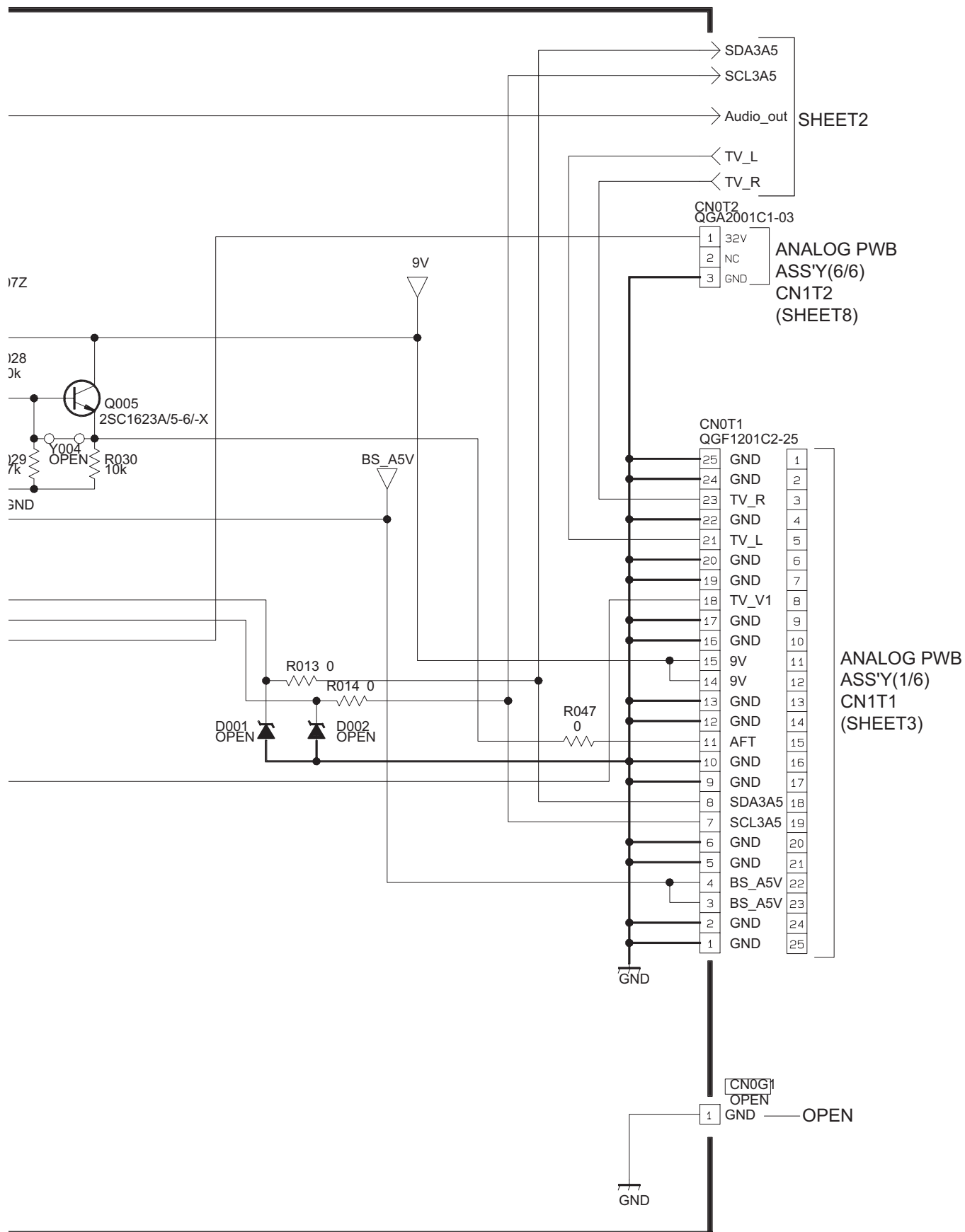




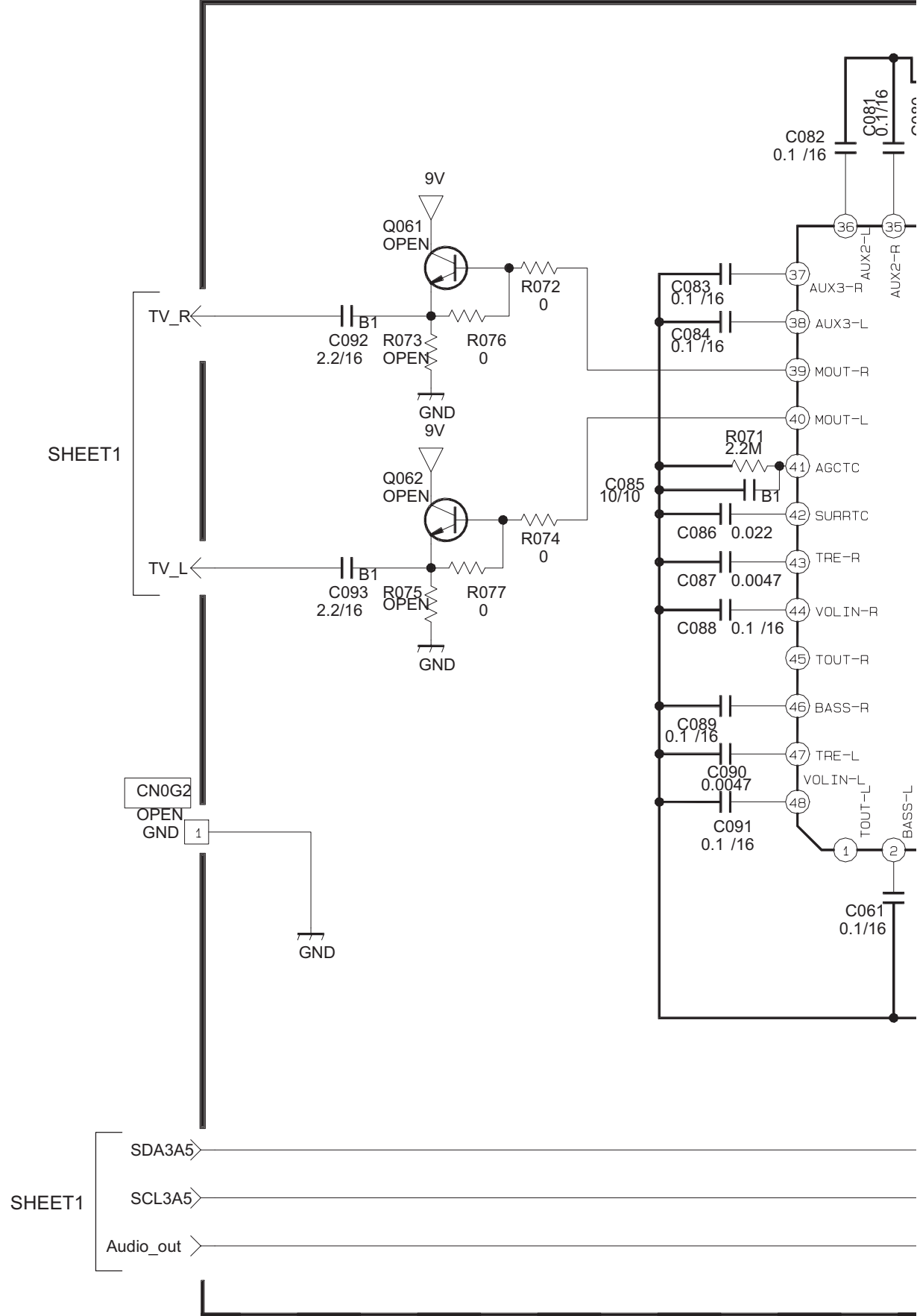
CIRCUIT DIAGRAMS
TUNER PWB CIRCUIT DIAGRAM (1/2) SHEET1

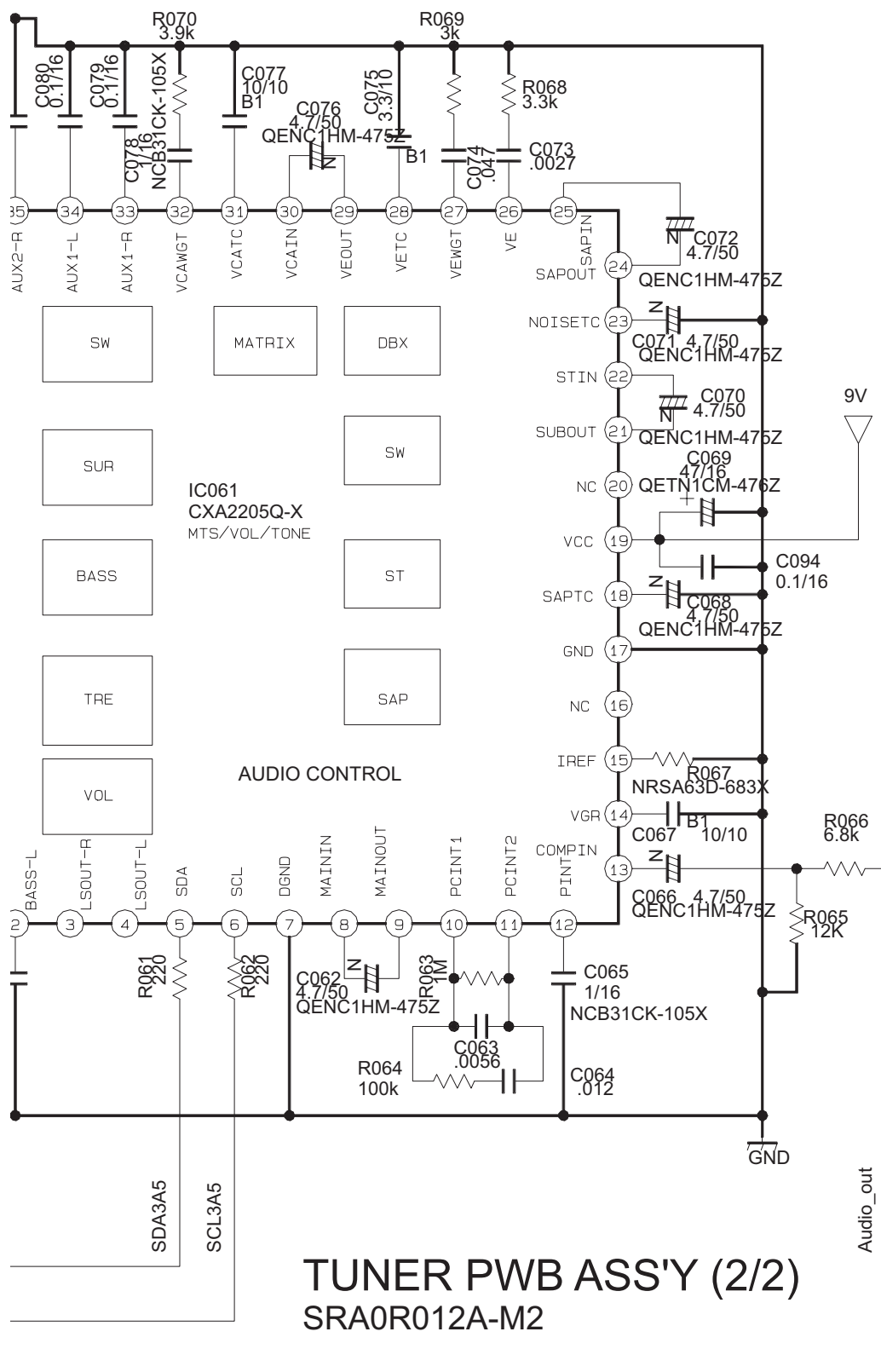


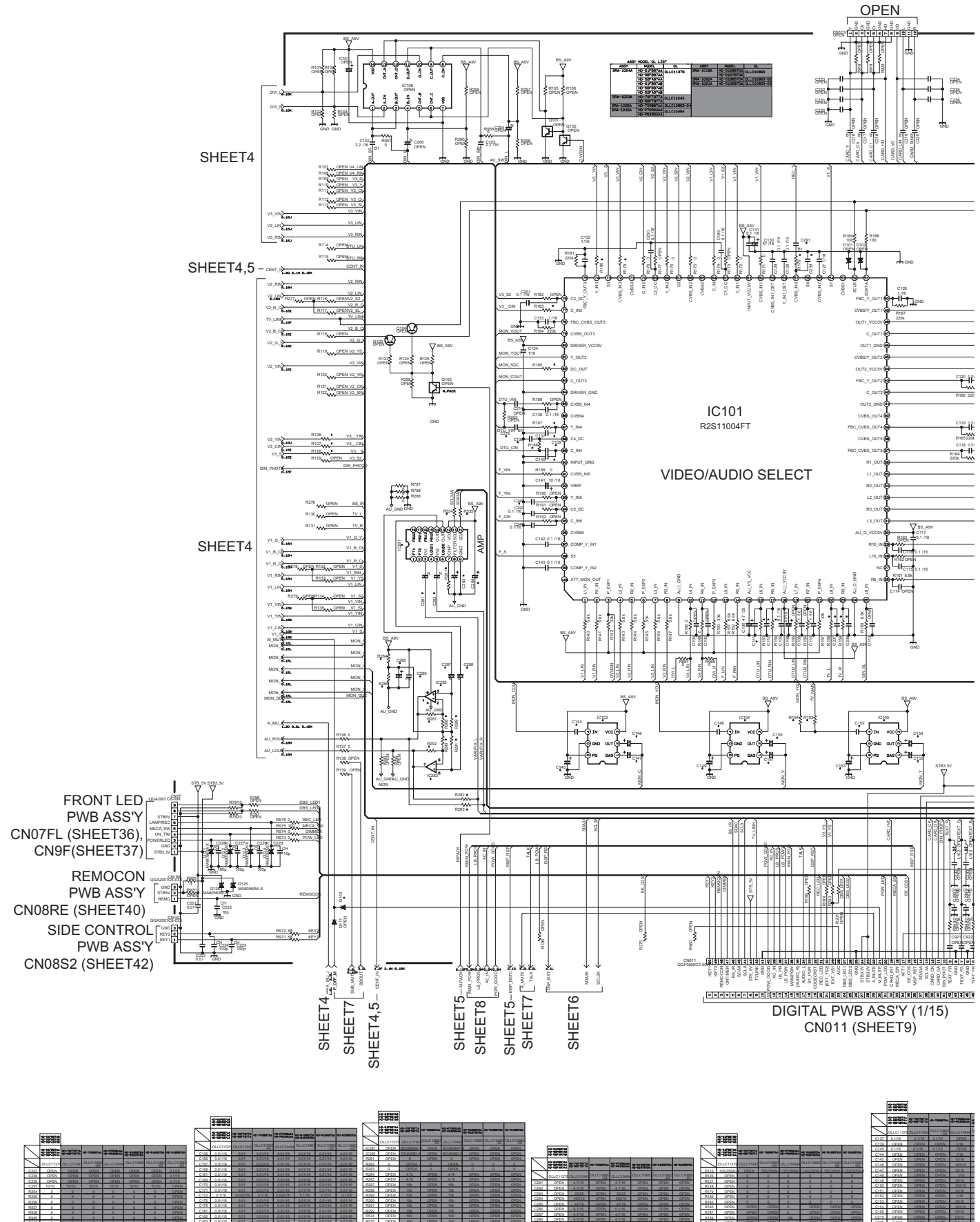
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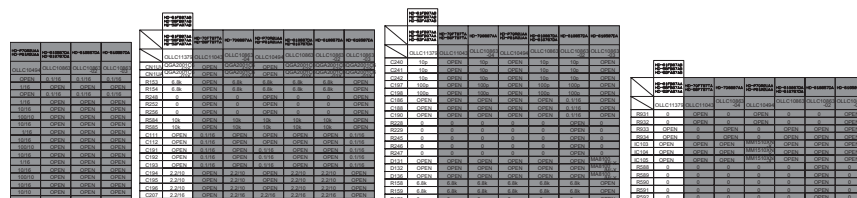


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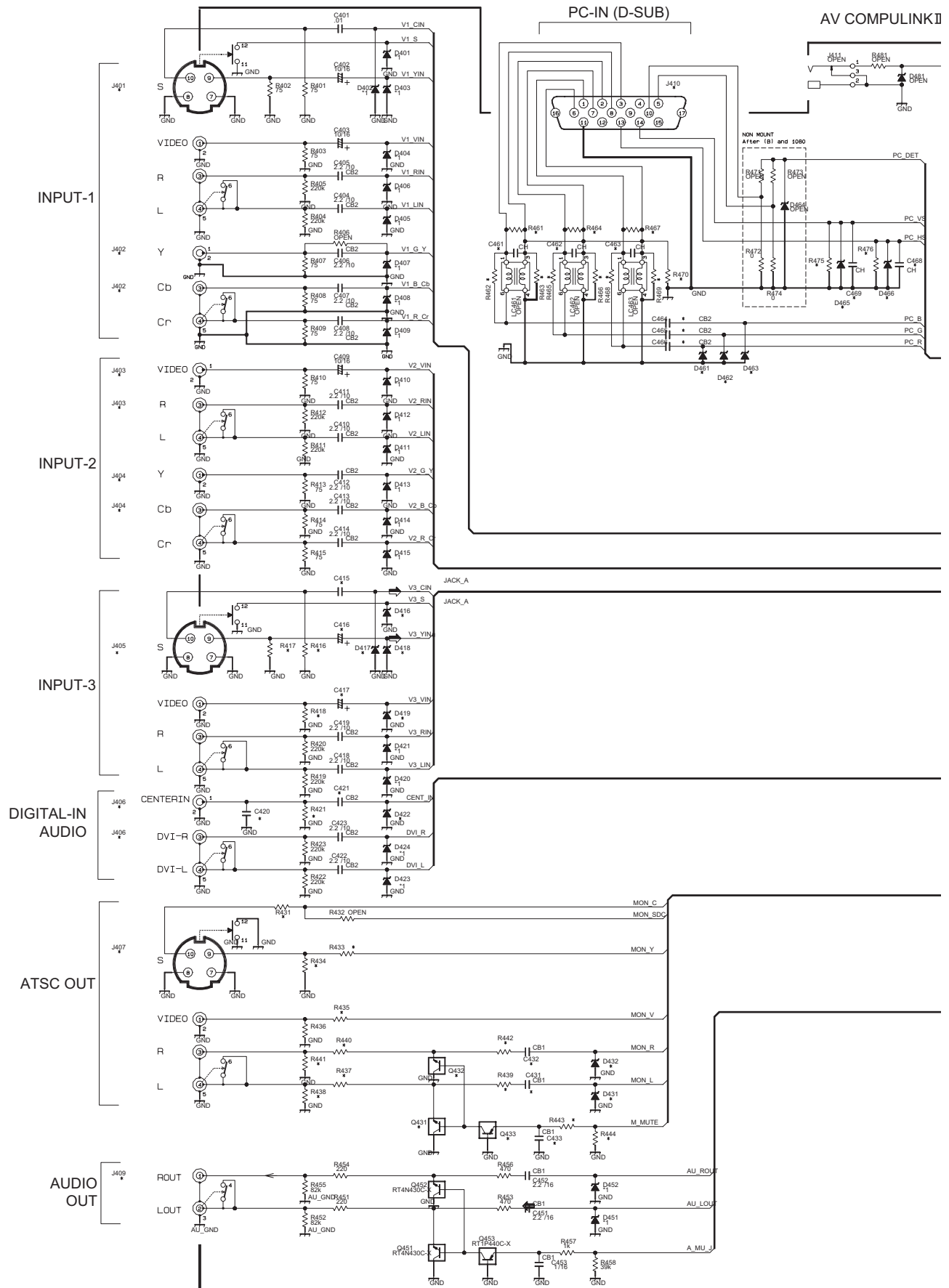




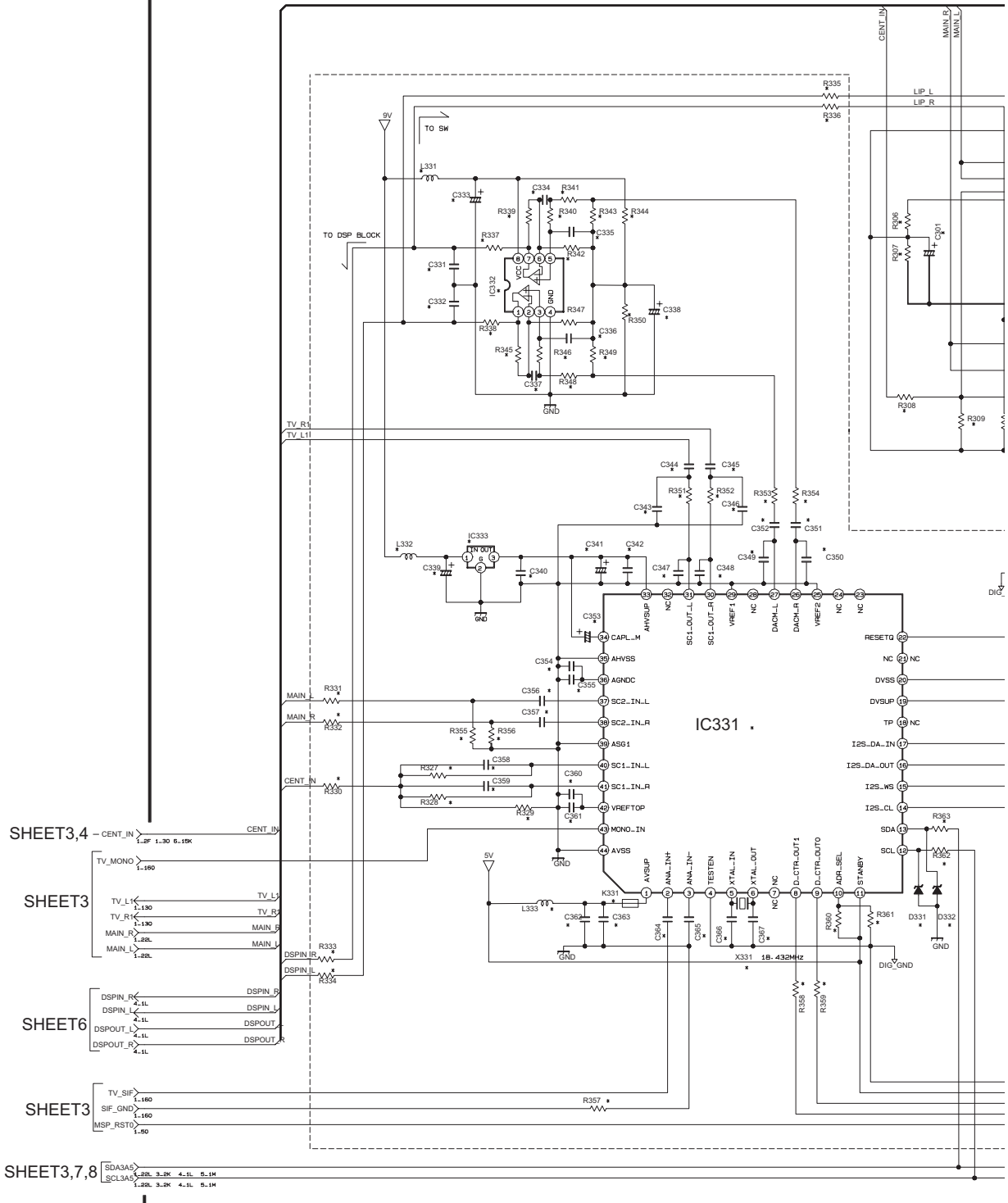


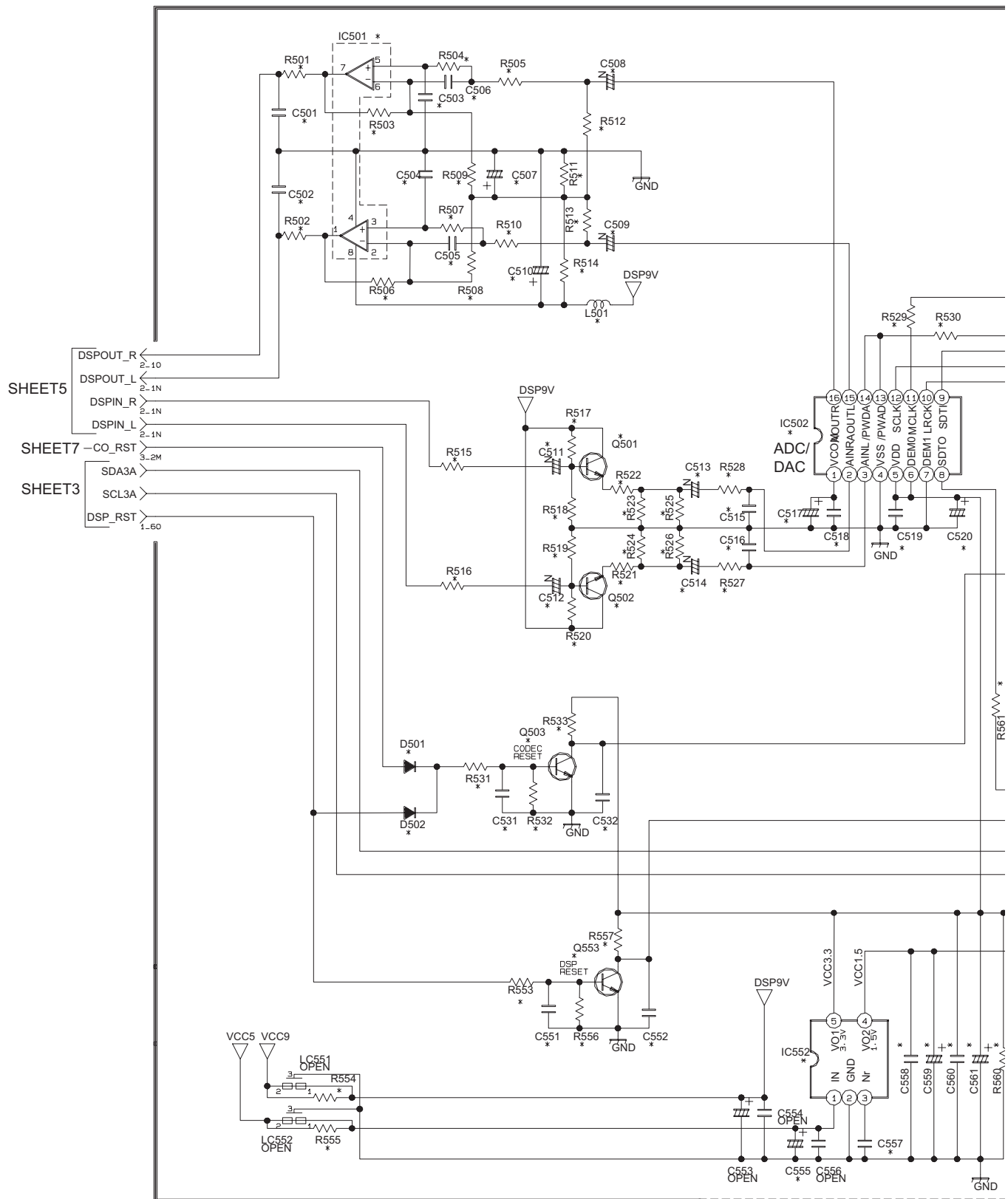
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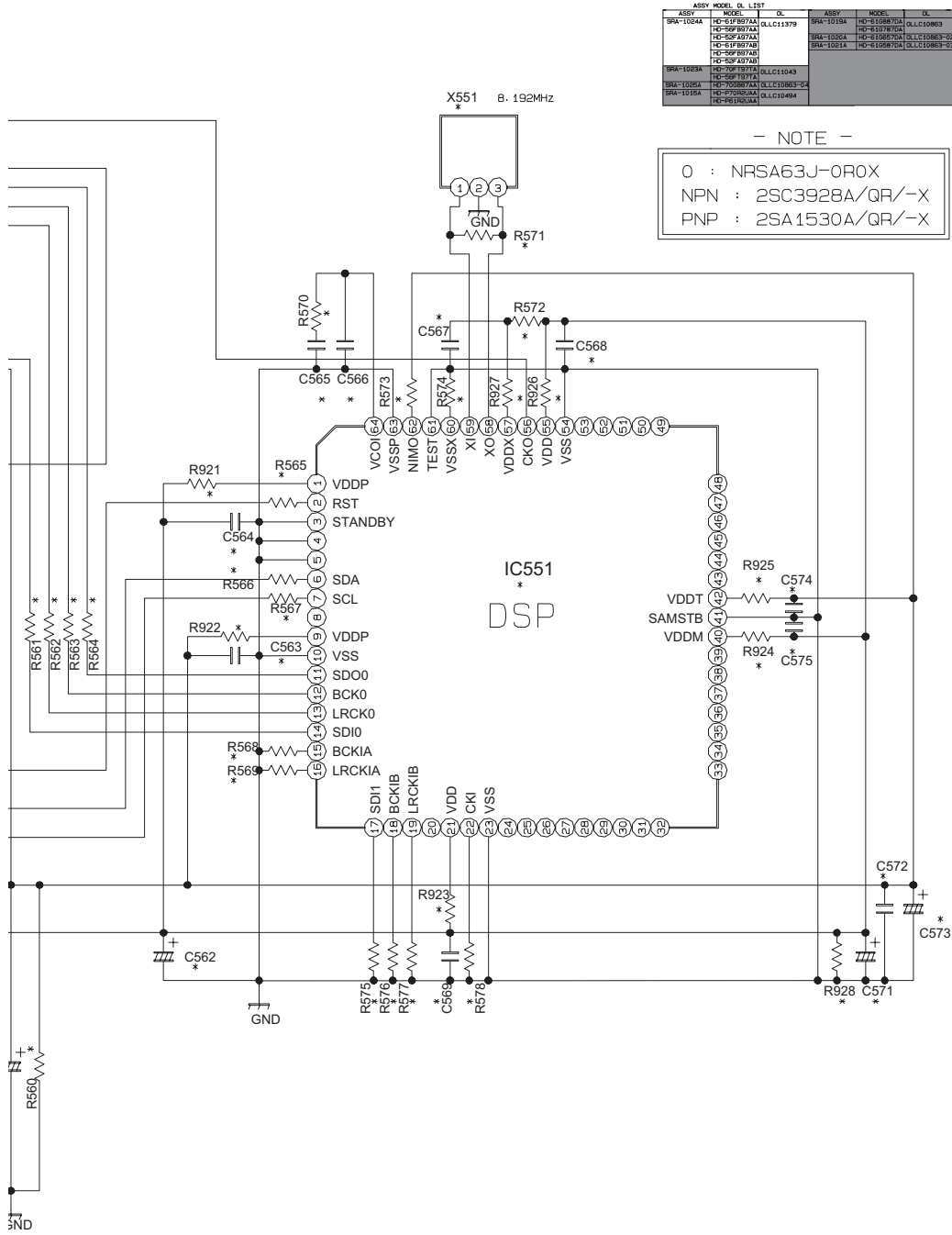
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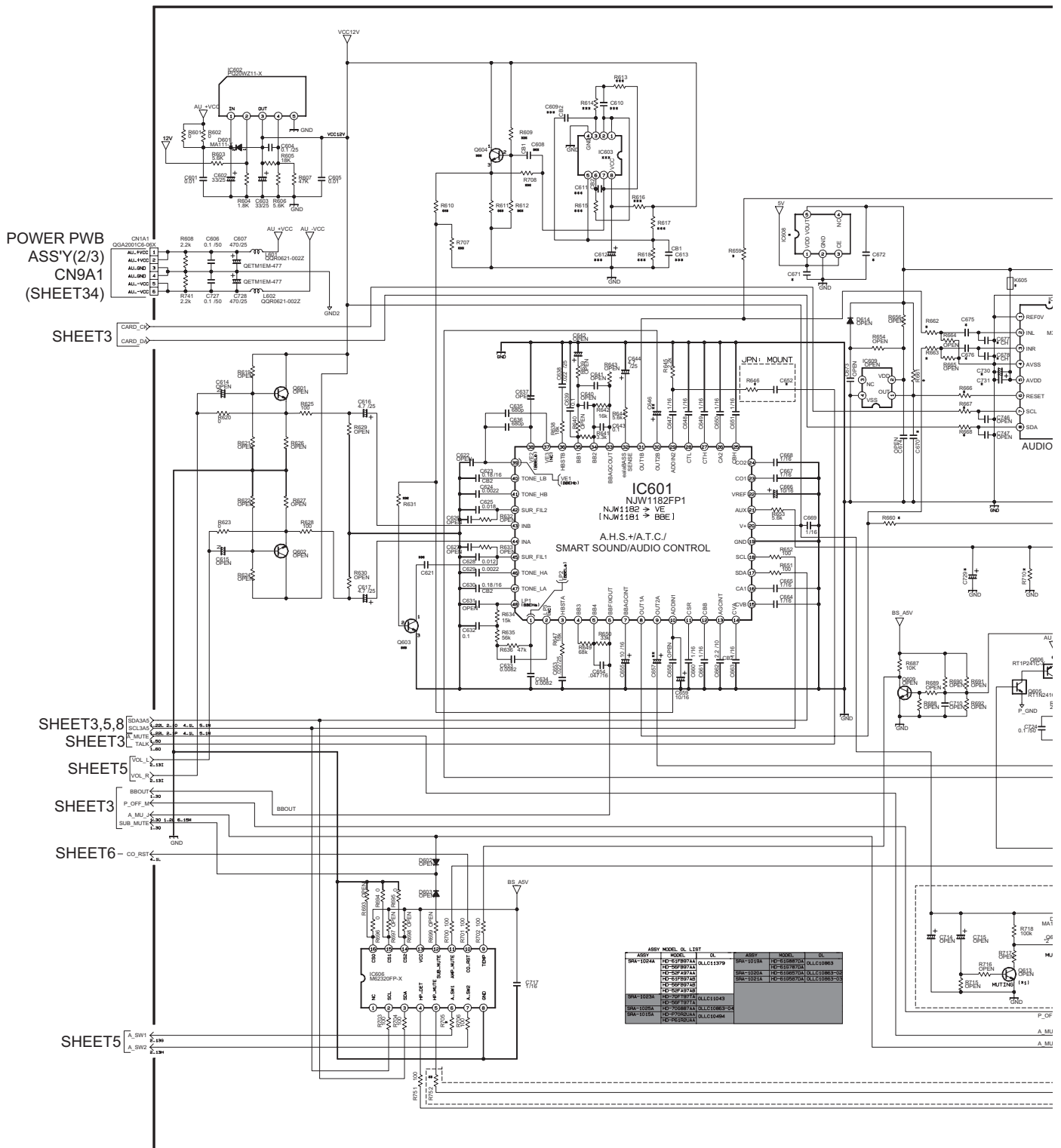


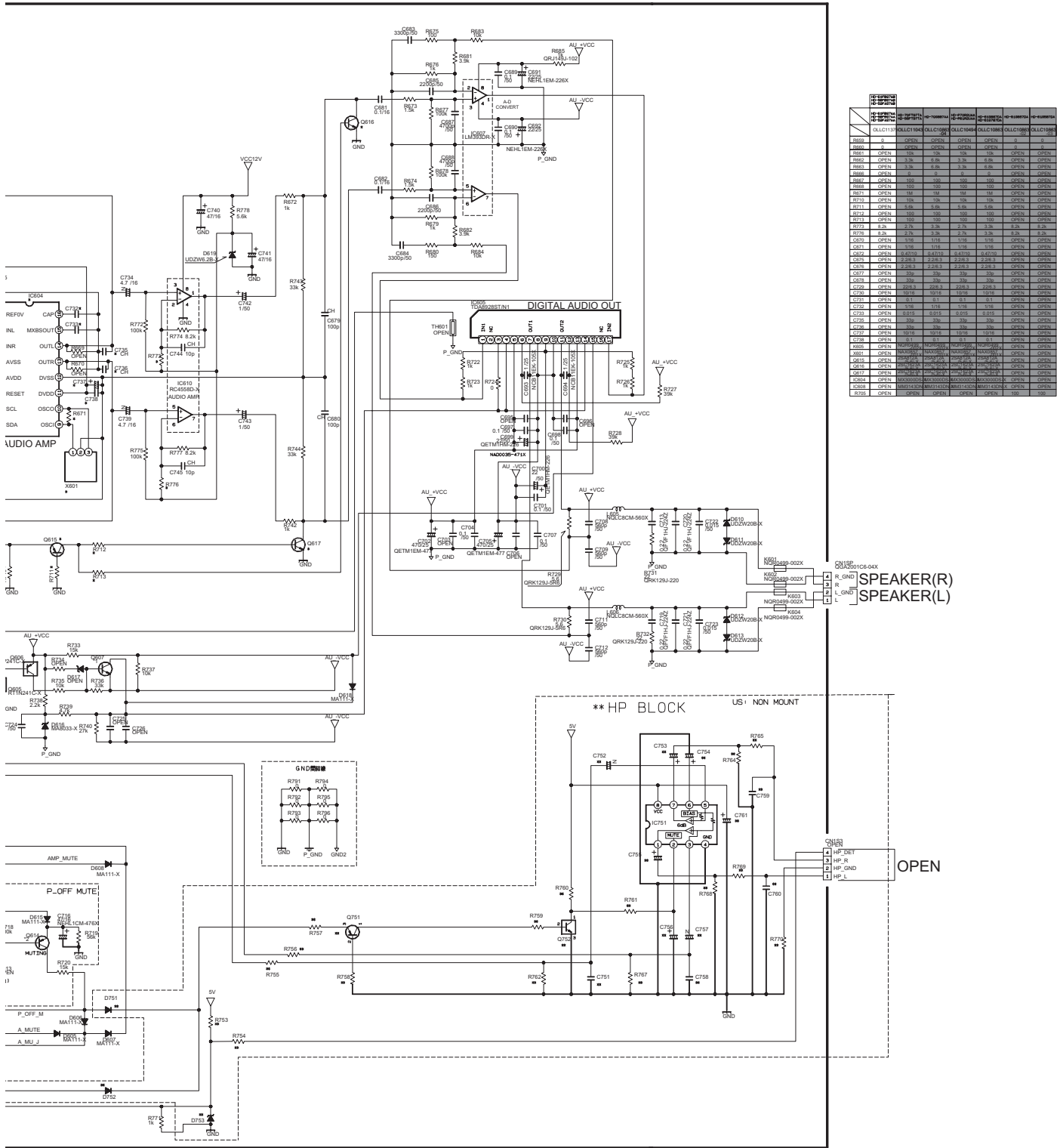
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ANALOG PWB ASS'Y(3/6)
SRA-1024A-M2

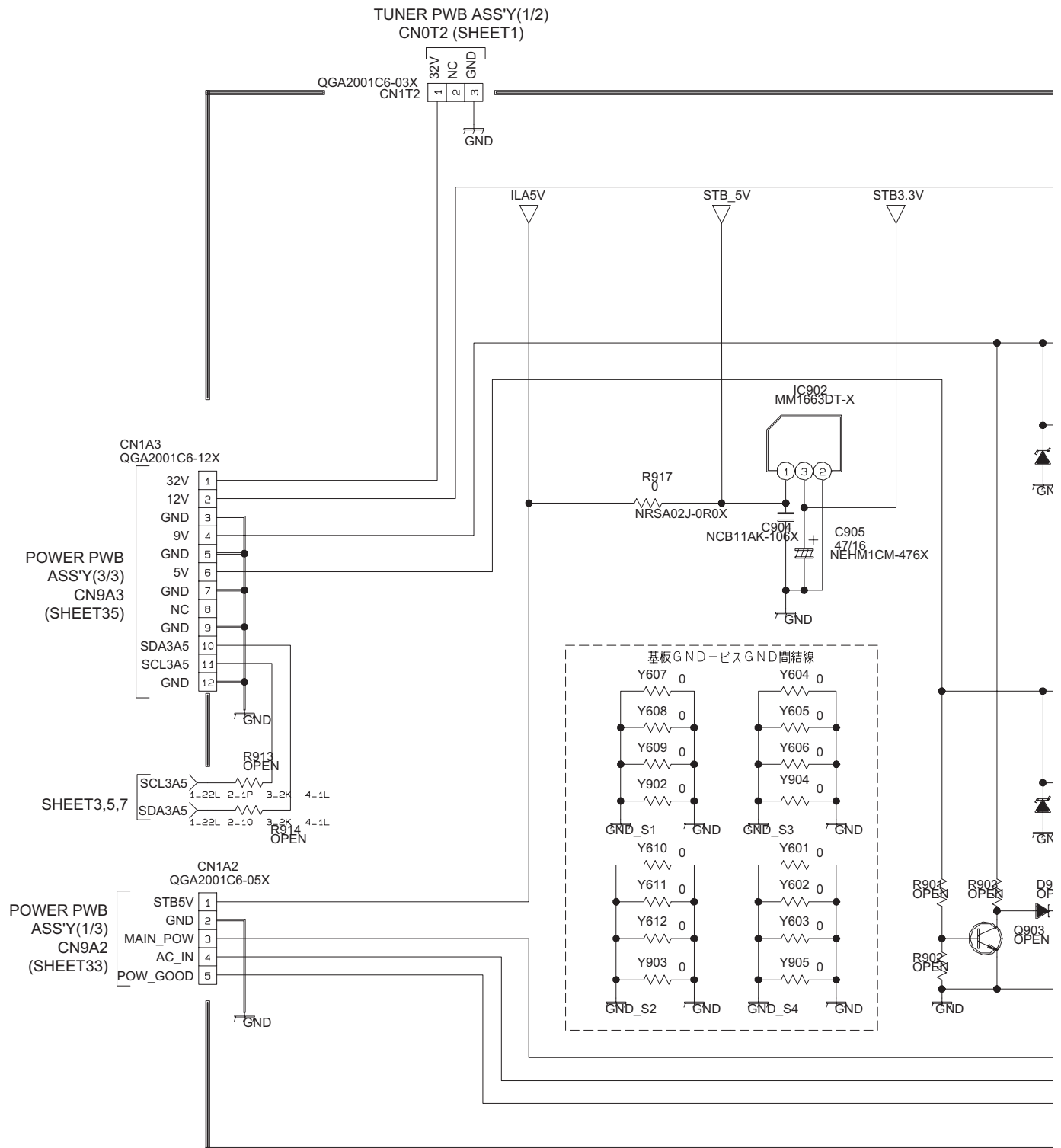


ANALOG PWB ASS'Y(4/6)
SRA-1024A-M2[illegible][illegible]



ANALOG PWB ASS'Y(5/6)
SRA-1024A-M2

c10508003_0911_3/6_0.0

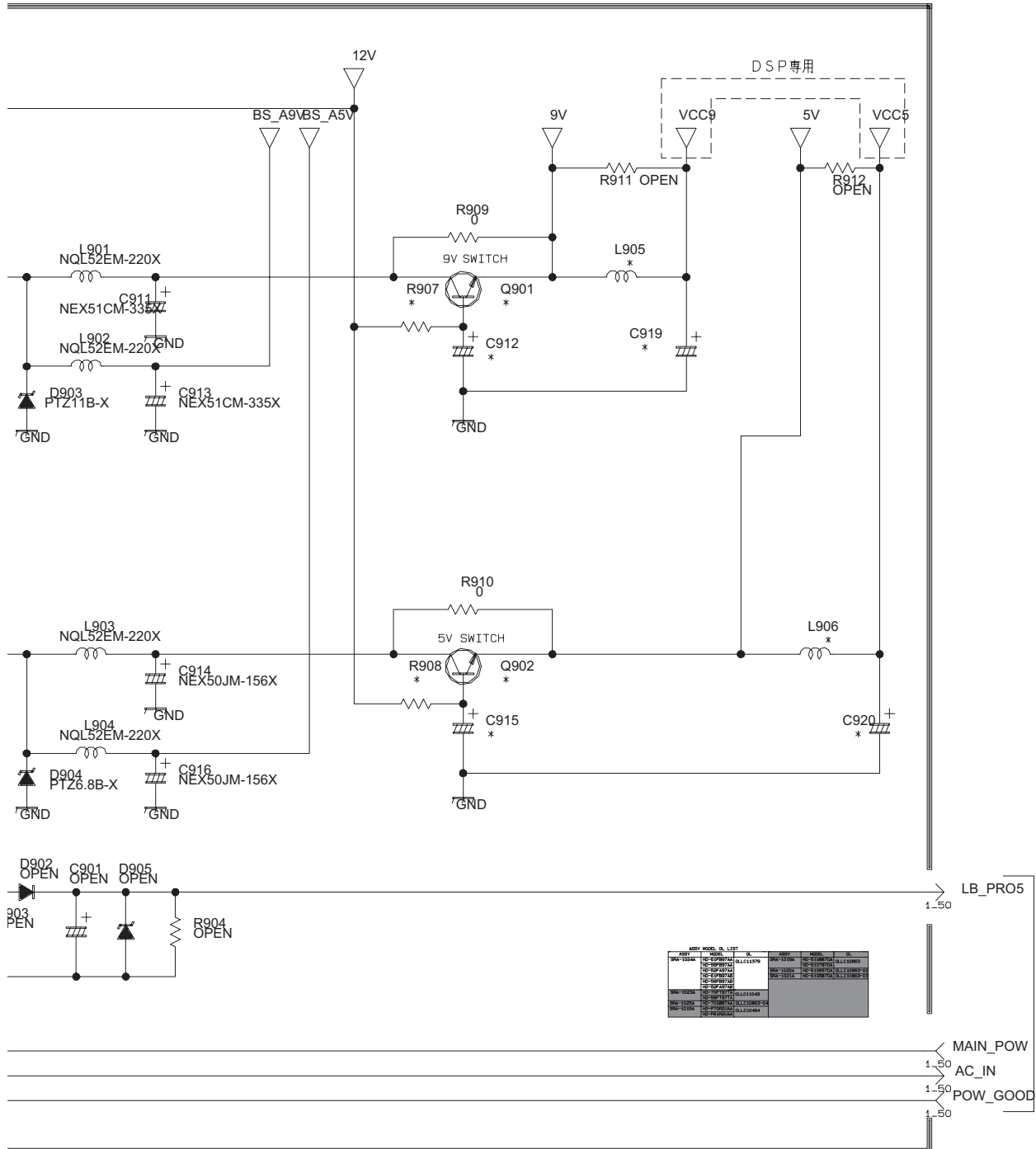


ANALOG PWB ASS'Y(6/6)

SRA-1024A-M2

REF	VALUE	QTY	UNIT	QTY	UNIT	QTY	UNIT	QTY	UNIT
Q901	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q902	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q903	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q904	OPEN	1	PCB	1	PCB	1	PCB	1	PCB

REF	VALUE	QTY	UNIT	QTY	UNIT	QTY	UNIT	QTY	UNIT
Q905	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q906	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q907	OPEN	1	PCB	1	PCB	1	PCB	1	PCB
Q908	OPEN	1	PCB	1	PCB	1	PCB	1	PCB

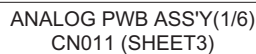


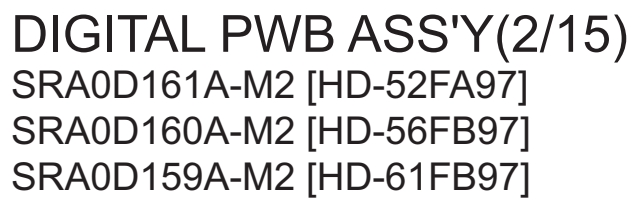
REF	VALUE	QTY	UNIT	REF	VALUE	QTY	UNIT
SRA-1024A	IC-1024A	1	PCB	SRA-1024A	IC-1024A	1	PCB
SRA-1024A	IC-1024A	1	PCB	SRA-1024A	IC-1024A	1	PCB
SRA-1024A	IC-1024A	1	PCB	SRA-1024A	IC-1024A	1	PCB
SRA-1024A	IC-1024A	1	PCB	SRA-1024A	IC-1024A	1	PCB

SHEET3

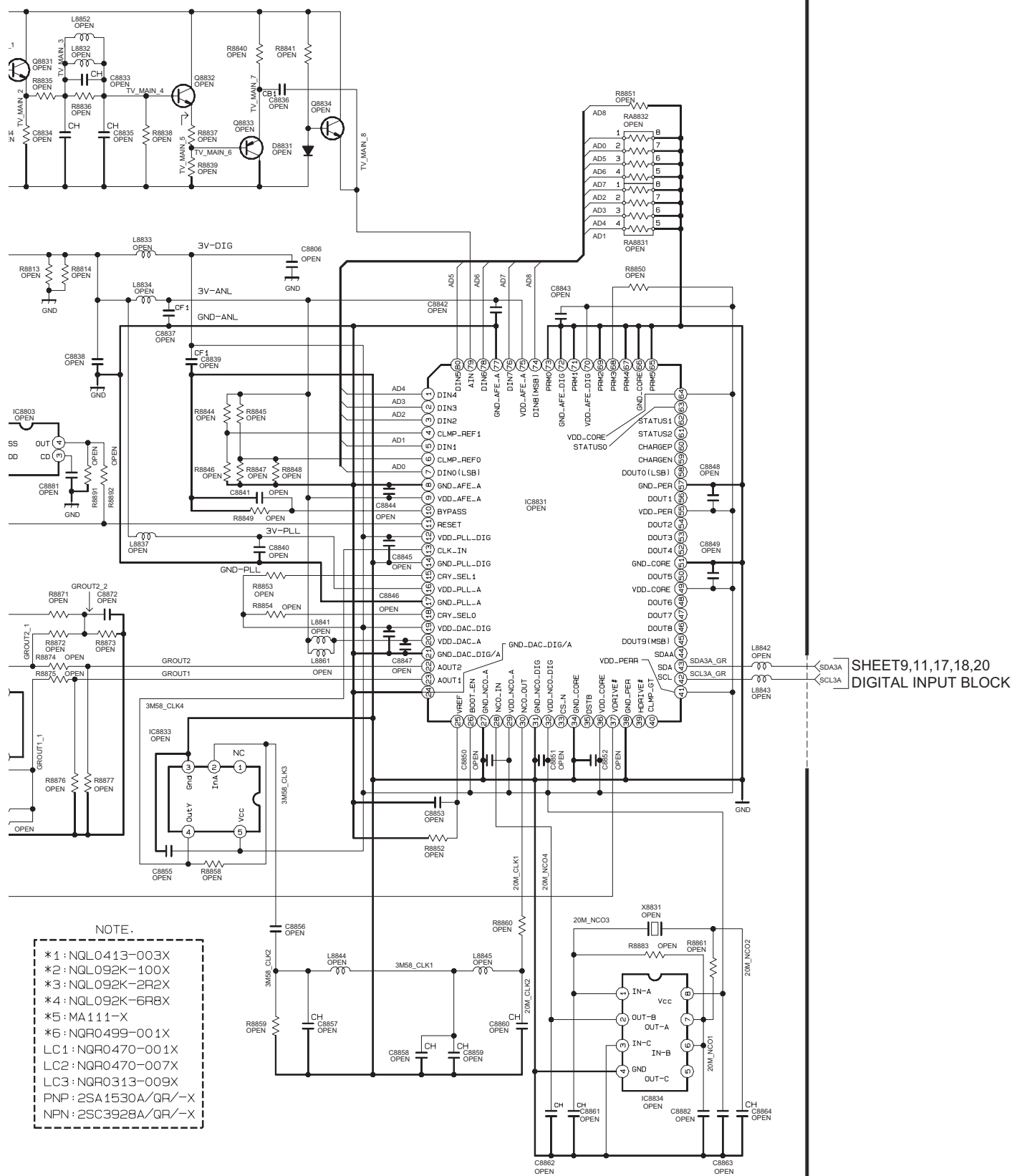
c10508005_0911_5/6_0.0

SRA0D159A-M2 [HD-61FB97]

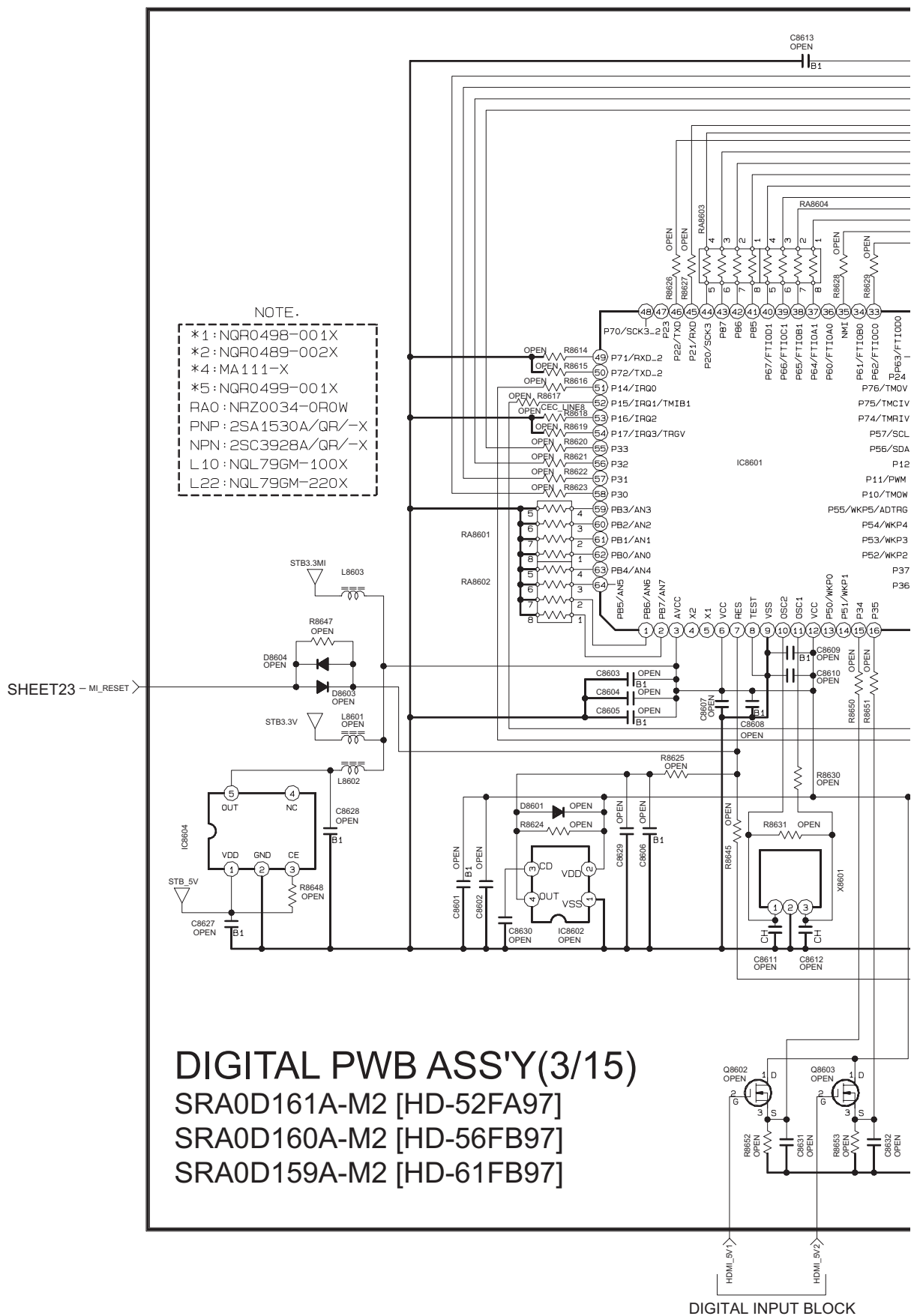


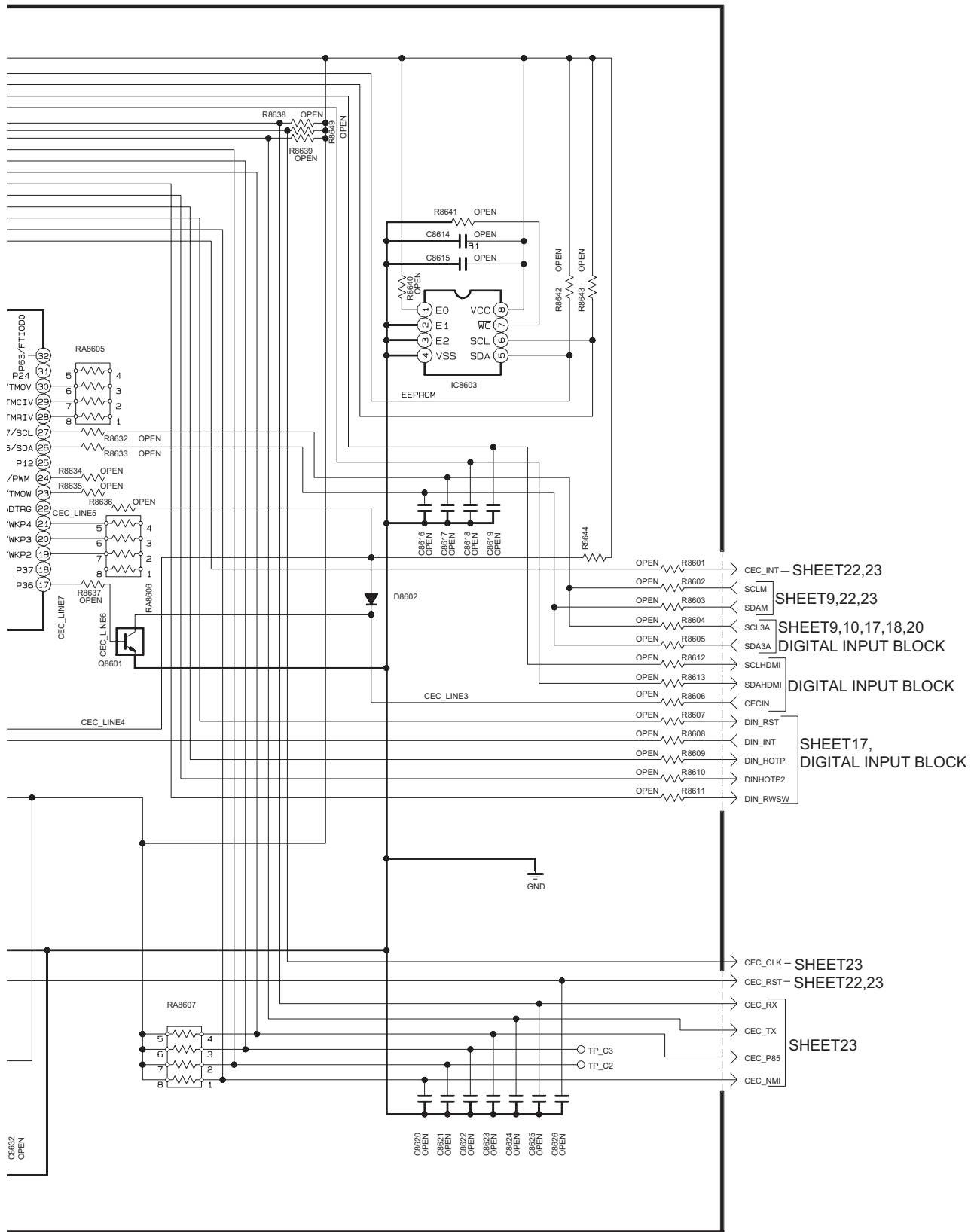


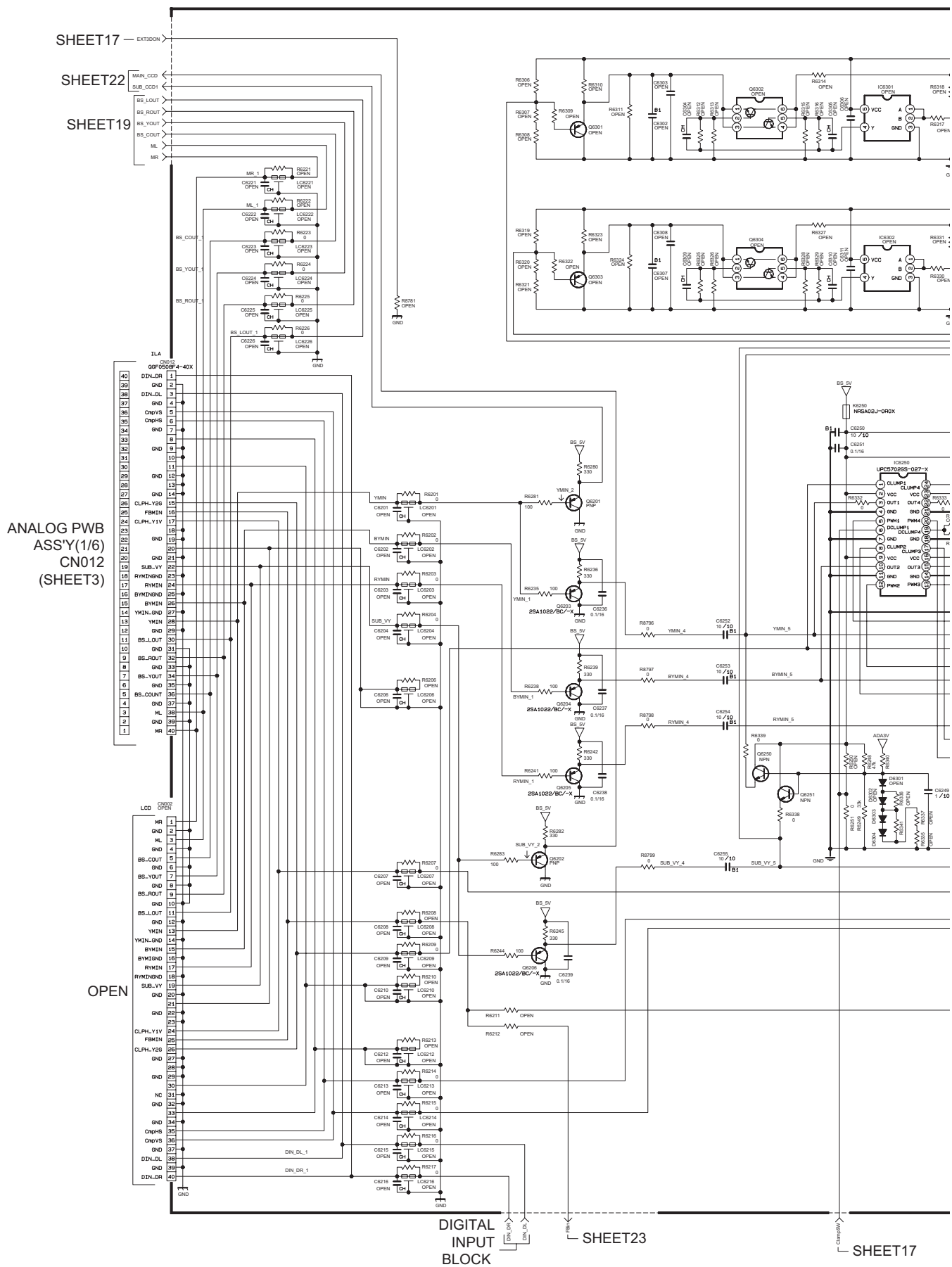
JPN MODEL:MOUNT
etc:NO MOUNT



c10502015_0808_15/16_0.0

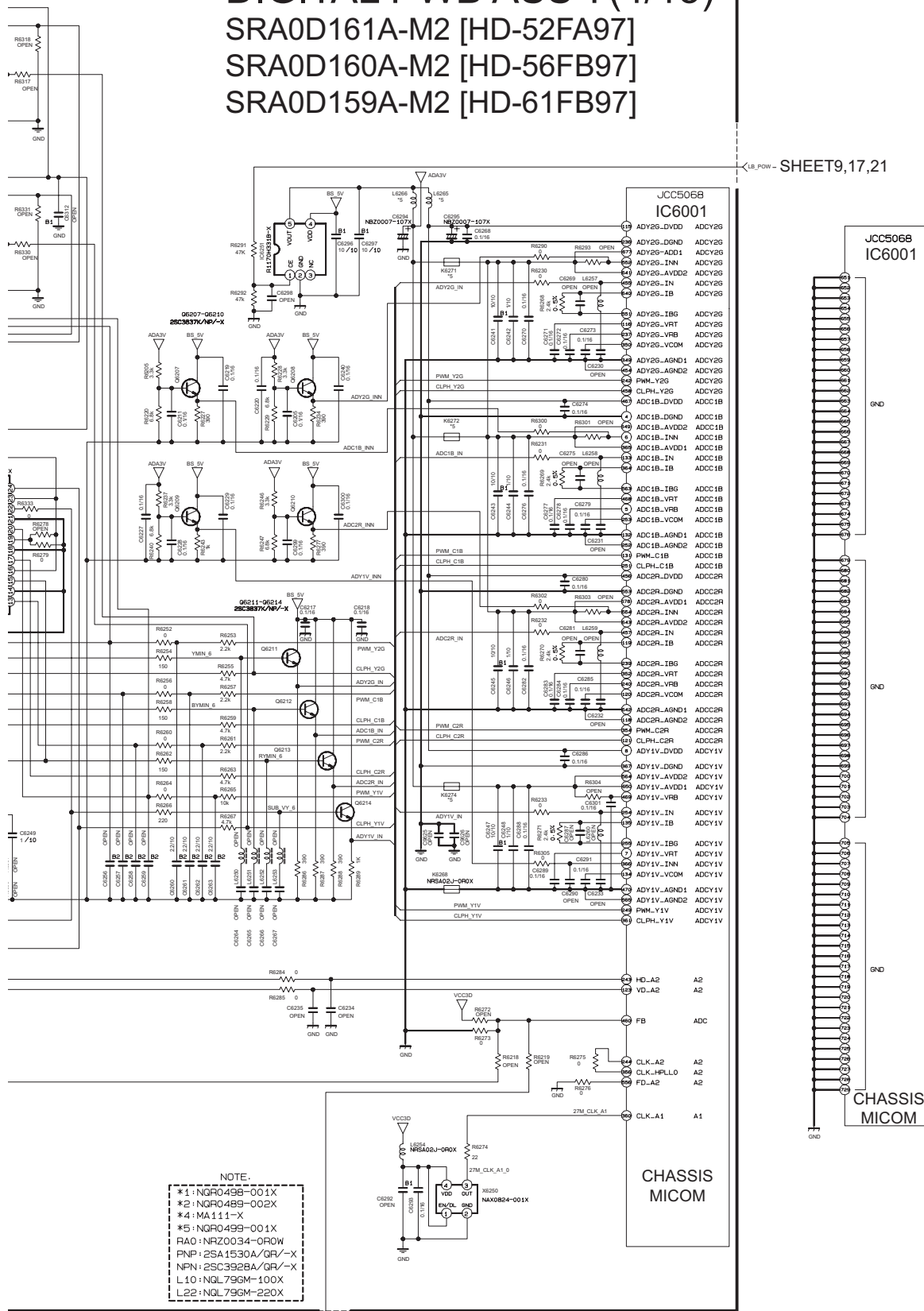


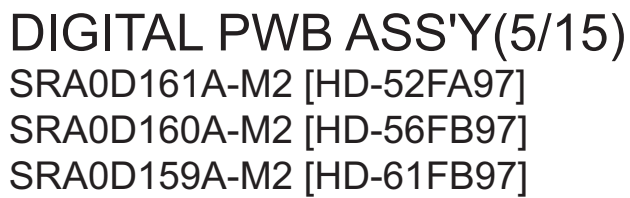


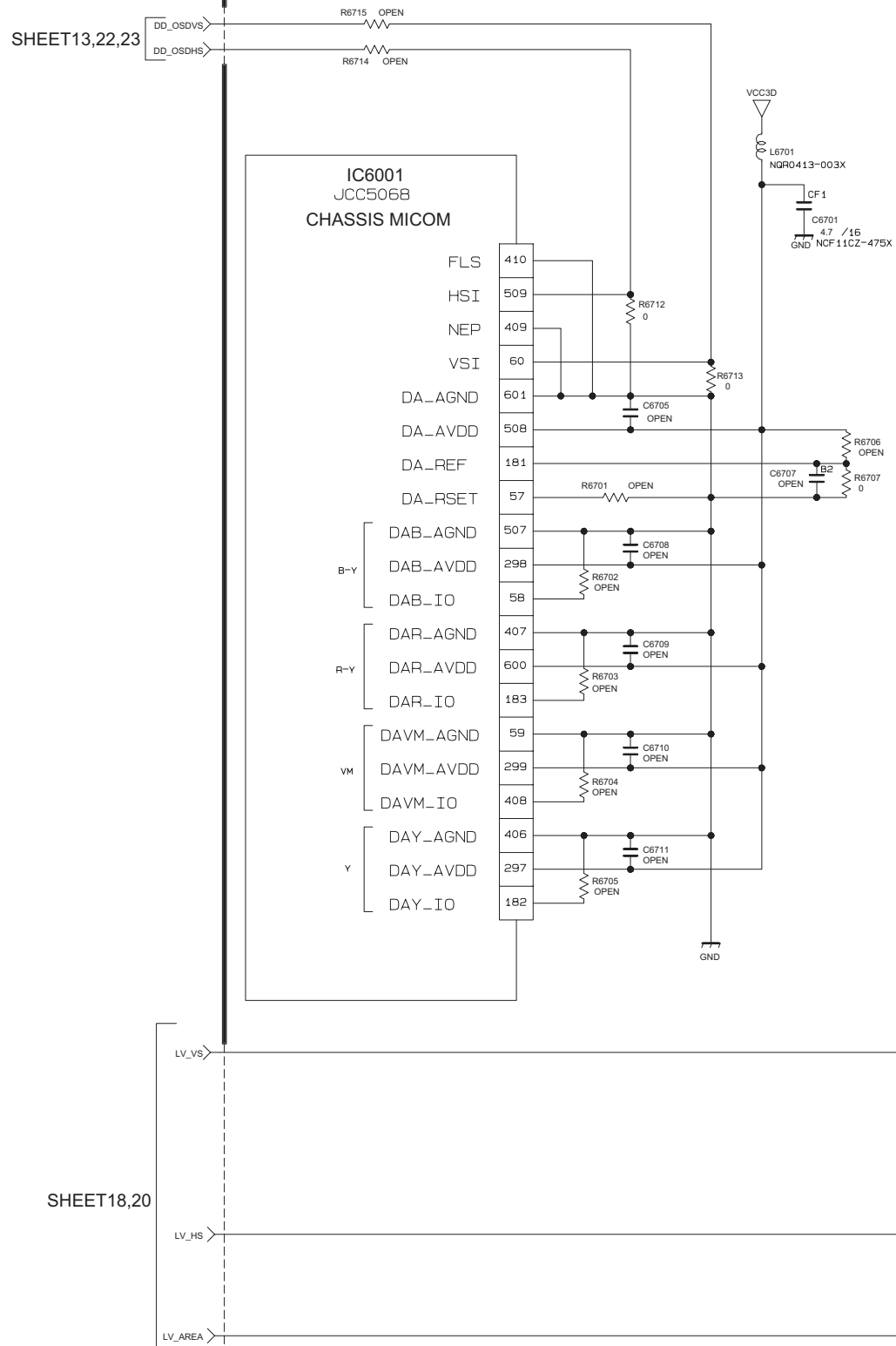


SRA0D159A-M2 [HD-61FB97]

(No.YA463)2-32







DIGITAL PWB ASS'Y(6/15)

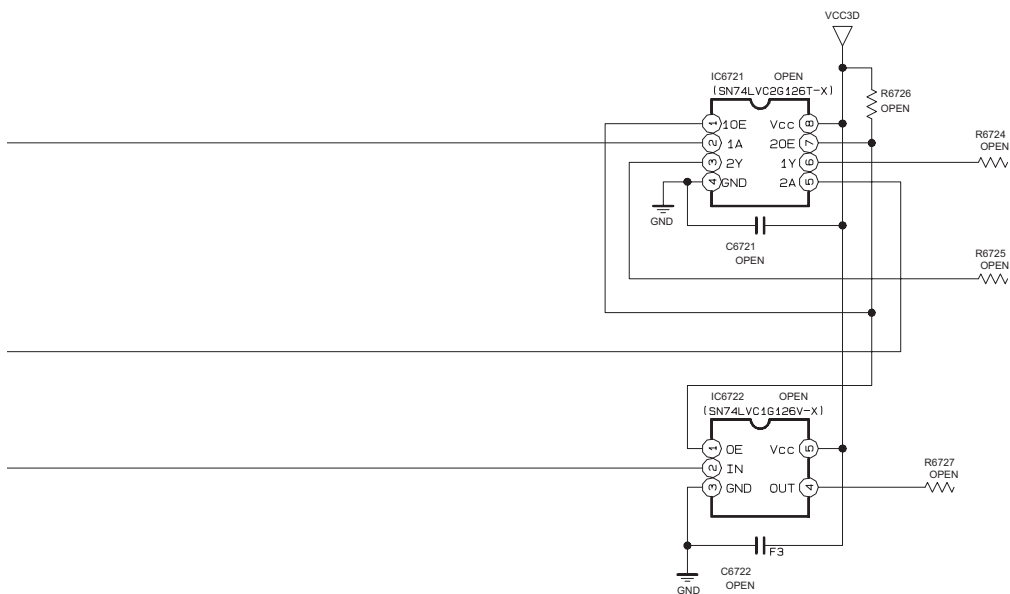
SRA0D161A-M2 [HD-52FA97]

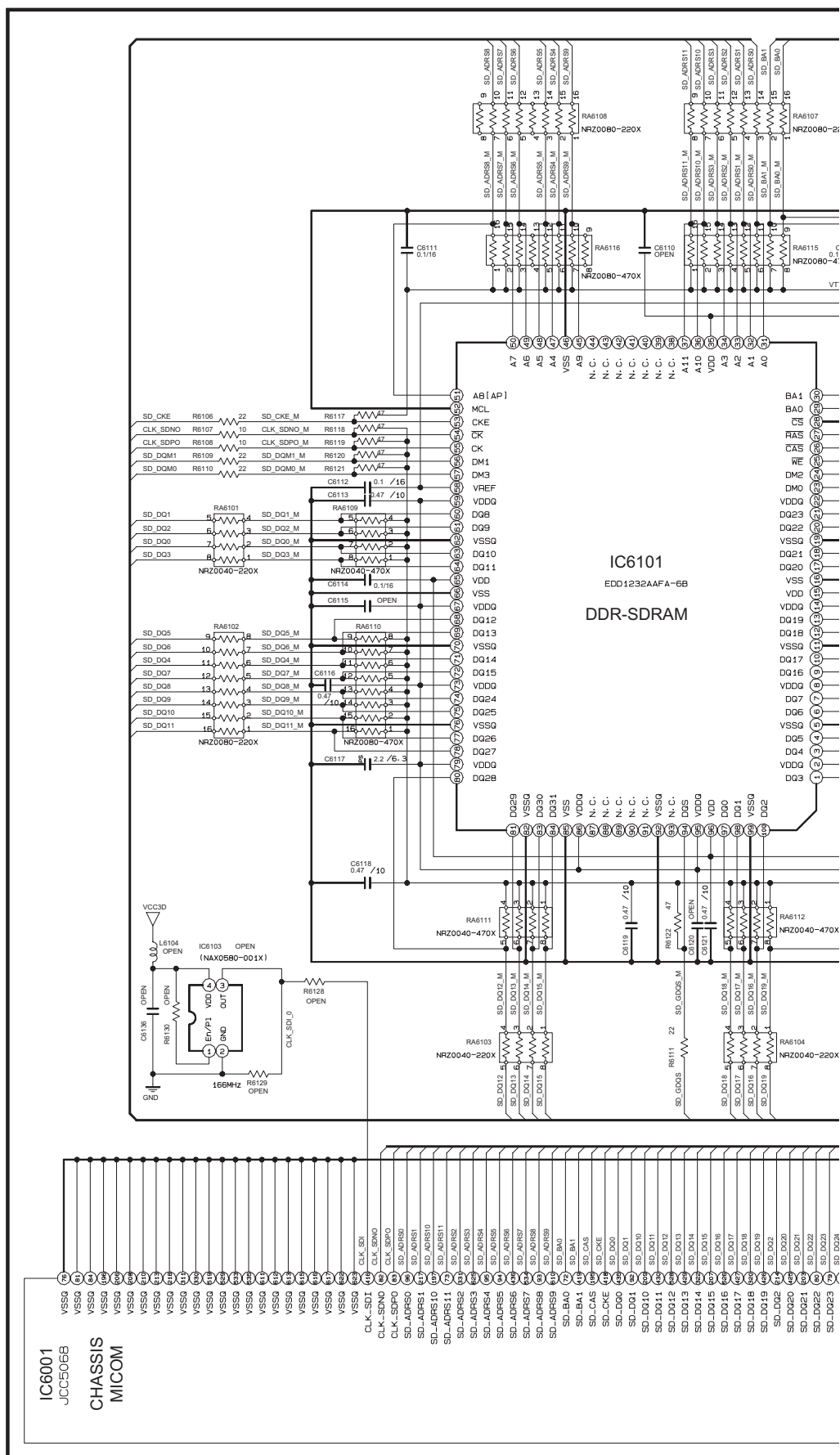
SRA0D160A-M2 [HD-56FB97]

SRA0D159A-M2 [HD-61FB97]

NOTE.

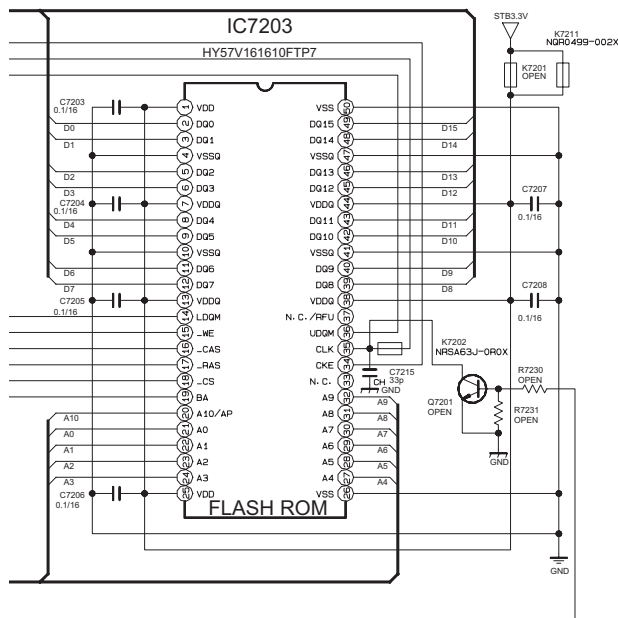
*1: NQR0498-001X
*2: NQR0489-002X
*4: MA111-X
RA0: NRZ0034-OR0W
PNP: 2SA1530A/QR/-X
NPN: 2SC3928A/QR/-X
L10: NQL79GM-100X
L22: NQL79GM-220X





SRA0D159A-M2 [HD-61FB97]

SRA0D159A-M2 [HD-61FB97]



SHEET19
SHEET11,DIGITAL INPUT BLOCK
SHEET22,23

SHEET11,DIGITAL INPUT BLOCK

SHEET19
SHEET20
SHEET19
SHEET9,16,19,23

SHEET9

SHEET9,21
SHEET20

SHEET22,23
SHEET9
SHEET10
SHEET9,20

SHEET19,23
SHEET9

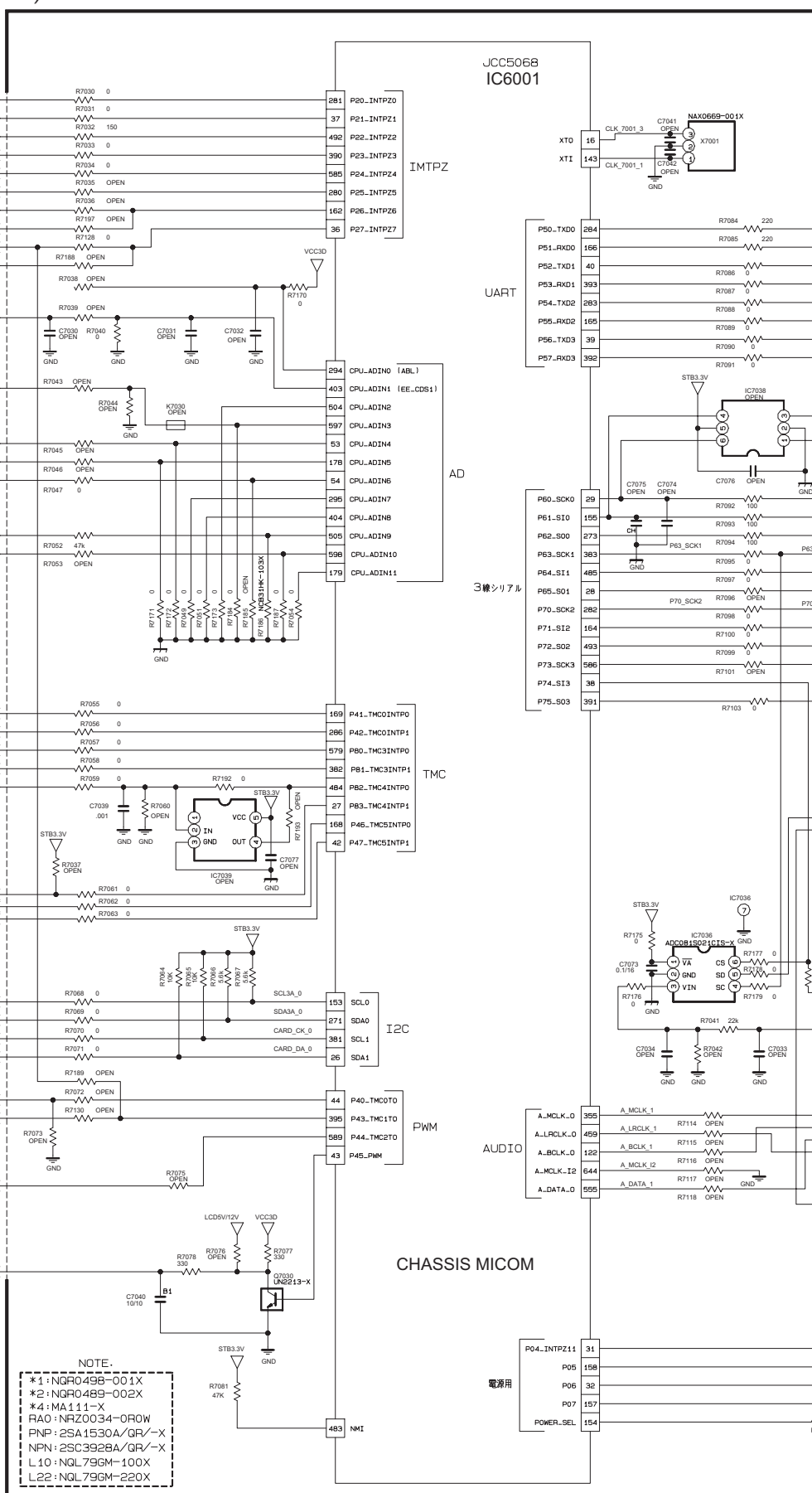
SHEET9,10,11,18,20
DIGITAL INPUT BLOCK

SHEET9

SHEET18
SHEET20

SHEET19

SHEET18



SRA0D159A-M2 [HD-61FB97]



MODEL	HD-70/61 /50F107A	HD-70/61 /50F107A	HD-61/56 FC37A	HD-61/56 F107A HD-52 FA7AA	HD-670 /61R2UA
	ASSY NO.	SRA-OD122A etc	SRA-OD125A etc	SRA-OD128A etc	SRA-OD159A etc
	OLL11103 etc	OLL11103 -04 etc	OLL11103 -07 etc	OLL11378 etc	OLL11103 -11 etc
C7034	OPEN	OPEN	OPEN	0.01516	OPEN
B7042	OPEN	OPEN	OPEN	3%	OPEN

CHASSIS MICOM



c10502009 0808 9/16 0.0

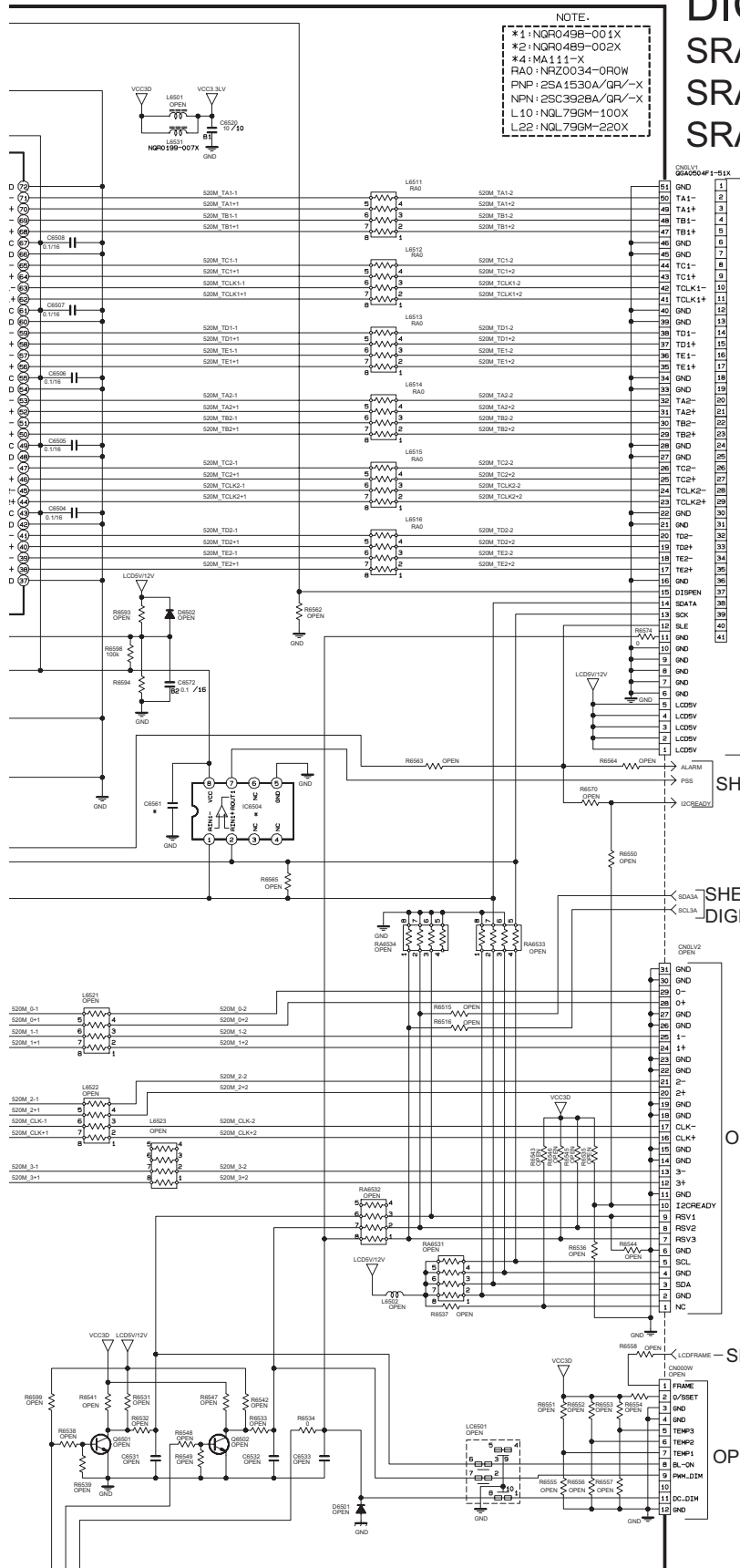


DIGITAL PWB ASS'Y(10/15)

SRA0D161A-M2 [HD-52FA97]

SRA0D160A-M2 [HD-56FB97]

SRA0D159A-M2 [HD-61FB97]



DRIVE PWB ASS'Y(1/9)
CNLV1
(SHEET24)

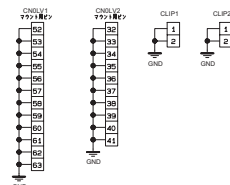
SHEET20

SHEET9,10,11,17,20,
DIGITAL INPUT BLOCK

OPEN

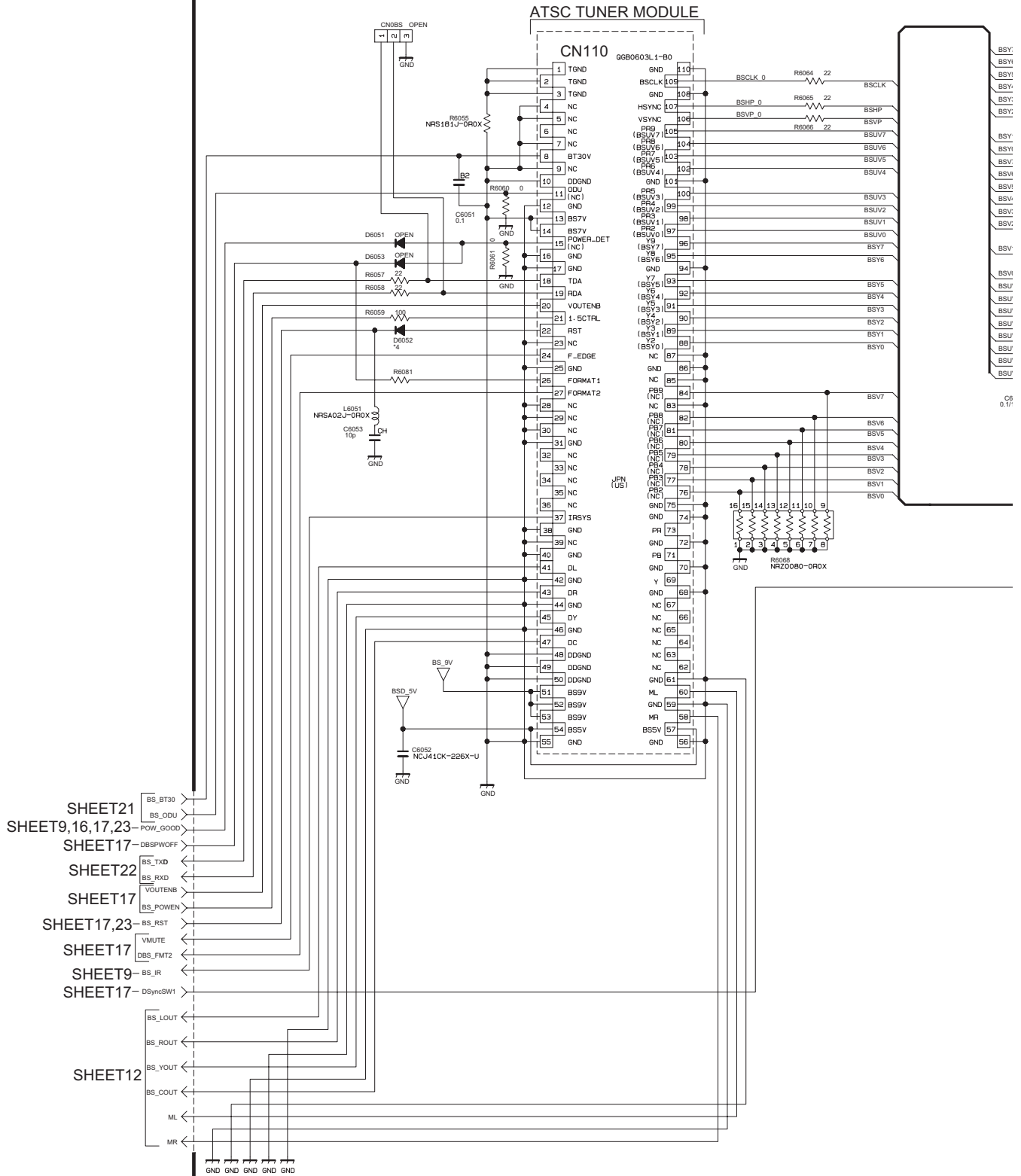
SHEET17

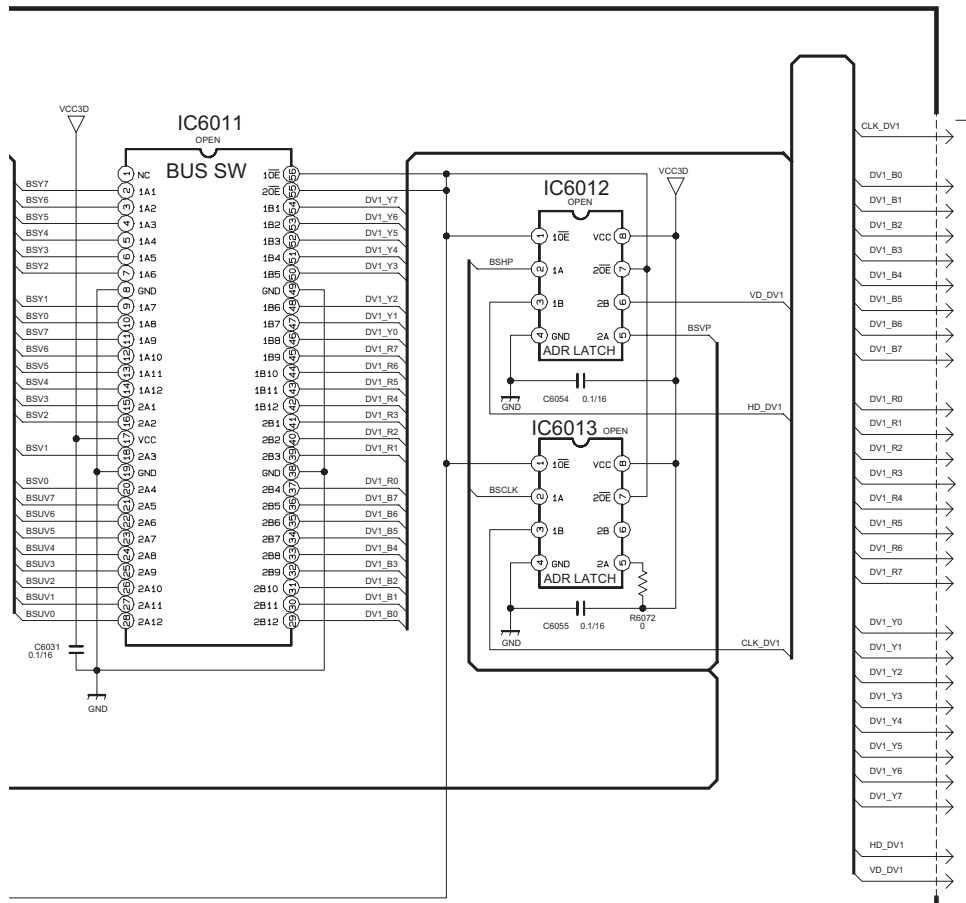
OPEN



SHEET17

c10502004_0808_4/16_0.0





SHEET13,
DIGITAL INPUT BLOCK

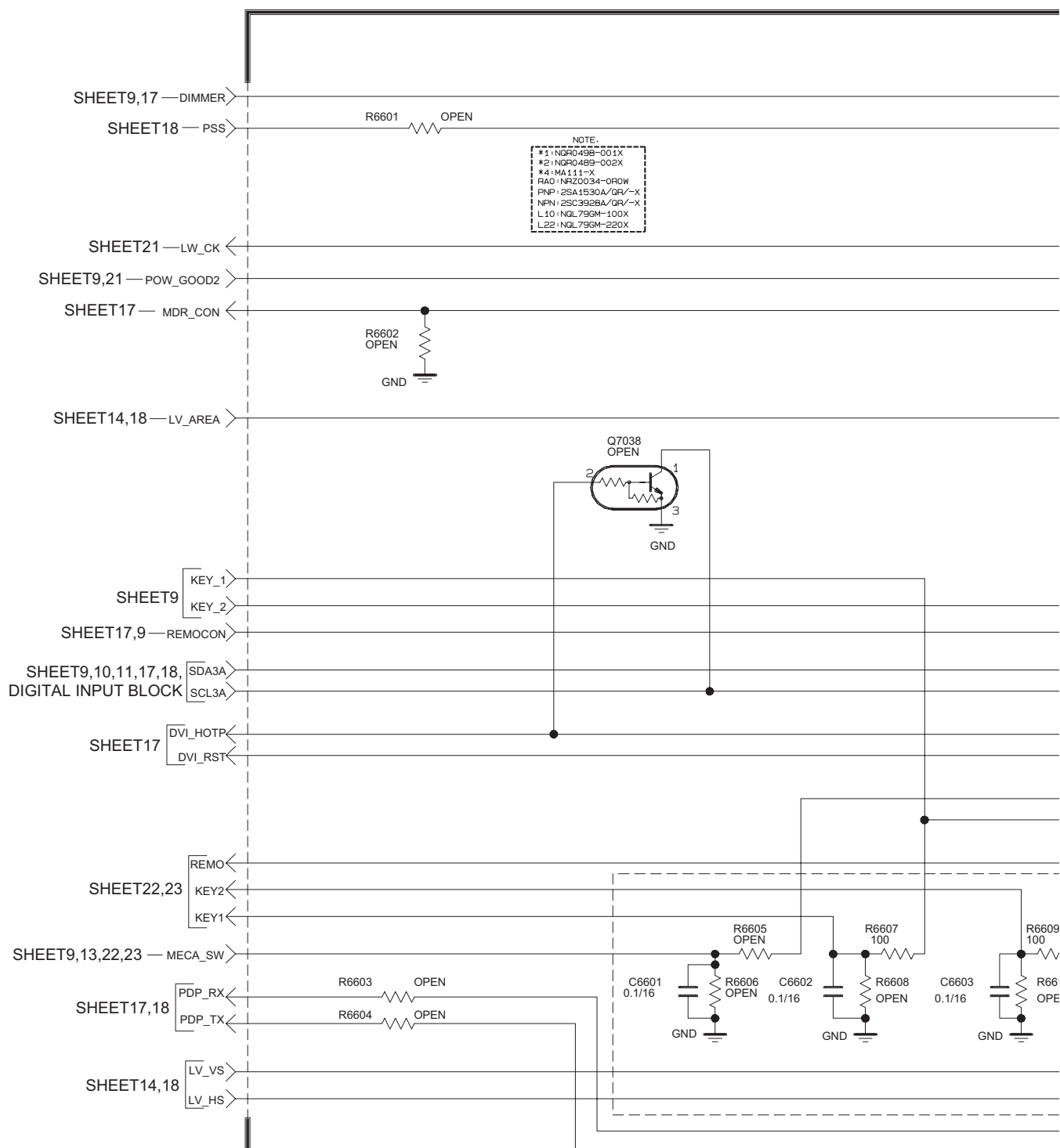
* DIFFERENCE LIST

MODEL	HD-25/B1 750FA97A	HD-25/B1 750FA97A	HD-25/B1 750FA97A	HD-25/B1 750FA97A	HD-25/B1 750FA97A
ASSY NO.	SRA-00100A E1C	SRA-00100A E1C	SRA-00100A E1C	SRA-00100A E1C	SRA-00100A E1C
IC6011	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6012	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6013	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6014	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6015	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6016	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6017	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6018	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6019	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6020	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6021	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6022	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6023	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6024	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6025	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6026	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6027	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6028	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6029	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6030	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6031	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6032	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6033	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6034	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6035	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6036	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6037	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6038	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6039	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6040	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6041	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6042	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6043	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6044	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6045	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6046	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6047	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6048	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6049	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6050	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6051	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6052	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6053	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6054	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6055	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6056	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6057	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6058	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6059	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6060	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6061	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6062	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6063	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6064	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6065	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6066	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6067	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6068	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6069	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6070	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6071	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6072	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6073	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6074	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6075	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6076	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6077	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6078	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6079	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6080	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6081	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6082	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6083	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6084	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6085	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6086	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6087	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6088	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6089	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6090	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6091	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6092	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6093	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6094	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6095	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6096	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6097	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6098	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6099	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16
IC6100	0.1/16	0.1/16	0.1/16	0.1/16	0.1/16

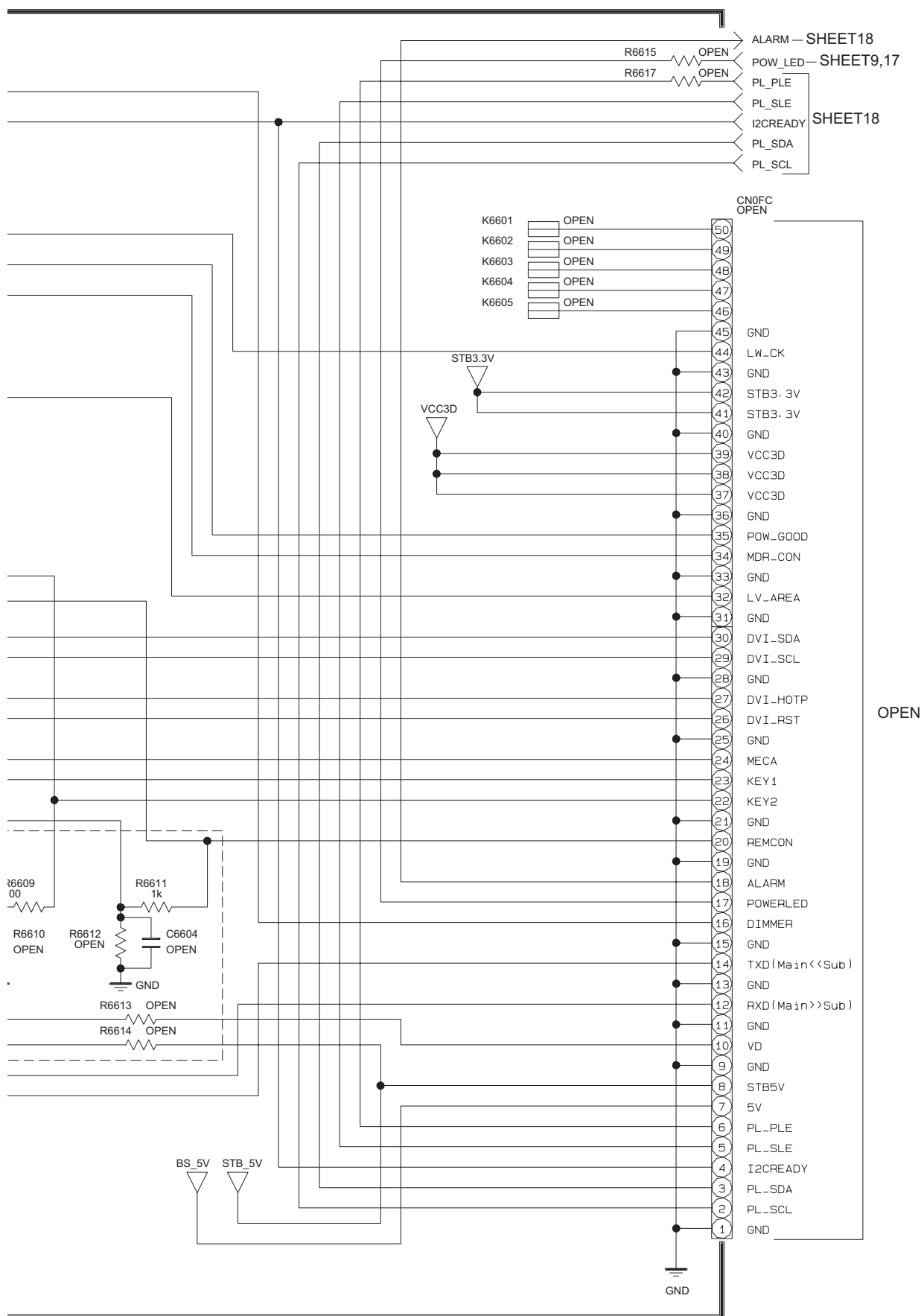
NOTE.

- *1: NQR049B-001X
- *2: NQR049B-002X
- *3: MA111-X
- *4: NQR049B-001X
- *5: NQR049B-002X
- RA0: NRZ0034-OROW
- RNP: 2SA1530A/GR/-X
- RNP: 2SC3326A/GR/-X
- L10: NQL79GM-100X
- L22: NQL79GM-220X

DIGITAL PWB ASS'Y(11/15)
SRA0D161A-M2 [HD-52FA97]
SRA0D160A-M2 [HD-56FB97]
SRA0D159A-M2 [HD-61FB97]



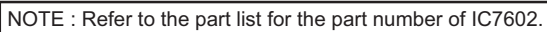
DIGITAL PWB ASS'Y(12/15)
 SRA0D161A-M2 [HD-52FA97]
 SRA0D160A-M2 [HD-56FB97]
 SRA0D159A-M2 [HD-61FB97]



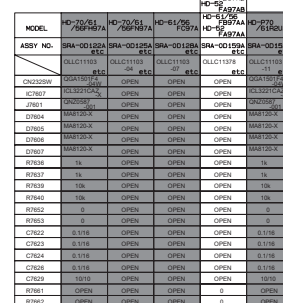
c10502012_0808_12/16_0.0

JCC506E





SRA0D159A-M2 [HD-61FB97]



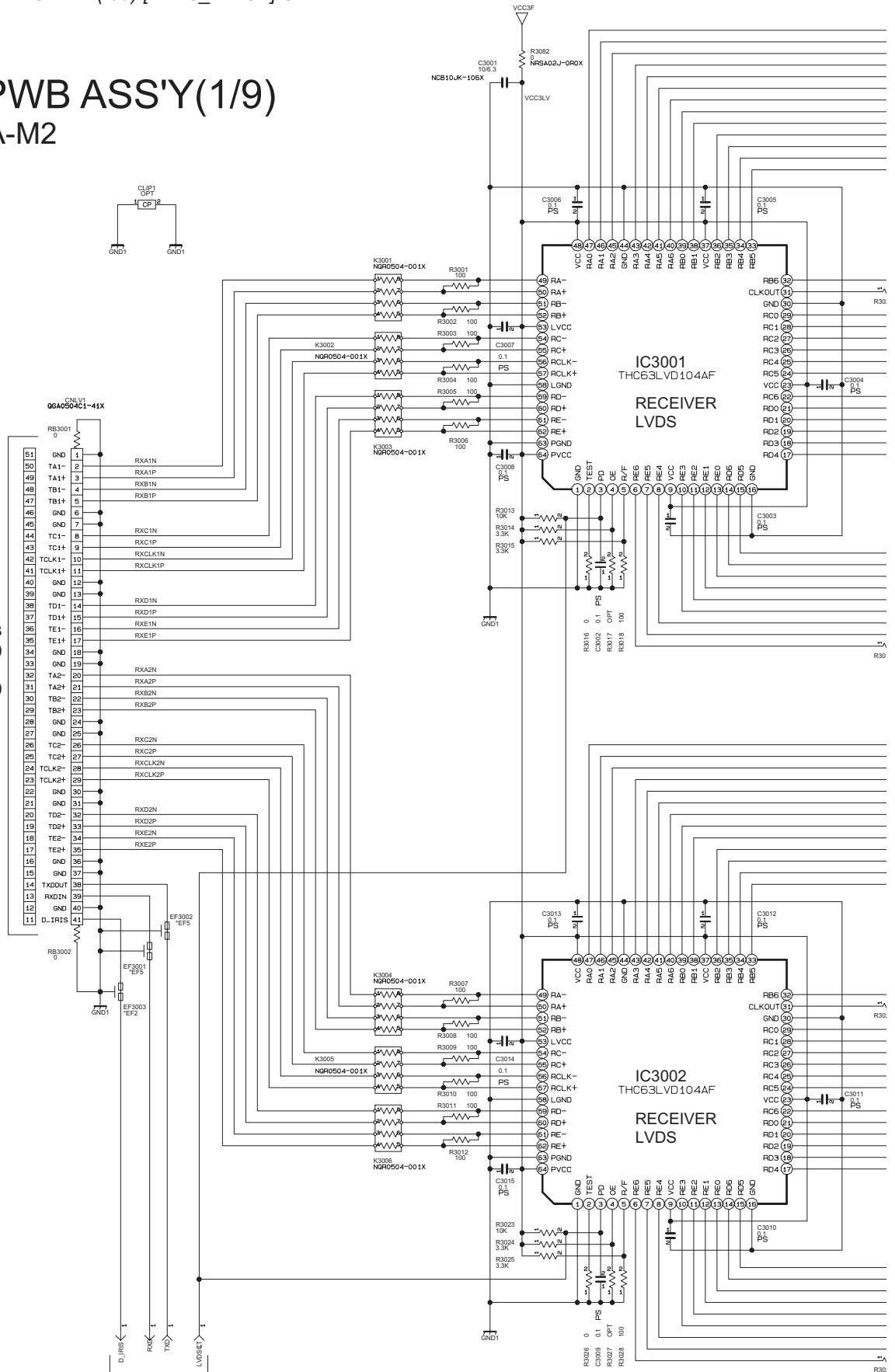
(No.YA463)2-52



DRIVE PWB ASS'Y(1/9)

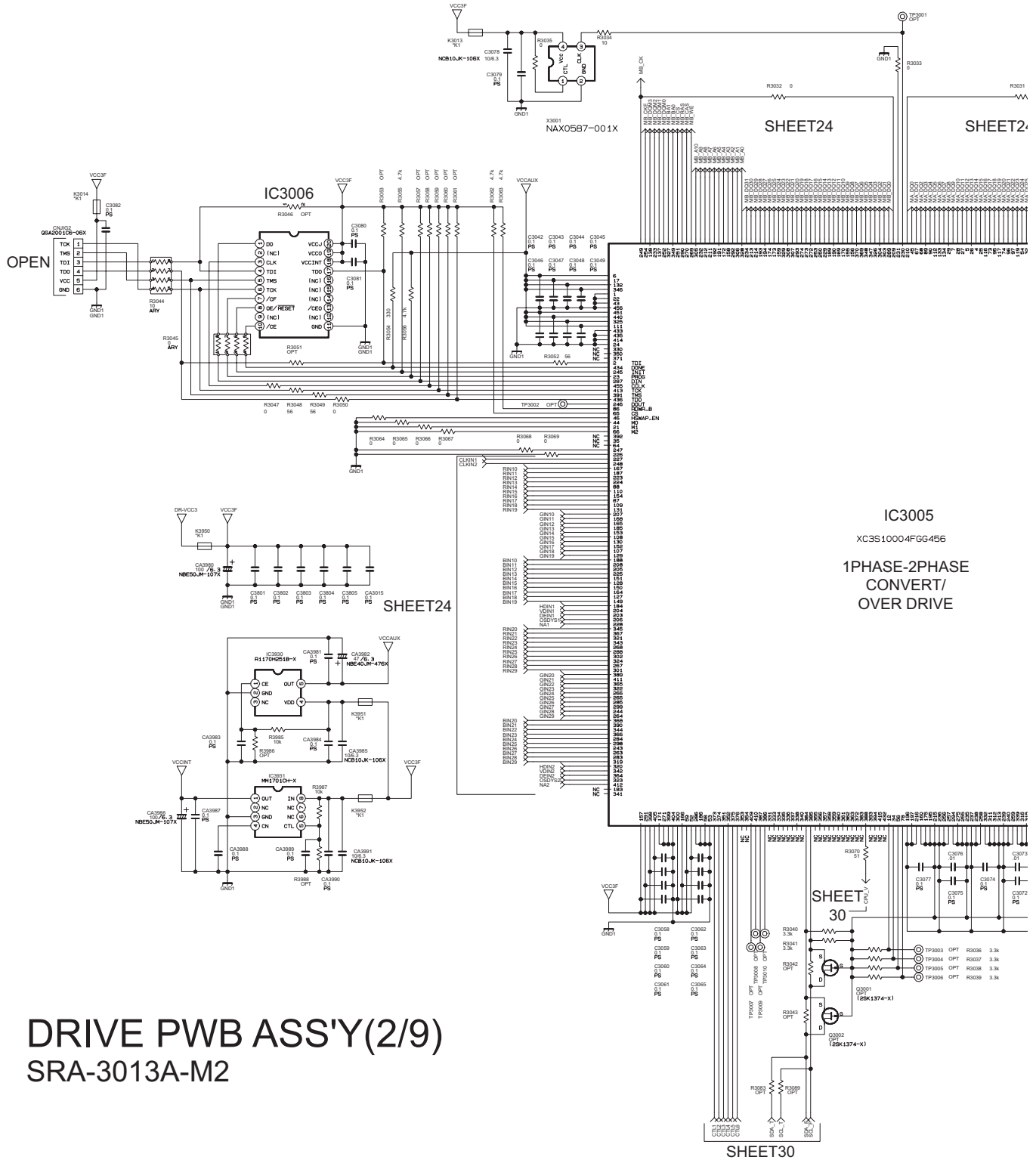
SRA-3013A-M2

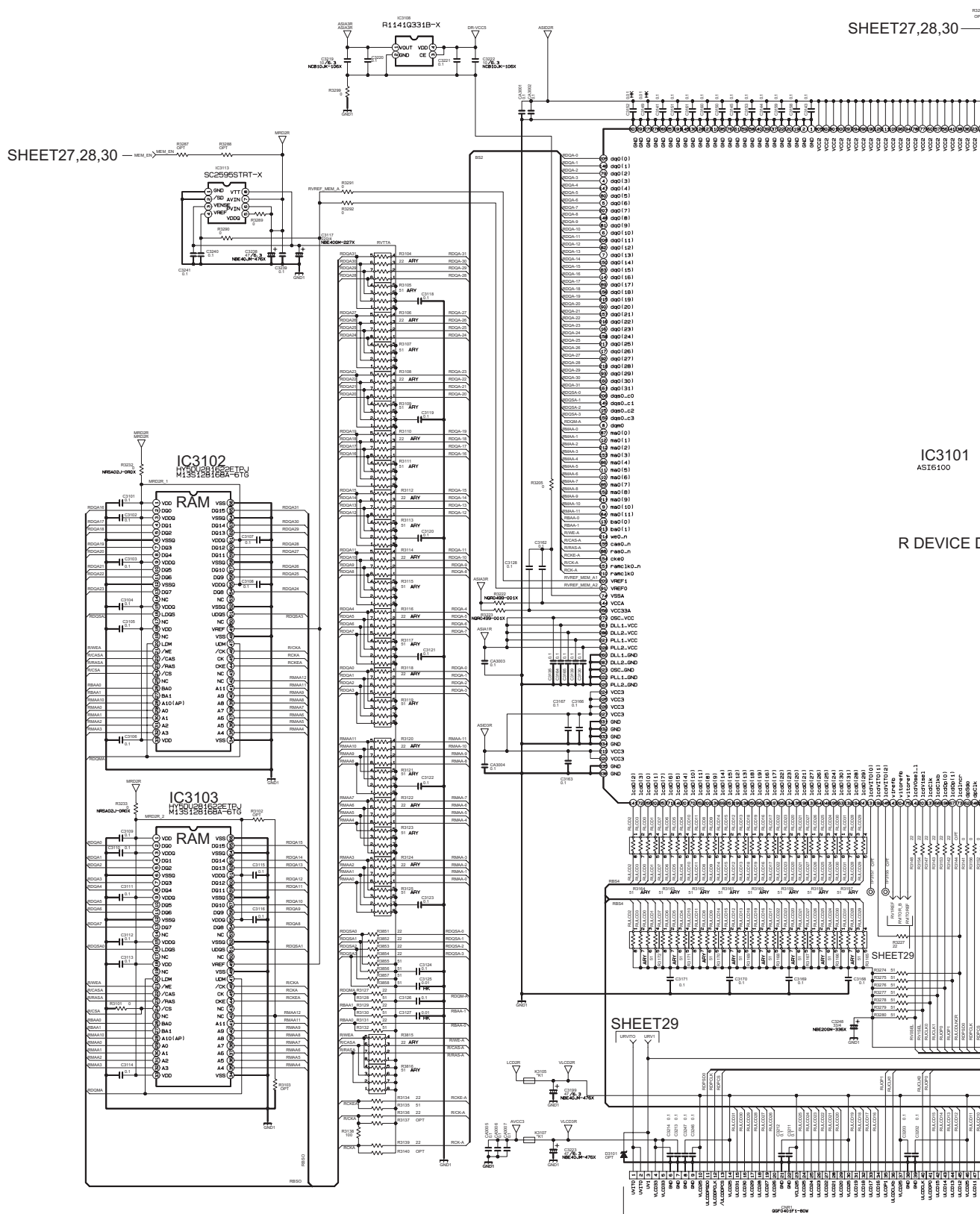
DIGITAL PWB
ASS'Y(10/15)
CN0LV1
(SHEET18)



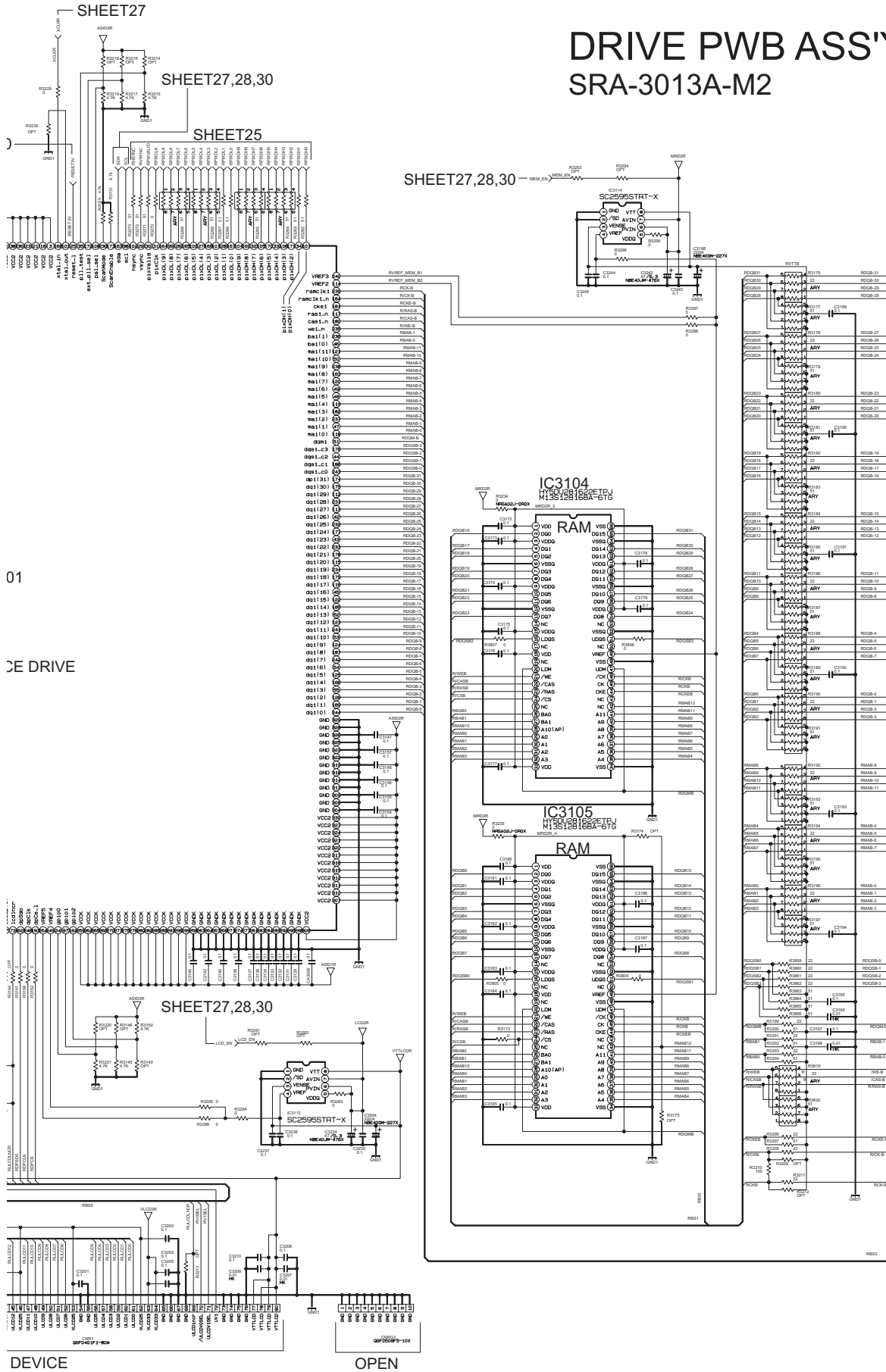
SHEET30

DRIVE PWB CIRCUIT DIAGRAM (2/9) [FPGA_INPUT] SHEET 25



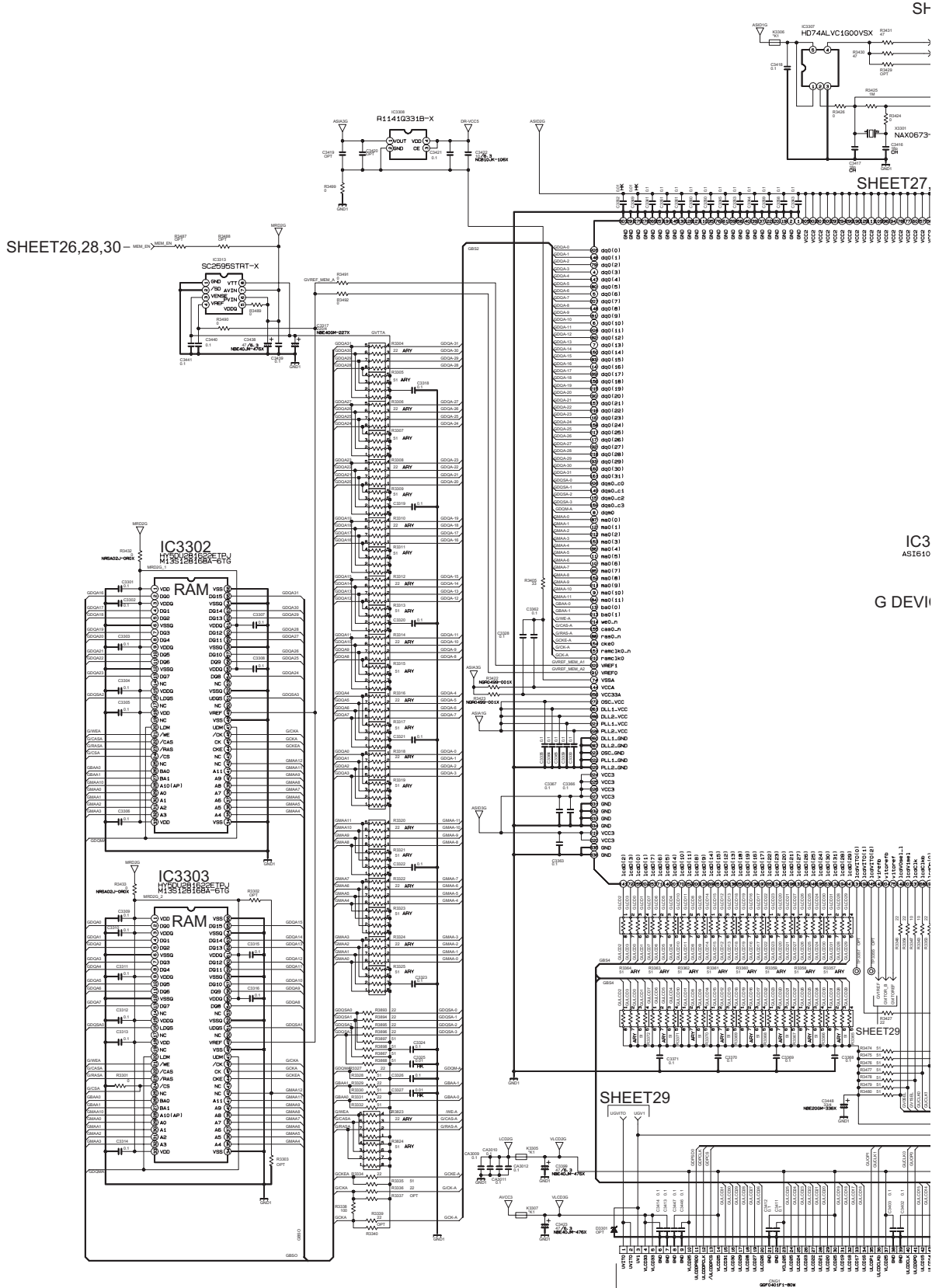


DRIVE PWB ASS'Y(3/9)
SRA-3013A-M2

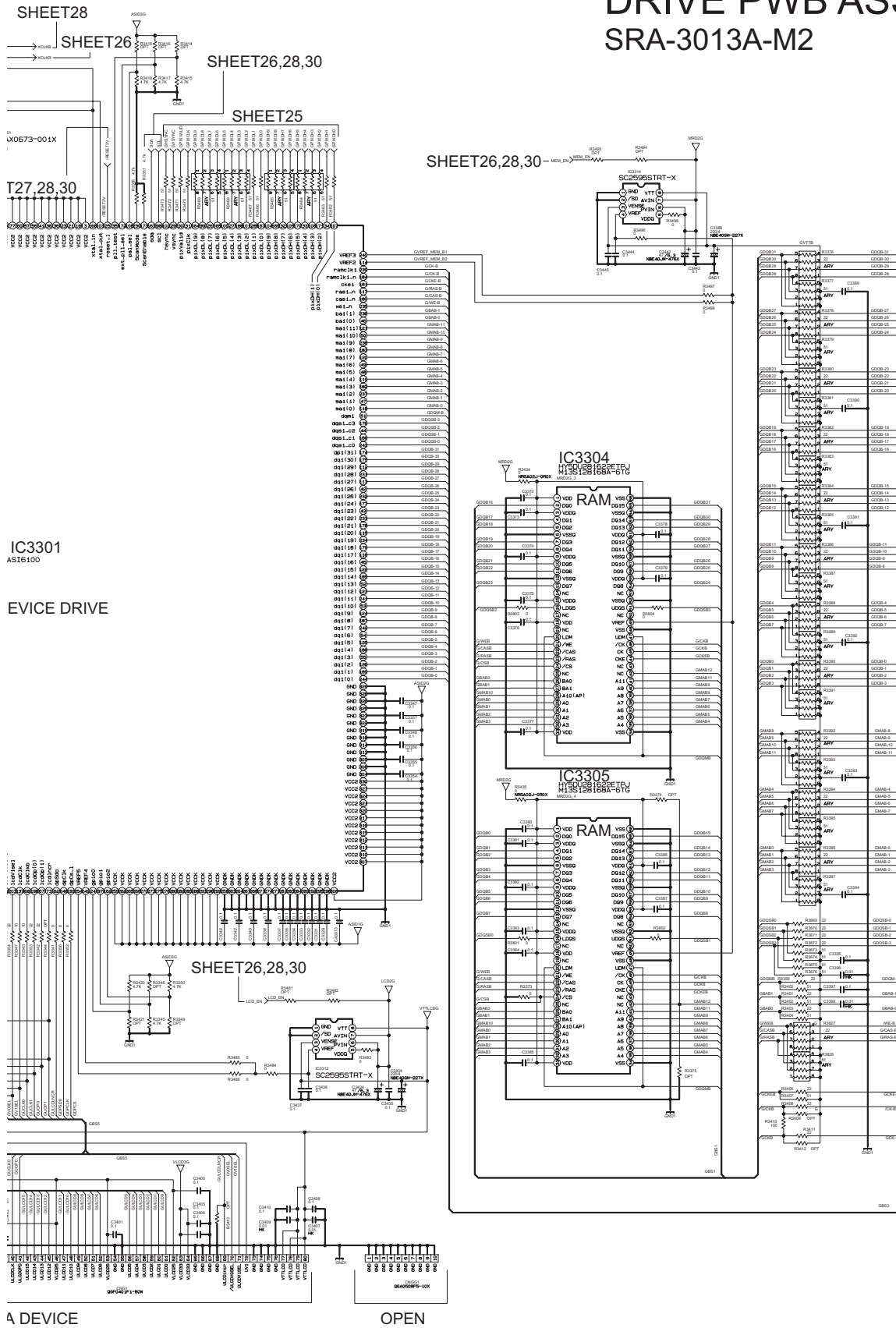


c10488001_0808_1/9_0.0

(No.YA463)2-60

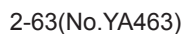


DRIVE PWB ASS'Y(4/9)
SRA-3013A-M2



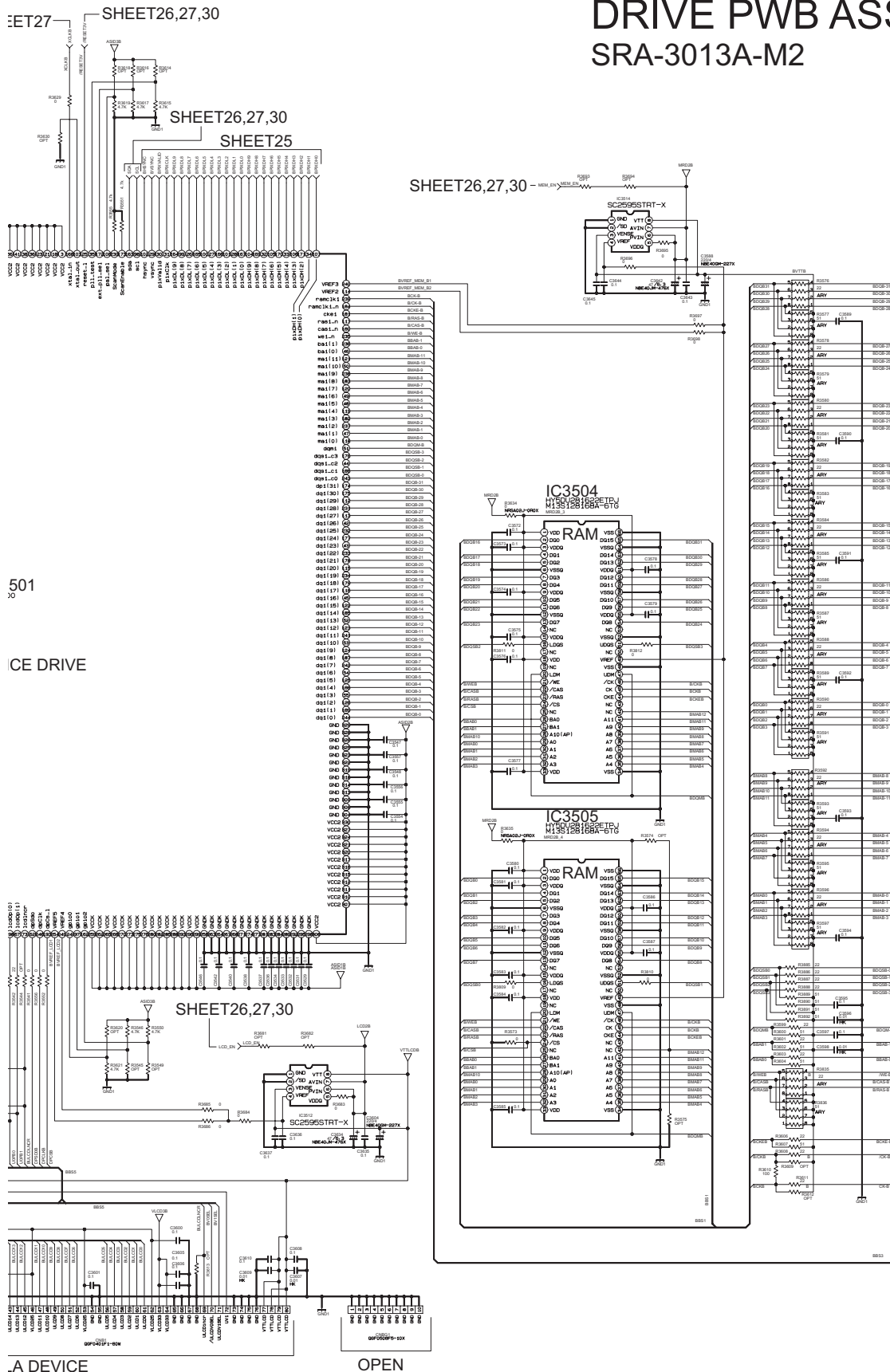
c10488002_0808_2/9_0.0

(No.YA463)2-62

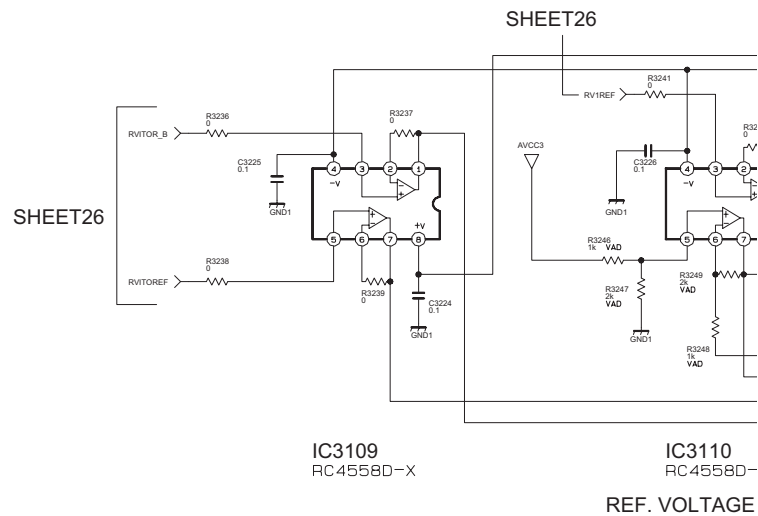


DRIVE PWB ASS'Y(5/9)

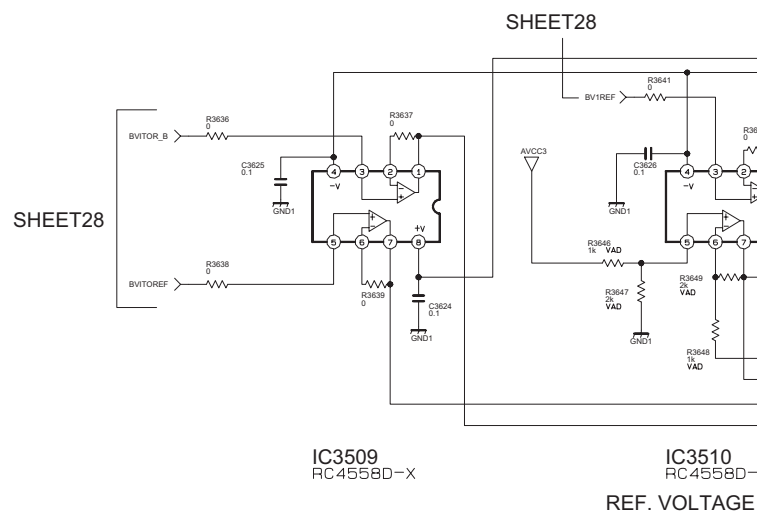
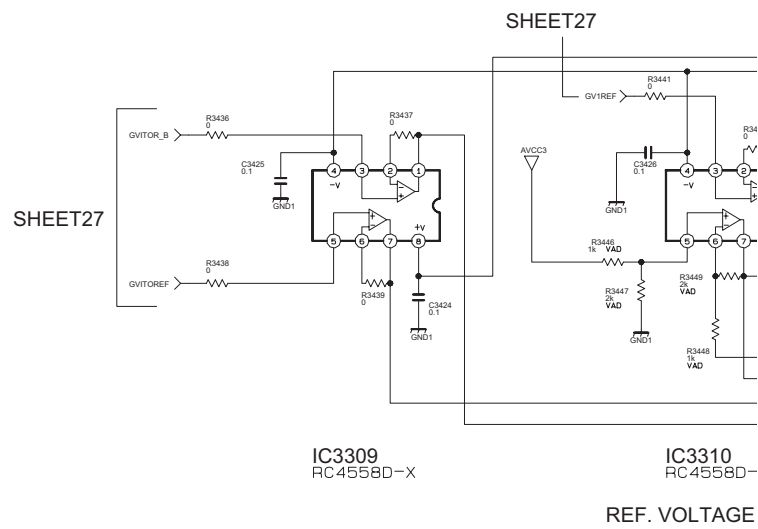
SRA-3013A-M2

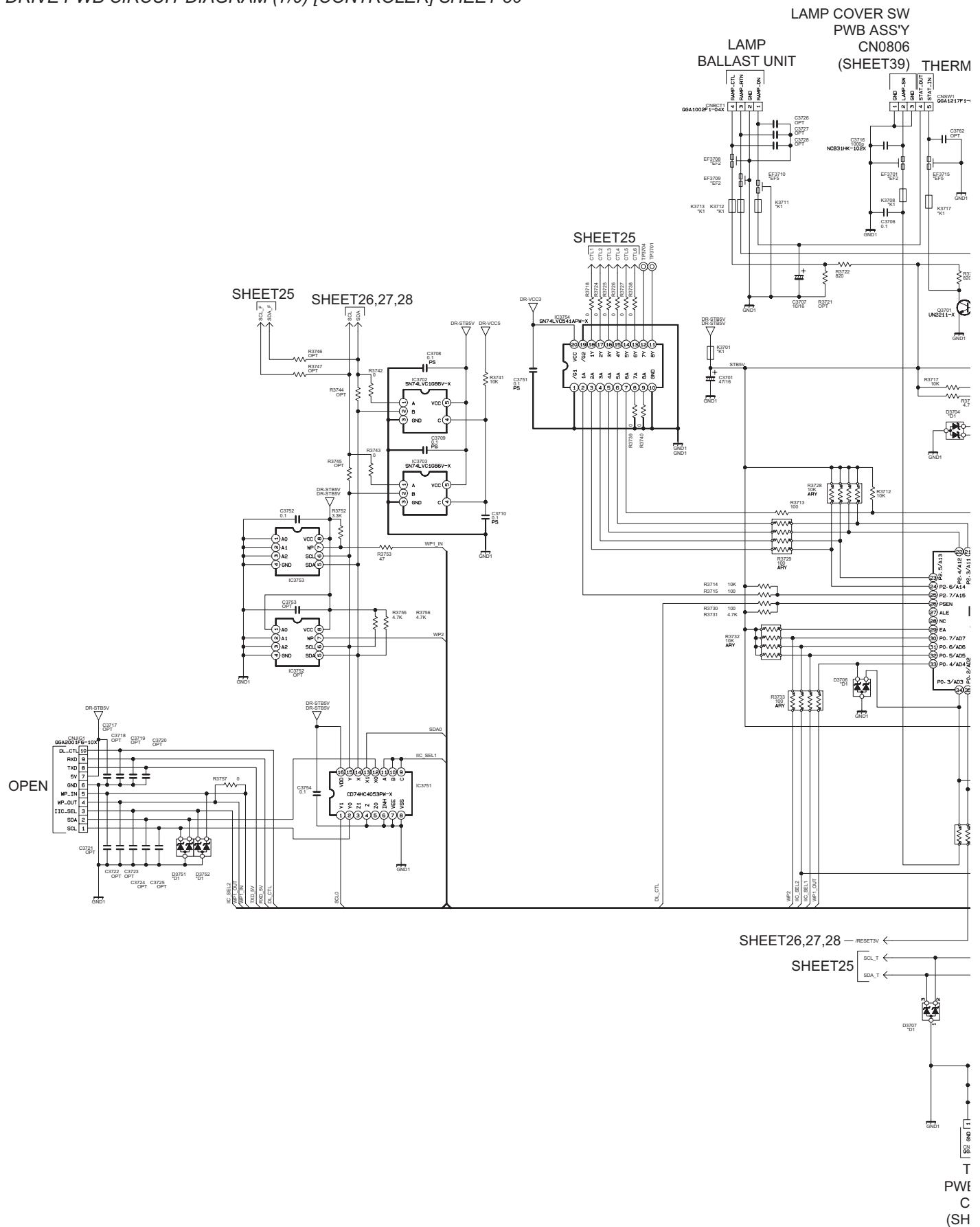


c10488003_0808_3/9_0.0



DRIVE PWB ASS'Y(6/9)
SRA-3013A-M2





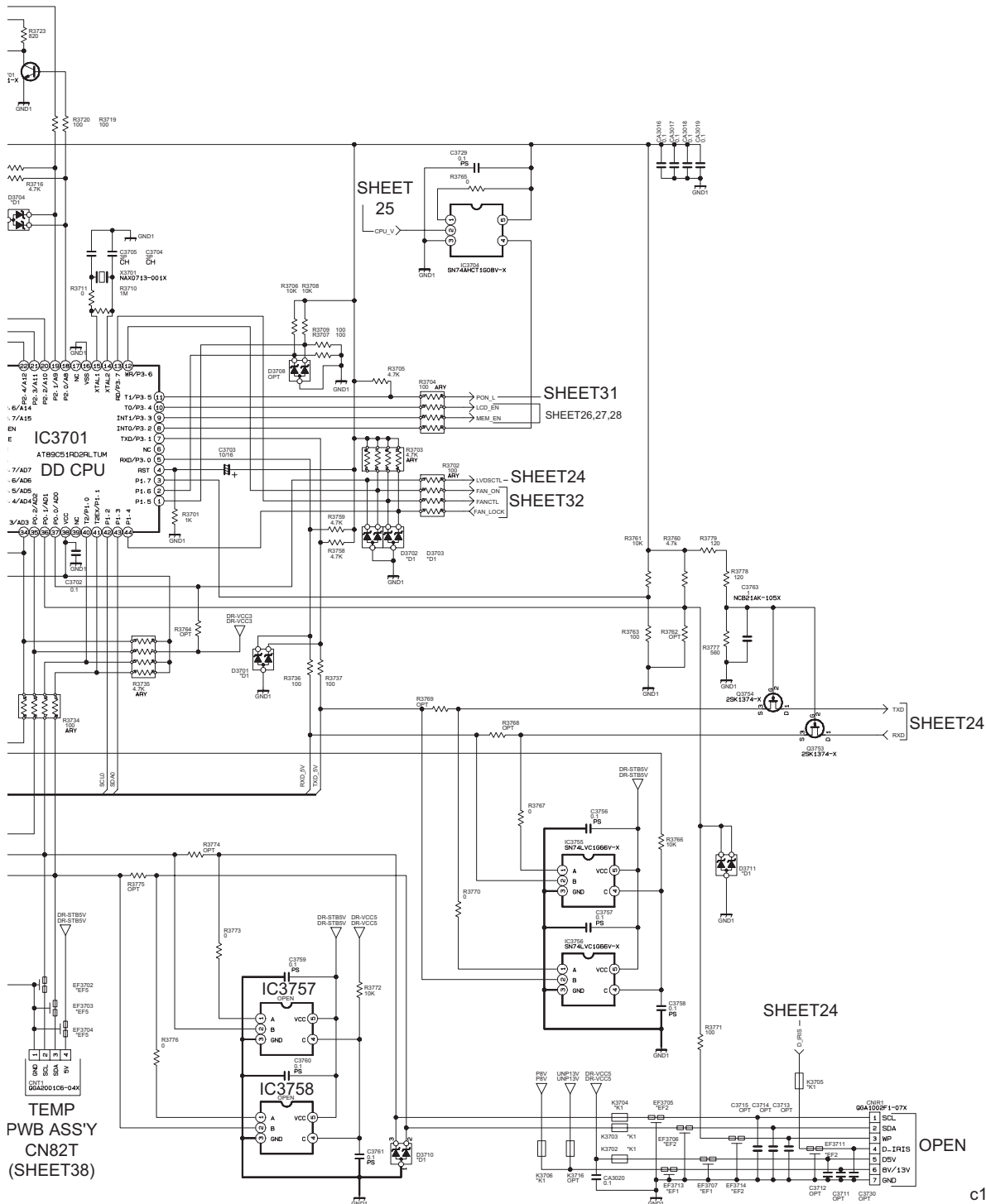
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11217F1-05X

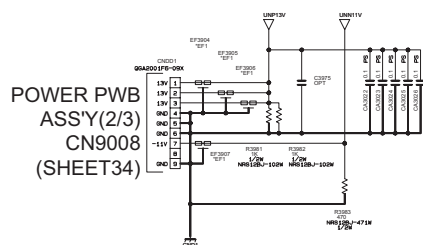


DRIVE PWB ASS'Y(7/9)

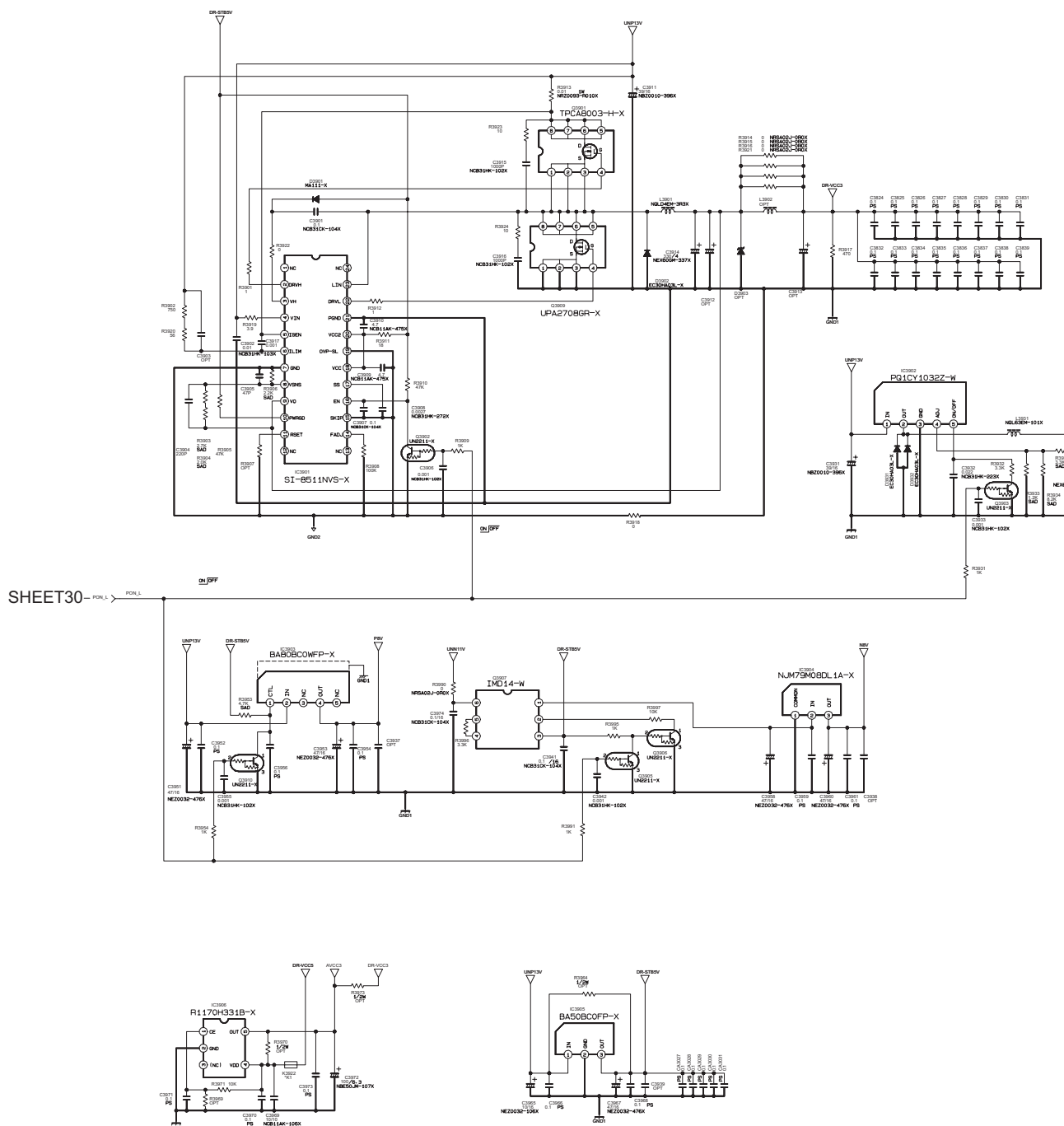
SRA-3013A-M2



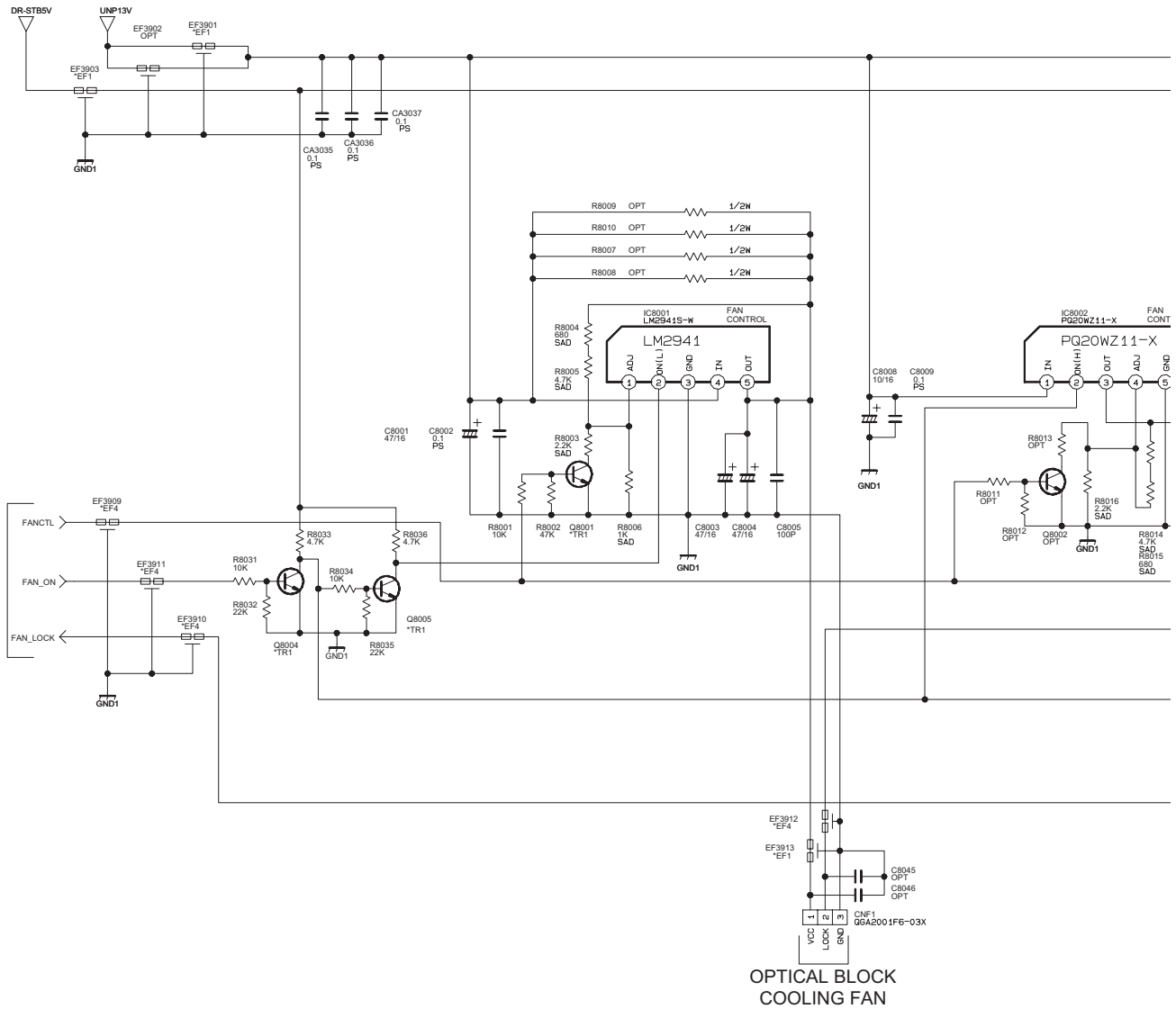
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DRIVE PWB ASS'Y(8/9)
SRA-3013A-M2



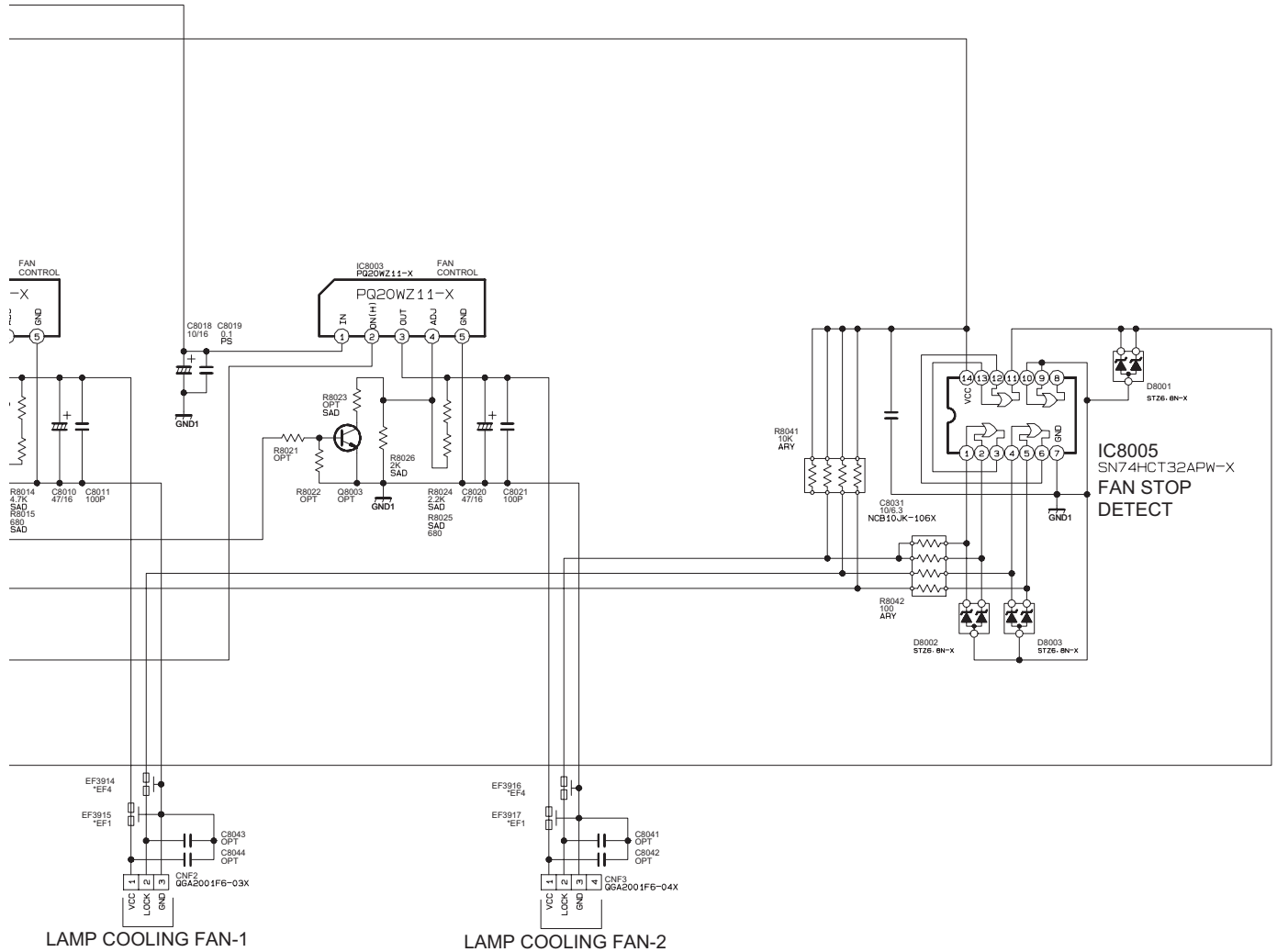
SHEET30



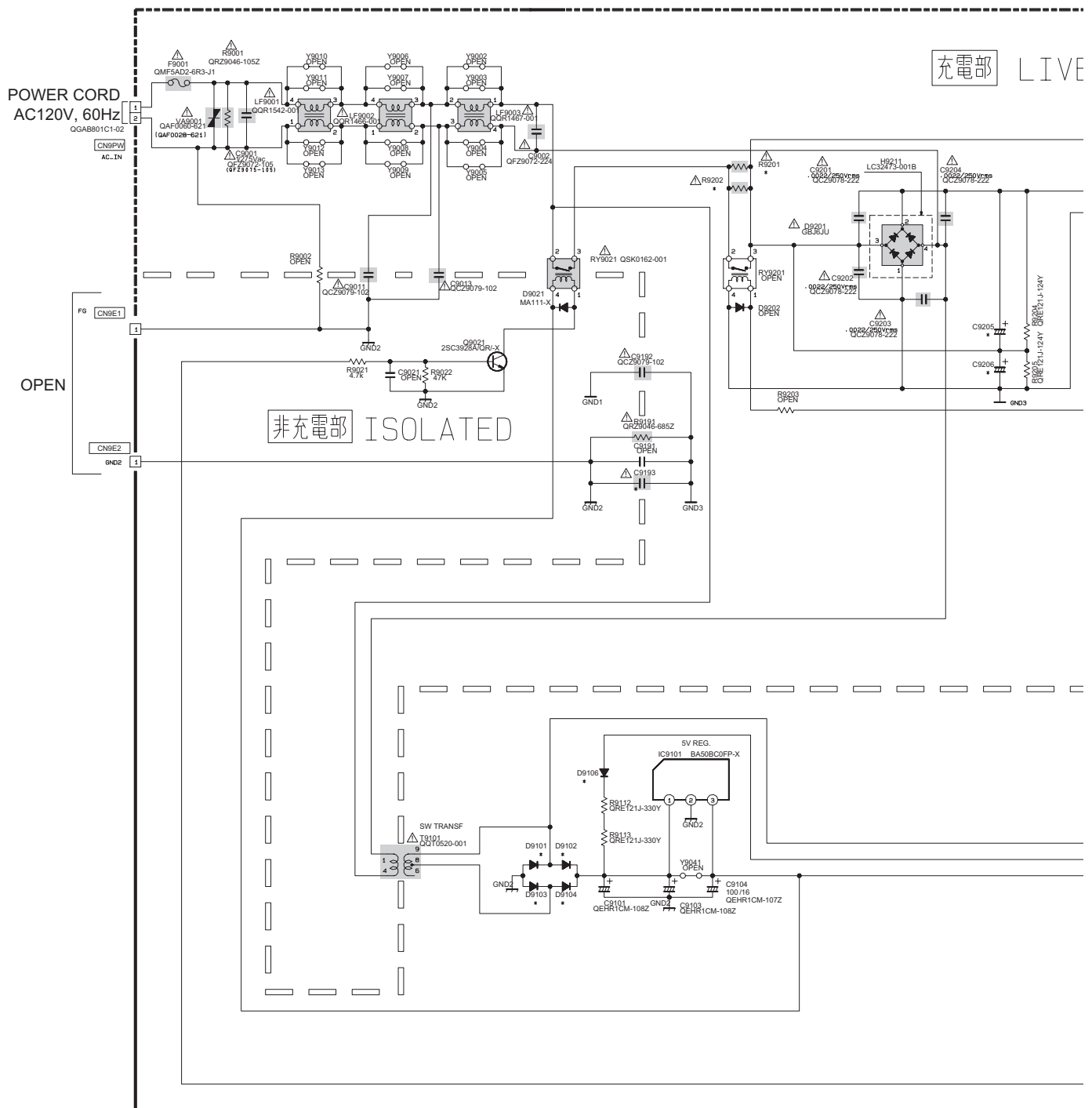
OPTICAL BLOCK
COOLING FAN

DRIVE PWB ASS'Y(9/9)

SRA-3013A-M2

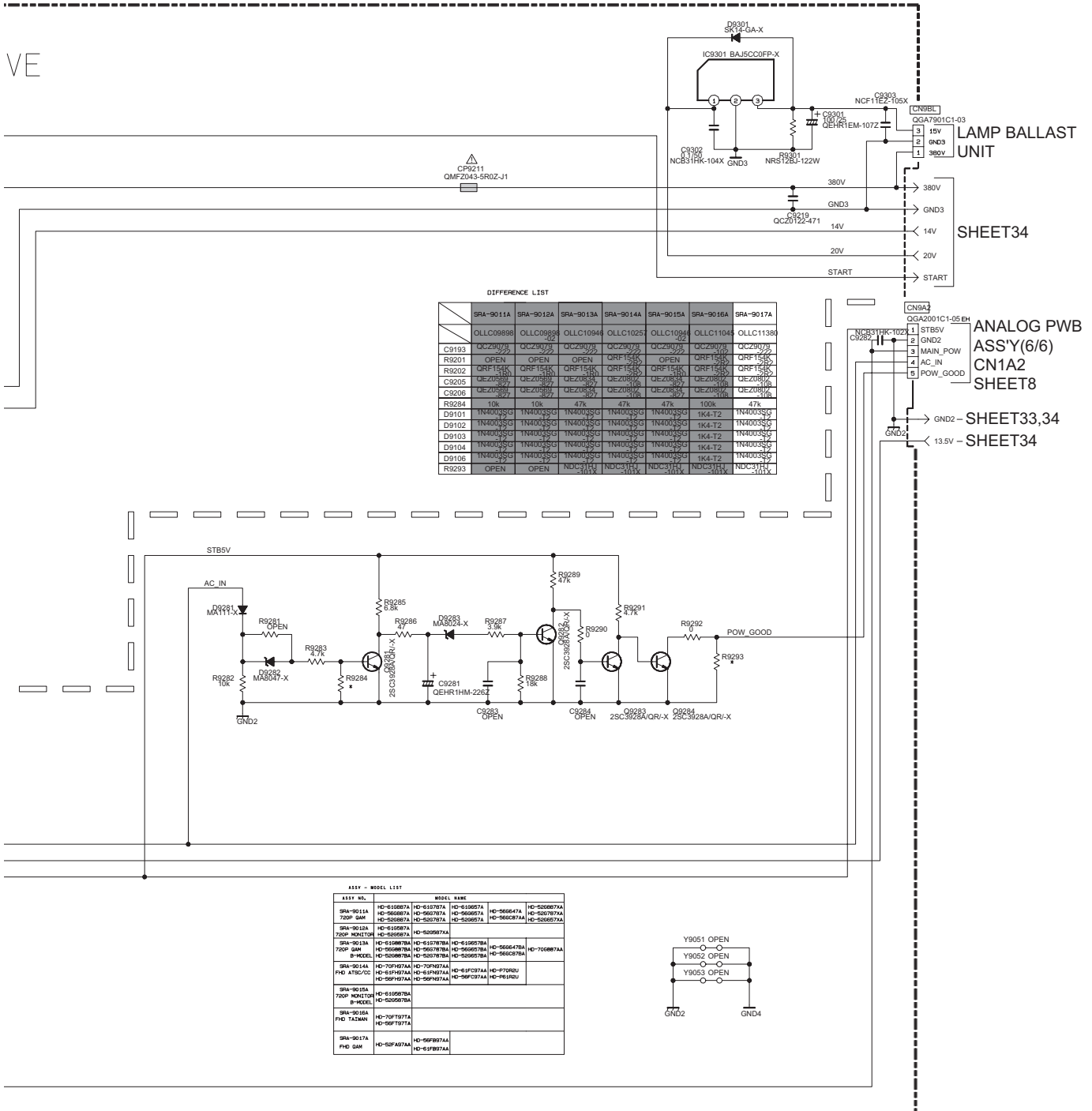


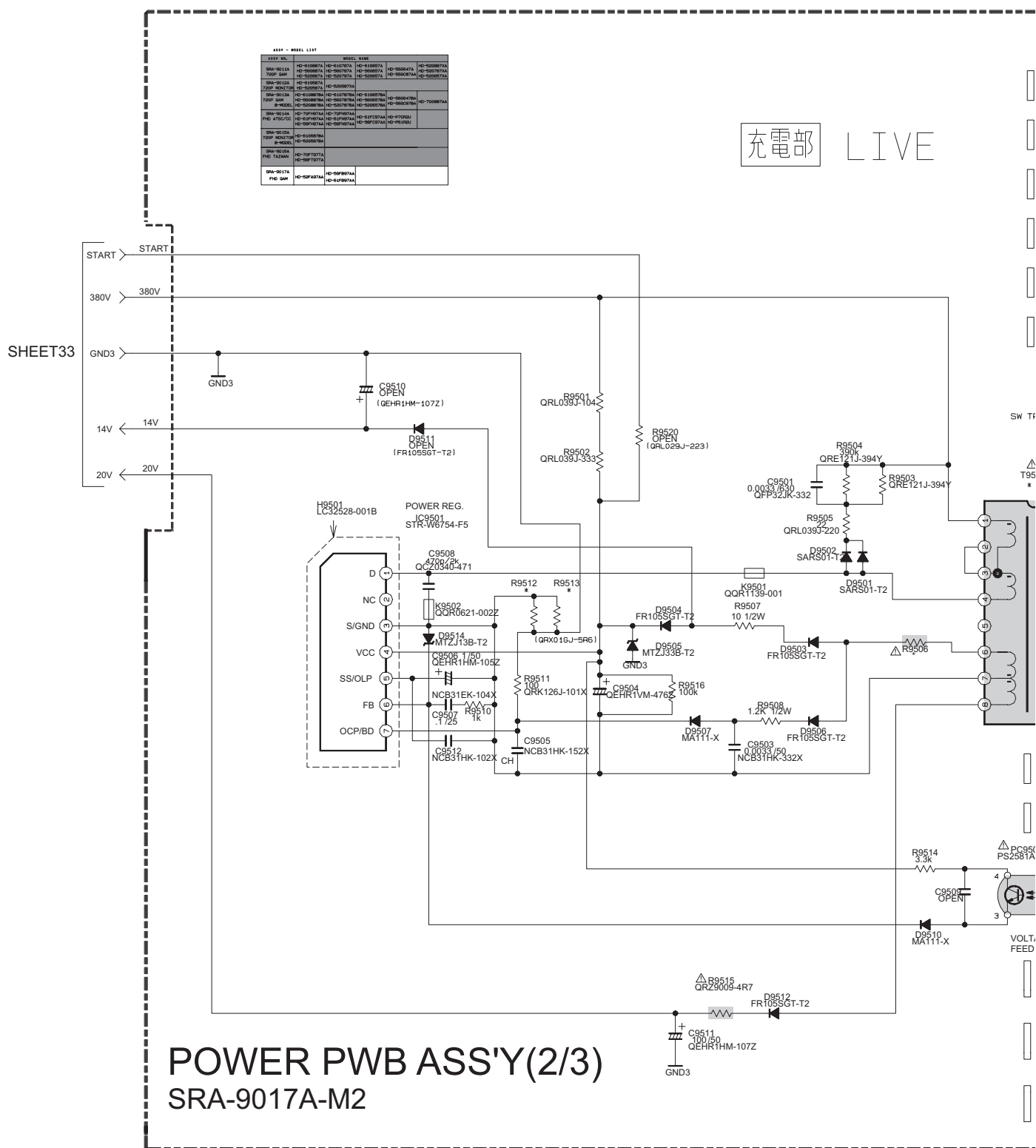
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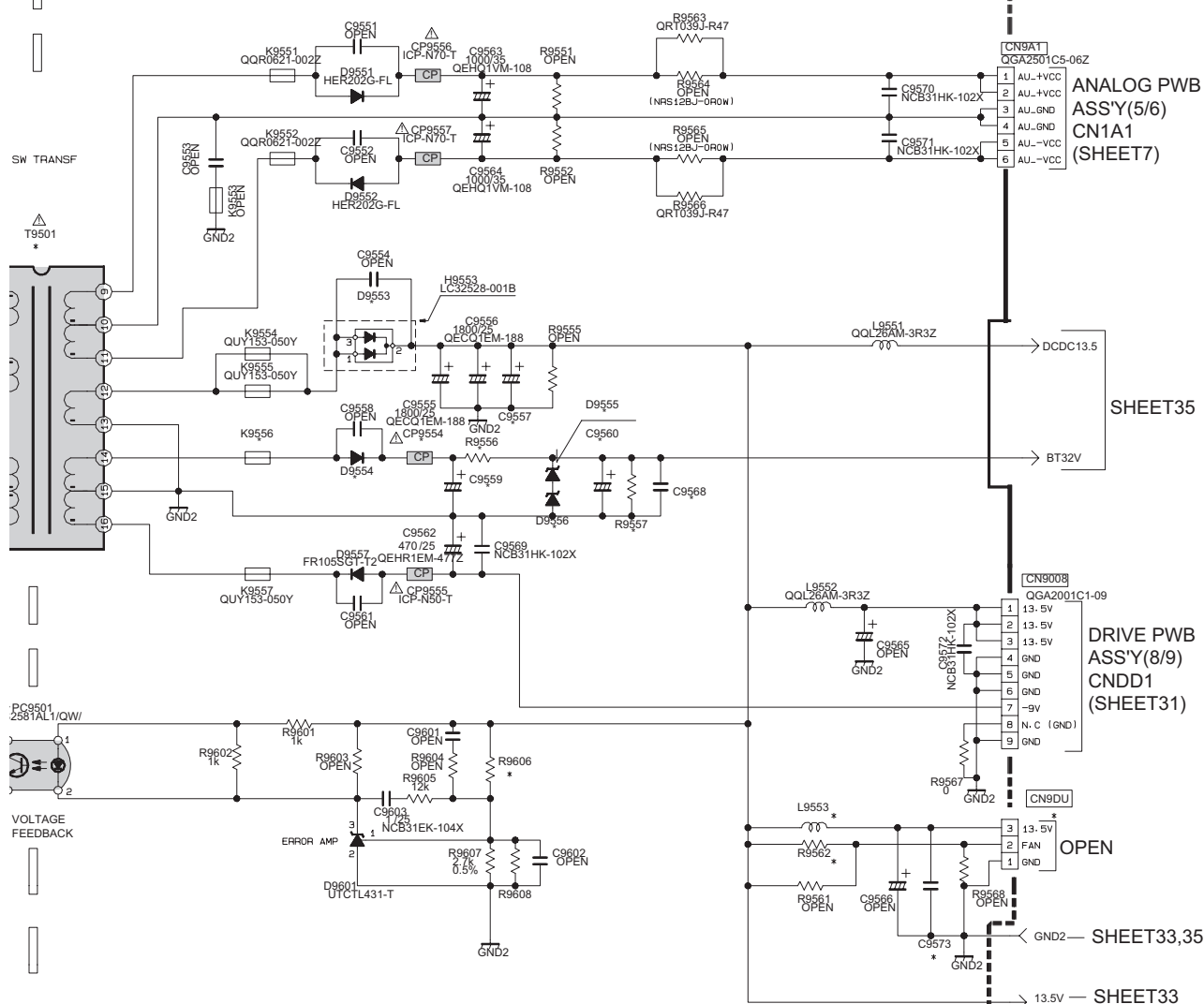
POWER PWB ASS'Y(1/3)
SRA-9017A-M2

VE





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[illegible]

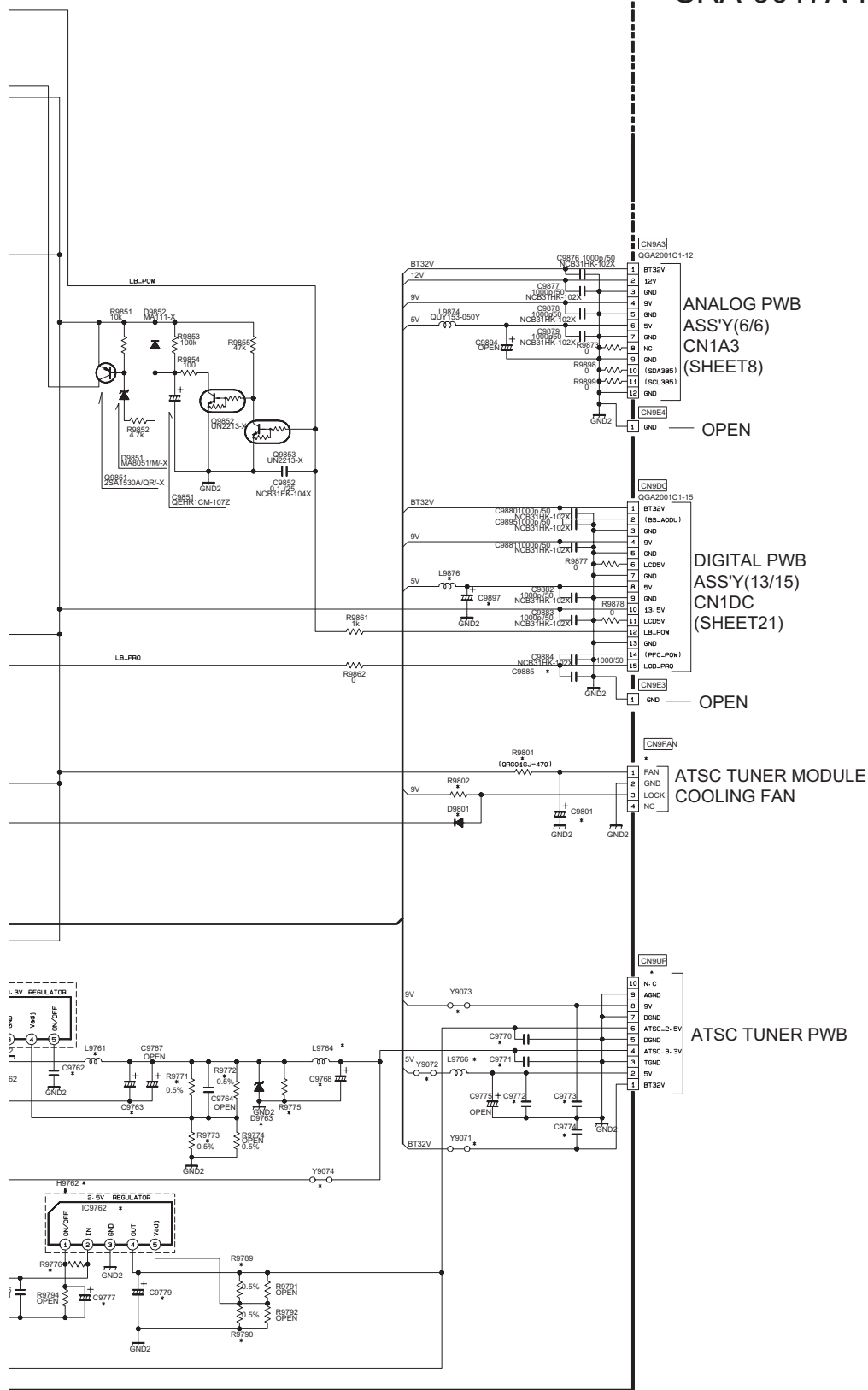
SHEET34

SHEET33,34

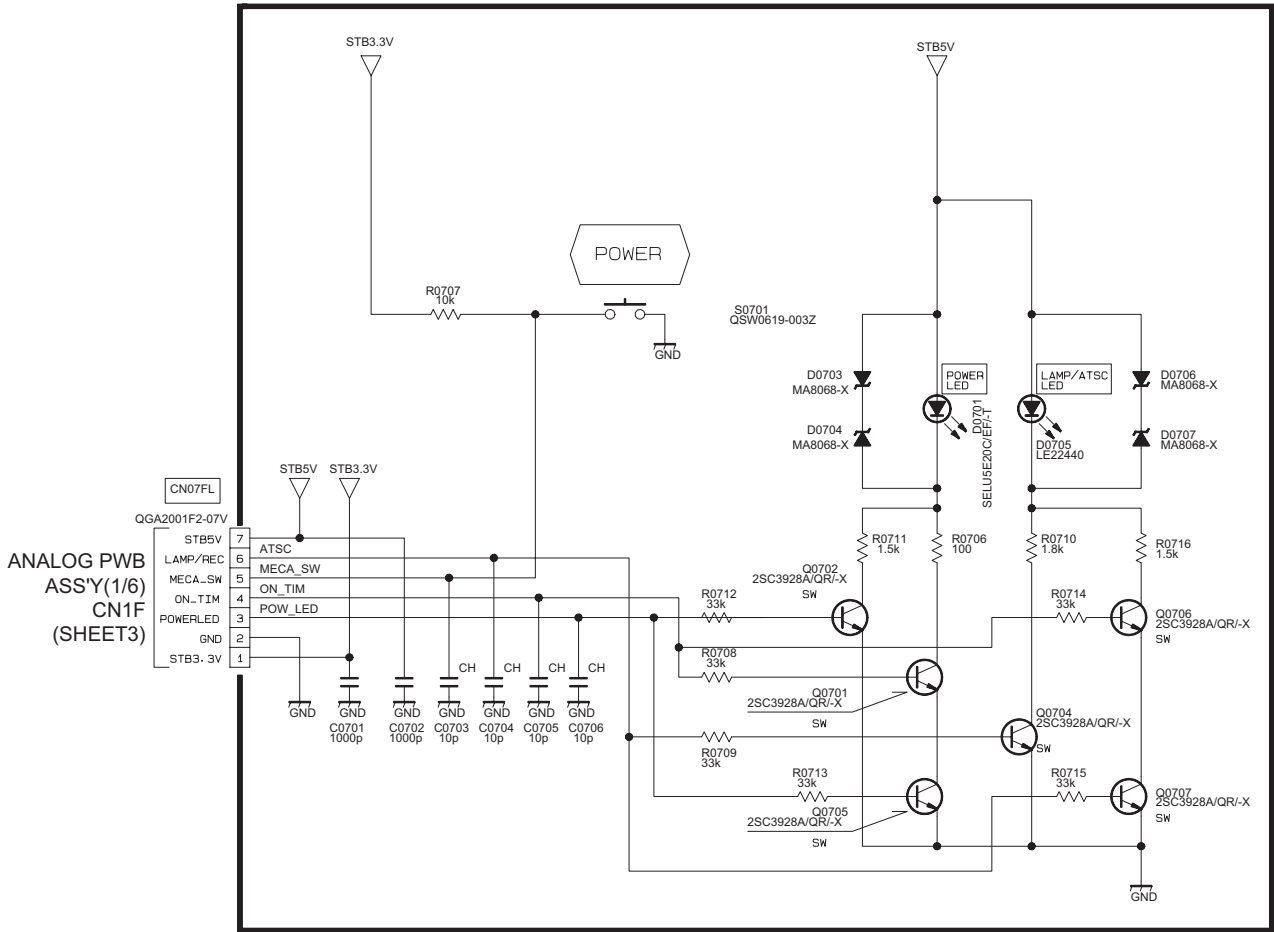
ASSY - MODEL LIST

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	HD-550887A	HD-550787A	HD-550857A	HD-520787XA
	HD-520887A	HD-520787A	HD-520857A	HD-520557XA
SRA-9012A 720P MONITOR	HD-610887A		HD-520587XA	
SRA-9013A 720P GAM B-MODEL	HD-610887A	HD-610787A	HD-610857A	HD-550887XA
	HD-550887A	HD-550787A	HD-550857A	HD-520787XA
	HD-520887A	HD-520787A	HD-520857A	HD-520557XA
SRA-9014A FHD ATSC/C	HD-70F987A	HD-70F987A	HD-70F987A	HD-70F987A
	HD-61F987A	HD-61F987A	HD-61F987A	HD-61F987A
	HD-56F987A	HD-56F987A	HD-56F987A	HD-56F987A
SRA-9015A 720P MONITOR B-MODEL	HD-610887A		HD-520587XA	
	HD-550887A			
	HD-520887A			
SRA-9016A FHD TAIWAN	HD-70F987A			
	HD-56F987A			
SRA-9017A FHD GAM	HD-52F987A		HD-56F987A	
			HD-61F987A	

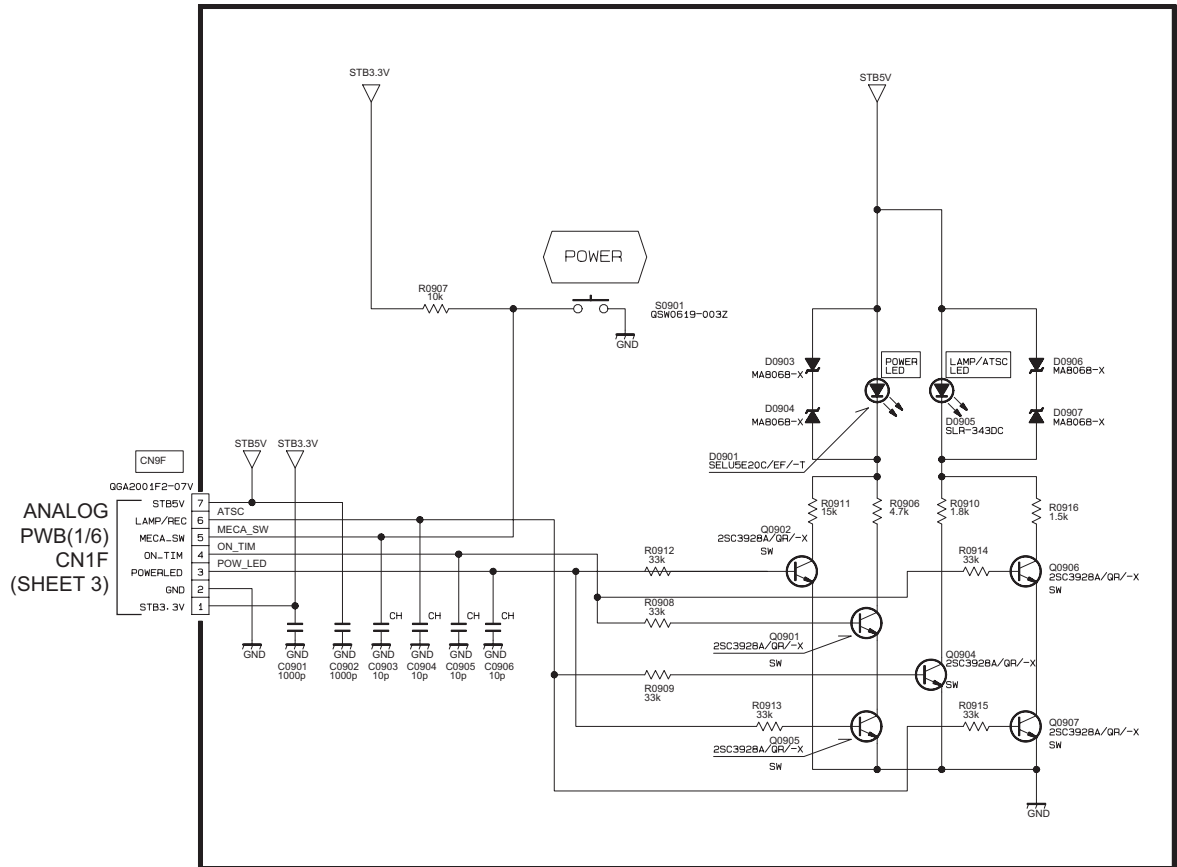
POWER PWB ASS'Y(3/3)
SRA-9017A-M2



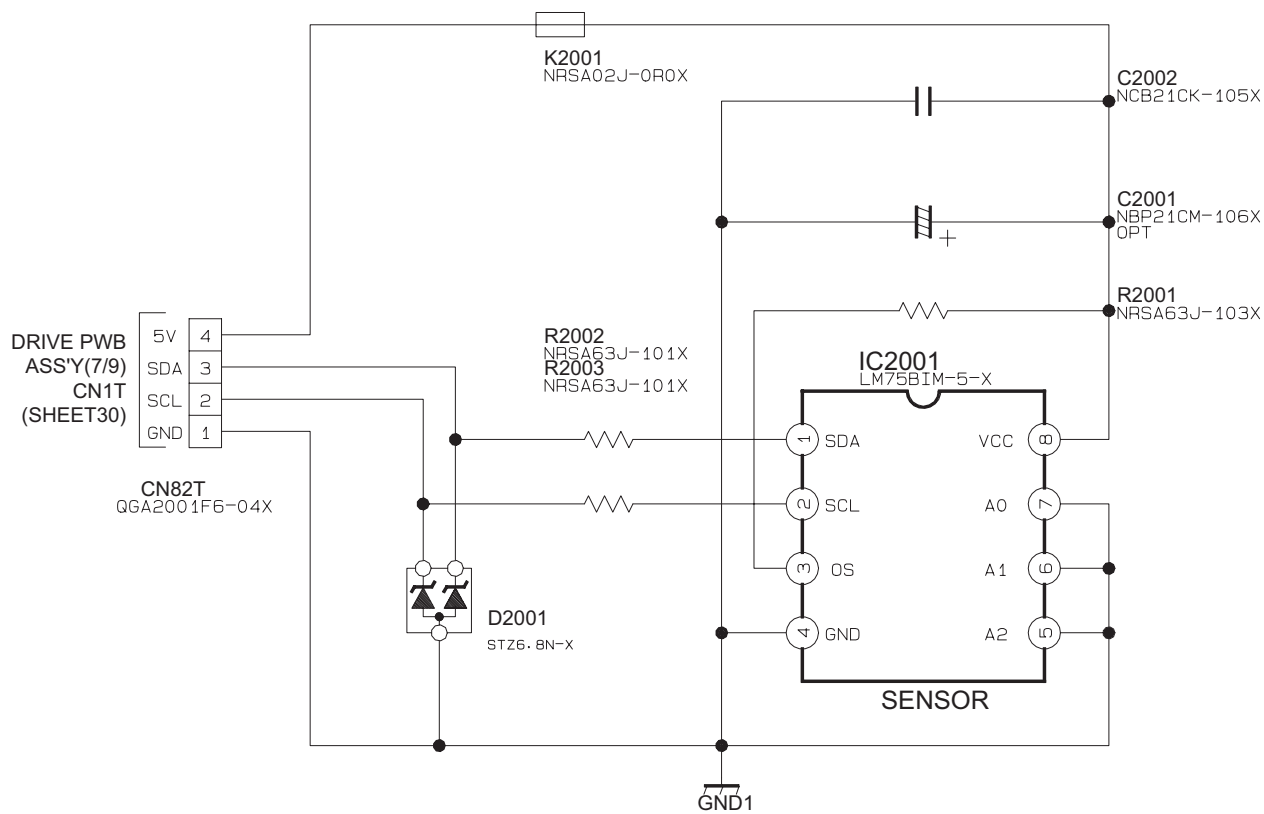
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CN57A	QCA2001-X	OPEN	QCA2001-X	OPEN	OPEN	OPEN	QCA2001-X		
CN63P	QCA2001-X	OPEN	QCA2001-X	OPEN	OPEN	OPEN	QCA2001-X		
CN64	QCA2001-X	OPEN	QCA2001-X	OPEN	OPEN	OPEN	QCA2001-X		
CN702	SPR1012Z	OPEN	SPR1012Z	OPEN	OPEN	OPEN	SPR1012Z		
H6781	OLC1131Z	OPEN	OLC1131Z	OPEN	OPEN	OPEN	OLC1131Z		
H6782	OLC1131Z	OPEN	OLC1131Z	OPEN	OPEN	OPEN	OLC1131Z		
H6783	OLC1131Z	OPEN	OLC1131Z	OPEN	OPEN	OPEN	OLC1131Z		
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C7683	NB-801TX	OPEN	NB-801TX	OPEN	OPEN	OPEN	NB-801TX		
C7684	NB-801TX	OPEN	NB-801TX	OPEN	OPEN	OPEN	NB-801TX		
C9770	NB-831TX	OPEN	NB-831TX	OPEN	OPEN	OPEN	NB-831TX		
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C2772	NB-831TX	OPEN	NB-831TX	OPEN	OPEN	OPEN	NB-831TX		
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C9778	NB-831TX	OPEN	NB-831TX	OPEN	OPEN	OPEN	NB-831TX		
C9779	NB-831TX	OPEN	NB-831TX	OPEN	OPEN	OPEN	NB-831TX		
C8601	DETR1001X	OPEN	DETR1001X	OPEN	OPEN	OPEN	DETR1001X		
H7672	FMB-614L	OPEN	FMB-614L	OPEN	OPEN	OPEN	FMB-614L		
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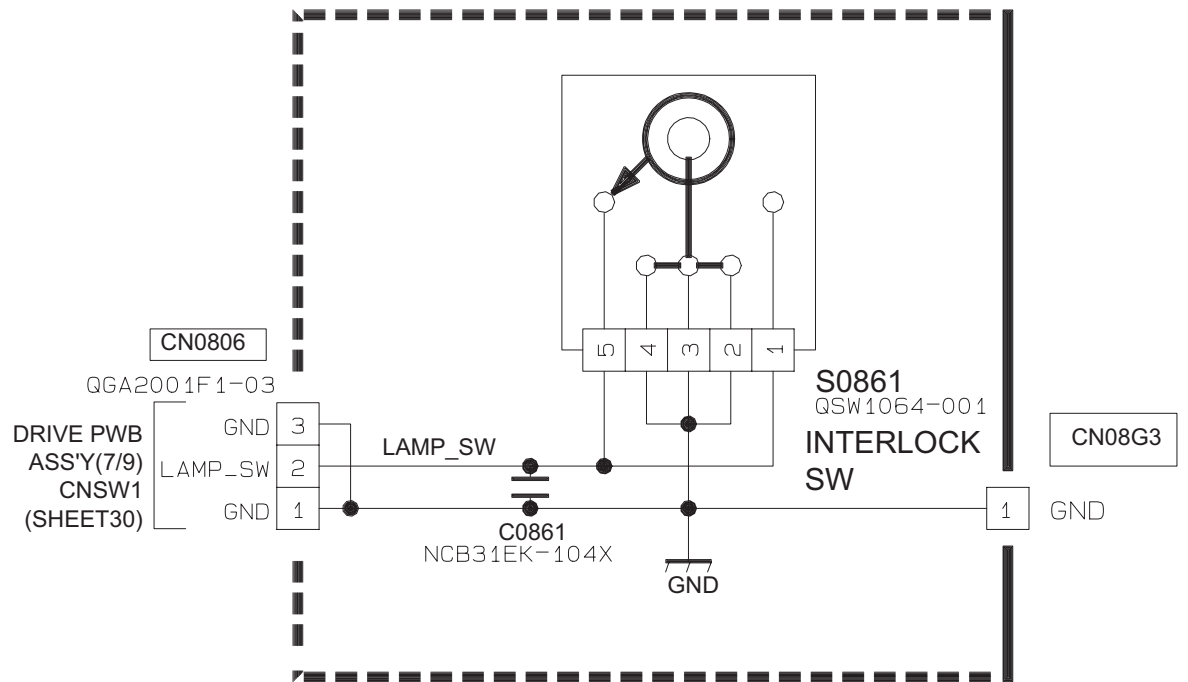
FRONT LED PWB ASS'Y
SRA0L111A-M2



FRONT LED PWB ASS'Y SRA0L113A-M2

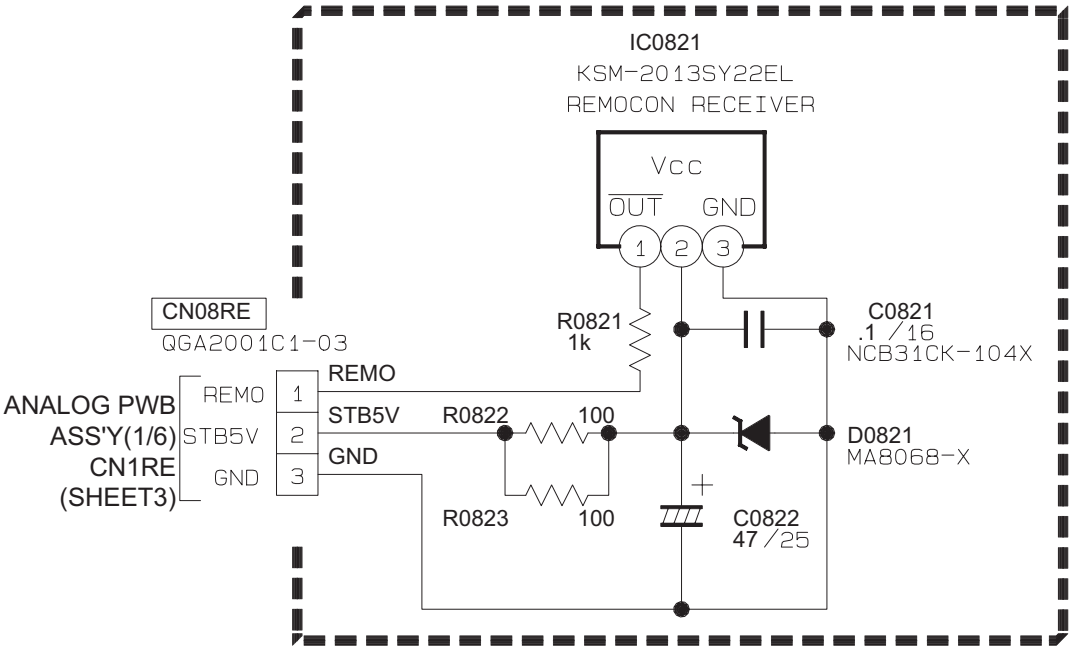


TEMP PWB ASS'Y
SRA-8211A-M2

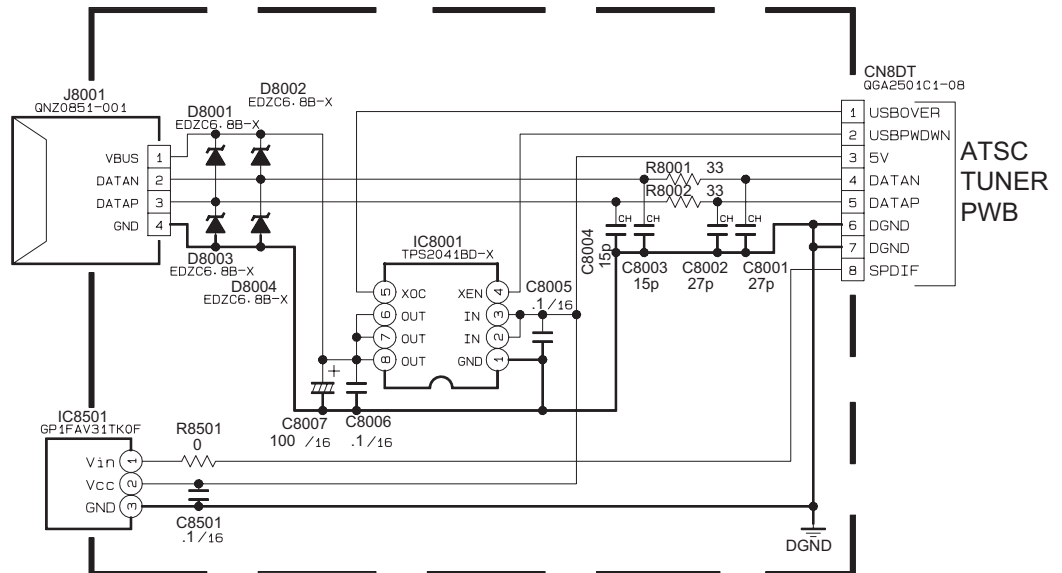


LAMP COVER SW PWB ASS'Y

SRA0L211A-M2

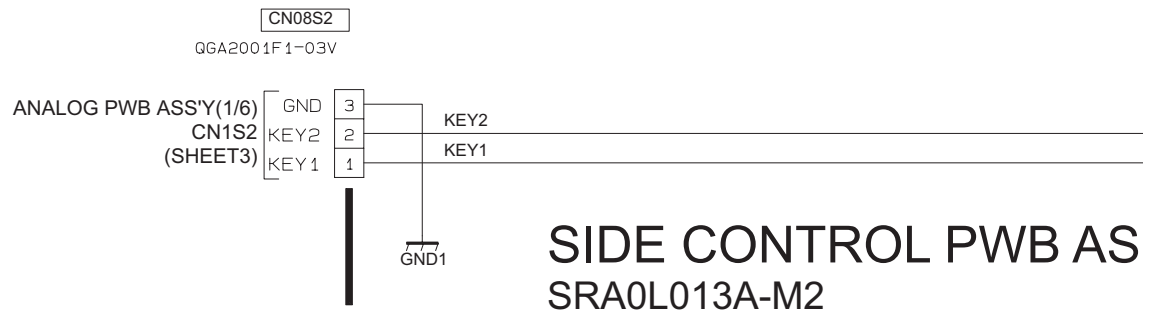
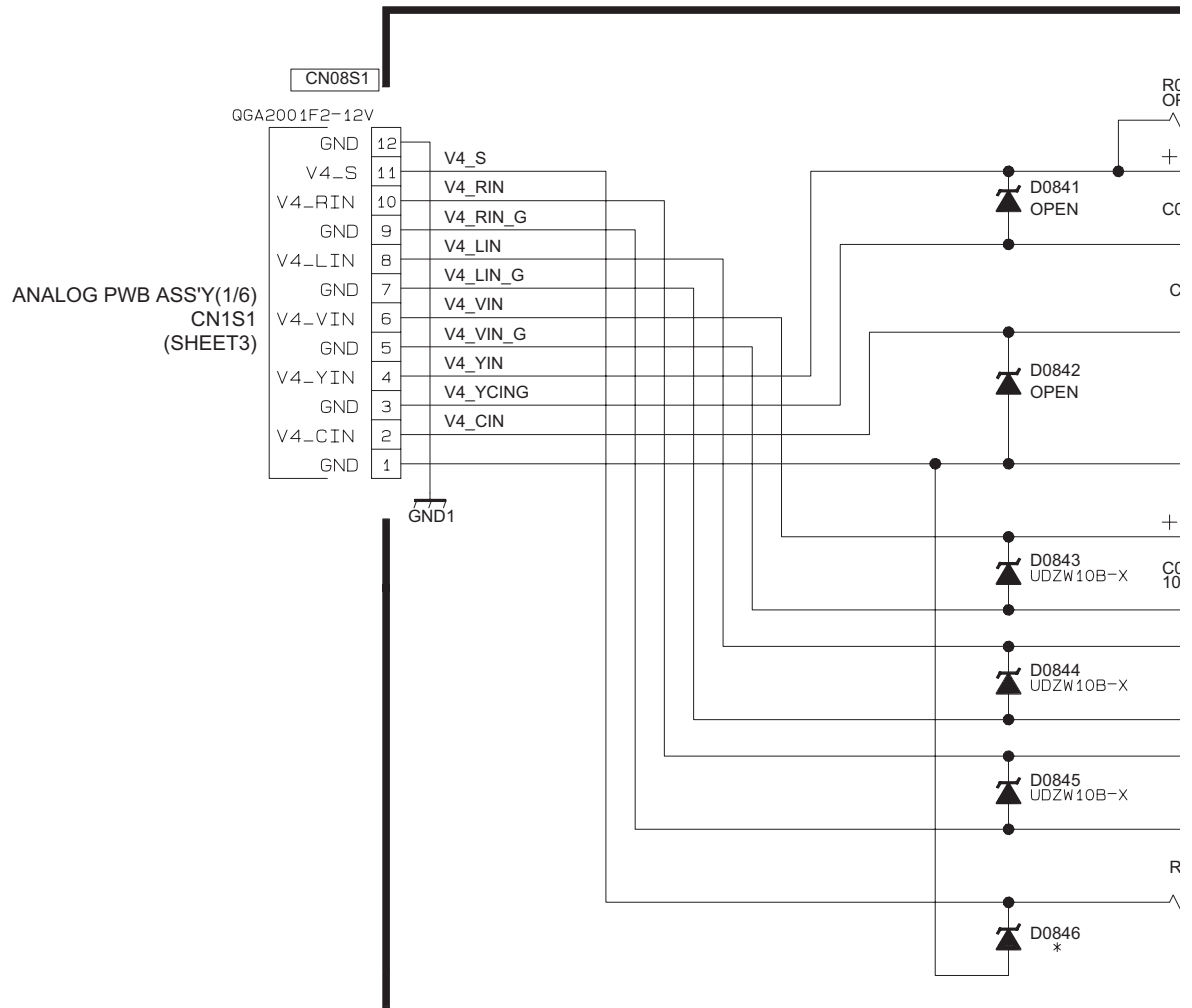


REMOCON PWB ASS'Y
SRA-8011A-M2

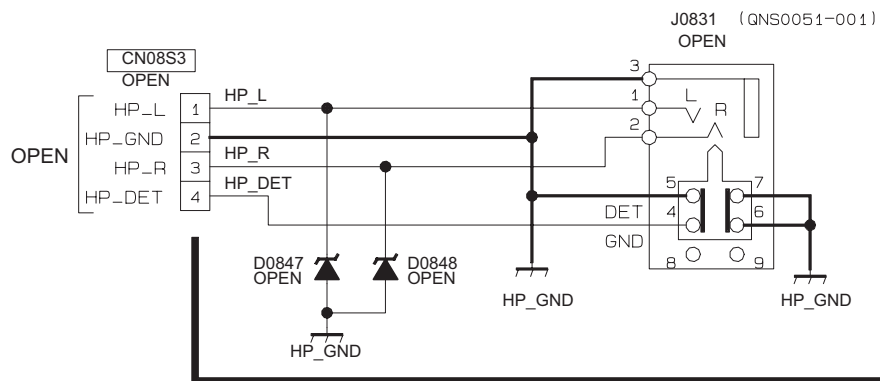


USB PWB ASS'Y

SRA-8521A-M2



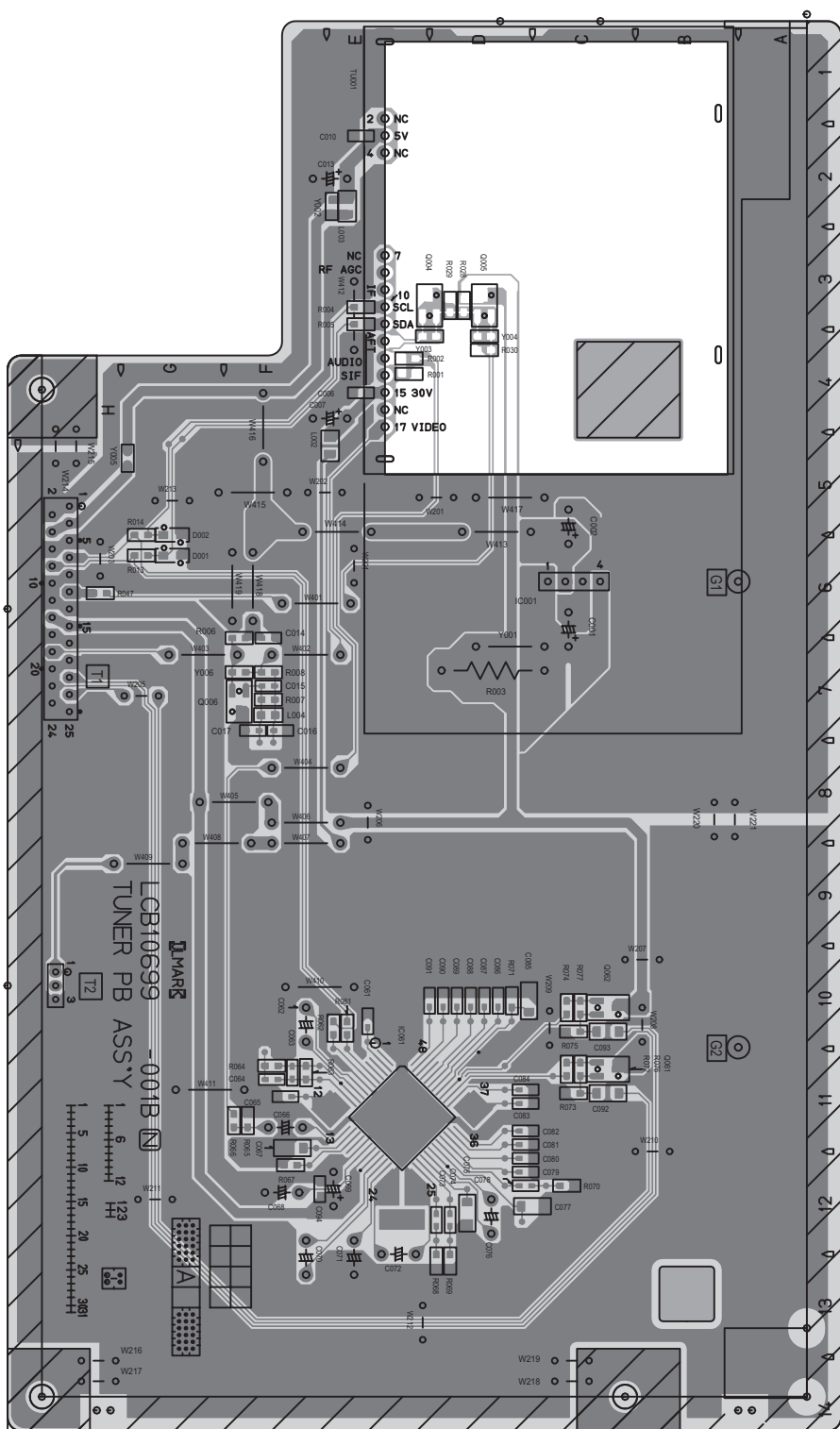
SIDE CONTROL PWB AS
SRA0L013A-M2



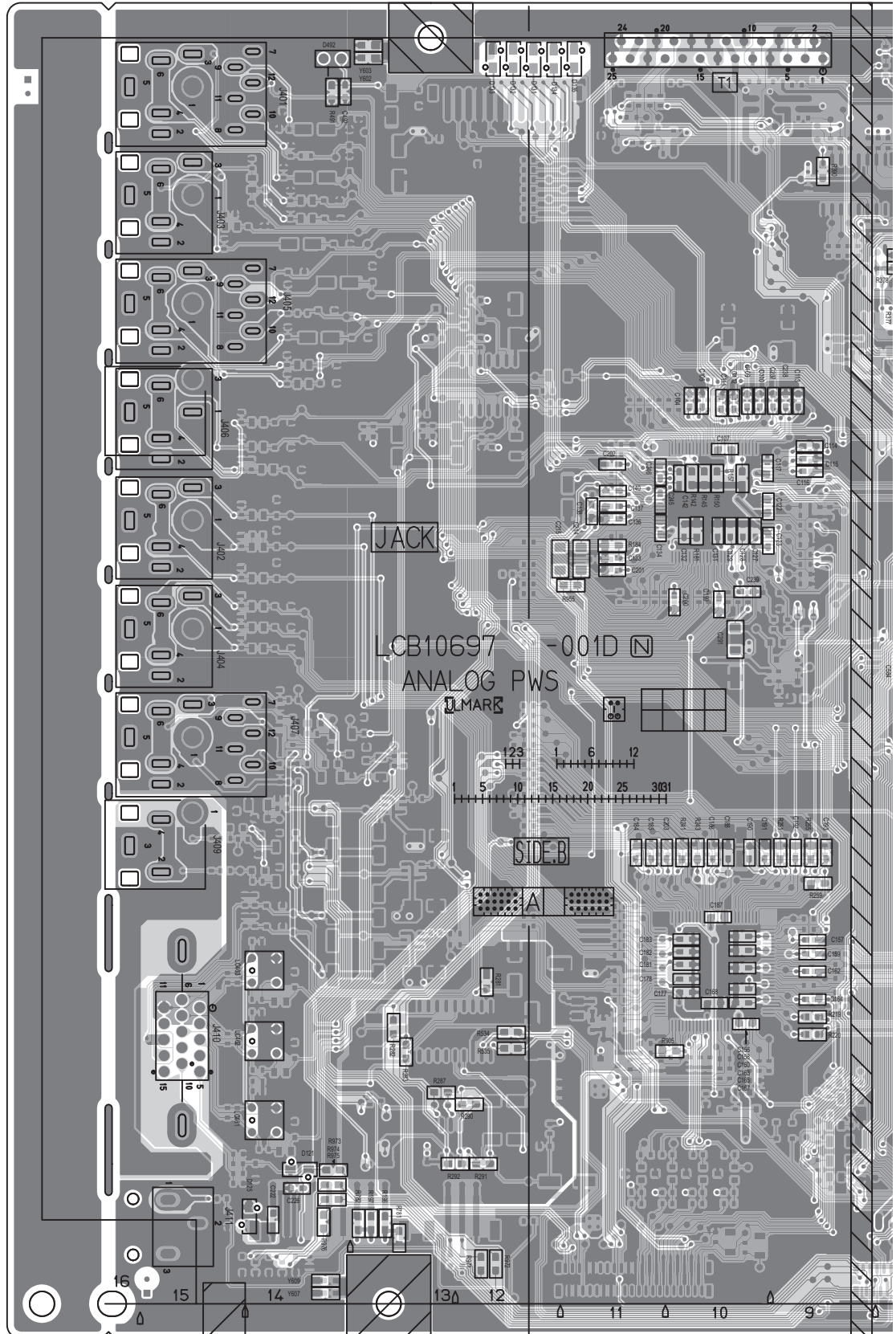
PATTERN DIAGRAMS

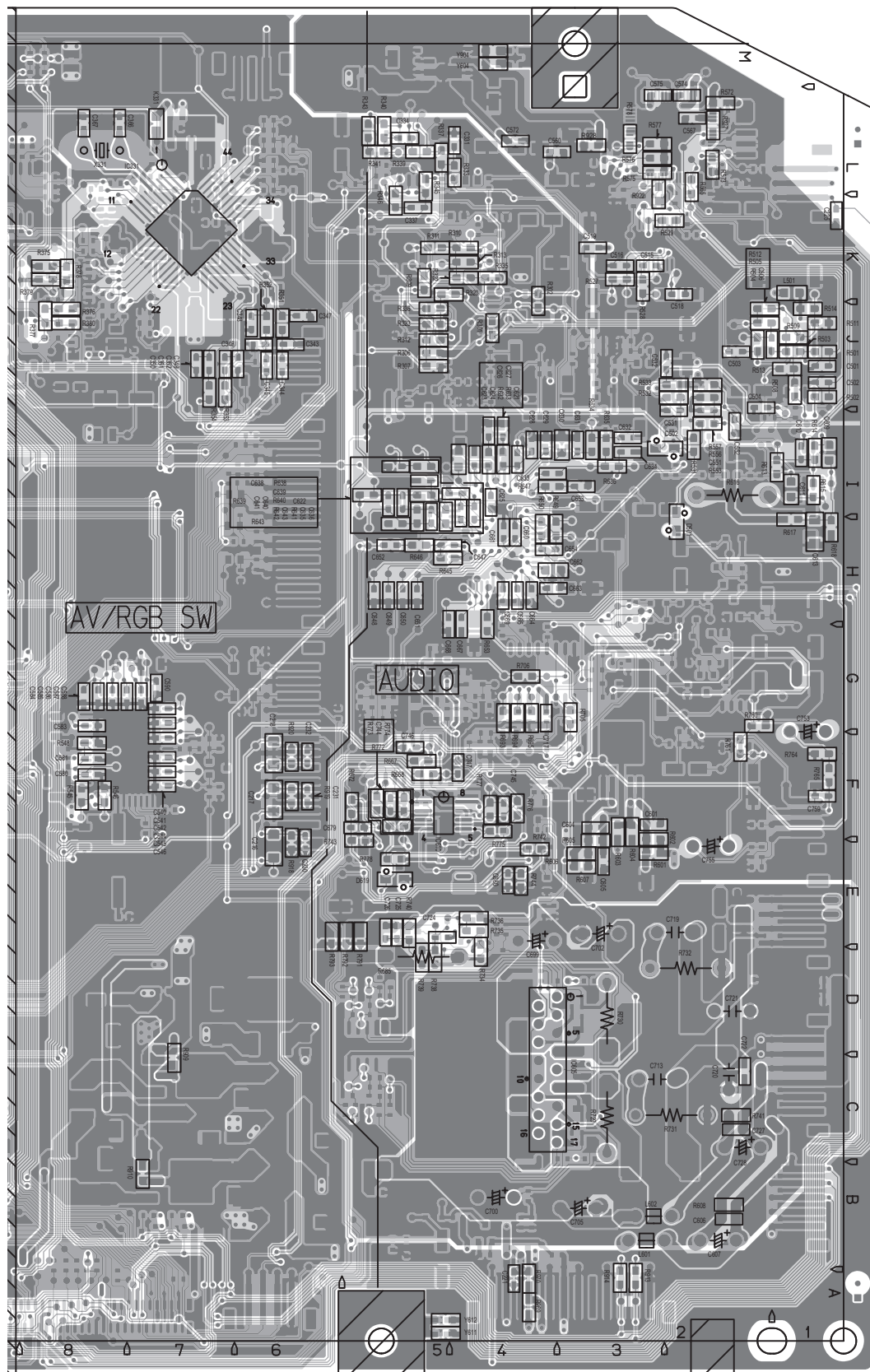
TUNER PWB PATTERN [SOLDER SIDE]

FRONT

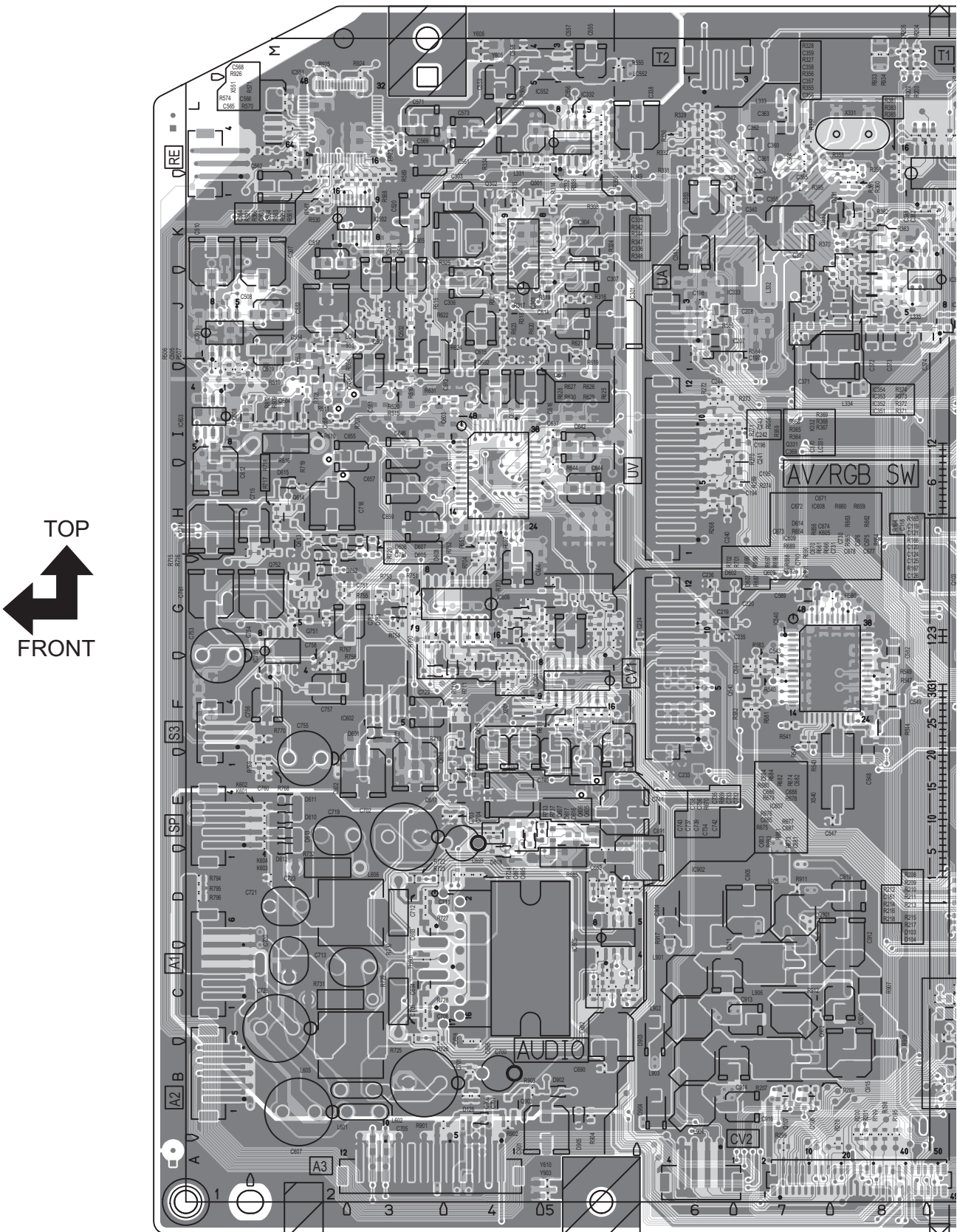


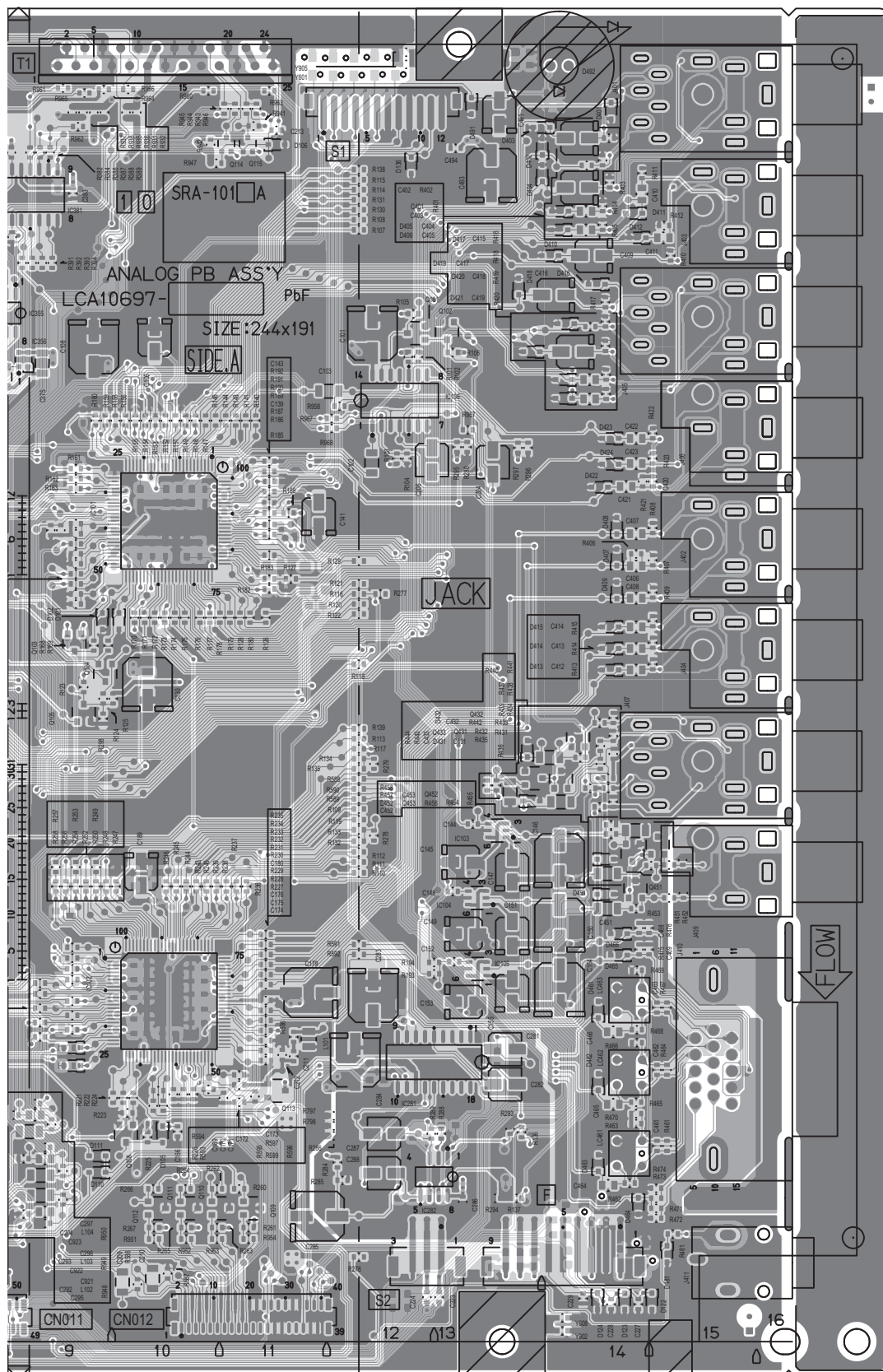


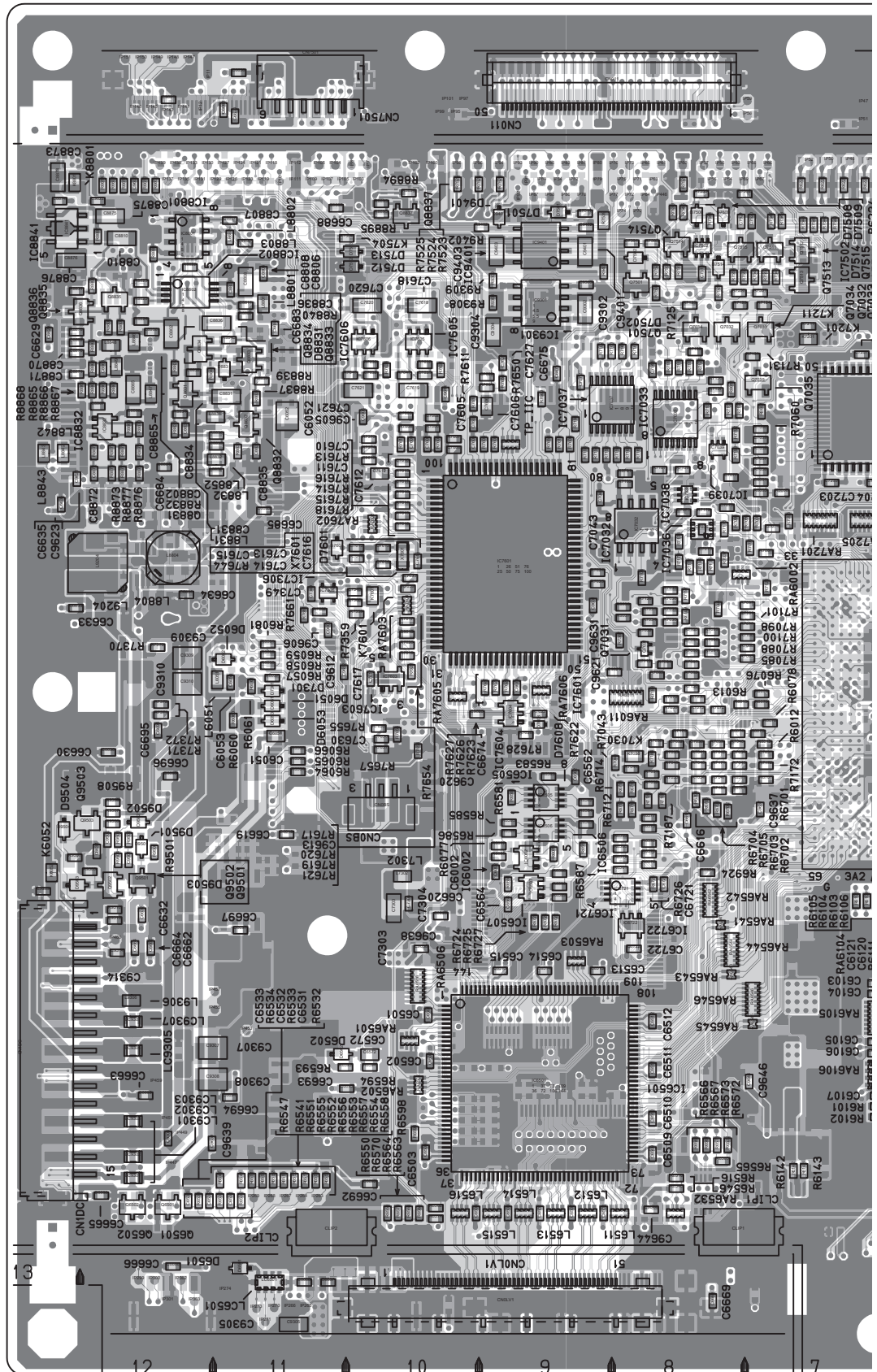


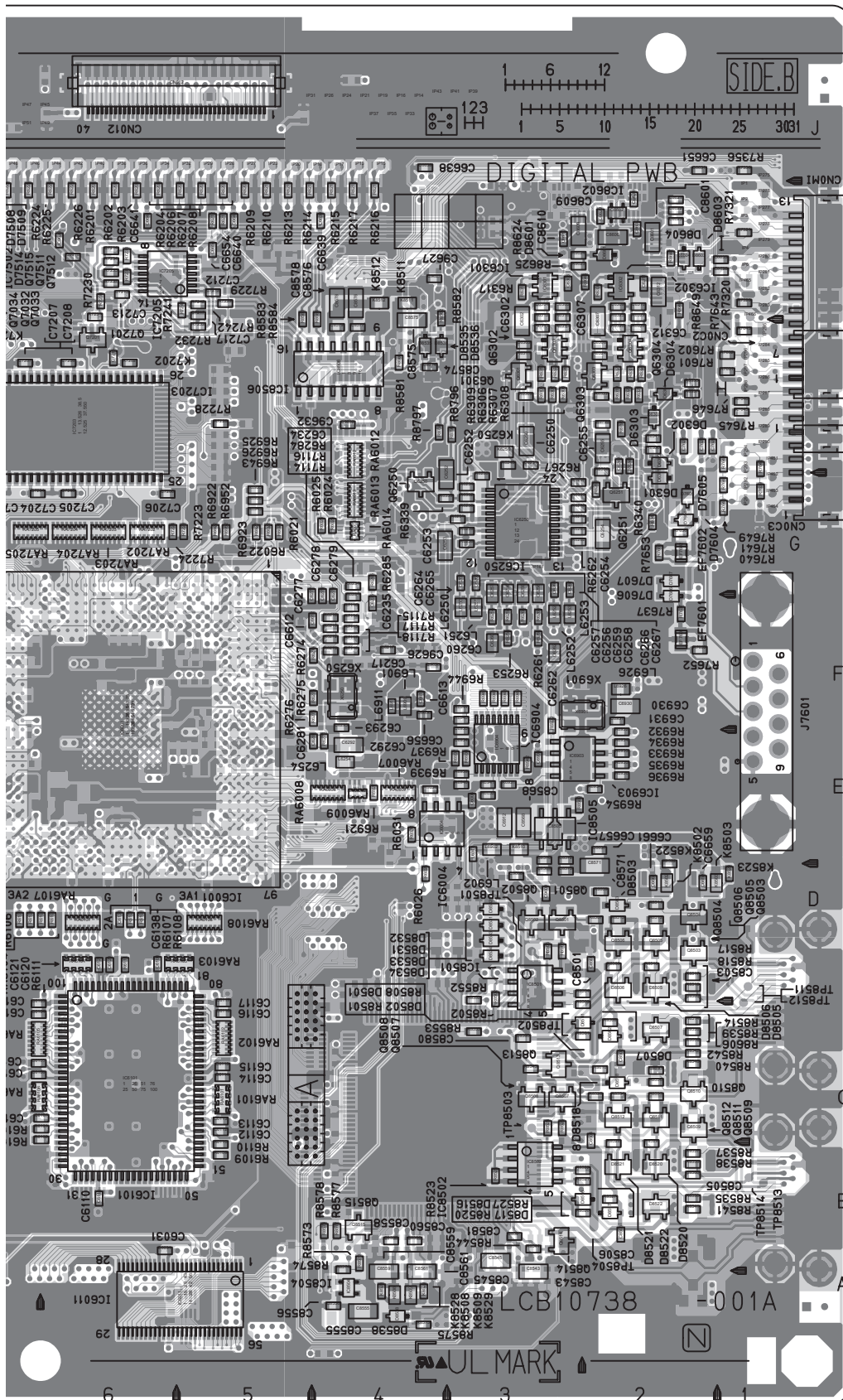


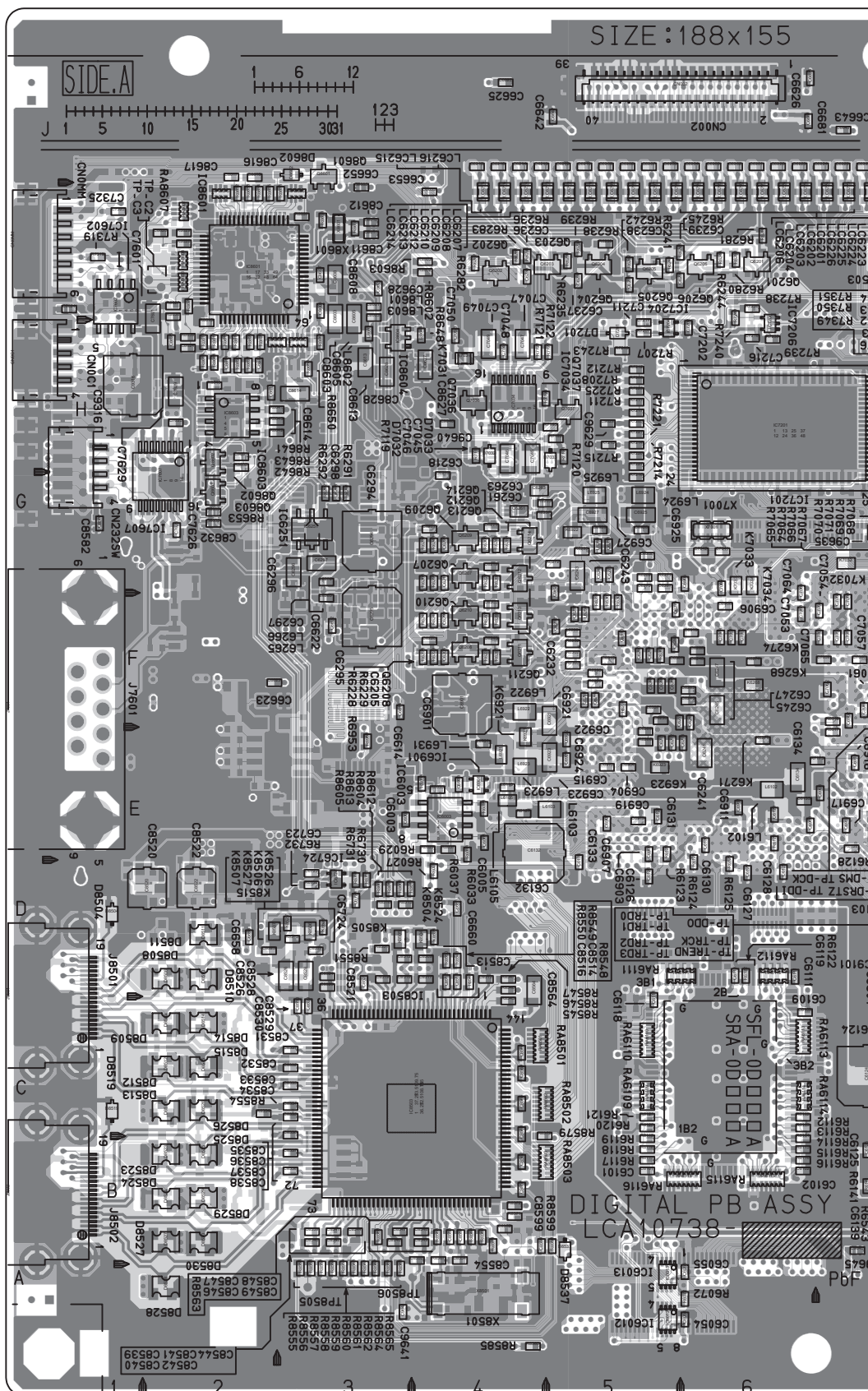
ANALOG PWB PATTERN [PARTS SIDE]

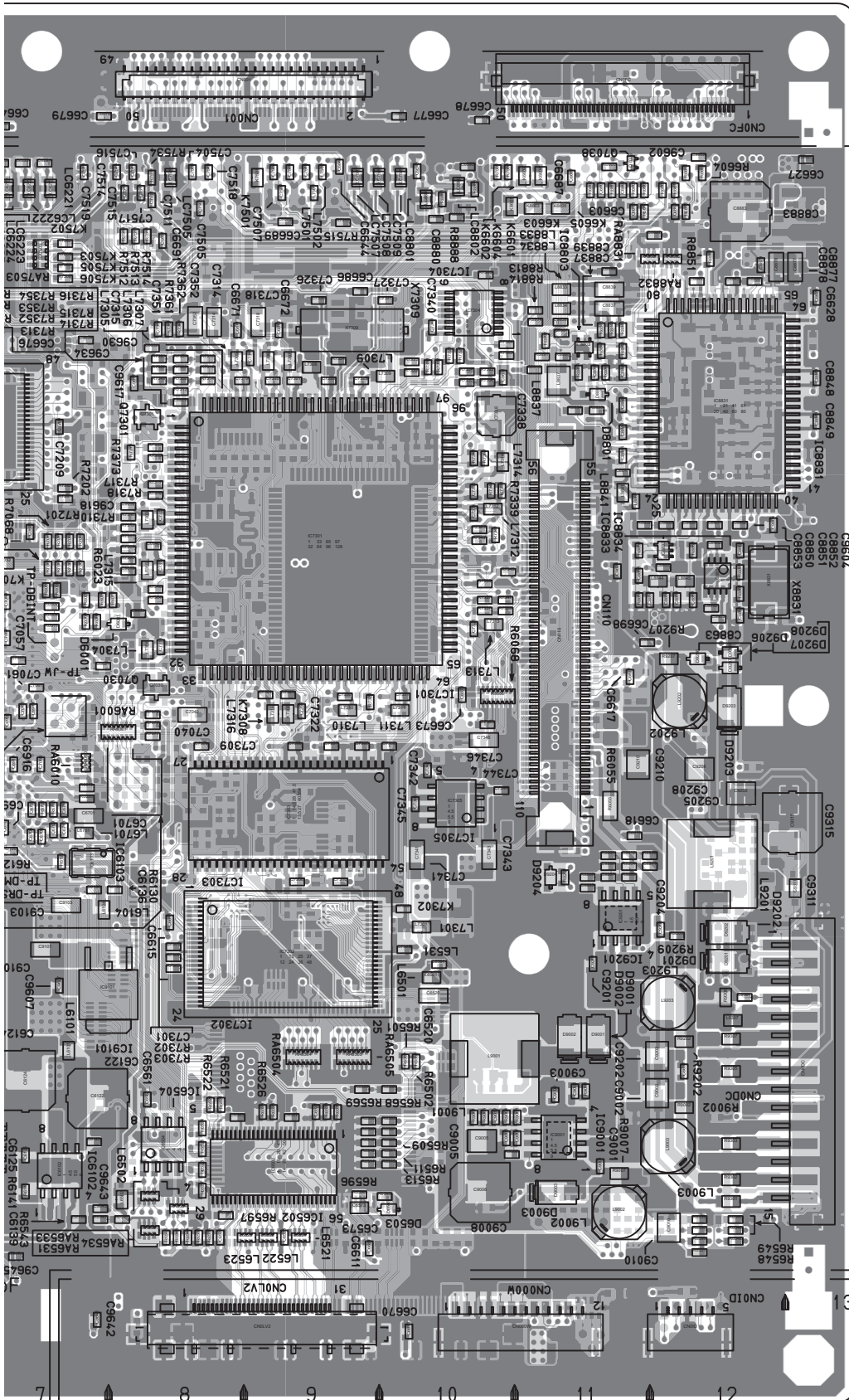








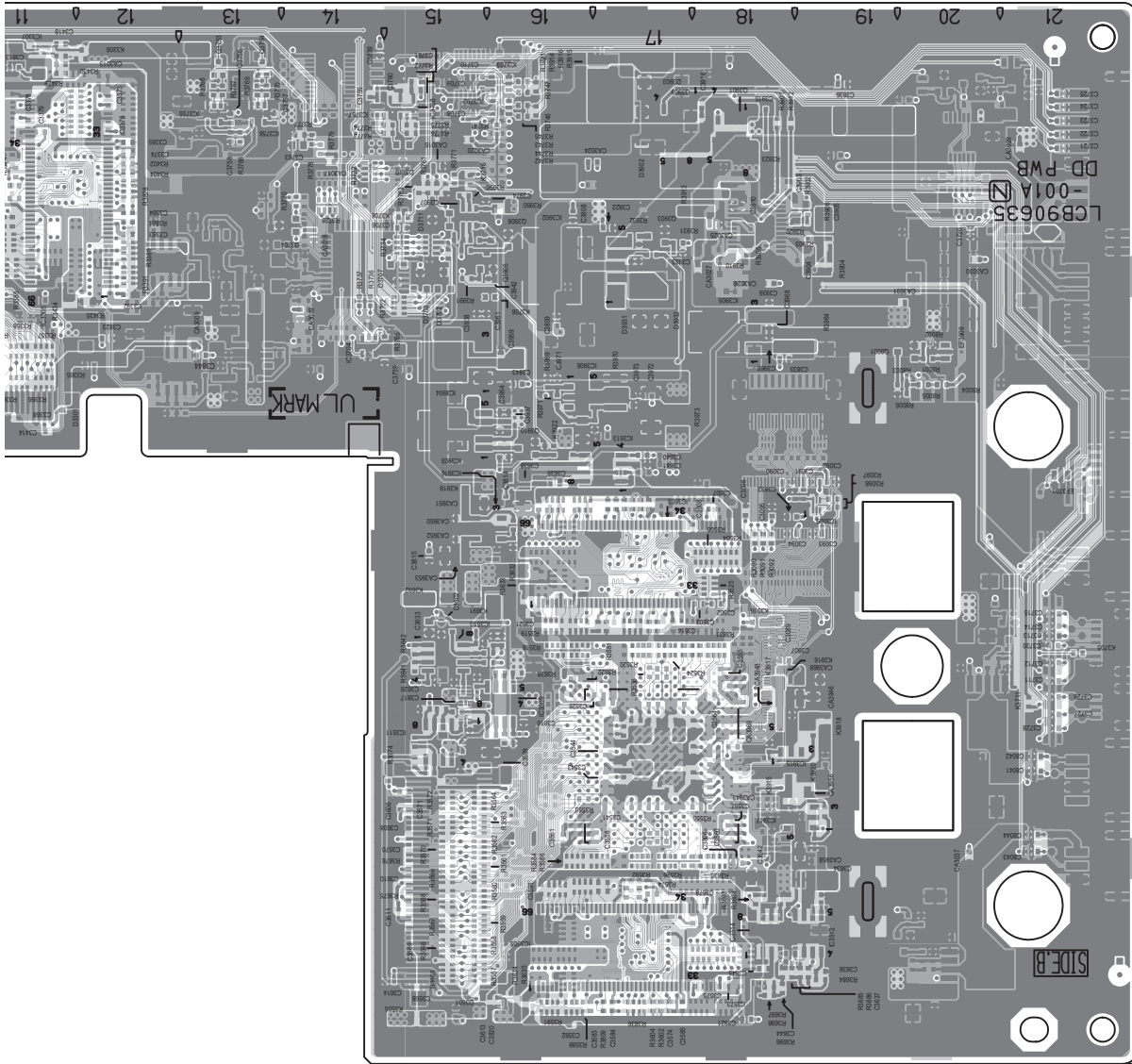




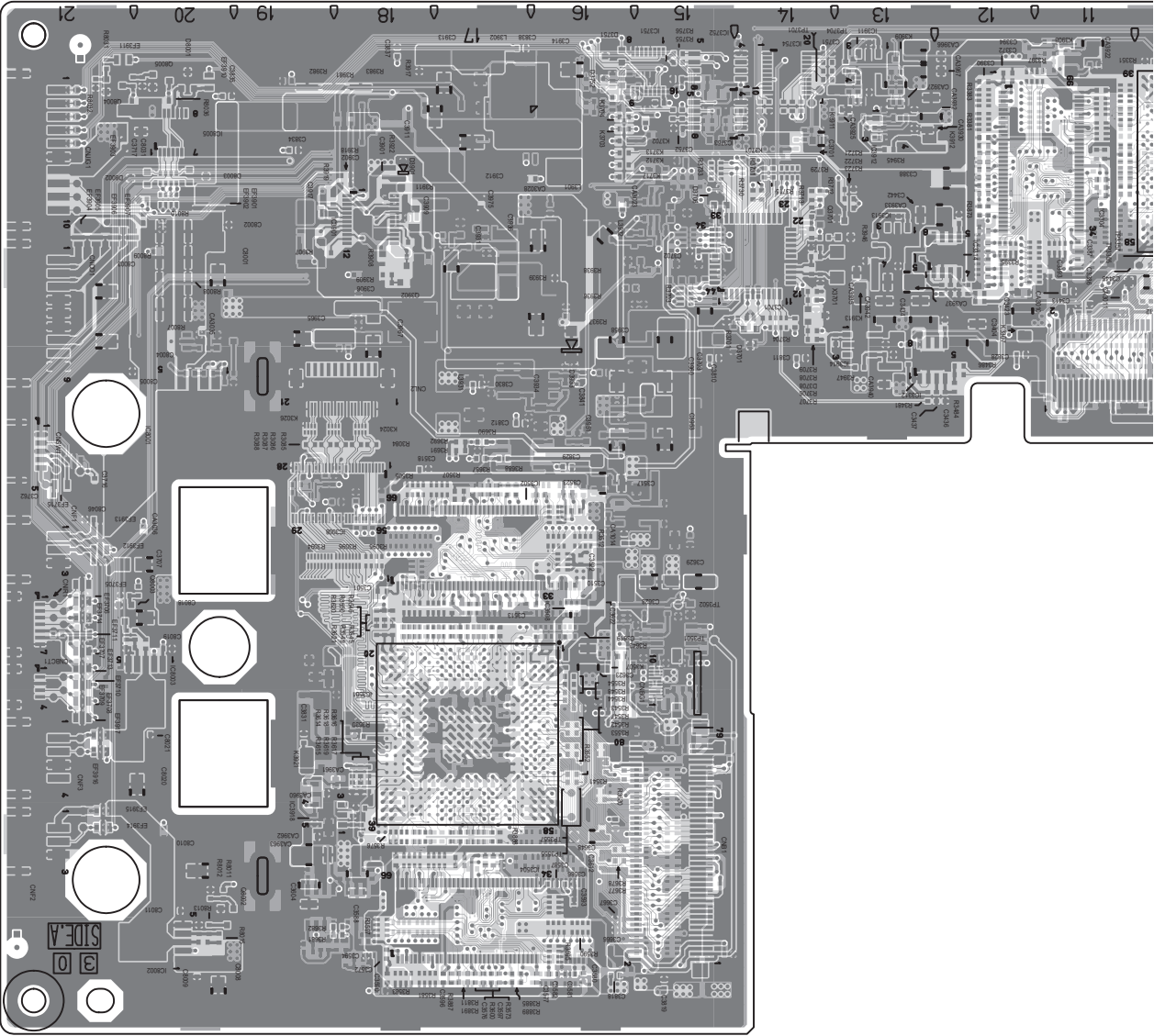
DRIVE PWB PATTERN [SOLDER SIDE]

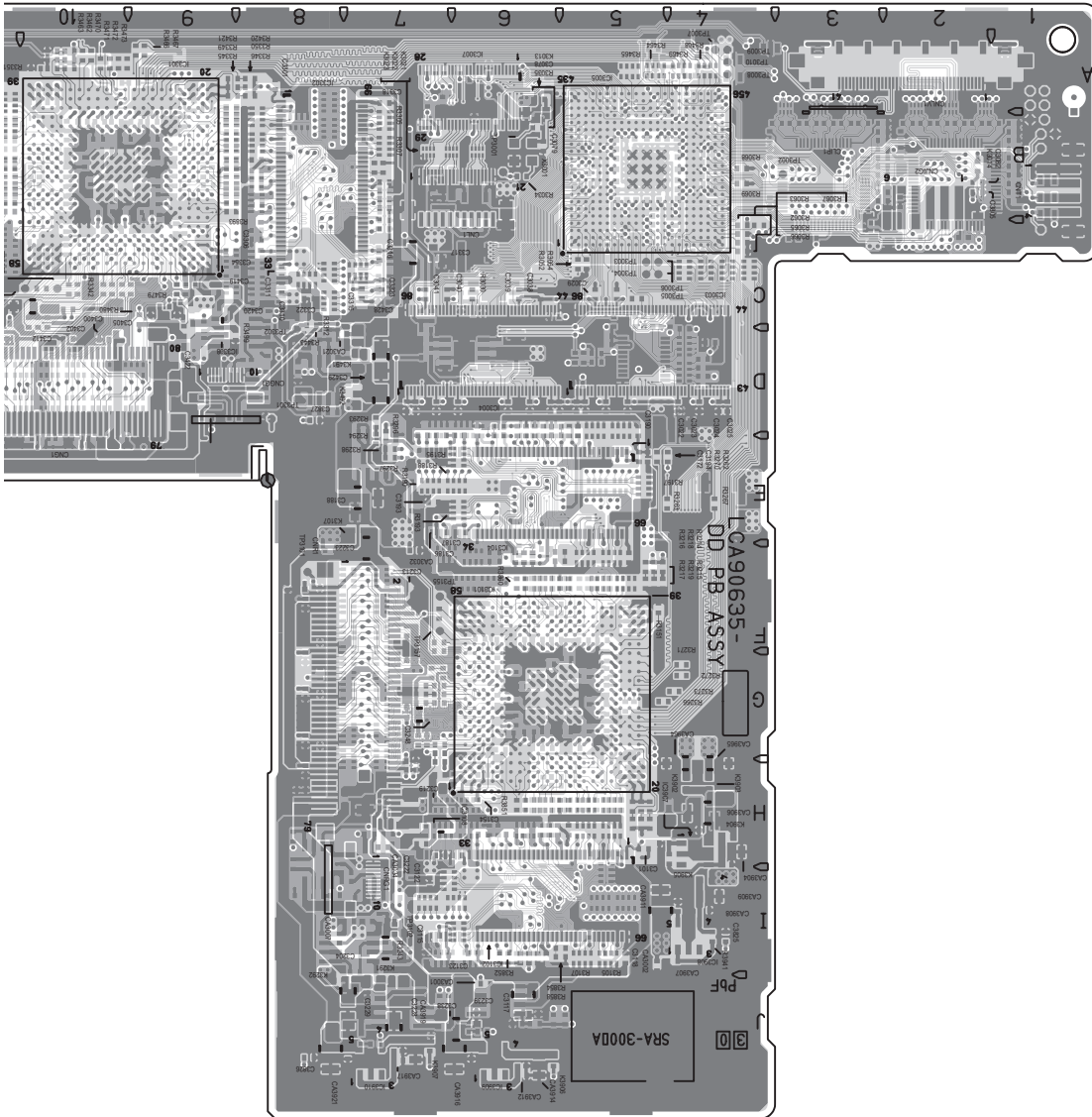
FRONT
↓





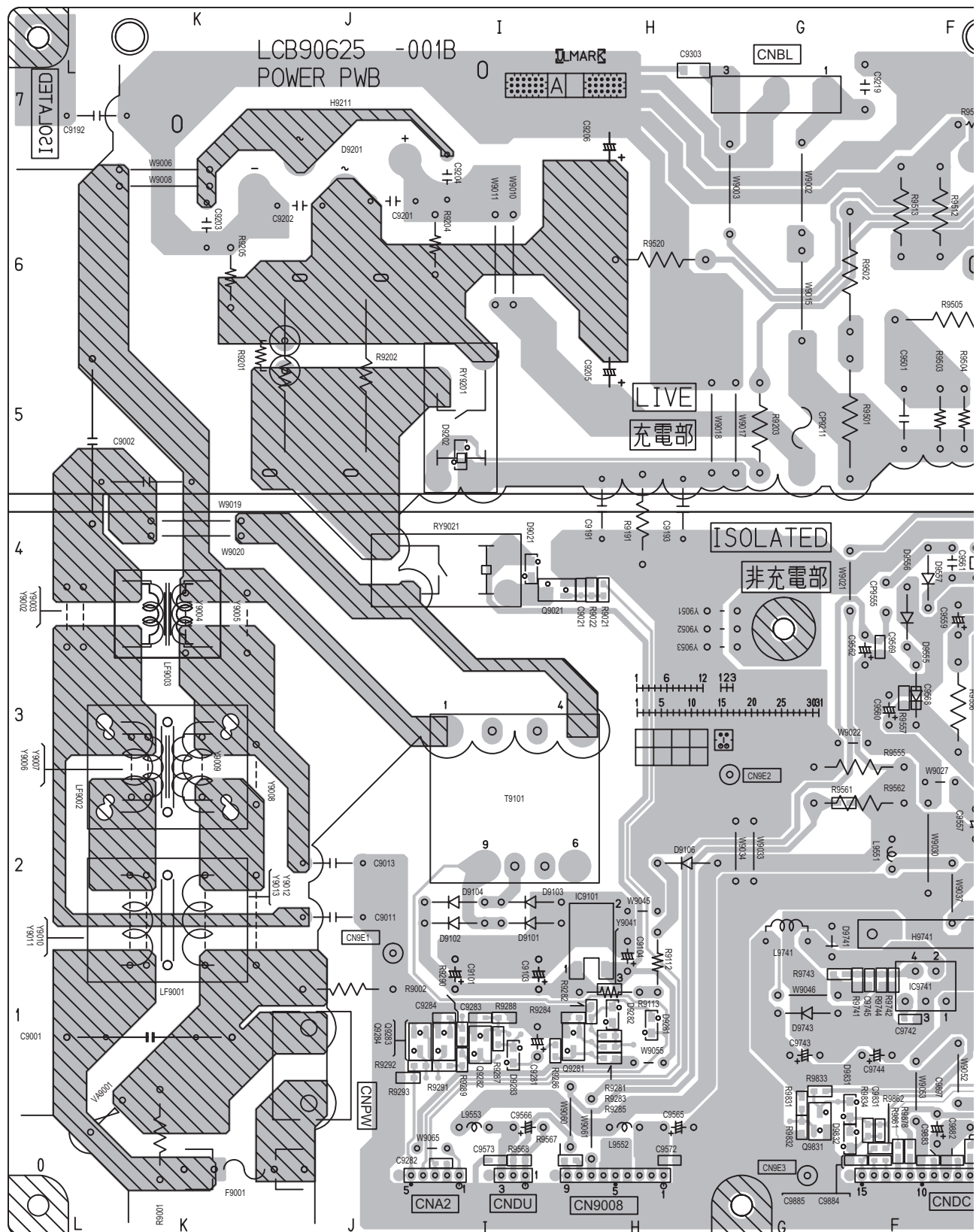
DRIVE PWB PATTERN [PARTS SIDE]



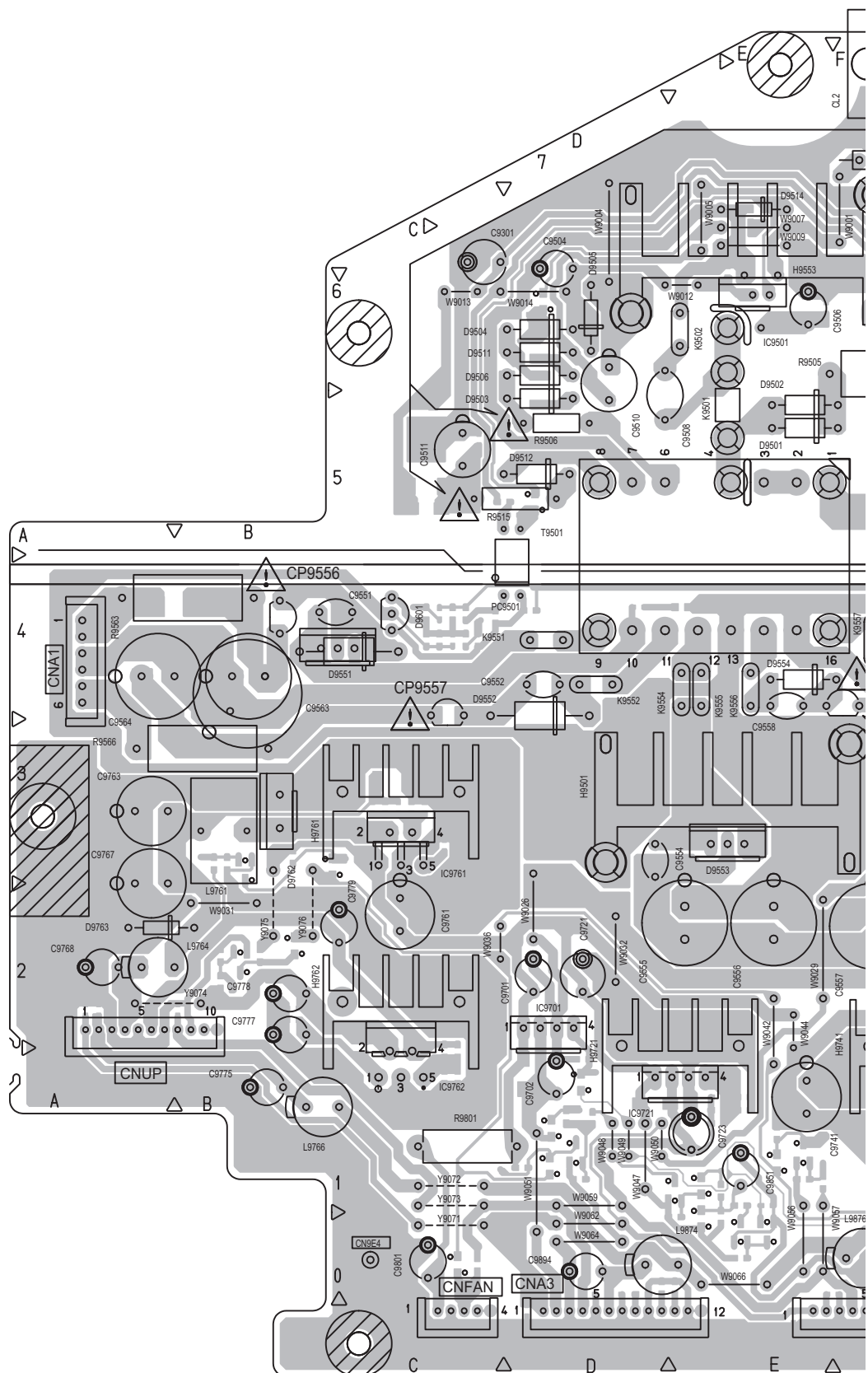


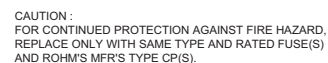
FRONT
↓

POWER PWB PATTERN [SOLDER SIDE]

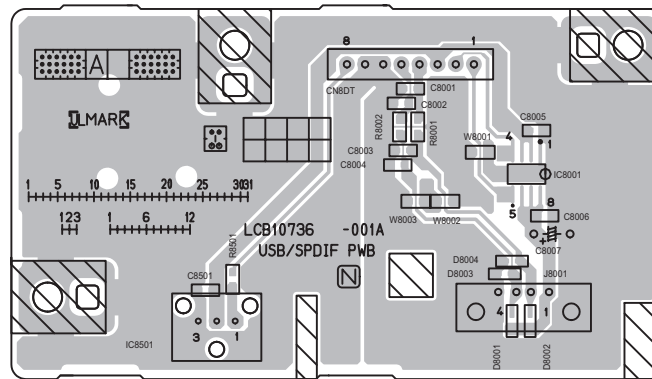


POWER PWB PATTERN [PARTS SIDE]

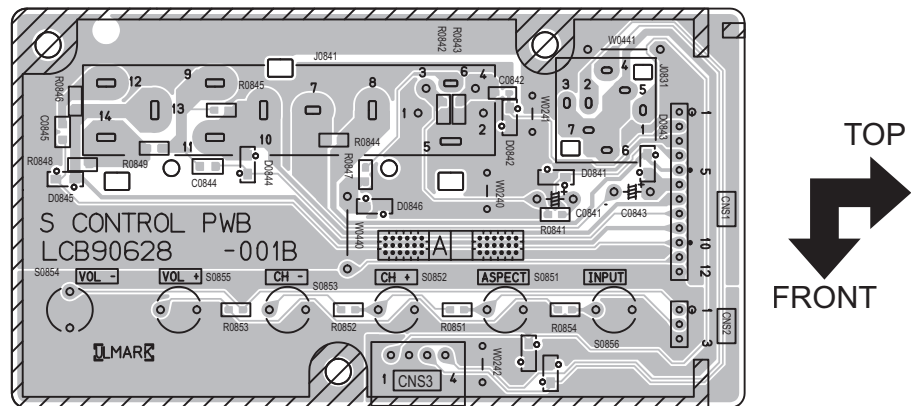




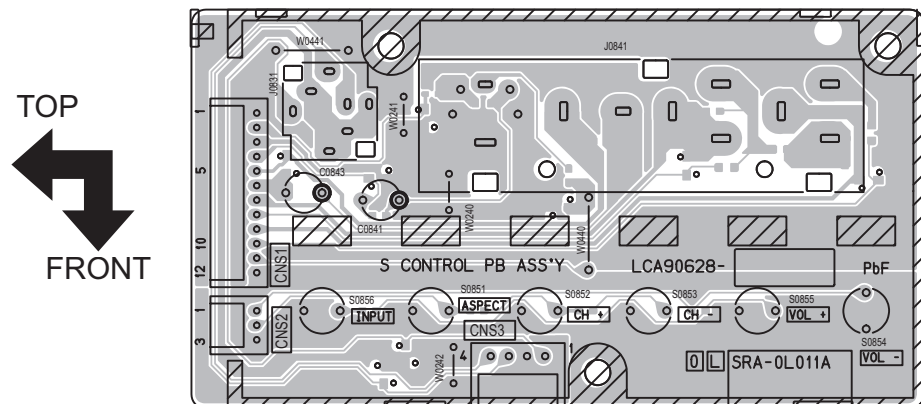
USB PWB PATTERN



SIDE CONTROL PWB PATTERN [SOLDER SIDE]



SIDE CONTROL PWB PATTERN [PARTS SIDE]



VOLTAGE CHARTS

<TUNER PWB(1/2)>

MODE PIN NO.	DC (V)
IC001	
1	6.9
2	4.9
3	0
4	6.9
Q004	
E	2.8
C	0
B	0
Q005	
E	2.2
C	8.7
B	2.8
Q006	
E	2.5
C	0
B	2
TU001	
1	NC
2	NC
3	4.9
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	4.4
11	4.3
12	0
13	2.8
14	NC
15	31.1
16	NC
17	2.4

<TUNER PWB(2/2)>

MODE PIN NO.	DC (V)
IC061	
1	NC
2	4
3	NC
4	NC
5	4.9
6	4.9
7	0
8	3.9
9	3.9
10	4
11	3.8
12	3.2
13	4
14	1.2
15	1.3
16	NC
17	0
18	3.2
19	8.9
20	NC
21	4
22	4
23	4
24	3.8
25	4
26	3.9
27	4
28	1.9
29	4
30	4
31	1.8
32	4
33	4
34	4
35	4
36	4
37	4
38	4
39	3.9
40	3.9
41	1.1
42	4
43	4
44	4
45	NC
46	4
47	4
48	4

<ANALOG PWB(1/6)>

MODE PIN NO.	DC (V)
IC101	
1	4.5
2	4.5
3	0
4	4.5

MODE PIN NO.	DC (V)
5	4.5
6	0
7	4.5
8	4.5
9	0
10	4.5
11	4.5
12	0
13	4.5
14	4.5
15	4.5
16	4.5
17	4.5
18	9
19	4.5
20	4.5
21	0
22	4.5
23	4.5
24	0
25	4.5
26	4.5
27	0
28	4.5
29	4.5
30	9
31	0
32	4.5
33	4.5
34	4.5
35	4.5
36	4.5
37	4.1
38	3.4
39	1.7
40	6.4
41	1.8
42	2.9
43	1.8
44	0
45	1.3
46	2.8
47	NC
48	2.5
49	3.9
50	6.4
51	4.9
52	NC
53	1.9
54	3
55	2.4
56	NC
57	2.5
58	NC
59	0
60	2.2
61	0
62	0
63	2.5
64	2.5
65	2.5
66	2.5
67	2.5
68	2.4
69	2.5
70	2.4
71	NC
72	2.5
73	4.9
74	2.5
75	0
76	0
77	2.1
78	1.4
79	2.8
80	5
81	2.3
82	0
83	2.8
84	0
85	2.5
86	4.6
87	2.5
88	2.2
89	2.1
90	0
91	2.5
92	2.8
93	2.5
94	0.2
95	2.1
96	NC
97	2.5
98	4.8
99	2.5
100	NC

MODE PIN NO.	DC (V)
IC102	
1	0
2	2.4
3	2.5
4	2.4
5	2.4
6	2.5
7	2.5
8	2.4
9	0
10	2.4
11	2.2
12	2.4
13	NC
14	0.3
15	0.3
16	0
17	2.4
18	0
19	2.4
20	0
21	2.4
22	0
23	0
24	0.1
25	5
26	0
27	4
28	3.9
29	0
30	NC
31	6.3
32	NC
33	0
34	1.2
35	0
36	3.4
37	4.1
38	3.4
39	1.7
40	6.4
41	1.8
42	2.9
43	1.8
44	0
45	1.3
46	2.8
47	NC
48	2.5
49	3.9
50	6.4
51	4.9
52	NC
53	1.9
54	3
55	2.4
56	NC
57	2.5
58	NC
59	0
60	2.2
61	0
62	0
63	2.5
64	2.5
65	2.5
66	2.5
67	2.5
68	2.4
69	2.5
70	2.4
71	NC
72	2.4
73	NC
74	2.4
75	NC
76	0.6
77	0.1
78	2.4
79	NC
80	2.4
81	NC
82	2.4
83	0.3
84	0.6
85	0.5
86	2.4
87	5
88	2.4
89	2.8
90	2.4
91	0
92	NC
93	NC
94	2.4
95	0
96	2.4

MODE PIN NO.	DC (V)
97	0
98	2.4
99	0
100	NC
Q106	
S	0.1
D	0.1
G	0
Q107	
S	3.2
D	5
G	3.3
Q108	
E	0.5
C	0
B	0
Q109	
E	2.6
C	0
B	1.9
Q110	
E	2.2
C	0
B	1.4
Q111	
E	2.2
C	0
B	1.4
Q112	
E	1.7
C	0
B	1
Q113	
E	0
C	5
B	2.9

<ANALOG PWB(2/6)>

MODE PIN NO.	DC (V)
Q451	
E	0
C	0
B	2.4
Q452	
E	0
C	0
B	2.4
Q453	
E	2.4
C	2.5
B	0

<ANALOG PWB(5/6)>

MODE PIN NO.	DC (V)
IC601	
1	6
2	6.1
3	6.1
4	6.1
5	6.1
6	6.1
7	0.7
8	6.1
9	6.1
10	6.1
11	1.1
12	0
13	1
14	6.1
15	0
16	5.2
17	0.1
18	5
19	0
20	12.1
21	5.9
22	0
23	0
24	4.9
25	3.9
26	4.7
27	4.7
28	6.1
29	6.1
30	6.1
31	6.1
32	6.1
33	6.1
34	0
35	0
36	6.1
37	6.1
38	0
39	6.1
40	6.1

MODE PIN NO.	DC (V)
41	6.1
42	6.1
43	6.1
44	6
45	6
46	6
47	6.1
48	6.1
IC602	
1	14.4
2	2.8
3	12.1
4	2.6
5	0
IC603	
1	5.9
2	4.7
3	4.8
4	0
5	6
6	6.1
7	8
8	11.7
IC605	
1	-15.4
2	NC
3	-15.4
4	-15.4
5	14.4
6	10.3
7	1.6
8	-15.4
9	-15.4
10	-15.4
11	1.5
12	10.2
13	14.4
14	-14.4
15	-13.7
16	NC
17	-15.3
IC606	
1	NC
2	5
3	0.1
4	5
5	4.9
6	0
7	0
8	0
9	4.8
10	4.9
11	0
12	5
13	5
14	0
15	0
16	5
IC607	
1	-15.3
2	0
3	0
4	-15.4
5	0
6	0.1
7	-15.3
8	13.6
IC610	
1	6.2
2	6.1
3	6.1
4	0
5	6.1
6	6.1
7	6.2
8	12.2
Q603	
E	0
C	0
B	0.6
Q604	
E	0
C	12.1
B	8
Q605	
E	0
C	0
B	4.4
Q606	
E	0
C	14.3
B	0
Q607	
E	-14.4
C	-14.3
B	-14.3

MODE PIN NO.	DC (V)
Q614	
E	11.5
C	0
B	11.9

<ANALOG PWB(6/6)>

MODE PIN NO.	DC (V)
IC902	
1	4.9
2	0
3	3.3

<DIGITAL PWB(1/15)>

MODE PIN NO.	DC (V)
Q7501	
E	0
C	1
B	2.1

<DIGITAL PWB(4/15)>

MODE PIN NO.	DC (V)
IC6250	
1	0
2	5.4
3	1.6
4	0
5	0
6	0
7	0
8	0
9	5.3
10	0.7
11	0
12	3.5
13	0
14	0
15	0
16	5.3
17	0
18	0
19	0
20	2.2
21	0
22	0
23	5.3
24	5.3
IC6251	
1	1.6
2	0
3	NC
4	5
5	3.3
Q6201	
E	0.5
C	0
B	0.5
Q6202	
E	3.3
C	0
B	2.6
Q6203	
E	0.5
C	0
B	0.5
Q6204	
E	2.9
C	0
B	2.2
Q6205	
E	2.9
C	0
B	2.2
Q6206	
E	3.3
C	0
B	2.6
Q6207	
E	1.3
C	5
B	2
Q6208	
E	1.3
C	5
B	2.1
Q6209	
E	1.4
C	5
B	2.1
Q6210	
E	1.3
C	5
B	2.1

MODE PIN NO.	DC (V)
Q6211	
E	0.8
C	5
B	1.5
Q6212	
E	0
C	5
B	0.7
Q6213	
E	0
C	5
B	0.7
Q6214	
E	1.5
C	5
B	2.2
Q6250	
E	1.5
C	5
B	2
Q6251	
E	2.2
C	5
B	2

<DIGITAL PWB(5/15)>

MODE PIN NO.	DC (V)
IC6002	
1	1.5
2	1.5
3	0
4	2.4
5	3.2
IC6003	
1	0.7
2	0
3	0
4	0
5	3.2
6	0.7
7	3.2
8	3.1
IC6004	
1	0
2	NC
3	0
4	0
5	3.2
6	0.7
7	3.2
8	3.1
IC6724	
1	0
2	3.3
3	0
4	3.3

<DIGITAL PWB(7/15)>

MODE PIN NO.	DC (V)
IC6101	
1	1.2
2	2.4
3	0
4	1.2
5	0
6	1.2
7	1.2
8	2.4
9	1.2
10	1.2
11	0
12	1.2
13	1.2
14	0
15	2.4
16	0
17	1.2
18	1.2
19	0
20	0
21	1.2
22	1.2
23	0.6
24	0.6

WAVEFORMS

MODE PIN NO.	DC (V)
IC9001	
1	8.6
2	13.3
3	3.5
4	0
5	0.9
6	1.3
7	3.4
8	0.9
IC9101	
1	3.3
2	0
3	2.5
IC9201	
1	6.5
2	13.3
3	1.3
4	0
5	0.9
6	1.3
7	3.3
8	0.9
IC9301	
1	1.2
2	NC
3	0
4	0.3
5	3.2
6	NC
7	NC
8	3.2

MODE PIN NO.	DC (V)
IC7601	
1	0
2	0
3	NC
4	NC
5	0
6	1
7	2.8
8	0
9	0
10	0
11	0
12	0
13	1.9
14	0
15	1.4
16	3.2
17	1.8
18	NC
19	0
20	3.2
21	0
22	0
23	NC
24	NC
25	NC
26	NC
27	NC
28	NC
29	4.9
30	3.2
31	0
32	0
33	0
34	0
35	0
36	3.2
37	0
38	0
39	NC
40	NC
41	3.2
42	NC
43	NC
44	NC
45	NC
46	0
47	3.2
48	0
49	3.2
50	NC
51	NC
52	NC
53	NC
54	NC
55	NC
56	NC
57	NC
58	NC
59	NC
60	NC
61	NC

MODE PIN NO.	DC (V)
62	3.9
63	NC
64	3.2
65	NC
66	NC
67	NC
68	NC
69	NC
70	NC
71	0
72	0
73	NC
74	NC
75	NC
76	NC
77	NC
78	NC
79	NC
80	0
81	0
82	3.2
83	NC
84	3.2
85	NC
86	3.2
87	3.2
88	3.2
89	0
90	NC
91	0
92	NC
93	3.2
94	3.2
95	0
96	0.2
97	0
98	0
99	4.9
100	0
IC7602	
1	0
2	0
3	0
4	0
5	3.2
6	3.2
7	0
8	3.2
IC7603	
1	3.3
2	3.3
3	0
4	5
5	5
IC7604	
1	NC
2	0
3	0
4	5
5	3.2
IC7605	
1	5
2	0
3	NC
4	0
5	0
6	5
IC7606	
1	5
2	0
3	NC
4	0
5	0
6	5

MODE PIN NO.	DC (V)
IC9101	
1	7
2	0
3	5
IC9301	
1	17.9
2	0
3	15.2
Q9021	
E	0
C	0.1
B	0.7
Q9281	
E	1.3
C	0
B	2.3

MODE PIN NO.	DC (V)
Q9282	
E	0
C	3.7
B	0.2
Q9283	
E	0
C	3.8
B	0.2
Q9284	
E	0
C	0
B	2.5

MODE PIN NO.	DC (V)
IC9501	
1	385
2	NC
3	0
4	15.7
5	0.1
6	1.1
7	0.8
PC9501	
1	11.1
2	10.1
3	13.6
4	1

MODE PIN NO.	DC (V)
IC9701	
1	13.1
2	11.9
3	0
4	2.6
IC9721	
1	13.2
2	9.1
3	0
4	2.6
IC9741	
1	13.2
2	5.1
3	0
4	1.3
5	6.9
IC9761	
1	13.2
2	3.3
3	0
4	1.2
5	6.8
IC9762	
1	3.3
2	3.4
3	0
4	2.6
5	1.1
Q9821	
E	0
C	0
B	0.6
Q9831	
E	0
C	0
B	0.6
Q9841	
E	0
C	0
B	0.6
Q9842	
E	0
C	0
B	0.7
Q9851	
E	13.1
C	6
B	13.1
Q9852	
E	0
C	13.1
B	0
Q9853	
E	0
C	0
B	3.1
Q9861	
E	0
C	0
B	0.6

MODE PIN NO.	DC (V)
Q0701	
E	0.2
C	0.4
B	0.9
Q0702	
E	0
C	0
B	0.6
Q0704	
E	0
C	4.9
B	0
Q0705	
E	0
C	0.2
B	0.7
Q0706	
E	4.5
C	4.9
B	3.3
Q0707	
E	0
C	4.4
B	0

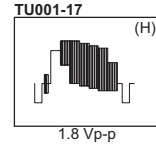
MODE PIN NO.	DC (V)
Q0901	
E	0.2
C	0.4
B	0.9
Q0902	
E	0
C	0
B	0.6
Q0904	
E	0
C	4.9
B	0
Q0905	
E	0
C	0.2
B	0.7
Q0906	
E	4.5
C	4.9
B	3.3
Q0907	
E	0
C	4.4
B	0

MODE PIN NO.	DC (V)
IC2001	
1	4.5
2	4.5
3	4
4	0
5	0
6	0
7	0
8	4.9

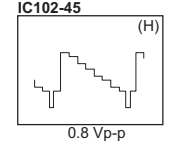
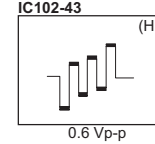
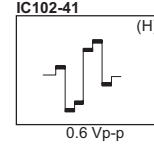
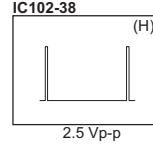
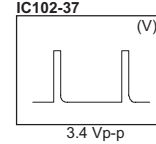
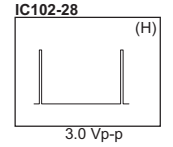
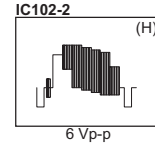
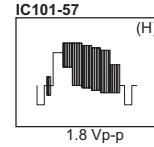
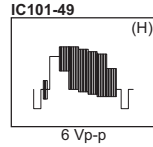
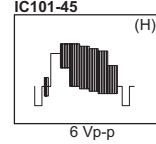
MODE PIN NO.	DC (V)
IC0821	
1	2.8
2	4.9
3	0

MODE PIN NO.	DC (V)
IC8001	
1	0
2	5
3	5
4	3.3
5	3.3
6	5
7	5
8	5
IC8501	
1	0.1
2	4.9
3	0

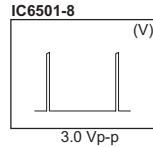
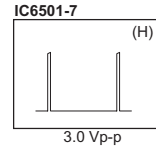
TUNER PWB(1/2)



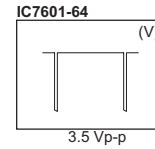
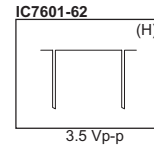
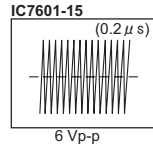
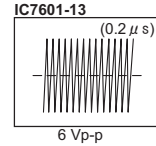
ANALOG PWB(1/6)



DIGITAL PWB(10/15)



DIGITAL PWB(14/15)





Victor Company of Japan, Limited
ILA Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA463)



Printed in Japan
VPT

JVC®

HD-ILA™
Powered by **D-ILA**

Projection Television Users Guide

***For Models:
HD-52FA97
HD-56FB97
HD-61FB97***



Illustration of HD-56FB97 and RM-C18G

Important Note:

In the spaces below, enter the model and serial number of your television (located at the rear of the television cabinet). Staple your sales receipt or invoice to the inside cover of this guide. Keep this user's guide in a convenient place for future reference. Keep the carton and original packaging for future use.

Model Number: _____

Serial Number: _____

LCT2170-001A-A
0806TNH-II-IM

Important Safety Precautions

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: To reduce the risk of electric shock. Do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.		
	The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.	
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.	

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid Improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Changes or modifications not approved by JVC could void the warranty.

- * When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.
- * To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



NOTICE (for USA)

This product has a High Intensity Discharge (HID) lamp that contains a small amount of mercury. It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronics Industries Alliance: <http://www.eiae.org>



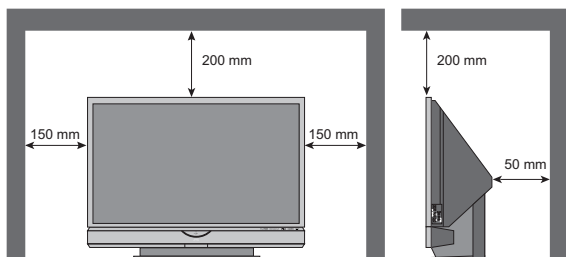
- As an "ENERGY STAR®" partner, JVC has determined that this product or product model meets the "ENERGY STAR®" guidelines for energy efficiency.

IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 16) Avoid improper installation and never position the unit where good ventilation is impossible. When installing this TV, distance recommendations must be maintained between the set and the wall, as well as inside a tightly enclosed area or piece of furniture. Keep to the minimum distance guidelines shown for safe operation.



17) Cautions for installation

- Do not tilt the TV towards the left or right, or towards the back.
 - Install the TV in a corner on the floor so as to keep cords out of the way.
 - The TV will generate a slight amount of heat during operation. Ensure that sufficient space is available around the TV to allow satisfactory cooling.
- 18) Make enough room for inserting and removing the power plug. Place the TV as close to the outlet as possible. The main power supply for this TV is controlled by inserting or removing the power plug.

FCC Notice:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warnings

We have an important note for customers who subscribe to basic cable services (do not have a separate cable box) and plan to use their JVC TV remote control to select channels.

Once you run the Auto Tuner Setup (which detects and programs all the channels your TV is receiving through the RF input), every channel number available from your cable company will appear in your television's Channel Summary and they will all be marked as available for scanning. Even though every channel is detected and appears as available, you will only be able to view those that you specifically subscribe to from your cable company. This will likely mean there are blank channels between those channels you wish to scan or "surf".

We apologize for any inconvenience this may cause but it is important to note that this is not a malfunction of your television. If you want to sequentially scan those channels you subscribe to without blank ones in between, you can contact your cable company for their cable box and remote.

Caring for the Cabinet

Normally, light dusting with a soft, non-scratching duster will keep your TV clean.

If you wish to wipe down the television, first unplug it. Then wipe gently with a soft cloth, slightly moistened with water. You can add a few drops of mild liquid detergent to the water to help remove spots of oily dirt.

- DO NOT allow liquid to enter the TV through the ventilation slots.
- DO NOT use strong or abrasive cleaners on the TV.
- DO NOT spray liquids or cleaners directly on the TV's surface.
- DO NOT rub or scrub the TV harshly. Wipe the set gently with a soft cloth.

Caring for the Screen

The screen is treated with an electrostatic-proof coating. When it gets dirty, wipe it gently with a soft cloth. If the screen is very dirty, wipe it down with a cloth dipped in a diluted kitchen cleaner and thoroughly wrung-out. Then wipe immediately after with a clean, dry cloth.

Do not apply alcohol, organic solvents (like acetone), acidic or alkaline cleansers to the screen. These will remove the coating layer and cause discolorations.

Do not push or hit the screen. This could cause scratches on the screen surface and image distortions.

Warnings

Thank you for purchasing a JVC HDTV-ready projection television which uses the high-quality HD-ILA projection system. This is one of the highest quality and most technologically advanced televisions available today. It is recommended that you read this instruction manual before using your television in order to learn about it's many features. Cautions related to the safe use of the device and important information which will help you to be able to use this device for a long time is in the Appendix. Once again, thank you for purchasing this television and please enjoy using it.

In order to use the television for a long time

This television uses a lamp to project the picture onto the screen. Before using this television, please read the safety cautions and information about this television which are summarized below.

1. When the power is turned on, the warming up commences

This television uses a lamp to project the picture onto the screen. Once the lamp has warmed up, you can enjoy the pictures at their full brightness. What happens when the power is turned on is explained below. Immediately after the power is turned on, since the lamp has not had time to warm up, the picture is displayed only dimly on the screen. As the lamp warms up, the picture becomes brighter. It takes approximately one minute for the lamp to warm up to it's normal operating temperature. There are 2 LED indicators on the front panel of the television that can be used as a guide. When the POWER button is pressed, the LAMP LED indicator blinks in orange for approximately 1 minute at approximately every 2 seconds, and then goes out.

Note: It is impossible to turn the power off during this period. After 1 or more minutes have passed, you can turn off the power.

2. Cooling the inside of the television and the lamp

Cooling is also performed while the television is being shut down.

When the POWER button is pressed to turn off the power, the following operations are performed. When the television is turned off, the picture on the screen disappears. Once the screen is dark, cooling is performed for approximately 1 minute. When the cooling is being performed, the LAMP LED indicator on the front panel blinks in orange at approximately every 3 seconds. **The television can not be operated while the cooling is being performed.** After the cooling has been performed for 1 minute, the power is turned off. **Do not remove the electrical plug until after the cooling process has completed.** If the electrical plug is removed before the cooling process has completed, the internal circuits and lamp may overheat leading to the life of the lamp being shortened and the possibility of malfunctions.

Do not block the ventilation holes.

Do not block the ventilation holes while the power is turned on. Do not block the air intake holes behind the speaker grills.

3. The lamp is a consumable item

Replace the lamp when it has blown or when the picture becomes dark. The lamp is a user replaceable item. The lamp must be recycled. For a detailed explanation on how to recycle the lamp, refer to the Appendix and the instructions that are included with the replacement lamp kit. The life of the lamp changes depending on the atmospheric temperature and altitude in which the TV is being used.

Warnings

4. The television requires a lot of electrical power

It is recommended that the television is connected directly to the wall socket, and not to another device. When connecting the television to a wall socket that is being used by another device, or when using an extension cord, be careful not to exceed the electrical capacity of the socket.

Do not turn the power on and off repeatedly in a short amount of time.

It subjects the television and the lamp to stress and may lead to malfunctions and the life of the lamp being shortened.

5. The screen is made of plastic

Handle the screen very carefully as it can scratch easily. Do not rub, hit or press on it with any hard objects. When the screen is dirty, gently wipe it with a soft cloth. Refer to the Appendix for details on how to clean the screen.

6. Caution! Warm air from the air ducts

This unit has an air duct for cooling. The duct will blow warm air while the television is operating. When placing the television, make sure not to locate it too close to wallpaper. The warm air could cause the color of the wallpaper to change. Also, take care to keep children and pets away from the warm air ducts. Long exposure to the warm air from the ducts could cause a minor burn.

7. Caution! Moving this television

When lifting this television, Do not hold by the screen frame. Holding the screen frame could cause it to detach, causing the television to fall.

8. Do not replace the lamp immediately after use

The lamp becomes extremely hot during use. If the lamp is touched immediately after use before it has a chance to cool down, there is a danger of burns. Be careful when handling the lamp.

9. Do not touch the lamp glass

If the lamp is used when there is dirt from fingers on the lamp glass, there is a possibility of the lamp breaking. Be careful not to touch the lamp glass.

10. ILA element characteristics

Do not project still pictures or pictures that have still segments for a long period of time. The still parts of the picture may remain on the screen. This is a characteristic of ILA elements and not a malfunction. The picture will disappear over time.

11. Condensation

When a heater is turned on or the television is moved from a cold place to a hot place, droplets of water may form on the lamp and screen. This is called condensation. If the television is used while this condensation is still present, the picture may seem distorted, and the inside of the screen may become dirty. In this case, wait until the condensation has gone before using the television.

12. Do not open the rear cabinet of this television

This television has a DIGITAL-IN terminal. Opening up the rear cabinet will violate the copyright of the program or software shown on the television. Please do not open the rear cabinet.

13. Usable Time

Do not keep the TV on for more than 24 hours consecutively. There is a possibility of the life of the lamp being shortened.

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Unpacking your TV

Thank you for your purchase of a JVC Color Television. Before you begin setting up your new television, please check to make sure you have all of the following items. In addition to this guide, your television box should include:

Television x 1



Remote Control x 1



AA
Batteries x 2



Note: Your television and/or remote control may differ from the examples illustrated here.

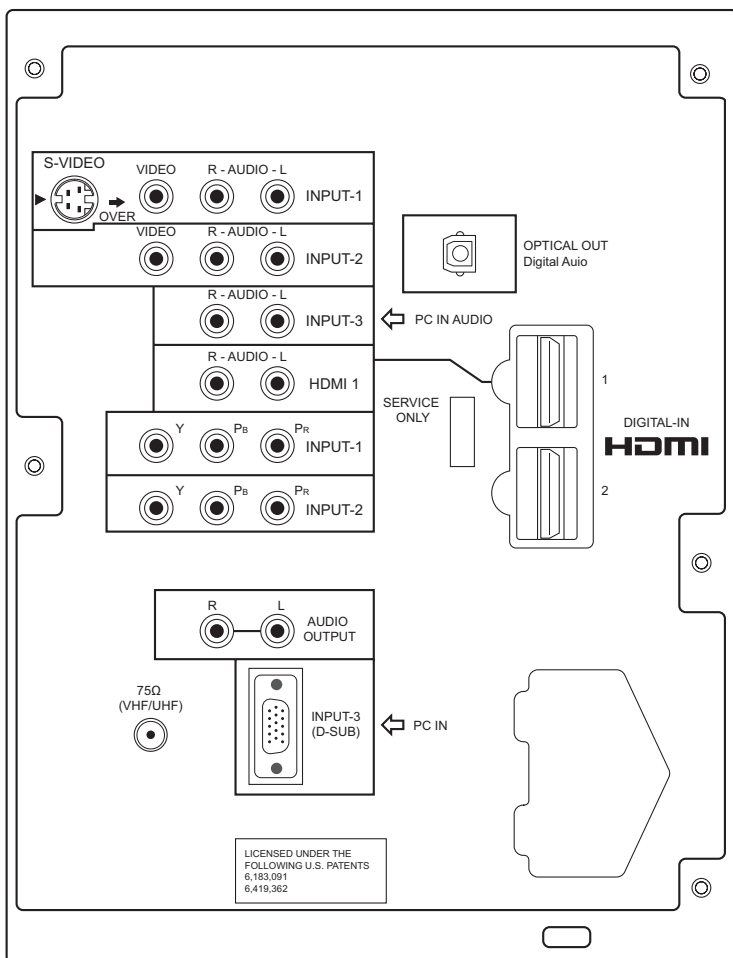
We recommend that before you start using your new television, you read your entire User's Guide so you can learn about your new television's many great features. If you're anxious to start using your television right away, a quick setup guide follows on the next few pages.

Quick Setup

TV Models

Before you connect your television to another device, please refer to the proper diagrams for your specific TV and remote. These will help assist you in understanding how to connect your television to another device, as well as use the remote to set up your television.

Rear Panel Diagram

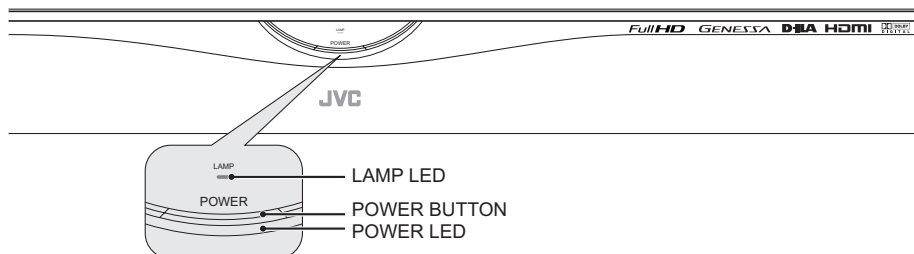


Notes:

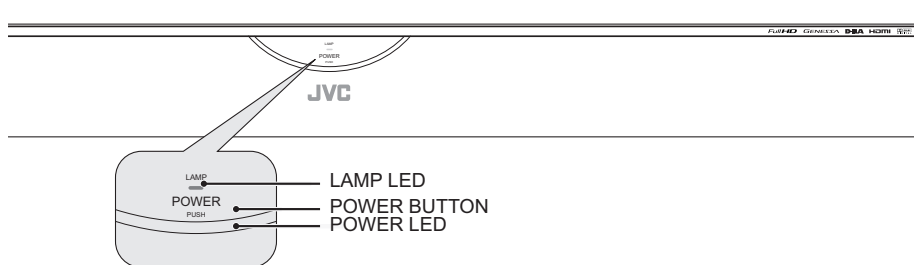
- The terminal labeled "SERVICE ONLY", is exclusively used to update the software version.
- INPUT-3 is for use only with a PC.

Front Panel Diagram

Model: HD-52FA97

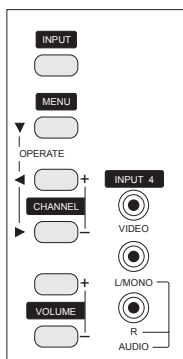


Models: HD-56FB97, HD-61FB97



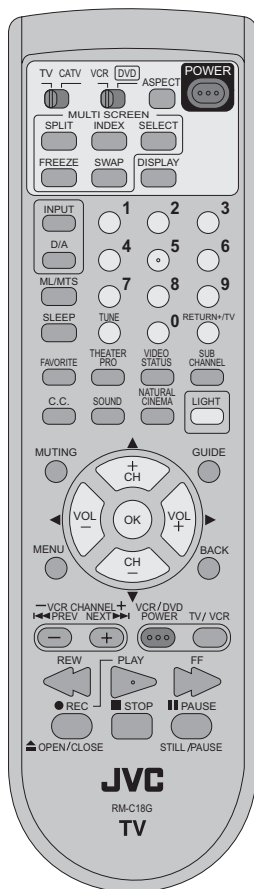
- For information on the LED, see page 80.

Side Panel Diagram



Quick Setup

Remote Control



RM-C18G

- For information on remote control buttons, see pages 62 - 74.
- SUB CHANNEL and GUIDE buttons are for digital channels. If your TV is connected to an ATSC antenna or Digital Cable, you can use these buttons.

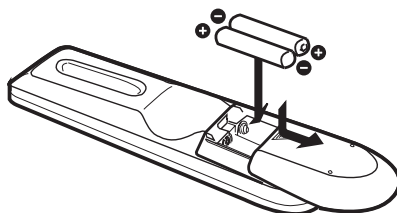
Getting Started

These quick setup pages will provide you, in three easy steps, with the basic information you need to begin using your new television right away. If you have questions, or for more detailed information on any of these steps, please consult other sections of this manual.

Step 1 – The Remote Control

Before you can operate your remote control, you first need to install the batteries (included).

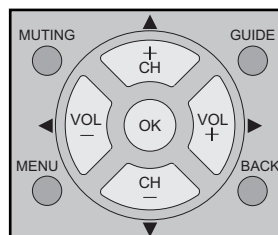
Slide the cover on the back of the remote down towards the bottom of the remote control. Insert two batteries (included) carefully noting the “+” and “-” markings, placing the “-” end in the unit first. Slide the cover back into place.



When you change the batteries, try to complete the task within three minutes. If you take longer than three minutes, the remote control codes for your VCR, DVD, and/or cable box/satellite receiver may have to be reset. See pages 27 - 30.

Key Feature Buttons

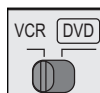
The four key feature buttons at the center of the remote can be used for basic operation of the television. The top and bottom buttons will scan forward and back through the available channels. To move rapidly through the channels using JVC's **Hyperscan** feature, press and hold CH+ or CH-. The channels will zip by at a rate of five channels per second. The right and left buttons will turn the volume up or down. These buttons are also marked with four arrows and are used with JVC's onscreen menu system. To use the onscreen menus, press the MENU button.



Basic Operation

Turn the television on and off by pressing the POWER button at the top right corner of the remote. The POWER LED will light blue. If this is the first time you are turning on the TV, the interactive plug-in menu appears.

- Make sure the TV/CATV switch is set to TV. Move the switch to CATV only if you need to operate a cable box.
- Slide the VCR/DVD selector switch to VCR to control a VCR. Slide to DVD to control a DVD player. Please see pages 27 to 30 for instructions on programming your remote control to operate a cable box, VCR or DVD player.



Note:

- If the lamp replacement message appears when you turn the television ON, see page 77.

Quick Setup

Step 2 – Connecting Your Devices

To make these connections, you will use plugs like the ones illustrated below.

Coaxial Cables



Used to connect an external antenna or cable TV system to your TV.

S-Video Cable



Used to make video connections with S-Video VCRs, Camcorders and DVD players.

Component Cables Composite Cables Audio Cables

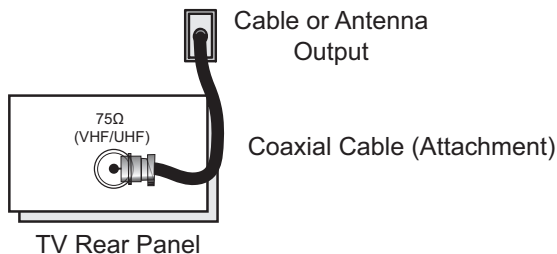


Used to connect audio/video devices like VCRs, DVD players, stereo amplifiers, game consoles, etc.

Notes:

- These connections are examples.
- After you are finished connecting your devices, plug the power cord into the nearest power outlet and turn on the TV.
- If you follow these diagrams and the television does not work properly, contact your local cable operator.
- To connect a DVD player, see VCR Connection. A DVD player is optional
- If you have a satellite television system, refer to the satellite TV manual.

No VCR Connection

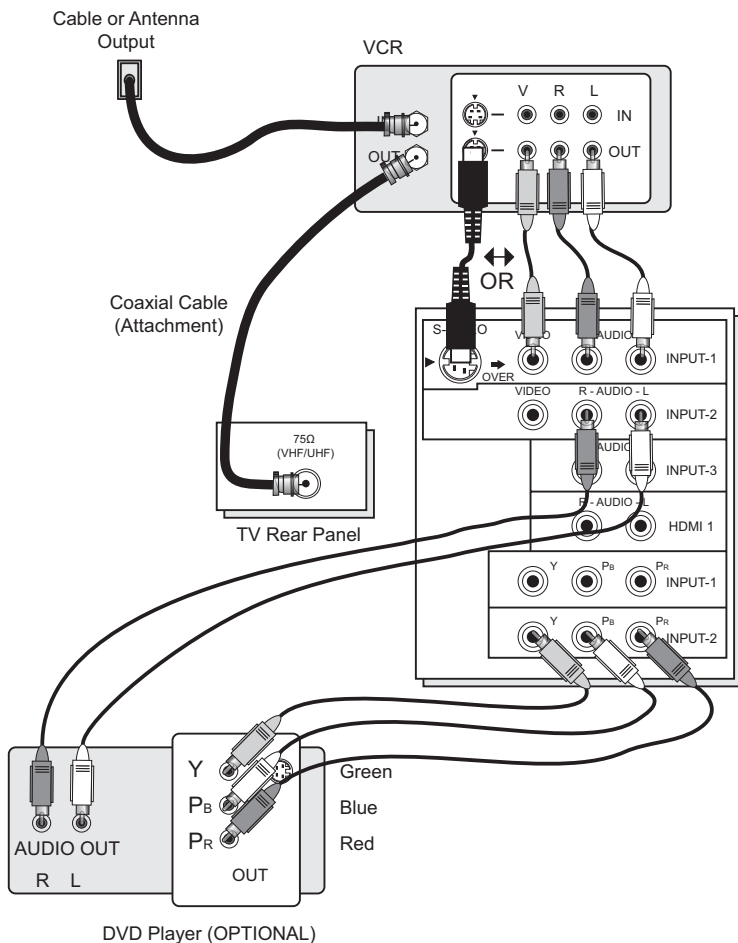


VCR Connection

Notes:

- Green, blue and red are the most common colors for DVD cables. Some models may vary colors. Please consult the user's manual for your DVD player for more information.
- Be careful not to confuse the red DVD cable with the red audio cable. It is best to complete one set of connections (DVD or audio output) before starting the other to avoid accidentally switching the cables.
- You may also connect the DVD player to Input 1.

Diagram #1

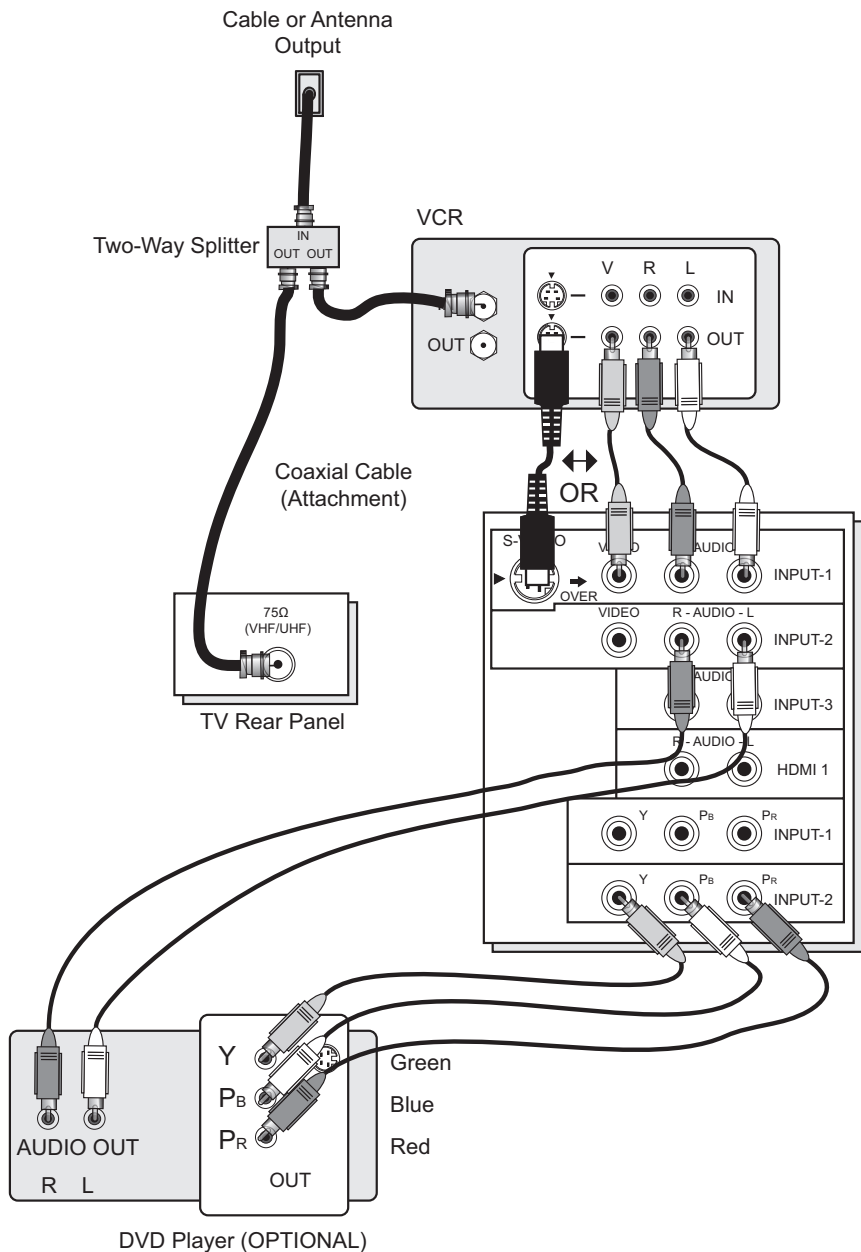


Note:

- If this connection setup does not work for you, try the connection setup on page 16.

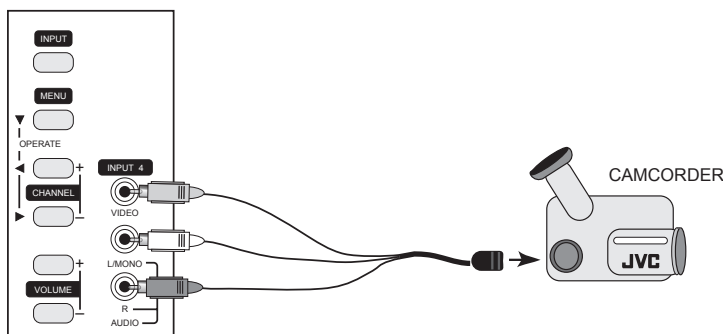
Quick Setup

Diagram #2



Connecting to a Camcorder

You may connect a camcorder, game console or other equipment to your television by using the side input jacks (Input 4) located on the side of the television. You can also connect these using the television's rear input jacks, using the same instructions.



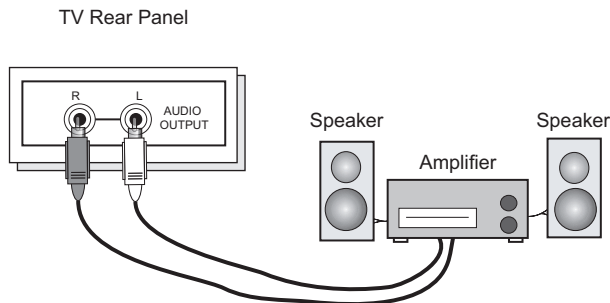
- 1) Connect a yellow composite cable from the camcorder VIDEO OUT, into the VIDEO IN on the side of the TV.
- 2) Connect a white cable from the camcorder LEFT AUDIO OUT, into the LEFT AUDIO IN on the side of the TV.
- 3) Connect a red cable from the camcorder RIGHT AUDIO OUT, into the RIGHT AUDIO IN on the side of the TV.

Note:

- If your camcorder is a mono sound model it will have only one AUDIO OUT. Connect it to the L/MONO on the side of the TV.

Quick Setup

Connecting to an External Amplifier



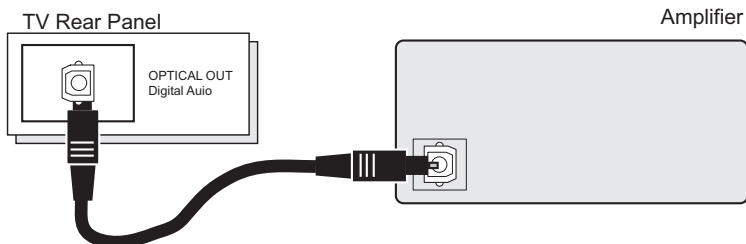
- 1) Connect a white cable from the LEFT AUDIO OUTPUT on the back of the TV to the LEFT AUDIO INPUT on the amplifier.
- 2) Connect a red cable from the RIGHT AUDIO OUTPUT on the back of the TV to the RIGHT AUDIO INPUT on the amplifier.

Notes:

- Refer to your amplifier's manual for more information.
- You can use AUDIO OUTPUT for your home theater system.
- You can not output audio using the AUDIO OUTPUT under the following conditions:
 - 1) When you have digital sound from an HDMI device connected to the HDMI 1 or HDMI 2 connection on the back of your TV. (See page 20).
 - 2) When you have analog sound from a DVI device connected to the AUDIO IN "HDMI 1" connection. (See page 19).

Connecting to an amplifier using your optical output

You can connect an amplifier that has an optical digital input terminal by using an optical digital cable from the optical output. The signal that is output can be PCM or Dolby Digital.



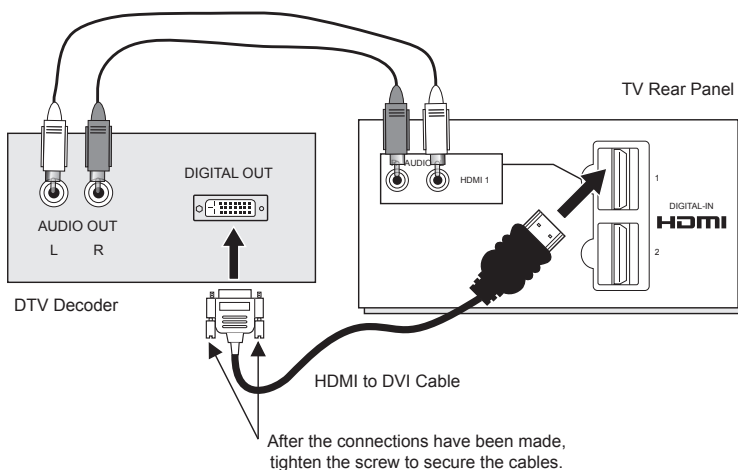
- 1) Connect the optical cable from the back of the TV to the back of the amplifier.

Notes:

- This terminal can only output digital audio.
- In order to use the optical output connection, select PCM or Dolby Digital on Digital Sound in the Digital Setup Menu. See page 53.
- Refer to your owners manual on using your amplifier.

Connecting to a Digital TV Receiver

By connecting a Digital TV Receiver, high definition pictures can be displayed on your TV in their digital form.



- 1) Connect the HDMI to DVI Cable from the DIGITAL OUT on the back of your DTV decoder, to the HDMI1 DIGITAL-IN on the back of your television.
 - 2) Connect a red cable from the "R AUDIO OUT" on the back of your DTV Device, to the HDMI 1 "R AUDIO" input terminal.
 - 3) Connect a white cable from the "L AUDIO OUT" on the back of your DTV Device, to the HDMI 1 "L AUDIO" input terminal.
- The digital-in terminal is not compatible with the picture signal of a personal computer.
 - Use a HDMI to DVI cable (commercially available) in order to digitally connect the television with a DTV decoder.

Notes:

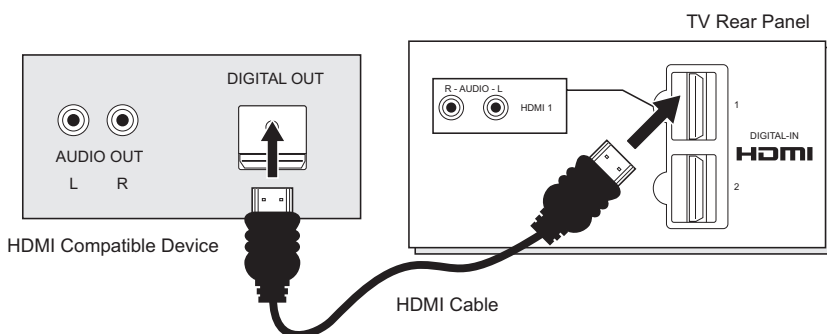
- If 480p signals (640x480 or 720x480) are displayed on the screen, the horizontal balance may be slightly shifted. Access the "DIGITAL-IN" in the initial setup menu to adjust it. (Refer to page 51.)
- When you do the above connection, set DIGITAL-IN1 AUDIO in the Initial Setup menu to ANALOG. See "DIGITAL-IN1 AUDIO", page 51.
- The Analog Audio input can only be used with the HDMI 1 input.
- When setting the "DIGITAL AUDIO – ANALOG / DIGITAL" menu setting on the TV, please note that this setting only effects the HDMI 1 jack and that if you use a DVI to HDMI adapter this connection must be made to the HDMI 1 along with analog audio cables.

Quick Setup

Connecting to an HDMI Compatible Device

By connecting an HDMI compatible device, high definition pictures can be displayed on your TV in their digital form. Some HDMI devices can include DVD players, D-VHS or any HDMI compatible devices.

HDMI (High Definition Multimedia Interface) is the first industry supported, uncompressed, all digital audio/video interface. HDMI provides an interface between any audio/video source, such as a set-top box, DVD player, A/V receiver or an audio and/or video monitor, such as a digital television (DTV).



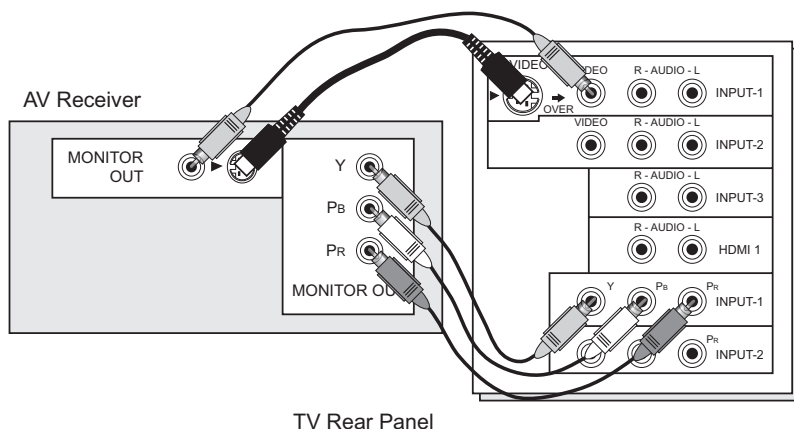
- 1) Connect the HDMI Cable from the DIGITAL OUT on the back of your DTV or HDMI device, to the DIGITAL-IN on the back of your television.

Notes:

- When you do the above connection, set DIGITAL-IN1 AUDIO in the Initial Setup menu to DIGITAL. See "DIGITAL-IN1 AUDIO", page 51.
- Some decoders may not respond depending on the equipment that you have connected when it is connected to the HDMI.
- If the HDMI output device signal is changed (for example, 480i/60Hz is changed to 480p/60Hz), the screen may turn green and there may be some distortion for a short time until the signal becomes stable.
- When you have an HDMI device connected to the HDMI 1 connection on the back of your TV, your TV detects it, and blocks the analog audio signal coming into the "HDMI 1" jacks. Therefore, you can not hear any analog sound from the other device connected to the "HDMI 1" jacks, while you are viewing the images from the HDMI device.

Connecting to an AV Receiver using your television's V1 Smart Input

By connecting your AV Receiver to your television's V1 Smart Input, you can watch picture sources from many different devices, without having to change or use the other input connections on your TV. This allows you to free up the other input connections so you can connect more devices to your television.



- 1) Connect an S-Video Cable from the AV Receiver's MONITOR OUT, to the S-Video INPUT-1 on the back of your television.
- 2) Connect a Yellow Composite Cable from the AV Receiver's MONITOR OUT, into the VIDEO INPUT-1 on the back of your television.
- 3) Connect a Green Component Cable from the AV Receiver's Y MONITOR OUT, into the Y VIDEO INPUT-1 on the back of your television.
- 4) Connect a Blue Component Cable from the AV Receiver's Pb MONITOR OUT, into the Pb VIDEO INPUT-1 on the back of your television.
- 5) Connect a Red Component Cable from the AV Receiver's Pr MONITOR OUT, into the Pr VIDEO INPUT-1 on the back of your television.

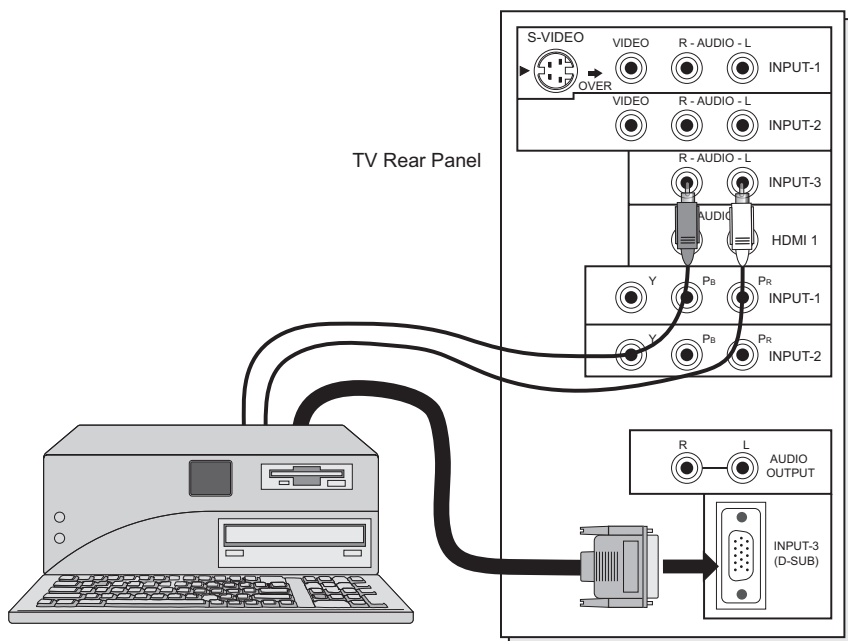
Note:

- Please refer to your AV Receiver instruction manual for more information on connecting your speakers and other devices like a DVD player.
- Use your AV Receiver's remote to switch to the different devices you have connected.
- Some AV Receivers may not respond when the V1 Smart Input function is turned on.
- If you have video connections for each input device connected to your AV Receiver, you should not connect them using both S-Video and Composite connection at the same time when you are using V1 Input as the V1 Smart Input. In this case we recommend using the S-Video connection.

Quick Setup

Connecting to the computer

This TV can be used as a computer screen. Use a commercially available D-SUB cable to connect the TV's PC INPUT terminal to the computer's analog RGB output terminal. If you want to listen to the sound from the computer, use a commercially available RCA cable to connect the INPUT-3 audio input terminal to the computer's audio output terminal.



Notes:

- Refer to your computer manual for a detailed explanation of the connections concerning your computer.
- Make sure that the connectors are facing the correct way when connecting.
- After connecting, tighten the two screws to fix the connectors in place.

Looking at the images from a computer

After starting the computer, press the INPUT button to choose INPUT-3. You can listen to the sound when the sound from the computer is connected to the INPUT-3 AUDIO input terminal.

Note:

- When the sound from the computer is connected to INPUT-3 by choosing external input INPUT-3, the sound from the computer can be listened to, but the images from the computer cannot be seen.

Table of signals for each type of computer

Resolution	Vertical Frequency (Hz)	Horizontal Frequency (kHz)
640 x 480 (VGA)	60.0	31.5
1024 x 768 (XGA)	60.0	48.4

- Only the above formats are supported.
- Even with the above formats at 60 Hz, some problems may be experienced depending on the quality of the synchronous signal. (Depending on the quality, some pictures may not be displayed correctly).
- Apple Macintosh* computers are not supported.

When a picture is not displayed

With some computers, some problems can be solved by changing the settings. Check the computer's refresh rate and set it to 60Hz. Computers that cannot set the refresh rate to 60 Hz, can not be used with this TV. Refer to the computer's instruction manual.

*Apple Macintosh is a registered trademark of Apple Computer, Inc.

Note:

- If you are inputting a PC signal that is invalid, "Invalid Signal" will appear on the TV screen. It appears when the input is PC and it is a single screen.

Quick Setup

Step 3 – The Interactive Plug In Menu

When you turn your television on for the first time the interactive plug-in menu will appear. The plug-in menu helps you to get your TV ready to use by letting you set your preferences for:

- The language in which you want the onscreen menus to appear.
- Setting the TV's clock to the correct time so your timer functions will work properly. You can choose "AUTO" or "MANUAL" for setting the clock.
- The auto tuner setup of which channels you wish to receive.

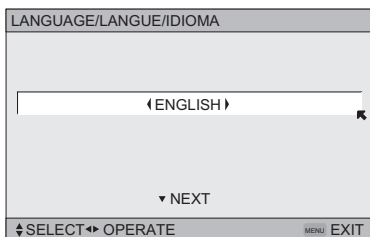
We recommend you complete the interactive plug-in items before you start using your television.

Notes:

- The interactive plug-in menu setting does not appear if your TV has been turned on before. In this case use the onscreen menus to perform these settings. See pages 44, 59, 34.
- If you press the Menu button while setting up the interactive plug-in menu, it will skip over it.

Language

After the "JVC INTERACTIVE PLUG IN MENU" has been displayed, the TV automatically switches to the LANGUAGE settings. You can choose to view your onscreen menus in three languages: ENGLISH, FRANÇAIS (French) or ESPAÑOL (Spanish).



To choose a language:
ENGLISH, FRANÇAIS or ESPAÑOL



To NEXT (To set clock)

(To be continued...)

Auto Clock Set

Before you use any of your TV's timer functions, you must first set the clock. You may precisely set your clock using the XDS time signal broadcast by most public analog broadcasting stations. If you do not have this in your area, you will have to set the clock manually. See manual clock set below. To set the clock using the XDS signal:

SET CLOCK	
MODE	← AUTO →
TIME	-- : -- --
TIME ZONE	← ATLANTIC →
D.S.T.	← ON →
▼ NEXT	
◆ SELECT ◆ OPERATE MENU EXIT	

- ◀▶ To choose AUTO
- ▼ To TIME ZONE
- ◀▶ To select your time zone: (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)
- ▼ To move to D.S.T. (Daylight Savings Time)
- ◀▶ To turn D.S.T. ON or OFF
- ▼ To NEXT (To Auto Tuner Setup)

Notes:

- D.S.T. can be used when it is set to ON in the SET CLOCK menu.
- Only when the MODE is set to AUTO, the Daylight Savings Time feature automatically adjusts your TV's clock for Daylight Savings. The clock will move forward one hour at 2:00 am on the first Sunday in April. The clock will move back one hour at 2:00 am on the last Sunday in October.
- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

Manual Clock Set

To set your clock manually (without using the XDS signal), choose MANUAL. If you choose AUTO, see auto clock set above.

SET CLOCK	
MODE	← MANUAL →
TIME	-- : -- --
TIME ZONE	← ATLANTIC →
D.S.T.	← ON →
▼ START CLOCK	
◆ SELECT ◆ OPERATE MENU EXIT	

- ◀▶ To choose MANUAL
- ▼ To TIME
- ◀▶ To set the hour
- ▼ To minute
- ◀▶ To set the minute
- ▼ To TIME ZONE
- ◀▶ To select your time zone: (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)
- ▼ To move to D.S.T. (Daylight Savings Time)
- ◀▶ To turn D.S.T. ON or OFF
- ▼ To START CLOCK

Note:

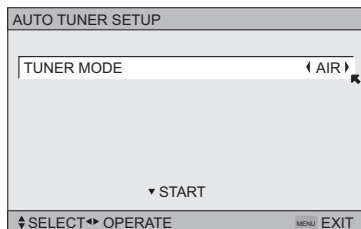
- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

(To be continued...)

Quick Setup

Auto Tuner Setup

In auto tuner setup, the TV automatically scans through all available channels, memorizing the active ones and skipping over blank ones or channels with weak signals. This means when you scan (using the CHANNEL +/- buttons) you will receive only clear, active channels.

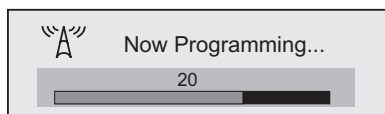


To choose CABLE or AIR (or SKIP when you skip Analog Auto Tuner Setup)



To START

After Analog Auto Tuner Setup is finished, Digital Auto Tuner Setup starts.



When the setup is finished, "THANK YOU ! SETUP IS NOW COMPLETE" is displayed. Your quick setup is now complete. You can now begin watching your television, or you can continue on in this guide for more information on programming your remote control, or using the JVC onscreen menu system to customize your television viewing experience.

Notes:

- If you want to cancel the Auto Tuner Setup, press the MENU button.
- Noise muting will not work during Auto Tuner Setup.
- If you choose SKIP, it finished without doing the Auto Tuner Setup.

Cable Box and Satellite Users: After your auto tuner setup is complete, you may, (depending on the type of hookup), have only 1 channel, usually 3 or 4 in the auto tuner memory. This is normal.

Remote Programming

You can program your remote to operate your cable box, satellite receiver, VCR or DVD player by using the instructions and codes listed below. If the equipment does not respond to any of the codes listed below or to the code search function, use the remote control supplied by the manufacturer.

Cable Box or Satellite Codes

The remote control is programmed with cable box and satellite codes for power on/off, channel up/down, and 10 key operation.

- 1) Find the cable box or satellite brand from the list of codes shown below.
 - 2) Slide the 2-way selector switch to "CATV".
 - 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
 - 4) Release the DISPLAY button, and confirm the operation of the cable box/satellite receiver.
- If your cable or satellite box does not respond to the first code, try the others listed. If it does not respond to any code, try the search codes function, on page 30.

Cable Box	Codes	Cable Box	Codes	Digital Satellite Systems	Codes
ABC	024	Puser	032	EchoStar (Dish Network)	100, 113, 114, 115
Archer	032, 025	RCA	061, 070		
Cableview	051, 032	Realistic	032		Express VU 100, 113
Citizen	022, 051	Regal	058, 064, 040, 041, 042, 045, 068		
Curtis	058, 059	Regency	034	G.E.	106
Diamond	024, 032, 025			G.I.	108, 120, 121, 122
Eagle	029	Rembrandt	037, 032, 051, 038	Gradiente	112
Eastern	034	Samsung	051	Hitachi	104, 111
GC Brand	032, 051	Scientific Atlanta	057, 058, 059	HNS (Hughes)	104
Gemini	022, 043	SLMark	051, 047	Magnavox	102, 103
General Instrument/Jerrol	065, 024, 025, 026, 027, 020, 021, 022, 057, 023, 072, 074	Sprucer	051, 056	Panasonic	105
Hamlin	040, 041, 042, 045, 058, 064	Stargate	032, 051	Philips	102, 103, 116
Hitachi	049, 024	Telecaption	067	Primestar	108
Macom	049, 050, 051, 054	Televue	047, 051	Proscan	106, 109, 110
Magnavox	033	Texscan	044	RCA	106, 109, 110
Memorex	030	Tocom	035, 036, 066, 074	Sony	107
Movietime	032, 051	Toshiba	050, 048	Star Choice	104, 108
Oak	039, 037, 048	Unika	032, 025	Toshiba	101, 104, 117, 118, 119
Panasonic	055, 056, 060, 071, 073	Universal	022, 032	Uniden	102, 103
Paragon	063	Videoway	052		
Philips	028, 029, 030, 052, 053, 031, 069	Viewstar	029, 030		
Pioneer	047, 062	Zenith	063, 046		
Pulsar	051, 032	Zenith/Drake Satellite	046		

Quick Setup

VCR Codes

The remote control is programmed with VCR codes for power on/off, play, stop, fast-forward, rewind, pause, record, channel up/down operation.

- 1) Find the VCR brand from the list of codes shown below.
 - 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR".
 - 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
 - 4) Release the DISPLAY button, and confirm the operation of the VCR.
- If your VCR does not respond to the first code, try the others listed. If it does not respond to any of the codes, try the search codes function on page 30.
 - After you program your remote, some VCR buttons may not work properly. If so, use the VCR's remote.
 - To record, hold down the REC button on the remote and press PLAY.

VCR	Codes	VCR	Codes	VCR	Codes
Admiral	035	Marantz	003, 004, 005	Samsung	037, 060, 062, 033, 089
Aiwa	027, 032, 095	Marta	064	Samtron	089
Akai	029, 072, 073, 074	Memorex	024, 067	Sansui	003, 026, 020, 052
Audio Dynamic	003, 005	MGA	038, 040, 047, 048, 041, 042	Sanyo	063, 067, 091, 071
Bell & Howell	063, 071	Minolta	058, 045, 093	Scott	059, 060, 062, 067, 038, 040, 047, 048, 026, 020
Broksonic	020, 026, 094	Mitsubishi	038, 040, 047, 048, 041, 042, 078, 090	Sears	063, 064, 065, 066, 058
Canon	023, 025	Multitech	047, 027, 062	Sharp	035, 036, 080, 088
CCE	043	NEC	003, 004, 005, 000	Shintom	075
Citizen	064	Olympic	024, 023	Signature 2000	027, 035
Craig	063, 029, 064	Optimus	028, 021, 035, 064	Singer	075
Curtis Mathes	045, 024, 027, 093	Orion	026, 020	Sony	028, 029, 030, 053, 054, 055
Daewoo	043, 059, 024, 092	Panasonic	023, 024, 021, 022	SV 2000	027
DBX	003, 004, 005	Penney	024, 058, 045, 063, 003, 004, 005, 093	Sylvania	031, 023, 024, 027
Dimensia	045, 093	Pentax	058, 005, 045, 093	Symphonic	027, 081
Emerson	043, 026, 077, 061, 025, 042, 020, 076	Philco	031, 024, 027, 023, 026, 020, 043	Tashiro	064
Fisher	063, 066, 067, 065, 071, 091	Philips	031, 023, 024, 086	Tatung	003, 004, 005
Funai	027, 026, 020, 000	Pioneer	023	Teac	003, 004, 027, 005
G.E.	033, 045, 024	Proscan	045, 058, 023, 024, 031, 046, 059, 060, 093, 033, 087	Technics	021, 022, 023, 024
Go Video	037, 051, 049, 050, 089	Quasar	021, 022, 023, 024	Teknika	024, 027, 070
Goldstar	064	Radio Shack	033, 024, 063, 036, 067, 040, 027	Thomson	033, 096
Gradiente	083, 084, 081, 000, 001	RCA	033, 045, 058, 023, 024, 031, 046, 059, 060, 083, 084, 085, 087, 093, 096	Toshiba	059, 046, 079
Hitachi	023, 045, 058, 093, 027, 081	Realistic	024, 063, 036, 067, 040, 027	Vector Research	005
Instant Replay	024, 023			Wards	035, 036, 067, 044, 064
Jensen	003			Yamaha	063, 003, 004, 005
JVC	003, 004, 005, 000, 001, 002, 006, 007			Zenith	044, 082, 064, 094
Kenwood	003, 004, 064, 005				
LG	064				
LXI	027, 064, 058, 065, 066, 063, 067				
Magnavox	031, 023, 024, 086				

DVD Codes

The remote control is programmed with DVD codes for power on/off, play, stop, fast-forward, rewind, previous/next chapter, tray open/close, and still/pause operation.

- 1) Find the DVD player brand from the list of codes shown below.
 - 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "DVD".
 - 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
 - 4) Release the DISPLAY button, and confirm the operation of the DVD player.
- If your DVD player does not respond to the first code, try the others listed. If it does not respond to any of the codes, try the search codes function on page 30.
 - After you program your remote, some DVD buttons may not work properly. If so, use the DVD player's remote.

DVD Player	Codes	DVD Player	Codes	DVD Player	Codes
Aiwa	043	Mintek	057	Sharp	028
Apex	040, 054, 055	Mitsubishi	025	Sylvania	038
Bose	058	Next Base	056	SMC	048
Denon	020, 037	Onkyo	041, 052	Sony	024, 045, 046, 047
Funai	038	Oritron	044	Technics	020
Go-Video	032	Panasonic	020	Thomson	021
Harman Kardon	053	Philips	023, 036	Toshiba	023
Hitachi	031	Pioneer	022	Venturer	051
JVC	000	Polk Audio	036	Vialta	050
Kenwood	035, 020	Raite	033	Wave	042
KLH	051	RCA	021, 026	Yamaha	020, 049
Konka	039	Sampo	034	Zenith	027, 032
Koss	050	Samsung	030		

Quick Setup

Search Codes

Cable/Satellite Search Codes Function

- 1) Slide the first 2-Way Mode Selector switch to CATV.
- 2) Press the POWER and RETURN+/TV buttons. Hold for at least three seconds and release.
- 3) Press the POWER button on the remote, and see if the cable or satellite box responds.
- 4) If there was a response, press RETURN+/TV. The codes are now set. If there was no response, repeat Step 3. If you repeat Step 3 a total of 80 times without a response, use the remote control that came with your equipment.
- 5) Press RETURN+/TV to exit.

VCR/DVD Search Codes Function

- 1) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR" or "DVD".
- 2) Press the VCR or DVD POWER and RETURN+/TV buttons. Hold for at least three seconds and release.
- 3) Press the VCR or DVD POWER button, and see if the VCR or DVD responds.
- 4) If there was a response, press RETURN+/TV. The codes are now set. If there was no response, repeat Step 3. If you repeat Step 3 a total of 80 times for the VCR (40 times for the DVD player), and there is no response, use the remote control that came with your equipment.
- 5) Press RETURN+/TV to exit.

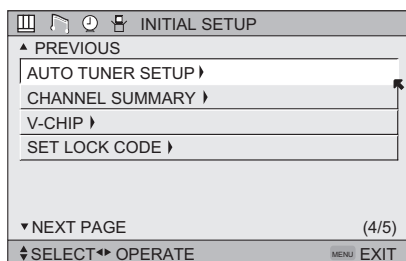
Onscreen Menus

Using the Guide

Certain symbols are used throughout this guide to help you learn about the features of your new television. The ones you will see most frequently are:

- ▲▼ Up and Down arrows mean press the CH+ or CH- buttons. Pressing the CH+ or CH- buttons let you:
 - Move vertically in a main menu screen
 - Move through a submenu screen
 - Move to the next letter, number, or other choice in a submenu
 - Back up to correct an error
 - Scan through TV channels (when not in a menu screen)
- ◀▶ Left and right arrows mean press the VOLUME+ or VOLUME- buttons to move left or right to:
 - Select a highlighted menu item
 - Select an item in a submenu
 - Select numbers in certain menu options
 - Turn the volume up or down (when not in a menu screen)
-  The “press button” icon means you should press the button named on your remote control. (Button names appear in SMALL CAPITAL LETTERS.)
- ↖ The “helping arrow” icon points to the highlighted or selected item in a menu.

To bring up the onscreen menu, press the MENU button on the remote control. The item that appears in green is the one currently selected. If you use the Menu button on the TV's side panel instead of the remote, an additional menu screen showing VIDEO STATUS and ASPECT will appear between INITIAL SETUP and PICTURE ADJUST. The “interactive plug-in menu” will appear the first time the TV is plugged in.



Note:

- Menus shown in this book are illustrations, not exact replications of the television's onscreen displays.

Onscreen Menus

The Onscreen Menu System

Your television comes with JVC's onscreen menu system. The onscreen menus let you make adjustments to your television's operation simply and quickly. Examples of the onscreen menus are shown on the next page. Detailed explanations on using each menu follow later in this guide. For information about the interactive plug-in Menu, see pages 24 - 26.

The Onscreen Menu System

To open the onscreen menu system, press the **MENU** button on the remote control. You navigate within the onscreen menus by using the four directional arrow buttons on the remote control. (These buttons are also the **CH +/-** and **VOL +/-** buttons. Channel and volume functions will not operate when the onscreen menu is active).

The selected feature and option on a menu screen are highlighted in a different color.

**Selected Option
(Green)**



**Selected Option
(Blue)**

To move to a different feature use the **▲ ▼** arrows to move up or down the list. When you press the up arrow at the top of the list or the down arrow at the bottom, the next menu screen will appear. Use the arrows **◀ ▶** to select an option from the highlighted feature. Pressing **MENU** on the remote control will close the onscreen menu system and return you to normal television viewing.

Each menu and its features will be discussed in the following pages of this guide.

Notes:

- If you do not press any buttons for about a minute, the onscreen menu will automatically shut off.
- Button names in this guide are shown in **SMALL CAPITAL LETTERS**.
- Menus may appear in different sizes onscreen depending on the aspect ratio selected.
- Some menu items may not appear in menu screens when certain aspect ratios or inputs are selected.

Onscreen Menus



Press the MENU button

To INITIAL SETUP 03



INITIAL SETUP	
▲ PREVIOUS	
[AUTO TUNER SETUP ▶]	
[CHANNEL SUMMARY ▶]	
[V-CHIP ▶]	
[SET LOCK CODE ▶]	
▼ NEXT PAGE (4/5)	
SELECT ◀▶ OPERATE	MENU EXIT

INITIAL SETUP 04



INITIAL SETUP	
▲ PREVIOUS	
[DIGITAL SETUP ▶]	
▼ NEXT PAGE (5/5)	
SELECT ◀▶ OPERATE	MENU EXIT

INITIAL SETUP 05



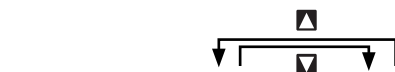
PICTURE ADJUST	
▲ PREVIOUS STANDARD	
TINT ◀ 00 ▶	[Slider]
COLOR ◀ 00 ▶	[Slider]
PICTURE ◀ 00 ▶	[Slider]
BRIGHT ◀ 00 ▶	[Slider]
DETAIL ◀ 00 ▶	[Slider]
▼ NEXT PAGE (1/3)	
SELECT ◀▶ OPERATE	MENU EXIT

PICTURE ADJUST 01



PICTURE ADJUST	
▲ PREVIOUS STANDARD	
COLOR TEMPERATURE ▶	HIGH
COLOR MANAGEMENT ▶	OFF
DYNAMIC GAMMA ▶	OFF
SMART PICTURE ▶	ON
▼ NEXT PAGE (2/3)	
SELECT ◀▶ OPERATE	MENU EXIT

PICTURE ADJUST 02



CLOCK / TIMERS	
▲ PREVIOUS	
[SET CLOCK ▶]	
[ON / OFF TIMER ▶]	
[LAMP TIMER RESET ▶]	
▼ NEXT PAGE	
SELECT ◀▶ OPERATE	MENU EXIT

CLOCK/TIMERS



SOUND ADJUST	
▲ PREVIOUS	
TURN ON VOLUME	10
VOLUME LIMIT	40
[RESET]	
▼ NEXT PAGE (2/2)	
SELECT ◀▶ OPERATE	MENU EXIT

SOUND ADJUST 02



SOUND ADJUST	
▲ PREVIOUS	
BASS ◀ 00 ▶	[Slider]
TREBLE ◀ 00 ▶	[Slider]
BALANCE ◀ 00 ▶	[Slider]
▼ NEXT PAGE (1/2)	
SELECT ◀▶ OPERATE	MENU EXIT

SOUND ADJUST 01



PICTURE ADJUST	
▲ PREVIOUS STANDARD	
DIGITAL VNR ▶	AUTO
MPEG NR ▶	ON
[RESET]	
▼ NEXT PAGE (3/3)	
SELECT ◀▶ OPERATE	MENU EXIT

PICTURE ADJUST 03

INITIAL SETUP	
▲ PREVIOUS	
[DIGITAL-IN ▶]	AUTO
[DIGITAL-IN1 AUDIO ▶]	{DIGITAL}
▼ NEXT PAGE (1/5)	
SELECT ◀▶ OPERATE	MENU EXIT

INITIAL SETUP 01



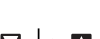
INITIAL SETUP	
▲ PREVIOUS	
[NOISE MUTING ▶]	{ON}
[FRONT PANEL LOCK ▶]	{OFF}
[V1 SMART INPUT ▶]	{ON}
[VIDEO INPUT LABEL ▶]	
[POSITION ADJUSTMENT ▶]	
[POWER INDICATOR ▶]	{OFF}
▼ NEXT PAGE (2/5)	
SELECT ◀▶ OPERATE	MENU EXIT

INITIAL SETUP 02



INITIAL SETUP	
▲ PREVIOUS	
[LANGUAGE ▶]	ENG, FRAN, ESP.
[CLOSED CAPTION ▶]	
[AUTO SHUT OFF ▶]	{OFF}
[XDS ID ▶]	{ON}
▼ NEXT PAGE (3/5)	
SELECT ◀▶ OPERATE	MENU EXIT

INITIAL SETUP 03



To INITIAL SETUP 04



Notes:

- The DIGITAL-IN menu can only be displayed when a 480p picture signal is input to the digital-in terminal and the picture is being displayed on the screen.
- SMART PICTURE menu cannot be displayed when DYNAMIC is selected for Video Status.
- When the Menu button on the TV side panel is pressed, the FRONT PANEL CONTROL menu between INITIAL SETUP 05 and PICTURE ADJUST 01 will appear.

Onscreen Menus

Auto Tuner Setup

The auto tuner setup function is described on page 26 as the interactive plug-in menu. If you need to run the auto tuner setup again, follow the steps below.



Press the MENU button



To AUTO TUNER SETUP



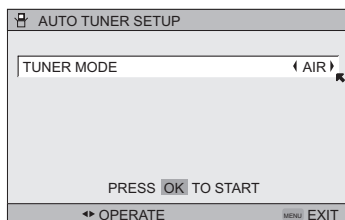
To operate



To choose CABLE or AIR



Press the Ok button to start



The auto tuner is finished when the message **PROGRAMMING OVER!** appears onscreen.



Press the Menu button when finished

Note:

- Digital Auto Tuner Setup will take approximately 14 minutes.

Onscreen Menus

Channel Summary

Channel summary allows you to customize the line-up of channels received by your TV. Regarding analog channels, you can add or delete channels from the line-up or prevent any unauthorized viewers from watching any or all 191 channels. Regarding digital channels, the only channels that will appear are the ones that are broadcasting.



Press the MENU button



To CHANNEL SUMMARY



To operate

The Channel summary screen will now be displayed with the channels set to scan marked with an "√". Regarding analog channels, you can delete channels from the scan by removing the "√". If any channels were missed during auto tuner setup and you wish to add them, you may by placing an "√" next to the channel number.

- Digital channels can not be added to the channel summary if the auto tuner setup did not find them.



To the SCAN column



Press the Ok button to include or delete from scan



Press the MENU button when finished

Analog Channels

CHANNEL SUMMARY							
CHNO.	SCAN	ID	LOCK	CHNO.	SCAN	ID	LOCK
01				06	✓	HBO	
02	✓	MTV		07	✓	L	
03				08			
04	✓	A&E		09	✓		
05	✓	E!		10			
SELECT				OPERATE			
				MENU EXIT			

Digital Channels

Channel Summary Digital				
CH No.	Scan	Station Name	LOCK	
D01		FOX		
D02	✓	ABC		
D02		CNN		
D10-1	✓	NBC	✓	
D10-2		BOX		
D12345	✓	NHK		
Select OK Operate BACK Back MENU Exit				

Note:

- The number of a digital channel may change, depending on the time of some broadcastings. If this channel existed and now had disappeared, the lock channel or scanned channel by the channel summary for that channel will be cancelled.

Onscreen Menus

How to set the channel label. *(This is only for analog broadcasting.)*



Press the MENU button



To CHANNEL SUMMARY



To operate



To the ID column



Press the Ok button to enter



To select the character you want



To move to the next space

...continue to follow these directions for all four spaces

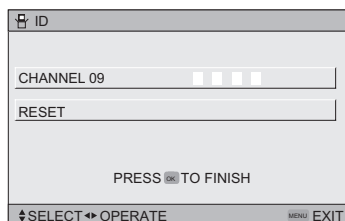


Press the Ok button to finish

Your characters are now set



Press the MENU button when finished



If you want to reset the characters you set:



Press the MENU button



To CHANNEL SUMMARY



To operate



To the ID column



Press the Ok button to enter



To select RESET



Press the Ok button to finish

Your characters are now reset

Notes:

- You can use characters for: Alphabet, numbers, marks and spaces.
- It is possible to set the maximum of 40 channel labels.
- If you try to set more than the 40 maximum, the message "MEMORY OVERFLOW" will appear.

You can block access to a channel by activating the channel lock.



Press the MENU button



To CHANNEL SUMMARY



To operate



To the Lock Column ()



Press the ZERO button to lock or unlock that channel



Press the MENU button when finished

Onscreen Menus

Channel Guard Message

When a viewer attempts to watch a guarded channel, the following message appears:

To watch a channel that you have locked, enter the Lock Code using the 10 key pad.

If the wrong code is entered, the message "INVALID LOCK CODE!" will flash on the screen.

The channel cannot be accessed until the correct code is entered.

THIS CHANNEL IS LOCKED BY
CHANNEL GUARD.
PLEASE ENTER LOCK CODE BY
10 KEY PAD TO UNLOCK IT.

NO. - - - -

Notes:

- Once a channel has been unlocked, it will remain unlocked until the television is turned off.
- See also "Set Lock Code", page 43.

V-Chip

Your TV is equipped with V-Chip technology which enables you to block channels or content that you feel to be inappropriate for children, based on US and Canada rating guidelines.

V-Chip has no effect on video signals from DVD discs or Camcorder connection.

Note: Some programs, and movies are broadcast without a ratings signal. Even if you set up V-CHIP ratings limits, these programs will not be blocked. See page 38 for information on how to block unrated programs.

Note (for Canadian viewers): The V-Chip function is based on specifications designed for the United States and therefore may not work properly in Canada.

You can customize the V-Chip settings of your television to match your personal tastes. The V-Chip menu below is the starting point for your V-Chip settings

You can use US V-Chip settings (for programming broadcast from the United States), Canadian V-Chip settings (for programming broadcast from Canada), and movie ratings. You may use any or all of the settings (US V-Chip, Canada V-Chip, Movie ratings). Descriptions for setting each of the three V-Chip formats appear in the next six pages along with descriptions of the rating categories.

To access the rating categories:



Press the MENU button



To V-CHIP



To operate (Lock icon  will appear)



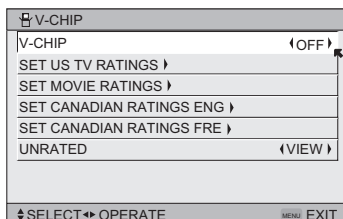
Press ZERO to access the V-Chip menu



To turn V-Chip ON or OFF (V-Chip must be turned ON for rating settings to operate)



To move to SET US TV RATINGS, SET MOVIE RATINGS, or SET CANADIAN RATINGS (see following pages for descriptions of each item)



Onscreen Menus

Unrated Programs

Unrated programming refers to any programming which does not contain a rating signal. Programming on television stations which do not broadcast rating signals will be placed in the "Unrated Programming" category.

Examples of Unrated programs:

- Emergency Bulletins
- News
- Public Service Announcements
- Sports
- Some Commercials
- Locally Originated Programming
- Political Programs
- Religious Programs
- Weather

Note:

- TV programs or movies that do not have rating signals will be blocked if the unrated category is set to BLOCK.

Directions to Block Unrated Programs

You can block programs that are not rated.



Press the MENU button



To V-CHIP



To operate (The lock icon  appears)



Press ZERO to access V-Chip setup options



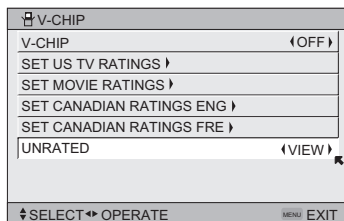
To UNRATED



To VIEW or BLOCK



Press MENU when done



Onscreen Menus

US V-Chip Ratings

U.S. PARENTAL RATING SYSTEMS

Programs with the following ratings are appropriate for children.

☐ **TV Y is Appropriate for All Children**

Programs are created for very young viewers and should be suitable for all ages, including children ages 2 - 6.

☐ **TV Y7 is for Older Children**

Most parents would find such programs suitable for children 7 and above. These programs may contain some mild fantasy violence or comedic violence, which children should be able to discern from reality.

Programs with the following ratings are designed for the entire audience.

☐ **TV G stands for General Audience**

Most parents would find these programs suitable for all age groups. They contain little or no violence, no strong language, and little or no sexual dialog or situations.

☐ **TV PG Parental Guidance Suggested**

May contain some, but not much, strong language, limited violence, and some suggestive sexual dialog or situations. It is recommended that parents watch these programs first, or with their children.

☐ **TV 14 Parents Strongly Cautioned**

Programs contain some material that may be unsuitable for children under the age of 14 including possible intense violence, sexual situations, strong coarse language, or intensely suggestive dialog. Parents are cautioned against unattended viewing by children under 14.

☐ **TV MA Mature Audiences Only**

These programs are specifically for adults and may be unsuitable for anyone under 17 years of age. TV MA programs may have extensive V, S, L, or D.

Viewing Guidelines

In addition to the ratings categories explained above, information on specific kinds of content are also supplied with the V-Chip rating. These types of content may also be blocked. The content types are:

- **V/FV** is for VIOLENCE/FANTASY VIOLENCE
- **S** stands for SEXUAL CONTENT
- **L** stands for strong LANGUAGE
- **D** stands for suggestive DIALOG

Onscreen Menus

Setting US V-Chip Ratings



Press the MENU button



To V-CHIP



To operate (lock icon  appears)



Press ZERO to access the V-Chip menu



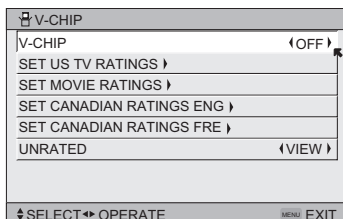
To turn V-Chip ON or OFF



To move to SET US TV RATINGS



To operate



Directions to set US V-Chip Ratings

Line up the cursor in the column (TV PG, TV G, etc.) with the content row (V/FV, S, etc.) and press the  or  to move the cursor to the correct location. Press Ok to turn the locking feature on or off. An item is locked if the  icon appears instead of a “—”.

For example. To block viewing of all TV 14 shows, move the cursor to the top row of that column and add a lock icon. Once you've put a lock on the top row, everything in that column is automatically locked.



To the TV 14 Column



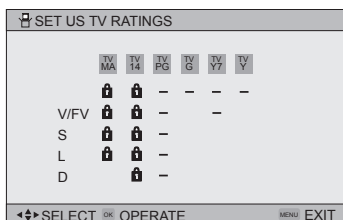
Press the Ok button to lock



Press the MENU button when finished

Note:

- If you want to change the setup, move the cursor to the top column and change the lock icon to “—” by pressing OK again. You may then select individual categories to block.



Onscreen Menus

Movies Ratings

NR – Not Rated

This is a film which has no rating. In many cases these films were imported from countries which do not use the MPAA ratings system. Other NR films may be from amateur producers who didn't intend to have their film widely released.

NR (Not Rated) Programming may contain all types of programming including children's programming, foreign programs, or adult material.

G – General Audience

In the opinion of the review board, these films contain nothing in the way of sexual content, violence, or language that would be unsuitable for audiences of any age.

PG – Parental Guidance

Parental Guidance means the movie may contain some contents such as mild violence, some brief nudity, and strong language. The contents are not deemed intense.

PG-13 – Parents Strongly Cautioned

Parents with children under 13 are cautioned that the content of movies with this rating may include more explicit sexual, language, and violence content than movies rated PG.

R – Restricted

These films contain material that is explicit in nature and is not recommended for unsupervised children under the age of 17.

NC-17 – No One Under 17

These movies contain content which most parents would feel is too adult for their children to view. Content can consist of strong language, nudity, violence, and suggestive or explicit subject matter.

X – No One under 18

Inappropriate material for anyone under 18.

Directions to set Movie (MPAA) Ratings



Press the MENU button



To V-CHIP



To operate (Lock icon  appears)



Press ZERO to access V-Chip setup options



To SET MOVIE RATINGS



To enter movies menu

For example: To block viewing of programming rated NC-17 shows, move the cursor to the NC-17 column and add a lock icon. Once you've put a lock on the NC-17 column, X column is automatically locked.



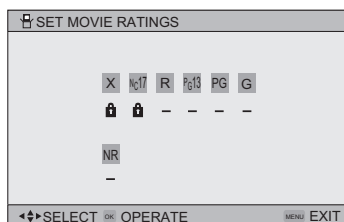
To the NC-17 Column



Press the Ok button to lock



Press the MENU button to finish



- If you want to change the setup, move the cursor to the column and change the lock icon to “—” by pressing Ok again.

Onscreen Menus

Canadian V-Chip Ratings

☐ **E – Exempt**

Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

☐ **C – Programming Intended for Children**

Violence Guidelines: There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature.

☐ **C8+ – Programming Intended for Children 8 and Over**

Violence Guidelines: Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. There will be no offensive language, nudity or sexual content.

☐ **G – General Audience**

Programming will contain little violence and will be sensitive to themes which could affect younger children.

☐ **PG – Parental Guidance**

Programming intended for a general audience, but which may not be suitable for younger children. Parents may consider some content not appropriate for children aged 8-13.

☐ **14+ – 14 Years and Older**

Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Programming may contain mature themes and scenes of intense violence.

☐ **18+ – Adult**

Material intended for mature audiences only.

Directions to set Canadian V-Chip Ratings



Press the MENU button



To V-CHIP



To operate (lock icon  appears)



Press ZERO to access V-Chip setup options



To SET CANADIAN RATINGS ENG (for English)



To enter ratings menu

For example: To block viewing of programming rated 14+ shows, move the cursor to the 14+ column and add a lock icon. Once you've put a lock on the 14+ column, 18+ column is automatically locked.



To the 14+ Column



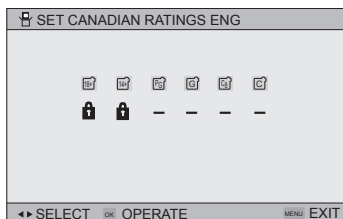
Press the Ok button to lock



Press the MENU button to finish

Notes:

- If you want to change the setup, move the cursor to the column and change the lock icon to “—” by pressing Ok again.
- For instructions on “SET CANADIAN RATINGS FRE (in French)”, please see page 42 in the French side of this user's guide.



Onscreen Menus

Set Lock Code

Channel guard and V-Chip settings are protected by a four-digit lock code. Your TV comes preset with a lock code of "0000". You may change the code to any four-digit number you wish. To change the lock code, follow the steps below.



Press the MENU button



To SET LOCK CODE



To operate (lock icon  appears)



Press ZERO to access the lock code

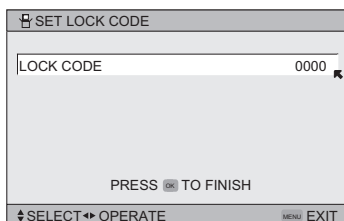
The first digit will be highlighted



To select the number



To move to the next digit



Continue to follow these directions for all four numbers



Press the OK button to finish (your lock code is now set)



Press the Menu button when finished

When a viewer attempts to watch a blocked channel, this message appears:

THIS PROGRAMMING EXCEEDS
YOUR RATING LIMITS.
PLEASE ENTER LOCK CODE BY
10 KEY PAD TO UNLOCK IT.
NO. - - - -

The channel will remain blocked until the correct lock code is entered (see above for information on setting your lock code).

Notes:

- After a power interruption you must reset the lock code.
- Write your lock code number down and keep it hidden from potential viewers.
- If you forget the lock code, a new code may be set using the steps listed above.

Onscreen Menus

Language

The language function is described on page 24 as the interactive plug-in menu. If you need to choose the language again, follow the steps below.



Press the Menu button



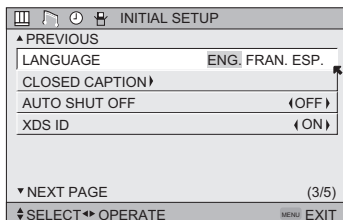
To LANGUAGE



To choose a language: ENG. (English),
FRAN. (French) or ESP. (Spanish)



Press the MENU button when finished



Closed Caption

Many broadcasts now include an onscreen display of dialog called closed captions. Some broadcasts may also include displays of additional information in text form. Your television can access and display this information using the closed caption feature. To activate the closed caption feature, follow the steps below. There are three methods. When you are watching analog channels, you can perform Analog Setting of closed caption. When you are watching digital channels, you can perform Digital Auto Setting or Digital Manual Setting.

Analog Setting



Press the MENU button



To CLOSED CAPTION



To enter



To MODE



To select CAPTION or TEXT in MODE



To CAPTION or TEXT



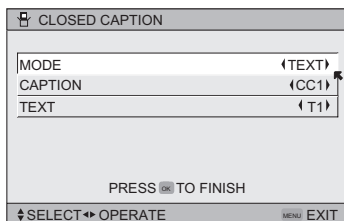
To select a caption (CC1 to CC4) or text
channel (T1 to T4)



Press the Ok button to save



Press the MENU button when finished



Onscreen Menus

Digital Auto Setting



Press the MENU button



To CLOSED CAPTION



To enter



To Type



To select Auto, Advanced or Basic

Auto: Shows closed caption a priority for digital channels over analog channels. It is set automatically.

Advanced: Shows only the digital closed caption.

Basic: Shows only the analog closed caption.



To Service



To select 1, 2, 3, 4, 5 or 6



To Appearance



To enter



To select Auto



To Set



Press the Ok button to save

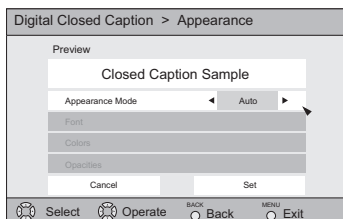
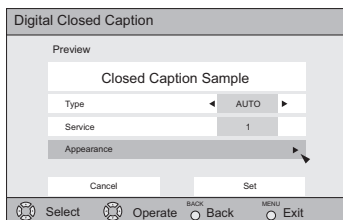
The font/type and color are set automatically.



Press the MENU button when finished

Note:

- If you want to cancel the settings, select cancel.



Onscreen Menus

Digital Manual Setting



Press the MENU button



To CLOSED CAPTION



To enter



To Type



To select Auto, Advanced or Basic



To Service



To select 1, 2, 3, 4, 5 or 6



To Appearance



To enter



To select Manual



To Font



To enter



To select Font Size or Font Style



To select the setting you like

Font Size: Auto, Standard, Large or Small

Font Style: Auto, Serif Mono, Serif, Sanserif mono,

Sanserif, Casual, Cursive or Small Capital



To Set



Press the Ok button to save



To Colors



To enter



To select Text, Edge or Background



To select the setting you like

Auto, White, Black, Red, Green, Blue,
Yellow, Magenta or Cyan



To Set



Press the Ok button to save



To Opacities



To enter



To select Text/Edge or Background



To select Auto, Transparent, Translucent, Solid
or Flashing



To Set



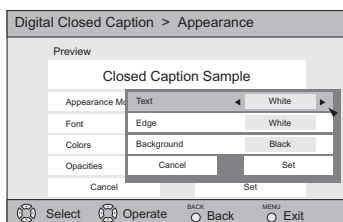
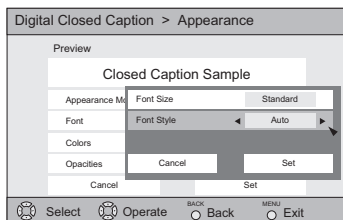
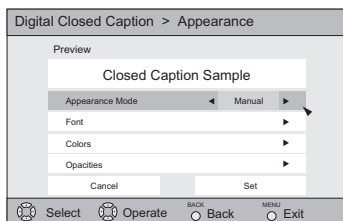
Press the Ok button to save



Press the MENU button when finished

Notes:

- Closed caption subtitles are usually found on closed caption channel CC1. Some programs may include additional text information which is usually found on text channel T1. The other channels are available for future use.
- Closed captioning may not work correctly if the signal being received is weak or if you are playing a video tape.
- Most broadcasts containing closed captioning will display a notice at the start of the program.
- To select the mode, press the C.C. button. See page 69.
- When ZOOM aspects like PANORAMA or CINEMA are selected, Digital Closed Captions may be cut off or distorted.



All fonts used for digital closed caption and digital menus are licensed from Monotype Imaging Inc.

Onscreen Menus

Auto Shut Off

This function automatically shuts off your TV when there is no signal from the channel the TV is on.



Press the MENU button



To AUTO SHUT OFF

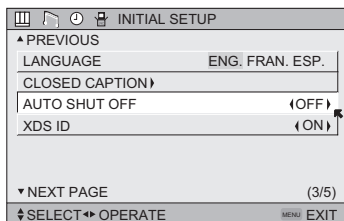


To turn ON or OFF



Press the MENU button when finished

- If the channel that you have on does not receive a signal for more than one minute, the blinking text "NOT RECEIVING A SIGNAL AUTO SHUT OFF IN 9 MIN." appears on the screen, and starts the countdown. If no signal is being received within 10 minutes, the TV shuts itself off.



XDS ID

XDS ID Display provides a channel's call letters, the network's name, and even a program name. The XDS ID information is provided by the broadcaster.



Press the MENU button



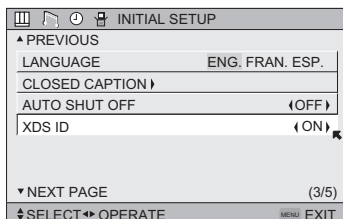
To XDS ID



To turn ON or OFF



Press the MENU button when finished



Noise Muting

This feature inserts a blank gray screen over channels which are not broadcasting or are too weak to be received clearly.



Press the MENU button



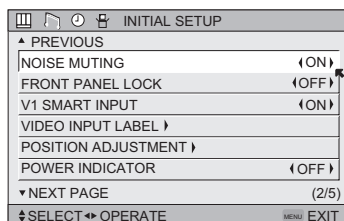
To NOISE MUTING



To turn noise muting ON or OFF



Press the MENU button when finished



Notes:

- Noise muting will not work during auto tuner setup or when you operate channel summary.
- Noise muting will not work when the digital TV is displayed.

Onscreen Menus

Front Panel Lock

This allows you to lock the keys on the side of the TV, so that a child may not accidentally change your viewing preferences.



Press the MENU button



To FRONT PANEL LOCK



To turn ON or OFF



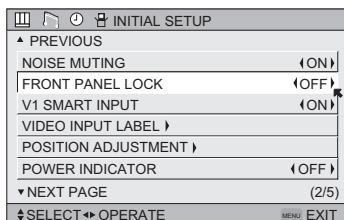
Press the MENU button when finished

You can turn off this feature in the following ways:

- Unplug the power cord, and plug it back in. Do this if your batteries die, or you lose your remote control.
- Use the remote control.
- Press the MENU button on the side of the TV for more than 3 seconds. In this case, the OSD for FRONT PANEL LOCK will appear.

Note:

- To turn ON/OFF the TV, press the power button for more than 3 seconds. This feature will remain ON.



V1 Smart Input

This feature is used if you have connected an AV Receiver to your television. By turning this feature on, your television can automatically detect the signal source from your components that are connected to your AV Receiver.



Press the MENU button



To V1 SMART INPUT



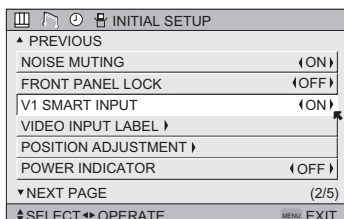
To turn ON or OFF



Press the MENU button when finished

Notes:

- If you do not have an AV Receiver connected to your television, turn this feature OFF.
- Some AV Receivers may not work with this function.



Onscreen Menus

Video Input Label

This function is used to label video input connections for the onscreen displays.



Press the MENU button



To VIDEO INPUT LABEL



To enter



To select the desired video input



To select the desired preset input label (see chart below)



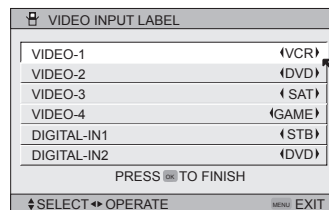
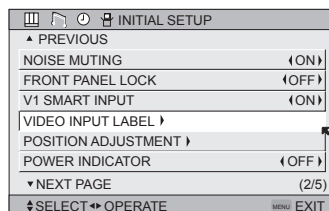
Press the OK button to save



Press the MENU button when finished

Note:

- Though VIDEO-3 is for use only with a PC, you still can select your desired input label.



Preset Labels	Select when...
VCR	You have a VCR connected to the video input
DVD	You have a DVD connected to the video input
PVR	You have a Personal Video recorder connected to the video input
DVHS	You have a Digital VCR connected to the video input
STB	You have a Set-top Box connected to the video input
SAT	You have a Satellite Receiver connected to the video input
AMP	You have an Amplifier connected to the video input
GAME	You have a Video Game connected to the video input
CAM	You have a Video Camera connected to the video input
DISC	You have a Video Disc player connected to the video input

Onscreen Menus

Position Adjustment

Position adjustment allows you to adjust the position of the picture on the screen vertically when the aspect is set to panorama or cinema.



Press the MENU button



To POSITION ADJUSTMENT



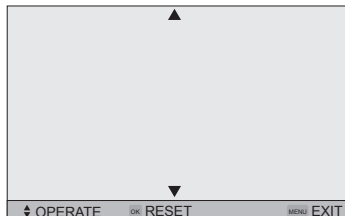
To enter



To adjust the position



Press the MENU button to finish



Notes:

- To reset the adjustment to the center, press the Ok button.
- When the arrow disappears, while you are adjusting the position, the position is at its maximum limit.
- If you select REGULAR, SLIM and FULL size with aspect or Multi Screen, position adjustment option is not seen.
- When you change the screen size, perform the position adjustment again.
- Position adjustment allows you to adjust the screen position vertically and horizontally when the aspect is set Panorama Zoom or Cinema Zoom for 1080i and 720p signals.
- It is also possible to use Position Adjustment when you are in PC Mode
- When you are receiving a 1080p signal, Position Adjustment can not be selected.

Power Indicator

Power indicator allows you to adjust the brightness of the power indicator



Press the MENU button



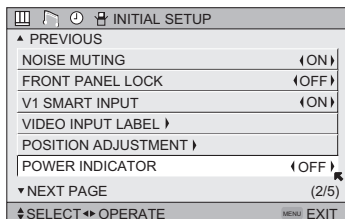
To POWER INDICATOR



To adjust POWER INDICATOR LOW, HIGH or OFF

Notes :

- When OFF is selected :
The LED disappears if you have a TV signal.
The LED is lit as "LOW" when there is no TV signal.
- When the On Timer turns ON, the LED is lit as "LOW" when you turn the power off.
- If you set a timer on the TV, the power indicator will light even if the TV is on stand by.



Onscreen Menus

Digital-In

The DIGITAL-IN option can only be displayed in the INITIAL SETUP menu when an HDMI480p picture signal is being input to the DIGITAL-IN terminal. This option adjusts the position when an HDMI or DVI 480p picture signal is being displayed on the screen. There are two types of HDMI480p picture signals: 640x480 and 720x480. If the displayed picture is slightly shifted, the position can be adjusted by selecting either SIZE1 or SIZE2.



Press the MENU button



To DIGITAL-IN



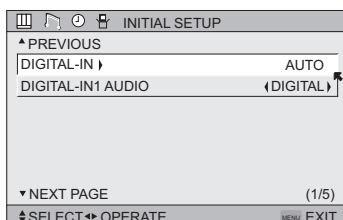
To enter



To select AUTO, SIZE1 or SIZE2



Press the MENU button to finish



Notes:

- The DIGITAL-IN menu can only be displayed when a HDMI or DVI 480p picture signal is input to the Digital-In terminal and the picture is being displayed on the screen.
- You can select AUTO only when the signal is 480p for HDMI. When you select AUTO, the television will select "SIZE1" or "SIZE2" automatically.

Digital-In1 Audio

This feature is used if you have a DTV or HDMI compatible component connected to your TV.



Press the MENU button



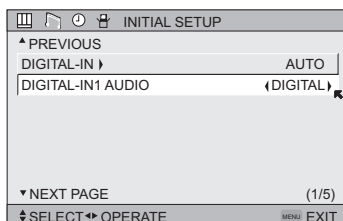
To DIGITAL-IN1 AUDIO



To select ANALOG, DIGITAL or AUTO



Press the Menu button when finished



Notes:

- If your DTV or HDMI component is capable of digital audio and video, choose DIGITAL. If your DTV or HDMI component is capable of analog audio and digital video, choose ANALOG.
- Refer to your DTV or HDMI component's instruction manual for more information.
- When you select AUTO, the television will select "ANALOG" or "DIGITAL" automatically, depending on the audio input from the HDMI.
- When you select DIGITAL, select PCM on Digital Sound in the Digital Setup menu. See page 53.

Onscreen Menus

Digital Setup

Use this function when you are receiving a digital broadcast.



Press the MENU button



To DIGITAL SETUP

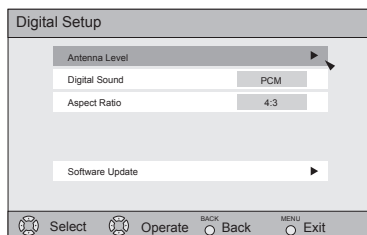


To enter

The onscreen will appear

Notes:

- Software Update will only appear when the USB memory is inserted into the USB connector.
- If you are watching an analog channel, you can still access the digital setup menu at anytime, while you are doing this, the background screen will turn blank. In this case, the tuner will switch to digital, since you are accessing the digital setup menu.



Antenna Level

Confirms the present antenna level.



Press the MENU button



To DIGITAL SETUP



To enter



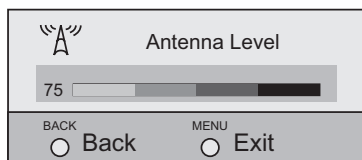
To Antenna Level



To enter

Note:

- If you are watching an analog channel, antenna level will not appear.



Onscreen Menus

Digital Sound

You can select the optical digital sound output, either PCM or Dolby Digital when your TV is connected to an amplifier that has Dolby Digital decoder. If you select Dolby Digital, you can enjoy listening in 5.1ch sound when watching digital broadcasts.



Press the MENU button



To DIGITAL SETUP



To enter



To Digital Sound



To select PCM or DOLBY DIGITAL



Press the MENU button when finished

Notes:

- If your amplifier does not have Dolby Digital decoder, select PCM. If you don't select PCM, it cannot output the sound from the speakers.
- For connecting an amplifier using the optical output, see page 18.



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

Aspect Ratio

You can select the aspect mode for ATSC from 4:3 or 16:9.



Press the MENU button



To DIGITAL SETUP



To enter



To Aspect Ratio



To select 4:3 or 16:9



Press the MENU button when finished

Notes:

- Set the mode to 4:3 or 16:9 before you record a program using the ATSC MONITOR OUT.
- Make sure the mode you choose is the same as the TV's aspect ratio when the recorded program is played back, so that you can obtain a good picture quality, free from any unnatural distortions.

Onscreen Menus

Software Update

At first, connect the USB memory into the USB connector. This function will appear only when the USB memory is inserted into the USB connector.



Press the MENU button



To DIGITAL SETUP



To enter



To Software Update



To enter



Checks the card if it needs an update or not



Press the MENU button when finished

Onscreen Menus

Picture Settings

These settings allow you to change and adjust the way the picture appears on your television.

TINT

Tint allows you to adjust the levels of red and green in your TV picture.

COLOR

The color function lets you make all the colors in the TV picture appear either more vivid or subtle.

PICTURE

Picture allows you to adjust the levels of black and white on the TV screen, giving you a darker or brighter picture overall.

BRIGHT

You can adjust the overall brightness of the TV picture with the Bright control.

DETAIL

The Detail feature adjusts the level of fine detail displayed in the picture.

Adjust the Picture Settings



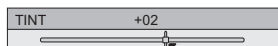
Press the MENU button



To TINT, COLOR, PICTURE, BRIGHT or
DETAIL



To enter



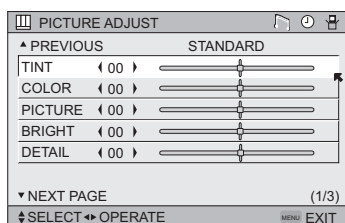
To adjust the setting



To move to the next setting



Press the MENU button when finished



Note:

- There are four video status settings: Dynamic, Standard, Theater and Game. Each video status setting has a separate memory for HD (1080i/1080p/720p) and SD (480p/480i) video signal. Each video status can be chosen along with your favorite picture settings (Tint, Color, Picture, Bright, Detail, etc.) See page 67 for details.

Color Temperature

You can decide how strong or dull the colors appear on the TV screen.



Press the MENU button



To COLOR TEMPERATURE



To enter



To set LOW or HIGH



Press the MENU button when finished



Onscreen Menus

Color Management

This TV supports the COLOR MANAGEMENT function to ensure dull colors are compensated to produce natural hues.



Press the MENU button



To COLOR MANAGEMENT



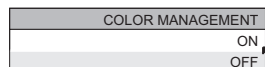
To enter



To select the mode "ON" or "OFF"



Press the MENU button when finished



Dynamic Gamma

JVC's Dynamic Gamma Circuitry (DGC) makes it easier to see dark areas when a picture has many dark areas, and makes it easier to see the bright areas when a picture has many bright areas. DGC is turned on, DGC analyzes and adjusts the total level of picture brightness balance, especially in dark areas where the level of grayscale is often lost, turning completely to black DGC automatically enhances the detail in these dark areas providing a more dynamic image with finer detail, so the optimum picture settings are automatically set for each picture. Normally use with DGC on.



Press the MENU button



To DYNAMIC GAMMA



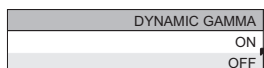
To enter



To turn ON or OFF



Press the MENU button when finished



Smart Picture

Smart Picture detects the APL (Average Picture Level) and adjusts the level of brightness on the TV screen suitable for what you are watching.



Press the MENU button



To SMART PICTURE



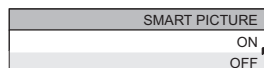
To enter



To select the mode "ON" or "OFF"



Press the MENU button when finished



Note:

- When you have "DYNAMIC" selected in the "VIDEO STATUS", Smart Picture is not selected.

Onscreen Menus

Digital VNR

This function can be selected to change the effect of Digital VNR (Video Noise Reduction).



Press the MENU button



To DIGITAL VNR



To enter



To select the effect you like.

AUTO: adjusts the effect of VNR automatically.

MIN: adjusts the effect of VNR to minimum.

MAX: adjusts the effect of VNR to Maximum.

OFF: turns the effect of VNR off.

DIGITAL VNR	
	AUTO
	MIN
	MAX
	OFF



Press the MENU button when finished

Notes:

- If it is in PC, Digital VNR will not be displayed.
- When you are receiving a 1080p signal, Digital VNR can not be selected.

MPEG NR

This function effects the block noise removal and mosquito NR (Noise Reduction) simultaneously.



Press the MENU button



To MPEG NR



To enter



To select ON or OFF

MPEG NR	
	ON
	OFF



Press the MENU button when finished

Notes:

- When you are receiving digital channels, block noise removal will have no effect.
- When you are receiving a 1080p signal, MPEG NR can not be selected.

Reset

Reset resets all picture adjustments (tint, color, picture, bright, detail, color temperature, Color Management, Dynamic Gamma, Smart Picture, Digital VNR and MPEG NR) at once to the default settings.



Press the MENU button



To RESET



To enter

The onscreen menu disappears for a moment, and then the settings are reset to the default setting for all the picture adjustments.



Press the MENU button when finished

PICTURE ADJUST	
▲ PREVIOUS	STANDARD
DIGITAL VNR ▶	AUTO
MPEG NR ▶	ON
RESET	
▼ NEXT PAGE	(3/3)
SELECT ◀ OPERATE	
MENU EXIT	

Onscreen Menus

Sound Settings

These settings allow you to change and adjust the sound on your television.

BASS – You can increase or decrease the level of low-frequency sound in the TV's audio with the bass adjustment.

TREBLE – Use treble to adjust the level of high-frequency sound in your TV's audio.

BALANCE – Adjust the level of sound between the TV's left and right speakers with the balance setting.

Adjust the Sound Settings



Press the MENU button



To BASS, TREBLE or BALANCE



To adjust the setting



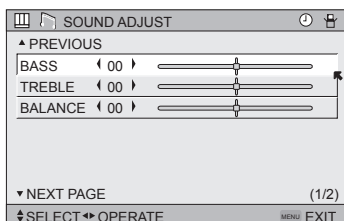
To move to the next setting



Press the MENU button when finished

Note:

- You can reset the sound adjustments (BASS, TREBLE and BALANCE) you set at once as the default setting when you select reset.
- You can adjust BALANCE only when A.H.S.+ is off. See page 66.



Turn On Volume

Turn On Volume allows you to set the volume level when you turn the TV on.



Press the MENU button



To TURN ON VOLUME



To set

→ Current ↔ 00 ↔ 01 ↔ 02 ↔ 03 ← - - - - - → 48 ↔ 49 ↔ 50 ←



Press the MENU button to finish

Volume Limit

Volume Limit allows you to set the maximum volume level.



Press the MENU button



To VOLUME LIMIT



To set the maximum volume level

→ 00 ↔ 01 ↔ 02 ↔ 03 ← - - - - - → 48 ↔ 49 ↔ 50 ←



Press the MENU button to finish

Reset

Reset resets all Sound Adjustments (Bass, Treble, Balance, Turn On Volume and Volume Limit) at once to the default settings. See page 57 on how to use reset.

Onscreen Menus

Set Clock

The set clock function is described on page 25 as the interactive plug-in menu. You can choose to set the clock automatically or manually. If you need to set the clock again, follow the steps below.



Press the MENU button



To SET CLOCK



To enter

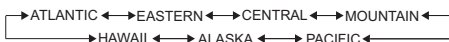
When you set the clock automatically, choose AUTO by pressing the ◀ or ▶ arrows.



To TIME ZONE



To select your time zone



To D.S.T. (daylight savings time)



To turn D.S.T. ON or OFF



Press OK to finish



Press the MENU button when finished

When you set the clock manually, choose MANUAL by pressing the ◀ or ▶ arrows.



To move to the hours



To set the hours



To move to minutes



To set the minutes



To TIME ZONE



To select your time zone:

(Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)



To D.S.T. (daylight savings time)



To turn D.S.T. ON or OFF



Press OK to start clock

THANK YOU !!



Press the MENU button when finished

Notes:

- D.S.T. can be used when it is set to ON in the SET CLOCK menu.
- Only when the MODE set to AUTO, the Daylight Savings Time feature automatically adjusts your TV's clock for Daylight Savings. The clock will move forward one hour at 2:00 am on the first Sunday in April. The clock will move back one hour at 2:00 am on the last Sunday in October.
- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

Onscreen Menus

On/Off Timer

The on/off timer lets you program your television to turn itself on or off. You can use it as an alarm to wake up, to help you remember important programs, or as a decoy when you're not home.



Press the MENU button



To ON/OFF TIMER



To enter (begins with ON TIME)



To set the hour (AM/PM) you want the TV to turn on



To move to minutes



To set the minutes



To accept ON TIME and move to OFF TIME (the time the TV will turn off). Set the OFF TIME the same way as ON TIME



To accept OFF TIME and move to CHANNEL



To select channel



To ON VOLUME



To set the volume level



To move to MODE



Choose ONCE or EVERYDAY



To ON/OFF TIMER



Choose YES to accept the timer setting, choose NO if you don't wish to accept



Press the OK button to finish



Press the MENU button to exit the menu

ON/OFF TIMER	
ON TIME	7:00 PM
OFF TIME	10:00 PM
CHANNEL	03
ON VOLUME	CURRENT
MODE	← EVERYDAY →
ON/OFF TIMER	← NO →
PRESS [OK] TO FINISH	
← SELECT → OPERATE MENU EXIT	

Notes:

- The on/off time cannot be set to locked or guarded channels.
- In order for the on/off timer to work, the clock must be set.
- After a power interruption, the timer settings must be reset.

Onscreen Menus

Lamp Timer Reset

The lamp replacement message will appear when you need to change the lamp. After you replace the lamp, you need to reset the timer which is built into your television.



Press the MENU button



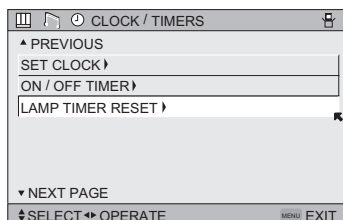
To LAMP TIMER RESET



To Enter

The following message will appear.

PRESS OK TO RESET THE LAMP
TIMER.



Press the OK button while the above message appears on the television screen.

THE LAMP TIMER IS RESET
SUCCESSFULLY.

The lamp timer has now been reset.

Notes:

- You can use the Lamp Timer Reset only after replacing the lamp.
- See Page 76 for instructions on lamp replacement.

Button Functions

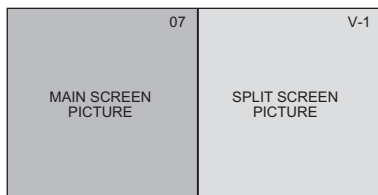
Multi Screen Function

Your television has two kinds of screen: SPLIT (2 channels) and INDEX (12 channels).

Note: After you press any multiscreen buttons, if you press the menu button, only the picture adjust screen will appear.

Split

Activate the split-screen option by pressing SPLIT on the remote control. The channel (or input) you were watching before pressing SPLIT will appear on the left, the new channel will appear on the right. The sound will continue to come from the main screen channel (or input). To turn split-screen off and return to normal television viewing, press SPLIT again or press the BACK button.



Notes:

- If the signal that you are watching is coming from the HDMI input, you cannot enter the SWAP or INDEX mode.
- Main Screen and Split Screen will not display the same channel or input at the same time.
- You can enter the SPLIT mode when the screen is in NORMAL or INDEX mode.
- Split screen will not display digital channels.
- Split-screen functions will not work with locked channels or channels blocked by V-Chip ratings limits. A gray screen will display instead.
- With split screen, the picture from the component terminal and DIGITAL-IN terminal will not be displayed.
- The aspect of MAIN CHANNEL PICTURE becomes 16:9 when you input the picture of 480p, 720p and 1080i from the component terminal and DIGITAL-IN terminal.
- After you press the SELECT button, and select SPLIT SCREEN when you press the OK button, select normal screen. If you don't operate, the MAIN CHANNEL SCREEN will be automatically selected about 8 seconds later.
- Aspect does not work in SPLIT mode.
- When it is PC output, Main and Split screen will not be displayed.
- When you are in PC mode, SPLIT, INDEX or FREEZE can not be used.
- When you press the Menu button in SPLIT mode, it appears only as Picture Adjust menu.
- When you are in 1080p mode, SPLIT, INDEX or FREEZE can not be used.

Button Functions

Index

This allows you to quickly look at up to 12 channels at a time so that you can decide which one to watch.

1	2	3	4
5	6	7	8
9	10	11	12

Notes:

- Only Analog channel input signal will be displayed.
- You can watch the channel added in channel summary. See page 35.

Freeze

Pressing the FREEZE button causes the screen to change to the split-screen display with the still picture displayed on the right. In order to return to the normal display, press the FREEZE button once again.

Swap

You can exchange the channel (or input) displayed in the split screen window for the main screen image by pressing the SWAP button.

Note:

- It will only work in SPLIT mode.

Select

With SELECT, you can select the picture (channel) while viewing SPLIT screen. When you press SELECT button, the channel number on the top will be highlighted. Each press of SELECT will shift the channel.

Button Functions

Power

Turns the TV on or off.



Press the POWER button

Note:

- After turning the power on, you can not turn the power off for about one minute.

Number Buttons - 10Key Pad

Use the number buttons on the remote control to move directly to a specific channel. For example, to move to channel 12:



0 (Zero)



1 (One)



2 (Two)

Tune

Lets you decide the input channel and select it. After you press the number buttons on the remote, press the TUNE button. For example, to move to channel 12:



1 (One)



2 (Two)



Press the TUNE button

Input

Selects the signal input source for the television: VIDEO-1, 2, 3, 4, DIGITAL-IN1 or DIGITAL-IN2 for video devices like VCRs, DVD players or camcorders.



Press the INPUT button

By every press of the INPUT button, you can change the input mode.

Notes:

- When you return to TV mode, press the RETURN +/TV button or direct 10 key pad or CHANNEL +/- button.
- You can also access by pressing the INPUT button on the side of the TV instead of the remote control.
- If you have a PC connected to the TV, select VIDEO-3

Button Functions

Channel +/-

Use these buttons to move up or down all the available channels your TV is able to receive.

Volume +/-

Use these buttons to raise or lower the TV's volume level. The maximum is the level you set in Volume Limit. See page 58.

TheaterPro D6500K

The TheaterPro D6500K color temperature technology function makes sure that the video you watch is set to the standard color temperature, so that what you see is as true to what the film to video editors intended it to be.



Press the THEATERPRO button

Return +/-TV

The RETURN+/TV button has three functions:

Return - Returns to the channel viewed just before the channel currently onscreen.

Return+ - Lets you program a specific channel to return to while scanning through the channels using the CH+ and CH- buttons.

TV - Returns to the TV mode.



Press the RETURN+/TV and hold for three seconds

RETURN CHANNEL
PROGRAMMED!

The channel currently active has been programmed as your return+ channel. Now scan through the channels using the CHANNEL+/- buttons.



Press the RETURN+/TV

You will return to your programmed channel.

- To cancel your return+ channel, press and hold the RETURN+ button for three seconds. The message "RETURN CHANNEL CANCELLED!" will appear.
- Return+ works only with the Channel+/- buttons. Pressing any number key will cancel return+.

Button Functions

Sound

By pressing the **SOUND** button, you can change the A.H.S.+ (Advanced Hyper Surround plus) mode, A.T.C. (Advanced Tone Correction), **SMART SOUND** and **HYPER BASS** on or off.

A.H.S.+ - Adds a more spacious surround sound. Music gives basic effect and movie for more effect.

A.T.C. - Reproduces distinctive sounds with tone correction.

SMART SOUND - Decreases high sound levels, giving a regulated sound level.

HYPER BASS - Increases bass levels, giving a richer, deeper bass.



Press the **SOUND** button



To select A.H.S.+, A.T.C., **SMART SOUND** or **HYPER BASS**



To choose the setting



Press the **MENU** when finished

SOUND EFFECT			
A.H.S.+	MOVIE	MUSIC	OFF
A.T.C.		ON	OFF
SMART SOUND		ON	OFF
HYPER BASS		ON	OFF
◆SELECT ◀OPERATE			MENU EXIT

Notes:

- Smart Sound may become an unnatural effect, depending on the signal source.
- You can adjust **BALANCE** only when A.H.S.+ is off.

Muting

The **MUTING** button instantly turns the volume down completely when you press it. Press **MUTING** and the volume level will instantly go to zero. To restore the volume to its previous level, press **MUTING** again.

Button Functions

Video Status

The VIDEO STATUS button gives you a choice of four TV picture display settings, including a display of your own preferences.

Standard - Resets the picture display to the factory settings.

Dynamic - Gives a vivid picture with better contrast when viewing in a brightly lit room.

Theater - Gives a rich, film-like look to video when viewing in a dimly lit room.

Game - Used for when you are playing video games connected to your TV.

VIDEO STATUS
STANDARD
DYNAMIC
THEATER
GAME



Press the VIDEO STATUS button

By every press of the VIDEO STATUS button, you change the mode.

Note:

- You can also change the mode by pressing the ▲▼ buttons.
- Each mode is memorized for each input connected to the TV.
- You can also access the FRONT PANEL CONTROL screen by using the MENU button on the side of the TV instead of the remote control. It appears between INITIAL SETUP and PICTURE ADJUST screen, and it has VIDEO STATUS and ASPECT menus. Choose VIDEO STATUS by pressing MENU ▼ on the side panel and choose a mode by using the CHANNEL +/- buttons (◀ OPERATE ▶).
- There are four video status settings: Dynamic, Standard, Theater and Game. Each video status setting has a separate memory for HD (1080i/1080p/720p) and SD (480p/480i) video signal. Each video status can be chosen along with your favorite picture settings (Tint, Color, Picture, Bright, Detail, etc.)
 - When an HD signal is displayed: Your HD settings are recalled for the video status you are using.
 - When an SD signal is displayed: Your SD settings are recalled for the video status you are using.
 - The input you are using (Input-1, Input-2, etc.) does not affect the setting that is recalled, just the signal type.
 - This function considers PC input as an HD signal and PIP and SPLIT screens as an SD signal.

Natural Cinema

Natural cinema corrects the problem of blurred edges which may occur when viewing a program originally shot on film (such as motion pictures) or animation. If you notice blurring at the edges of these programs, press NATURAL CINEMA and set it to AUTO. Natural Cinema helps correct conversion errors that occur when film, which is shot at 24 frames-per-second, is broadcast at the television rate of 30 frames-per-second.



Press the NATURAL CINEMA button

NATURAL CINEMA
AUTO
ON
OFF

Notes:

- When you are receiving a 1080p signal, Natural Cinema can not be selected.
- The natural cinema mode is automatically set to "AUTO" in the following cases:
 - Turning on or off
 - Changing the channel or input mode
 - Using multi-screen functions
- If you are in PC mode, Natural Cinema can not be used

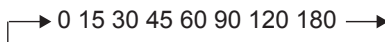
Button Functions

Sleep Timer

The Sleep Timer can turn the TV off for you after you fall asleep. Program it to work in intervals of 15 minutes, for a total time of up to 180 minutes.



Press the SLEEP button



Sleep Timer Message

60 seconds before the automatic shutoff, this message will appear:

GOOD NIGHT!!
PUSH SLEEP TIMER BUTTON
TO EXTEND

You then have 60 seconds to press the SLEEP button to delay the shut off for another 15 minutes.

ML/MTS

MTS technology allows several audio signals to be broadcast in analog at once, giving you a choice in what you wish to hear with a TV program. In addition to mono or stereo sound, an MTS broadcast may also include a second audio program (SAP).



Press the ML/MTS button

By every press of the ML/MTS button, you change the mode

MTS	
ON AIR	STEREO
ON AIR	SAP
	MONO

Notes:

- When you are receiving a digital broadcast, if there are other languages, you can change the language by pressing the ML/MTS button.
- Keep the TV in stereo mode to get the best sound quality. The sound will work in stereo mode even if a certain broadcast is in mono sound only.
- Choose the mono setting to reduce excessive noise on a certain channel or broadcast.
- Selecting SAP will allow you to hear an alternative soundtrack, if one is available.
- MTS unavailable if your television's Input source is in VIDEO-1, 2, 3, 4, DIGITAL-IN1 or DIGITAL-IN2 mode, as described on page 64.
- ML/MTS will not work when you are using the Digital-In.
- You can also change the mode by pressing the ▲▼ buttons.

Button Functions

Display

The display screen shows the current status of timers, inputs and XDS ID.



Press the DISPLAY button

The screen to the right shows the following information:

- The current channel or AV input (Channel 05)
- The current time (12:20 pm)
- Sleep timer status/minutes remaining (The Sleep Timer is off)
- On/off timer status (Set to turn on everyday at 7:00 PM, off at 10:00 PM)
- Each Press of the DISPLAY button changes the display mode:

05 KLVX PBS	
JAZZ FESTIVAL	
NOW	12:20 PM
SLEEP TIMER	OFF
ON/OFF TIMER	EVERYDAY
ON TIME	7:00 PM
OFF TIME	10:00 PM



Display - Full screen shown above

Time - Shows the current time only

Channel - Shows the current channel

Off - Turns display off

Notes:

- You may also turn off the display at any step by pressing MENU.
- If the clock, sleep timer or on/off timer are not set, the display screen will show: "CLOCK NOT SET", "SLEEP TIMER OFF", and "ON/OFF TIMER OFF" respectively.

C.C. (Closed Caption)

Use the C.C. (Closed Caption) button to select the mode of closed caption.



Press the C.C. button

Notes:

- SMART CAPTION will appear when you press the MUTING button, only on channels where the broadcast contains closed captioning.
- When you select ON, it will be the mode selected in the Closed Caption Menu.
- See page 44 when you set the caption/text mode.
- You can also change the mode by pressing the ▲▼ buttons.
- If you are in PC mode, C.C. can not be used

CLOSED CAPTION
OFF
SMART CAPTION
ON

Button Functions

Favorite

The Favorite button allows you to select your favorite channels easily. First, you must register the channels that you like. See how to register below.



Press the FAVORITE button
The favorite channel list will appear.



To select the channel you want to watch



Press the Ok button
It will change to the channel you have selected.

FAVORITE	
▲ PREVIOUS	
101	CBS
102	FOX
D103	PBS2
<	>
D107	HBO
8	ABC
▼ NEXT	

Register the favorite channel



Press the channel number you want to register
The channel program will change.



Press the FAVORITE button for three seconds
The channel will be registered in the favorite channel list.

Notes:

- Both analog and digital channels can be registered. The digital channels have a "D" in front of the channel number.
- The maximum number of channels you can register is 24.
- If you have registered the maximum number of channels, and try to register more channels, the oldest channel you registered will be deleted.
- Sub channels can not be registered.
- The newest channel you registered will appear at the top of the list.

Delete the favorite channel



Press the FAVORITE button
The favorite channel list will appear.



To select the channel you want to delete



To enter



Press the Ok button
The channel was deleted.



Press the FAVORITE button when finished

Note:

- Before pressing the FAVORITE button when you are finished, press the ◀▶ button again, and you can return to the deleted channel.

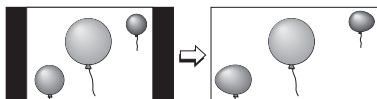
Button Functions

Aspect

This feature will help you adjust the picture you are watching to give you the best possible picture quality.

Aspect Ratios

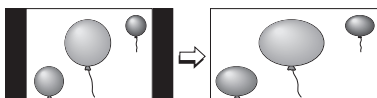
PANORAMA - With this ratio a normal 4:3 aspect picture is stretched to fit the dimensions of the 16:9 aspect screen.



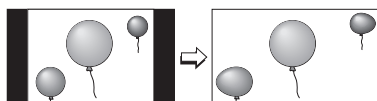
CINEMA - This ratio "zooms in" on the center part of a 4:3 aspect picture, blowing it up to fill the 16:9 screen.



FULL - This is the ratio to use when watching 16:9 High-Definition broadcasts.



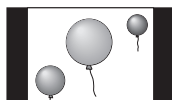
PANORAMA ZOOM - This ratio stretches the High-Definition 16:9 aspect image to eliminate the black side bars.



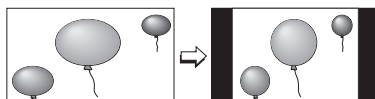
CINEMA ZOOM - This ratio stretches the High-Definition 16:9 aspect image to eliminate the black surrounding bars.



REGULAR - The regular ratio is used when you want to watch a 4:3 broadcast or recorded program without modifying the original picture to fit the dimensions of your 16:9 screen. The 4:3 picture will fill the screen from top to bottom, while black bars will appear to fill up the remaining space along the picture's sides. The 4:3 picture will be centered within the boundaries of the 16:9 screen.

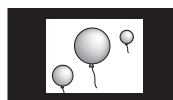


SLIM - This aspect mode shrinks the screen of 16:9 to 4:3. There are some programming that is already stretched by mistake at broadcasting companies, so this mode corrects it. Black side bars will appear.

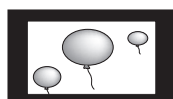


Aspect Ratios in PC Mode

REGULAR - This is the original aspect mode.



FULL - This aspect mode stretches the image to fit the dimensions of the 16:9 aspect screen.



Button Functions

Aspect Ratios (Continued)



Press the ASPECT button

- By pressing the ASPECT button, you can change the size.

When you change the aspect ratios, it is different from their broadcast or recorded program.

SD (480i, 480p)
NTSC, 480i, 480p

ASPECT
PANORAMA
CINEMA
FULL
REGULAR

HD (1080i, 720p)
ATSC (1080i, 720p)

ASPECT
PANORAMA ZOOM
CINEMA ZOOM
FULL

ATSC (480i, 480p)

ASPECT
PANORAMA ZOOM
CINEMA ZOOM
FULL
SLIM

PC

ASPECT
FULL
REGULAR

Notes:

- You can also choose the size by pressing the ▲▼ buttons.
- When you change the aspect ratio or signal, reset the picture position to center.
- You can also access the FRONT PANEL CONTROL screen by using the MENU button on the side of the TV instead of the remote control. It appears between INITIAL SETUP and PICTURE ADJUST screen, and it has VIDEO STATUS and ASPECT menus. Choose ASPECT by pressing Menu ▼ on the side panel and choose a mode by using the CHANNEL +/- buttons (◀ OPERATE ▶).
- "SLIM" can only be displayed when the signal is ATSC (480i or 480p).
- If the television receives a 16:9 signal from your HDMI device, the aspect mode will turn to FULL automatically. If the television receives a 4:3 signal from your HDMI device when you are in FULL aspect mode, it will return to REGULAR aspect mode. If you change the aspect mode after the television changed it to FULL automatically, the television will change to the aspect mode you choosed.
- When you are receiving a 1080p signal, you can not change the aspect ratios.

Menu

The MENU button allows you to access JVC's onscreen menu system. Press MENU to activate the onscreen menu system.

- See individual topics like "Sound Adjust" for specific information on using menus.

OK

This button confirms your selection when you are in one of the onscreen menus.

Back

This button allows you to go back in the menu to change a selection or correct a mistake.

Button Functions

TV/CATV Slide Switch

Use either the television's own tuner or a cable box to select channels. Set this switch to **TV** to operate the television's built-in tuner. Move the switch to **CATV** to operate a cable box.

Note:

- See page 25 for information on programming your remote for cable box operation.

VCR/DVD Slide Switch

You can control a VCR or DVD player with the buttons on the lower part of the remote control. Move the slide switch to **VCR** or **DVD** to operate.

Notes:

- The remote is preset with the code 000 to control JVC-brand VCR's. For any other manufacturer's brand VCR, please see the code chart and instructions on page 26.
- The remote is preset with the code 000 to control JVC-brand DVD players. For any other manufacturer's brand DVD player, please see the code chart and instructions on page 27.

VCR Buttons

You can use this remote control to operate the basic functions of your VCR. These functions include: play, record, rewind, fast-forward, stop, pause, channel scan, TV/VCR, power on and power off.

Move the selector switch to **VCR** to operate.

- The remote is preset with the code 000 to control JVC-brand VCR's. For any other manufacturer's brand VCR, please see the code chart and instructions on page 26.

DVD Buttons

You can also use this remote control to operate the basic functions of your DVD player. These functions include: play, rewind, fast-forward, stop, still/pause, previous/next, tray open/close, power on and power off.

Move the selector switch to **DVD** to operate.

- The remote is preset with the code 000 to control JVC-brand DVD players. For any other manufacturer's brand DVD player, please see the code chart and instructions on page 27.

Light

Your remote control includes illuminated buttons for key features like CHANNEL +/- and VOLUME +/- . Press the LIGHT button to turn the illumination on for 5 seconds.

Button Functions

Digital CH D/A (Digital/Analog)

The D/A button changes the analog and digital channel. Each time you press the D/A button, you can switch back and forth the analog and digital channels. Digital channels have a "D" in front of the channel number.



Press the D/A button

To watch digital channels

For example, to move to channel D23:



Press 2 (Two)



Press 3 (Three)



Press the TUNE button

Sub Channel

The main channel sometimes has minor channels (Sub Channels). By using the Sub button, you can select a sub channel easily.

For example, to move to sub channel 123-45:



Press 1, 2 and 3 in order



Press the SUB button



Press 4 and 5 in order



Press the TUNE button

Note:

- If there are more than 2 major channels, select the digital channel by using the ▲▼ buttons and then press the Ok button.

Guide

You can view the program from the GUIDE.

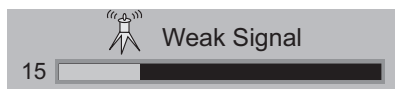
Notes:

- The GUIDE function will only work when you are receiving digital programming only.
- The GUIDE will not show the correct time and date if you have not performed the set clock function on your television. See page 59.

OSD Information

Weak Signal

This OSD warning appears when the digital channel that you have selected is too weak to receive or no signal is being detected for that channel.



No Program

If the external input terminal you selected, or were watching is not receiving a signal, "NO PROGRAM" appears on the television screen. It appears when that external input terminal is not receiving a signal and you have the Noise Muting function OFF and you have a single screen. It moves automatically every two seconds to prevent the screen from burn-in.

Note:

- Even if "NO PROGRAM" appears on the screen, your timer functions and auto shut off functions that you set, are still active.

Invalid Signal

If you are inputting a PC signal that is invalid, "Invalid Signal" will appear on the TV screen. It appears when the input is PC and it is a single screen.

Lamp Replacement

Changing the Lamp

WARNING!

It is very important that you **NEVER TOUCH THE GLASS SURFACE OF THE NEW LAMP**. Touching the glass surface will deposit oils from your hand onto the lamp surface. When the lamp heats up to its operating temperature, the oil will cause a difference in temperature on the lamp surface that will likely cause the lamp to break.

Replace the lamp with part number TS-CL110U only! The television is designed to work specifically with this lamp. Using a different lamp, or a third-party manufacturer's lamp could cause a malfunction and or damage to the television.

This television uses a 110-Watt high-pressure mercury lamp to project images onto the television screen. When the lamp nears the end of its operating life, you may notice the picture becoming dark. When the picture begins to darken, or the lamp burns out, it is time to replace the lamp. The following instructions will tell you how to safely replace the lamp.

WARNING!

Under operating conditions, THE LAMP WILL GET EXTREMELY HOT AND WILL CAUSE SEVERE BURNS IF TOUCHED.

Before attempting to replace the lamp, make sure the television has completely run through its cooling cycle. Turn the power off and wait until the LAMP/PROGRAM LED blinks very slowly and turns off completely. Unplug the TV. If you feel any warmth as you place your hand near the lamp, **DO NOT TOUCH IT**. Wait until the lamp has completely cooled before attempting to replace it. After turning the power off, wait at least 1 hour or more.

NEVER attempt to replace the lamp with the television plugged into a wall outlet. Attempting to replace the lamp with the TV plugged in could lead to a severe electrical shock.

Do not keep the TV on for more than 24 hours consecutively. There is the possibility of the life of the lamp being shortened.

The life of the lamp changes depending on the atmospheric temperature and altitude in which the TV is being used.

Please read these instructions fully before attempting to replace the lamp. If you feel unsure about replacing the lamp yourself, call a service technician.

Lamp Replacement

Replacement Lamp Kit

Before replacing the lamp, you will need to purchase a replacement kit, part number TS-CL110U. To purchase this kit, consult your dealer or call 1-800-252-5722, or go to www.jvc.com.

The replacement kit will include the following:

1 High-Pressure Mercury Lamp

1 Instruction Manual

Because the lamp contains a small amount of mercury, it cannot be disposed of with normal trash.

Lamp Message

LAMP NEEDS TO BE REPLACED.
REFER TO OWNER'S MANUAL FOR
REPLACEMENT INSTRUCTIONS.

AFTER REPLACING THE LAMP,
PLEASE RESET TIMER IN THE TV
MENU.

PRESS OK, IF YOU DO NOT WANT
TO SEE THIS MESSAGE AGAIN.

If this message appears when you turn the TV on, you need to replace the lamp. See page 78 on how to replace the lamp.

Note:

- This message will appear every time you turn on the TV when the lamp needs to be replaced. Press the OK button to make the message disappear, or replace the lamp.

Lamp Replacement

How to Replace the Lamp

Please read these instructions fully before attempting to replace the lamp. If you feel unsure about replacing the lamp yourself, call a service technician. Please observe all safety warnings.

1) Turn off the television.

Press the POWER button on the remote control or TV front panel. Wait until the picture has closed and the LAMP LED on the front panel has stopped blinking indicating the lamp cool down is complete.

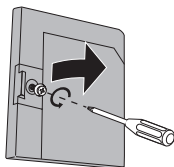
Warning: The cool-down process cools the lamp from its operating temperature. This does not mean that the lamp will now be cool enough to handle safely. We strongly recommend you wait at least one hour before proceeding.

2) Unplug the television.

Disconnect the power cord from the AC outlet. Make sure that the LAMP LED light has stopped blinking before you unplug the set. Never attempt to replace the lamp with the television plugged in.

3) Remove the lamp cover.

The lamp is located behind the lamp cover below the left side of the television. To access the lamp you will need to remove the lamp cover. First, remove the screw located on the lamp cover using a Philips head type screwdriver (cross-head type). Once the screw has been removed, gently pull the knob towards you and the panel will come away from the television. Set it aside.



WARNING: DO NOT attempt to remove the assembly until the lamp has fully cooled. If you feel any heat near the lamp, STOP and wait until the lamp has FULLY COOLED.

NEVER attempt to remove the lamp with the television plugged into an outlet.

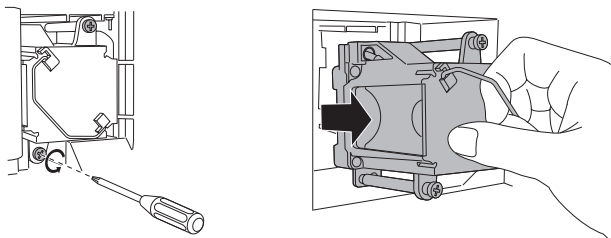
DO NOT DROP the used lamp. The inside of the lamp is under pressure. Dropping or other hard shock could cause the lamp to shatter.

ALWAYS recycle the used lamp. Because the lamp contains a small amount of mercury, it cannot be thrown away with regular trash. Follow the recycling instructions included with the Lamp Replacement Kit.

Lamp Replacement

4) Remove the lamp unit.

Using a Philips head type screwdriver (cross-head type), loosen the two screws fastening the lamp unit. When the screws have been loosened, remove the lamp by raising the handle and gently sliding the unit straight towards you. Place it carefully in the recycling packaging.



5) Install the new lamp unit.

Holding the handle attached to the new lamp unit, slide and push the new lamp straight into the television and back into the lamp housing area. **Do not forget to re-tighten the two screws.**

Note: If the lamp does not sit securely in the TV (flat in the lamp housing area), it won't turn on. Make sure the lamp sits securely and flat in the housing area.

WARNING!

Remember it is very important that **YOU DO NOT TOUCH THE LAMP SURFACE**. Please read the warnings on page 76 again.

Also, replace the lamp with part number TS-CL110U only! The television is designed to work specifically with this lamp. Lamps other than TS-CL110U may cause malfunctions and/or other damage to the television.

NOTICE (for USA)



This product has a High Intensity Discharge (HID) lamp that contains a small amount of mercury. It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronics Industries Alliance: <http://www.eiae.org>

To purchase a replacement lamp kit, please call 1-800-252-5722.

6) Re-install the lamp cover.

Insert the lamp cover in the right concave and close the lamp cover. Because the lamp cover has a role to help prevent the danger of an electrical shock, tighten the screw using your fingers.

Note:

- After installing the new lamp unit, do not forget to reset the lamp timer. See page 61.

Lamp Replacement

Warning LED Messages

While the power is on, and there is a problem with the TV, the TV changes to warning mode and informs you of the problem using the LED as follows. Then, the power turns off automatically and performs the cooling for approximately 1 minute.

The LAMP blinks

Condition: It may be a malfunction of the internal electrical circuits.

To correct: Keep the TV off for a while and then turn the power on again. If the TV goes into warning mode, unplug the TV after the cooling has completed and consult your dealer.

The POWER LED and LAMP blink alternately

Condition: The inside temperature rises abnormally or the fan may be blocked.

To correct: Keep the TV off for a while and then turn the power on again. If the TV goes into warning mode, unplug the TV after the cool down as completed and consult your dealer.

The POWER LED and LAMP blink rapidly simultaneously

Condition: The lamp unit has been installed on a slant and is not flat, or it is not fully inserted into the lamp housing. Or it may be a lamp malfunction.

To correct:

- If this condition occurs soon after replacing the lamp: Reinstall the new lamp unit. Repeat the lamp installation steps, taking care to observe all warnings. Make sure the lamp sits FLAT inside the unit when you reinstall it.
- If this condition occurs except for replacing the lamp: Keep the TV off for a while and then turn the power on again. If the TV goes into warning mode, unplug the TV after the cool down as completed and consult your dealer.

Troubleshooting

PROBLEMS	CHECK
There is no power	• See if the power cord became unplugged. • Check for a blown fuse or circuit breaker or a power outage. • It is possible the fan is stuck or the inside temperature is rising abnormally. Consult your dealer.
The POWER LED and LAMP LED are blinking alternately.	• It may be a malfunction that the fan is locked or the temperature has increased.
The POWER LED and LAMP LED are blinking rapidly simultaneously.	• The lamp may not have been installed correctly, or it may be due to a malfunction. • The lamp door may not be closed correctly.
There is no picture or sound	• The antenna could be disconnected. • The input mode could be set improperly. See page 64. • The tuner (Auto Tuner Setup) could be set improperly. See page 34. • The TV station may be having difficulties. Check to see if other stations are working. • Use the HDMI cable with HDMI logo HDMI. See page 20. • You can not output audio using the AUDIO OUTPUT under the following conditions: 1) When you have digital sound from an HDMI device connected to the HDMI 1 or HDMI 2 connection on the back of your TV. (See page 20). 2) When you have analog sound from a DVI device connected to the AUDIO IN "HDMI 1" connection. (See page 19). • When you have an HDMI device connected to the HDMI 1 connection on the back of your TV, your TV detects it, and blocks the analog audio signal coming into the "HDMI 1" jacks. Therefore, you can not hear any analog sound from the other device connected to the "HDMI 1" jacks, while you are viewing the images from the HDMI device. (See page 20).
Remote control is not operating properly or at all	• Check to see that the batteries are still working and properly installed. • Make sure the remote has a clear sight path to the TV. • Check that the TV/CATV switch is in the proper position. • You may be too far from the TV. You must be within 23 feet (7 meters).
You cannot select a certain channel	• Make sure the channels have been programmed. See "Channel Summary", page 35. • Check to see if the channel is locked. See "Channel Summary - Lock" page 36.
The power turns off by itself	• Make sure the set did not become unplugged. • Perhaps the On/Off Timer is set. See page 60. • Check to see if the Sleep Timer was set. See page 68.
It does not operate correctly	• This television is operated by a microprocessor. It is possible that external noise or interference is causing the problem. If the television does not function correctly, remove the electrical plug from the wall outlet and wait a while before inserting it into the wall outlet again and operating the television.
The clock is wrong	• The power was interrupted and the clock was not reset. See page 59.
The color quality is poor	• Tint and Color may be improperly adjusted. See page 55. • The Video Status mode may be turned to the wrong setting. See page 67.
There are lines across the picture	• There could be interference from another electrical appliance, such as a computer, another TV or VCR. Move any such appliances further away from the TV.
The picture is spotted	• There could be interference from a high-wattage appliance, like a hairdryer or vacuum, operating nearby. Move the antenna away from the appliance or change to a coaxial cable connection which is less prone to interference.
There are double pictures (ghosts)	• A building or passing airplane can reflect the original signal and produce a second, slightly delayed one. Adjust your antenna position.
Picture is snowy (image noise)	• Your antenna may be damaged, disconnected or turned. Check the antenna connection. If the antenna is damaged, replace it.
Screen is 80% black	• The Closed Caption Text mode is on. Turn it off in the Closed Caption Menu, page 69.
Stereo or bilingual programs can't be heard	• Make sure the MTS settings are correct. See page 68.
The LAMP LED continues blinking	• It may be a malfunction of the internal electrical circuits.

Troubleshooting

PROBLEMS	CHECK
Static electricity	• It is normal to feel static electricity if you brush or touch the screen.
You hear occasional crackling sounds	• It is normal for the TV to make crackling sounds when first turned on or off. Unless the sound or picture become abnormal, this is fine.

The following are not malfunctions.

- The television may make a creaking sound if the temperature of the room or the temperature inside the television changes. If there is no problem with the screen or sound, then there is no need to worry.
- The lamp may make a noise when it blows, but this is not dangerous.
- The lamp may make a noise when the power is turned on and a picture is displayed on the screen. This noise is caused when the mercury inside the lamp is heated, and is not a malfunction.
- The still parts of a picture may remain on the screen. This is a characteristic of HD-ILA elements and not a malfunction. The picture will disappear over time.
- The operation of this television is not guaranteed below 0°C. If the power is turned on while the temperature is below 0°C, the picture may be disturbed. Use the television when the temperature is 0°C or higher.
- Although the HD-ILA element is manufactured with high-precision technology, please understand that some pixels may be lost or permanently displayed.
- There is a cooling fan built-in to the television. Please understand that this fan will make some noise when the television is on and while cooling.
- Although the picture may be temporarily disturbed and noise may be seen on the screen if the power is turned on immediately after it has been turned off. This is not a malfunction.

Specifications

Model	HD-52FA97	HD-56FB97	HD-61FB97
Type	HD-ILA Device Projection		
Reception Format	NTSC, BTSC System (Multi-Channel Sound) ATSC Terrestrial, Digital Cable		
Reception Range	VHF 2 to 13, UHF 14 to 69 at ATSC, CATV 135 Sub, Mid, Super, Hyper and Ultra bands at Digital Cable		
	VHF 2 to 13, UHF 14 to 69 CATV 125 Sub, Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system) at Analog Reception of channel A-5 ("95" of the TV set's on-screen cable channel numbers) is not recommended for your TV set.		
Power Source	AC 120V, 60 Hz		
Power Consumption	220W		
Projection Source	110W High-Pressure Mercury Lamp		
Screen Size	52 inch / 132 cm measured diagonally, 16:9 ratio	56 inch / 142 cm measured diagonally, 16:9 ratio	61 inch / 155 cm measured diagonally, 16:9 ratio
Speakers	10 cm round x 2	(8.5 cm x 12.5 cm) oval x 2	
Audio Output	Full Range - 10W + 10W		
Antenna Terminal (VHF/UHF, ATSC/DIGITAL CABLE IN)	75 ohms (VHF/UHF)(F-type connector)		
Input 1, 2, 3, 4 Terminal	S (Input 1) Y: 1 Vp-p positive, 75 ohms (negative sync provided) C: 0.286 Vp-p (burst signal), 75 ohms Video: 1 Vp-p, 75 ohms (Input 1, 2, 4) Audio: 500 mVrms (-4dBs) high impedance		
Input 1, 2 Terminal (component terminal)	1080i / 720p / 480p / 480i Y: 1 Vp-p positive, 75 ohms (negative sync provided) Pb/Pr: 0.7 Vp-p 75 ohms		
DIGITAL-IN (HDMI input terminal)	HDMI Jack x 2 Personal computer compatibility cannot be guaranteed. Video: 1080p / 1080i / 720p / 480p / 480i / VGA Audio: 2ch PCM, 32 / 44.1 / 48 KHz 16 / 20 / 24 bit		
Audio Output Jacks	FIX : 500mVrms (-4dBs) Low impedance (1000 Hz when modulated 100%)		
Optical Output Digital Audio	Digital Out (optical) x 1		
PC Input Jack	Analog RGB D-SUB (15 pin) x 1 PC signal is available. Refer to page 23 for details on the signals which can be input.		
Dimensions (inch) W X H X D (cm)	48 1/2 x 35 7/8 x 16 3/8 122.9 x 91.1 x 41.5	50 7/8 x 37 1/8 x 17 3/4 129.2 x 94.4 x 45	55 1/4 x 40 x 19 140.3 x 101.6 x 48.4
Weight (lbs / kg)	86 / 39	91 / 41	99 / 45
Accessories	Remote control unit x 1 / AA batteries X 2		

Specifications subject to change without notice.

- The open source software is embedded in this product. For more information, please go to:
http://software.jvc.com/opensource/Inx/DP/05_AtscQam/download.html



LIMITED WARRANTY

COLOR TV 1-1

For Canadian model televisions, see separate sheets for Canadian Warranty information.

JVC COMPANY OF AMERICA (JVC) warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period")
FOR DIRECT-VIEW COLOR TELEVISION, PICTURE TUBE is covered for Two(2)years.

Parts	1 YEAR	Labor	1 YEAR
-------	--------	-------	--------

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website <http://www.jvc.com>. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Care Center at 800-252-5722

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
2. Initial installation, installation and removal from cabinets or mounting systems.
3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
5. Signal reception problems and failures due to line power surge;
6. Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
7. Accessories;
8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
9. Products used for commercial purposes, including, but not limited to rental.

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.

1700 Valley Road
Wayne, NJ 07470

<http://www.jvc.com>

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAIL OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:

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

Model No. : _____

Serial No. : _____

Purchase date : _____

Name of dealer : _____

TO OUR VALUED CUSTOMER —

THANK YOU FOR PURCHASING THIS JVC PRODUCT.
WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

**NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?**

JVC[®] IS HERE TO HELP!
TOLL FREE: 1(800)252-5722
<http://www.jvc.com>

Remember to retain your Bill of Sale for Warranty Service.

———— **Do not attempt to service the product yourself** ————

Caution

To prevent electrical shock, do not open the cabinet.
There are no user serviceable parts inside.
Please refer to qualified service personnel for repairs.

Notes

JVC COMPANY OF AMERICA
Division of JVC Americas Corp.
1700 Valley Road
Wayne, New Jersey, 07470



JVC CANADA, INC.
21 Finchdene Square
Scarborough, Ontario
Canada, M1X 1A7

PARTS LIST

CAUTION

- The parts identified by the Δ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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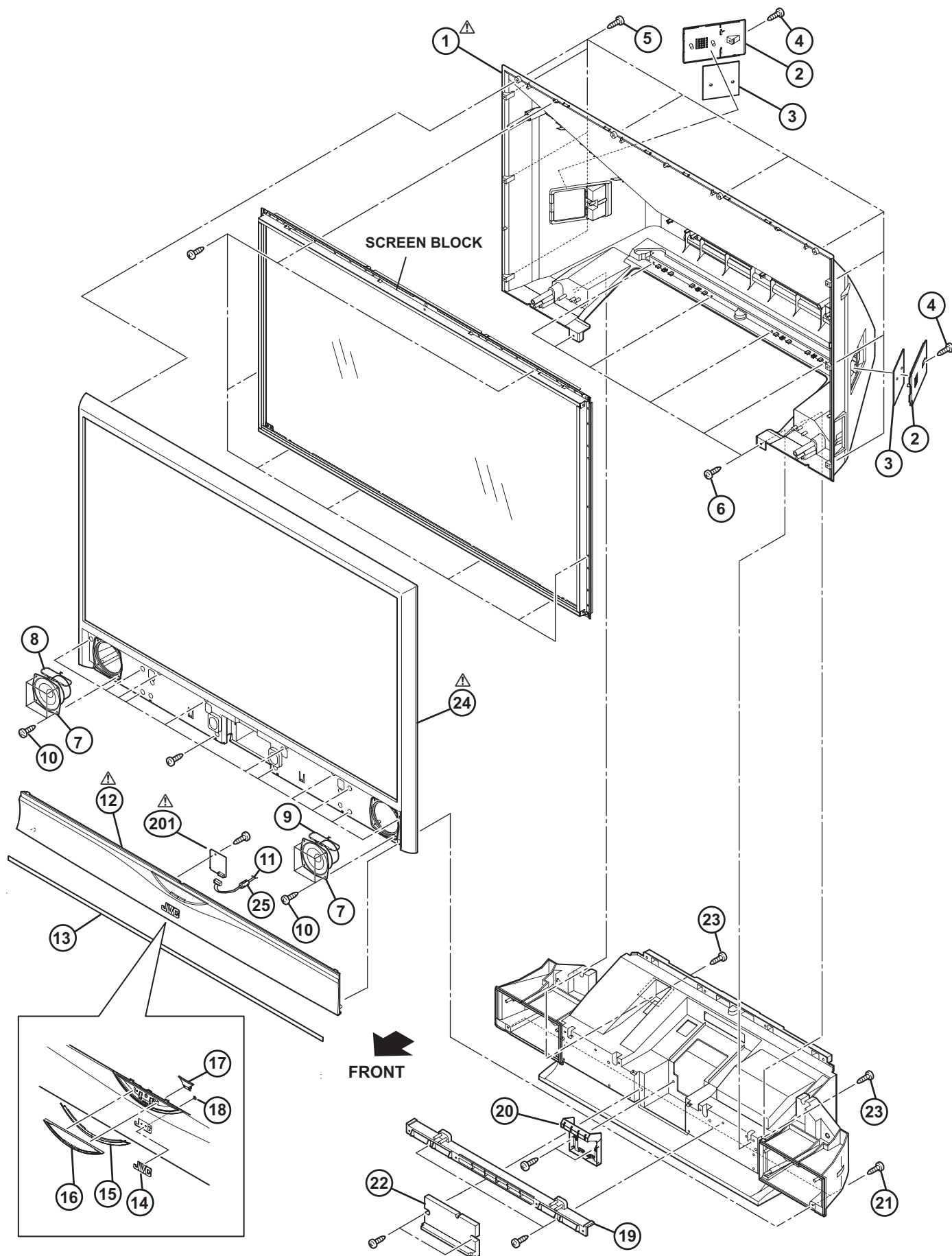
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	P.W.B ASS'Y No.		
	HD-52FA97	HD-56FB97	HD-61FB97
ANALOG P.W.B	SRA-1024A-M2	←	←
DRIVE P.W.B	SRA-3013A-M2	←	←
REMOCON P.W.B	SRA-8011A-M2	←	←
TEMP P.W.B	SRA-8211A-M2	←	←
USB P.W.B	SRA-8521A-M2	←	←
POWER P.W.B	SRA-9017A-M2	←	←
DIGITAL P.W.B	SRA0D161A-M2	SRA0D160A-M2	SRA0D159A-M2
SIDE CONTROL P.W.B	SRA0L013A-M2	←	←
FRONT LED P.W.B	SRA0L111A-M2	SRA0L113A-M2	←
LAMP COVER SW P.W.B	SRA0L211A-M2	←	←
TUNER P.W.B	SRA0R012A-M2	←	←
ATSC TUNER MODULE P.W.B	SSD-2205A-M2	←	←
REMOTE CONTROL UNIT	RM-C18G-1H	←	←

EXPLODED VIEW PARTS LIST -1 [HD-52FA97]

△	Ref.No.	Part No.	Part Name	Description	Local
△	1	LC12260-001E-A	BACK COVER		
	2	LC21888-001B-A	FILTER COVER	(x2)	
	3	LC33541-001A-A	FILTER	(x2)	
	4	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x2)	
	5	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x10)	
	6	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x6)	
	7	QAS0369-002	SPEAKER	SP01/SP02(x2)	
	8	WJJ0487-001A-E	E-SI C WIRE C-C	SPEAKER (LEFT)	
	9	WJJ0487-002A-E	E-SI C WIRE C-C	SPEAKER (RIGHT)	
	10	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x8)	
△	11	WJJ0486-001A-E	E-SI C WIRE C-C		
	12	LC12261-003B-A	SPEAKER GRILL		
	13	LC21877-006A-A	FITTING PLATE		
	14	LC32707-003A-C	JVC MARK		
	15	LC21876-001A-A	INDICATE WINDOW		
	16	LC33145-006A-0K	POWER KNOB ASSY		
	17	LC33148-001B-A	LED LENS		
	18	QYNSS2000P	PUSH NUT	M2	
	19	LC12303-001C-A	SUPPORT HOLDER		
	20	LC22201-001A-A	SHADE COVER		
	21	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x2)	
	22	LC21590-001C-A	CENTER COVER		
	23	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x2)	
△	24	LC12262-005A-A	FRONT PANEL		
	25	QQR0491-001	FERRITE CORE		
△	201	SRA0L111A-M2	FRONT LED PWB		

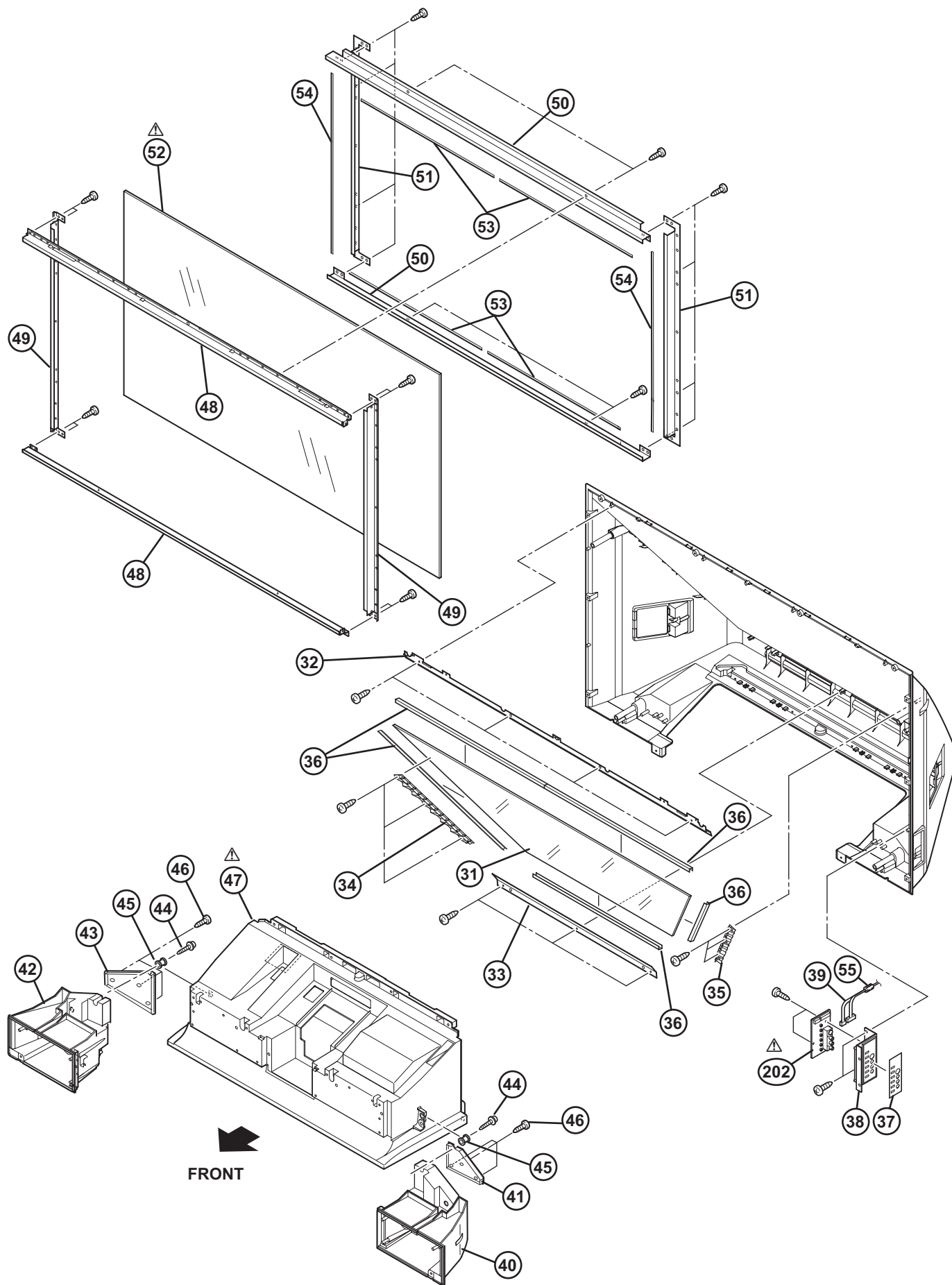
EXPLODED VIEW -1 [HD-52FA97]



EXPLODED VIEW PARTS LIST -2 [HD-52FA97]

△ Ref.No.	Part No.	Part Name	Description	Local
31	LC33055-003B	GLASS MIRROR		
32	LC12362-002A-A	MIRROR HOLDER	TOP	
33	LC12371-001A-A	MIRROR HOLDER	BOTTOM	
34	LC21538-001A-A	MIRROR HOLDER	RIGHT	
35	LC21538-002A-A	MIRROR HOLDER	LEFT	
36	LC21931-003A-A	SPONGE SPACER	(x5)	
37	LC33046-003A-A	SIDE CONTROL SHEET		
38	LC21805-001A-A	SIDE CONTROL BASE		
39	WJZ0221-001A-E	E-HARNESS ASSY	SIDE CONTROL S1/S2/S3 - ANALOG	
40	LC12305-001A-A	SPEAKER BOX	LEFT	
41	LC12306-001A-A	SPEAKER BOX COVER	LEFT	
42	LC12305-002A-A	SPEAKER BOX	RIGHT	
43	LC12306-002A-A	SPEAKER BOX COVER	RIGHT	
44	LC40506-003A-A	TAPPING SCREW	(x2)	
45	LC40226-005A-H	SPACER	(x2)	
46	QYSBSFG4016MA	TAP SCREW	(x6)	
△ 47	LC12263-001G-A	BODY		
48	LC12364-001B-A	SCREEN HOLDER	FRONT TOP/BOTTOM(x2)	
49	LC12366-001A-A	SCREEN HOLDER	FRONT LEFT/RIGHT(x2)	
50	LC12365-001B-A	SCREEN HOLDER	BACK TOP/BOTTOM(x2)	
51	LC12367-001A-A	SCREEN HOLDER	BACK LEFT/RIGHT(x2)	
△ 52	52SC-006A-M2	SCREEN ASSY		
53	LC21715-020A-A	SPONGE SPACER	(x4)	
54	LC21715-034A-A	SPONGE SPACER	(x2)	
55	QQR0491-001	FERRITE CORE		
△ 202	SRA0L013A-M2	SIDE CONTROL PWB		

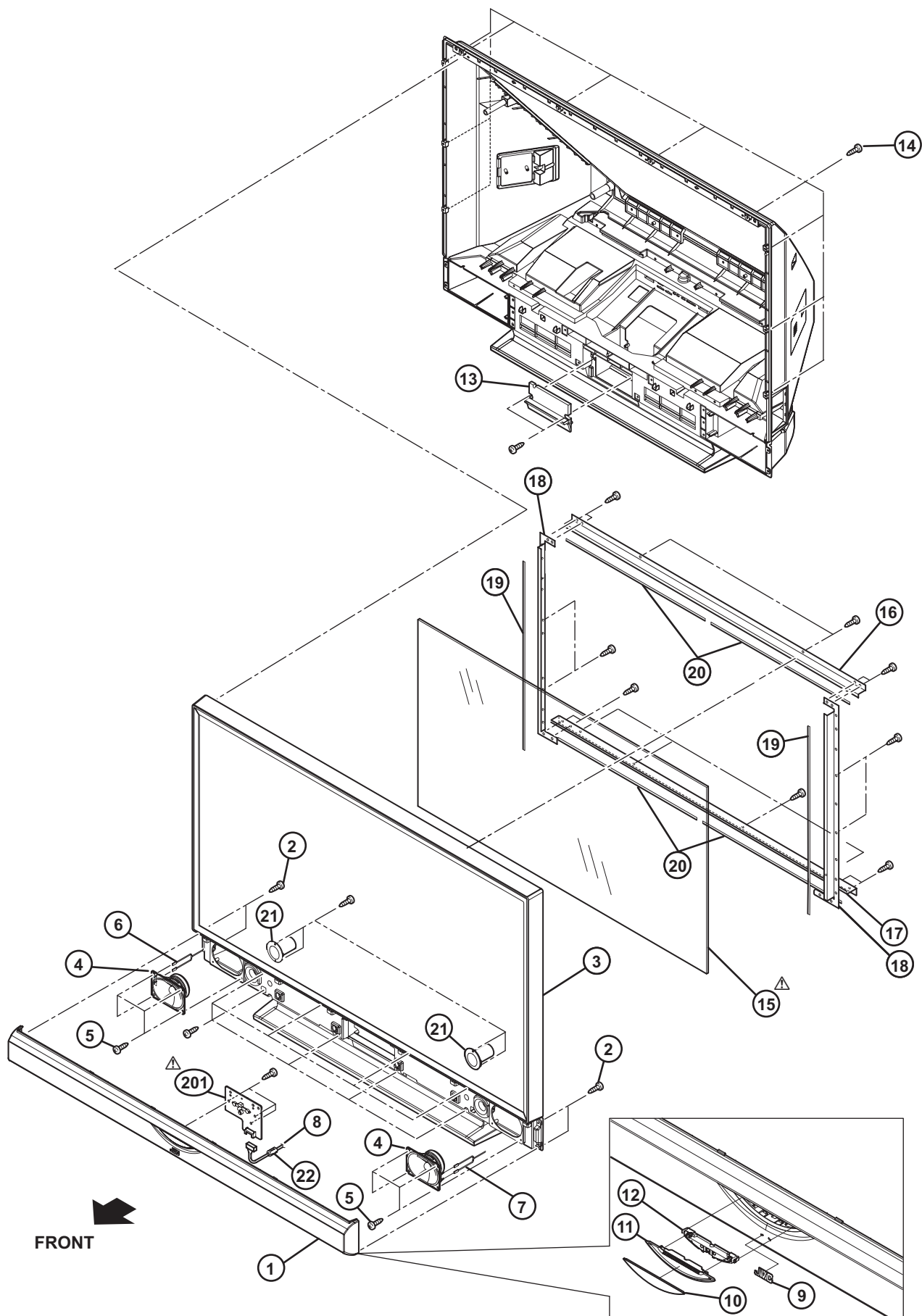
EXPLODED VIEW -2 [HD-52FA97]



EXPLODED VIEW PARTS LIST -3 [HD-56FB97, HD-61FB97]

△	Ref.No.	Part No.	Part Name	Description	Local
	1	LC12698-004A-A	SPEAKER GRILL		HD-56FB97
	1	LC12746-003A-A	SPEAKER GRILL		HD-61FB97
	2	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x4)	
	3	LC12695-005A-A	FRONT PANEL		HD-56FB97
	3	LC12745-004A-A	FRONT PANEL		HD-61FB97
	4	QAS0437-001	SPEAKER	SP01/SP02(x2)	
	5	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x8)	
	6	WJJ0487-001A-E	E-SI C WIRE C-C	for SPEAKER	
	7	WJJ0487-002A-E	E-SI C WIRE C-C	for SPEAKER	
	8	WJJ0486-001A-E	E-SI C WIRE C-C	FRONT LED CN9F - ANALOG	
	9	LC33535-003A-C	JVC MARK		
	10	LC33460-003A	ORNAMENT PLATE		
	11	LC22099-001B-A	POWER KNOB		
	12	LC22100-001B-A	KNOB BASE		
	13	LC12727-001A-A	CENTER COVER		
	14	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x10)	
△	15	56ILASC11AM2	SCREEN ASSY		HD-56FB97
△	15	61SC-012A-M2	SCREEN ASSY		HD-61FB97
	16	LC12717-001A-A	SCREEN HOLDER	TOP	HD-56FB97
	16	LC12751-001A-A	SCREEN HOLDER	TOP	HD-61FB97
	17	LC12718-001A-A	SCREEN HOLDER	BOTTOM	HD-56FB97
	17	LC12752-001A-A	SCREEN HOLDER	BOTTOM	HD-61FB97
	18	LC12716-001A-A	SCREEN HOLDER	LEFT/RIGHT(x2)	HD-56FB97
	18	LC12750-001A-A	SCREEN HOLDER	LEFT/RIGHT(x2)	HD-61FB97
	19	LC21715-038A-A	SPONGE SPACER	(x2)	HD-56FB97
	19	LC21715-033A-A	SPONGE SPACER	(x2)	HD-61FB97
	20	LC21715-039A-A	SPONGE SPACER	(x4)	HD-56FB97
	20	LC21715-042A-A	SPONGE SPACER	(x4)	HD-61FB97
	21	LC33504-001A-A	SPEAKER DUCT	(x2)	
	22	QQR0491-001	FERRITE CORE		
△	201	SRA0L113A-M2	FRONT LED PWB		

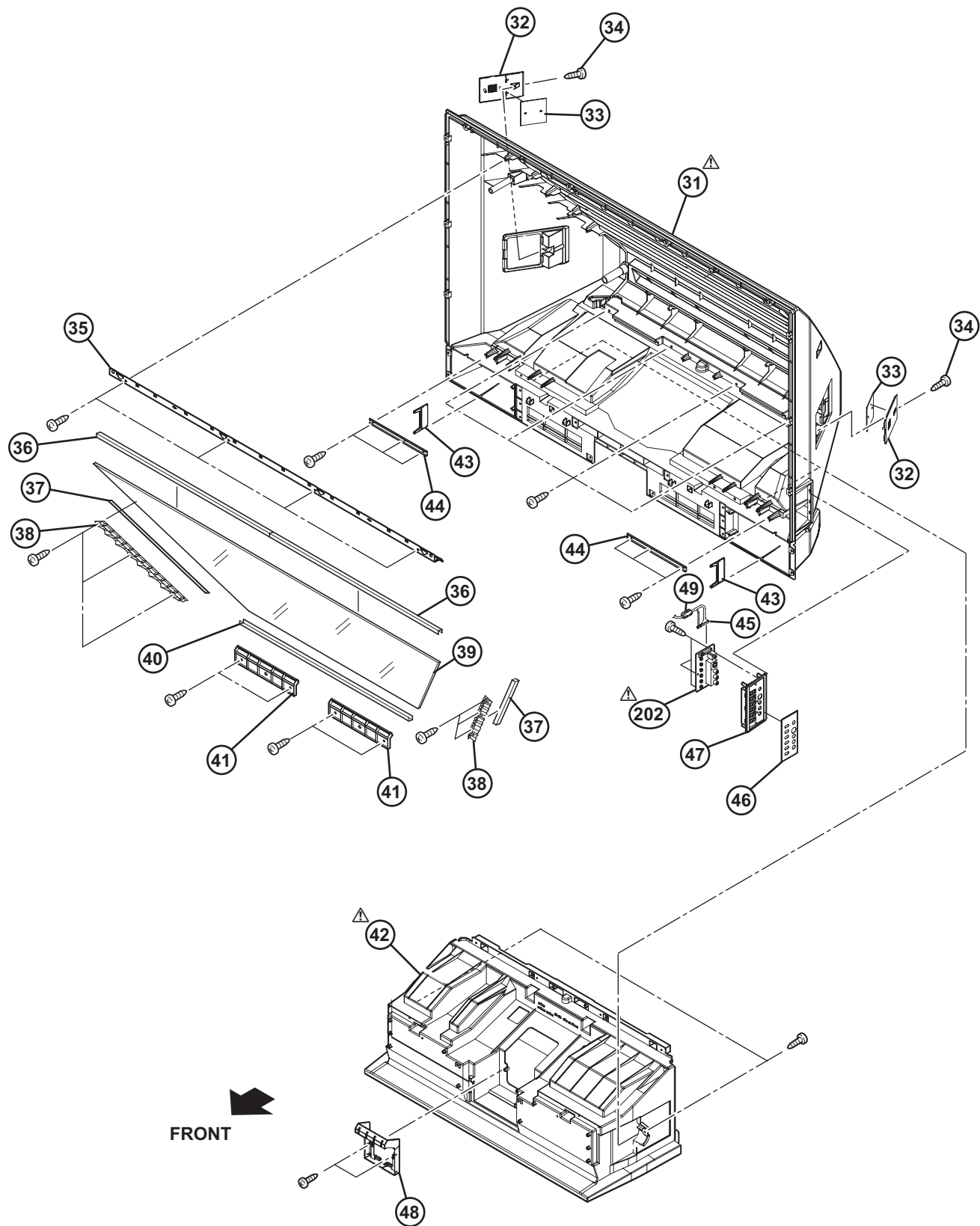
EXPLODED VIEW -3 [HD-56FB97, HD-61FB97]



EXPLODED VIEW PARTS LIST -4 [HD-56FB97, HD-61FB97]

△	Ref.No.	Part No.	Part Name	Description	Local
△	31	LC12696-001B-A	BACK COVER		HD-56FB97
△	31	LC12743-001B-A	BACK COVER		HD-61FB97
	32	LC21888-001B-A	FILTER COVER	(x2)	
	33	LC33541-001A-A	FILTER	(x2)	
	34	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x2)	
	35	LC12713-001A-A	MIRROR HOLDER	TOP	HD-56FB97
	35	LC12747-001A-A	MIRROR HOLDER	TOP	HD-61FB97
	36	LC33598-008A-A	STICK SHEET	(x2)	HD-56FB97
	36	LC33598-010A-A	STICK SHEET	(x2)	HD-61FB97
	37	LC33598-006A-A	STICK SHEET	(x2)	
	38	LC12715-001A-A	MIRROR HOLDER	LEFT/RIGHT(x2)	
	39	LC33507-002A	GLASS MIRROR		HD-56FB97
	39	LC33507-003A	GLASS MIRROR		HD-61FB97
	40	LC33598-008A-A	STICK SHEET		HD-56FB97
	40	LC33598-010A-A	STICK SHEET		HD-61FB97
	41	LC12714-001A-A	MIRROR HOLDER	BOTTOM(x2)	
△	42	LC12697-001A-A	BODY		
	43	LC22229-001B-A	SUPPORT PLATE	(x2)	HD-56FB97
	43	LC22230-001A	SUPPORT PLATE	(x2)	HD-61FB97
	44	LC33580-001A-0K	SUPPORT BRACKET	(x2)	
	45	WJZ0221-001A-E	E-HARNESS ASSY	S CONTROL CN08S1/CN08S2 - ANALOG	
	46	LC33463-001A-A	SIDE CONTROL SHEET		
	47	LC22101-001B-A	SIDE CONTROL BASE		
	48	LC22201-001A-A	SHADE COVER		
	49	QQR0491-001	FERRITE CORE		
△	202	SRA0L013A-M2	SIDE CONTROL PWB		

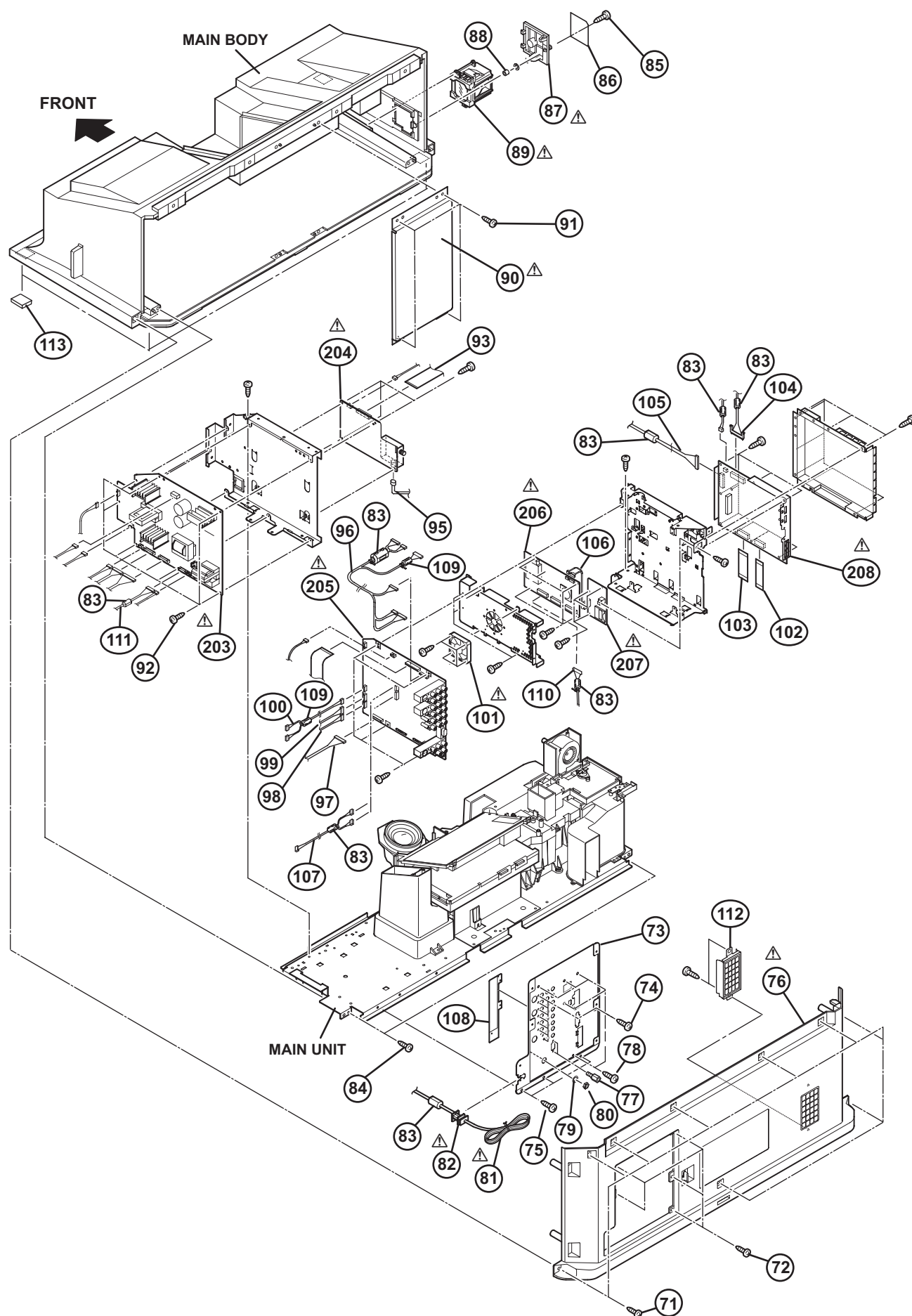
EXPLODED VIEW -4 [HD-56FB97, HD-61FB97]



EXPLODED VIEW PARTS LIST -5

△	Ref.No.	Part No.	Part Name	Description	Local
	71	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x11)	HD-52FA97
	71	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x7)	HD-56FB97,HD-61FB97
	72	QYSBSG4012ZA	TAP SCREW	M4 x 12mm(x5)	
	73	LC22113-010A-A	AV TERMINAL BOARD		
	74	QYSBSF3012MA	TAP SCREW	M3 x 12mm(x7)	
	75	QYSBSG4012ZA	TAP SCREW	M4 x 12mm(x3)	
△	76	LC12259-001C-A	BODY COVER		
	77	QNB0036-001	CONN ACCESSORY	(x2)	
	78	QYSBSG3008ZA	TAP SCREW	M3 x 8mm(x5)	
	79	CM46798-001	WASHER		
	80	LC42119-001A	NUT		
△	81	QMPD290-200-JC	POWER CORD(US/CA)	2m BLACK	
△	82	LC20106-001D-A	POWER CORD CLAMP		
	83	QQR0491-001	FERRITE CORE	(x8)	
	84	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x2)	
	85	LC42077-001A-A	ASSY SCREW		
	86	LC33208-001A-A	WARNING SHEET		
△	87	LC12307-001C-A	LAMP COVER		
	88	LC42276-001A-A	INSERT NUT		
△	89	TS-CL110UAA	LAMP UNIT		
△	90	LC11943-001B-A	BODY BRACKET		
	91	QYSBSFG4016MA	TAP SCREW	M4 x 16mm(x4)	
	92	QYSBSGG3008ZA	TAP SCREW	M3 x 8mm(x7)	
	93	QUQK12-2514CH-E	FFC WIRE	TUNER CNT1 - ANALOG CN1T1	
	95	WJX0035-001A-E	E-COAXIAL ASSY	TUNER	
	96	WJZ0222-001A-E	E-HARNESS ASSY	ANALOG CN1F/CN1S1/CN1S2 - FLONT LED/S CONTROL	
	97	QJJ015-122012-E	SIN CR C-C WIRE	ANALOG CN1A3 - POWER CN9A3	
	98	QJJ015-053010-E	SIN CR C-C WIRE	ANALOG CN1A2 - POWER CN9A2	
	99	QJJ061-062211-E	SIN CR C-C WIRE	ANALOG CN1A1 - POWER CN9A1	
△	100	WJJ0485-003A-E	E-SI C WIRE C-C		
△	101	QAR0404-001	COOLING FAN		
	102	QUQL05-4013AE-E	FFC WIRE	DIGITAL CN012 - ANALOG CN012	
	103	QUQL05-5013AE-E	FFC WIRE	DIGITAL CN011 - ANALOG CN011	
	104	WJW0051-001A-E	E-TWISTED ASSY	DIGITAL CN0LV1 - DRIVE CNLV1	
	105	WJJ0656-001A-E	E-SI C WIRE C-C		
	106	WJJ0729-001A-E	E-SI C WIRE C-C		
	107	WJZ0218-001A-E	E-SI C WIRE C-C		
	108	LC42521-001A-A	COVER SHEET		
	109	QQR0490-001	NOISE FILTER	(x2)	
	110	WJJ0699-001A-E	E-SI C WIRE C-C		
	111	QJJ015-099424-E	SIN CR C-C WIRE		
	112	LC21690-002A-A	LAMP DUCT BRACKET		
	113	LC33206-001A-A	FOOT	(x4)	
△	203	SRA-9017A-M2	POWER PWB		
△	204	SRA0R012A-M2	TUNER PWB		
△	205	SRA-1024A-M2	ANALOG PWB		
△	206	SSD-2205A-M2	ATSC TUNER MODULE PWB		
△	207	SRA-8521A-M2	USB PWB		
△	208	SRA0D161A-M2	DIGITAL PWB		HD-52FA97
△	208	SRA0D160A-M2	DIGITAL PWB		HD-56FB97
△	208	SRA0D159A-M2	DIGITAL PWB		HD-61FB97

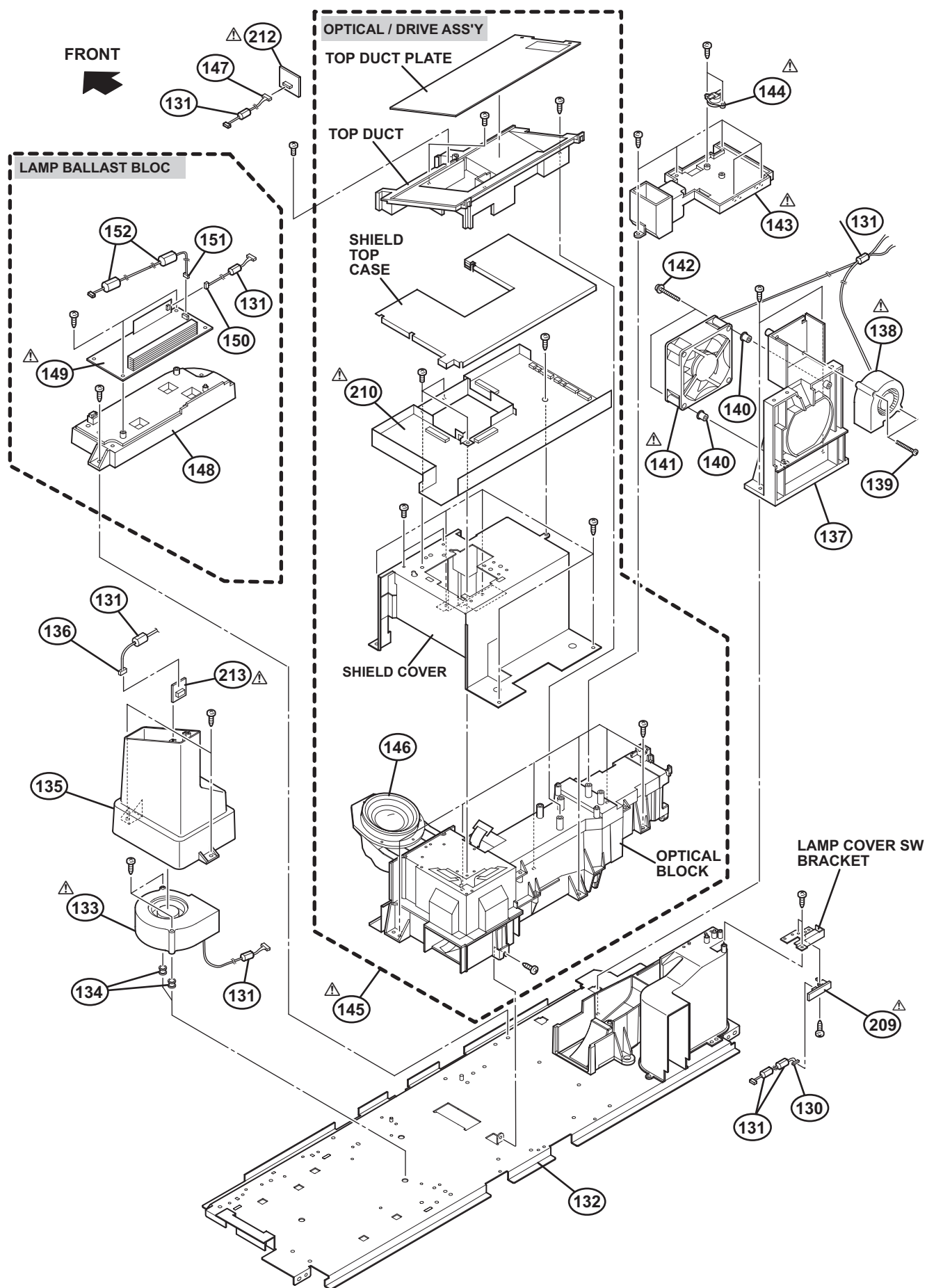
EXPLODED VIEW -5



EXPLODED VIEW PARTS LIST -6

△	Ref.No.	Part No.	Part Name	Description	Local
	130	WJJ0708-001B-E	E-HARNESS ASSY		
	131	QQR0490-001	NOISE FILTER	(x7)	
	132	LC12369-001C-A	UNIT BASE		
△	133	QAR0368-003	COOLING FAN		
	134	LC42034-001A-A	WELL NUT	(x2)	
	135	LC12355-001B-A	SIROCCO CASE T		
	136	QJJ015-041204-E	SIN CR C-C WIRE		
	137	LC12352-001B-A	HOLDER FAN		
△	138	QAR0367-001	COOLING FAN		
	139	QYSBSFG4035MA	TAP SCREW	M4 x 35mm(x2)	
	140	LC42034-001A-A	WELL NUT	(x2)	
△	141	QAR0354-002	COOLING FAN		
	142	QYSPSPD4040MA	SCREW	M4 x 40mm(x2)	
△	143	LC12225-001A-A	DUCT PCS		
△	144	QMR0014-001	THERMO PROTECTOR		
△	145	COP14A-SAA	OPTICAL/DRIVE ASSY		
	146	LC12777-002A	PJ LENS		
	147	QJJ015-034213-E	SIN CR C-C WIRE		
	148	LC12353-001C-A	BALLAST HOLDER		
△	149	QAL0883-001	POWER UNIT ASSY		
	150	WJJ0664-001A-E	E-SI C WIRE C-C		
	151	WJJ0652-003A-E	E-SI C WIRE C-C		
	152	QQR0491-001	FERRITE CORE	(x2)	
△	209	SRA0L211A-M2	LAMP COVER SW PWB		
△	210	SRA-3013A-M2	DRIVE PWB		
△	212	SRA-8011A-M2	REMOCON PWB		
△	213	SRA-8211A-M2	TEMP PWB		

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PRINTED WIRING BOARD PARTS LIST [HD-52FA97]

ANALOG P.W. BOARD ASS'Y (SRA-1024A-M2)

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
IC101	R2S11004FT	IC			C108	NEHL1CM-476X	E CAPACITOR	47uF 16V M	
IC102	R2S11003FT	IC			C109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
IC601	NJW1182FP1	IC			C110	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
IC602	PQ20WZ11-X	IC			C115	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
IC605	TDA8928ST/N1	IC			C116	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
IC606	M62320FP-X	IC			C117	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
IC607	LM393DR-X	IC			C118	NCB31CK-105X	C CAPACITOR	1uF 16V K	
IC610	RC4558D-X	IC			C119	NCB31CK-105X	C CAPACITOR	1uF 16V K	
IC902	MM1663DT-X	IC			C120	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q106	SSM3K17FU-X	MOS FET			C121	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q107	SSM3K17FU-X	MOS FET			C122	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q108	2SC3928A/QR/-X	TRANSISTOR			C123	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q109	2SA1022/BC/-X	TRANSISTOR			C124	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q110	2SA1022/BC/-X	TRANSISTOR			C125	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q111	2SA1022/BC/-X	TRANSISTOR			C126	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q112	2SA1022/BC/-X	TRANSISTOR			C127	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q113	2SC3928A/QR/-X	TRANSISTOR			C128	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q451	UN2226-X	DIGI TRANSISTOR			C129	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q452	UN2226-X	DIGI TRANSISTOR			C130	NEHL1CM-476X	E CAPACITOR	47uF 16V M	
Q453	UN2110-X	DIGI TRANSISTOR			C131	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q605	UN2212-X	DIGI TRANSISTOR			C132	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q606	UN2112-X	DIGI TRANSISTOR			C133	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q607	2SC3928A/QR/-X	TRANSISTOR			C134	NCB31CK-105X	C CAPACITOR	1uF 16V K	
Q614	2SA1530A/QR/-X	TRANSISTOR			C136	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D105	1SS355W-X	DIODE			C137	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D110	1SS355W-X	DIODE			C138	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D121	MA8056/M/-X	Z DIODE			C140	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D122	MA8056/M/-X	Z DIODE			C141	NEHL1CM-106X	E CAPACITOR	10uF 16V M	
D123	MA8056/M/-X	Z DIODE			C142	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D124	MA8056/M/-X	Z DIODE			C143	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D125	MA8056/M/-X	Z DIODE			C156	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D126	MA8056/M/-X	Z DIODE			C157	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D133	MA8100/M/-X	Z DIODE			C158	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D134	MA8100/M/-X	Z DIODE			C159	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
D135	MA8100/M/-X	Z DIODE			C160	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
D401	UDZW10B-X	Z DIODE			C161	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D402	UDZW10B-X	Z DIODE			C162	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
D403	UDZW10B-X	Z DIODE			C163	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D404	UDZW10B-X	Z DIODE			C164	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D405	UDZW10B-X	Z DIODE			C165	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D406	UDZW10B-X	Z DIODE			C166	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D407	UDZW10B-X	Z DIODE			C167	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D408	UDZW10B-X	Z DIODE			C168	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D409	UDZW10B-X	Z DIODE			C169	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D410	UDZW10B-X	Z DIODE			C170	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D411	UDZW10B-X	Z DIODE			C171	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D412	UDZW10B-X	Z DIODE			C172	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D413	UDZW10B-X	Z DIODE			C173	NDC31HJ-680X	C CAPACITOR	68pF 50V J	
D414	UDZW10B-X	Z DIODE			C174	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
D415	UDZW10B-X	Z DIODE			C175	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D420	UDZW10B-X	Z DIODE			C176	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D421	UDZW10B-X	Z DIODE			C177	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D422	UDZW10B-X	Z DIODE			C178	NCB31CK-105X	C CAPACITOR	1uF 16V K	
D423	UDZW10B-X	Z DIODE			C179	NEHL1CM-476X	E CAPACITOR	47uF 16V M	
D424	UDZW10B-X	Z DIODE			C180	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D451	UDZW10B-X	Z DIODE			C181	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D452	UDZW10B-X	Z DIODE			C182	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D461	UDZW10B-X	Z DIODE			C183	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
D462	UDZW10B-X	Z DIODE			C184	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D463	UDZW10B-X	Z DIODE			C185	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D465	UDZW10B-X	Z DIODE			C187	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D466	UDZW10B-X	Z DIODE			C189	NEHL1CM-106X	E CAPACITOR	10uF 16V M	
D491	UDZW3.3B-X	Z DIODE			C194	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
D492	S9648	PHOTO CONDUCTOR			C195	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
D601	1SS355W-X	DIODE			C196	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
D605	1SS355W-X	DIODE			C197	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D606	1SS355W-X	DIODE			C198	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D607	1SS355W-X	DIODE			C199	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D608	1SS355W-X	DIODE			C200	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D610	UDZW20B-X	Z DIODE			C201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D611	UDZW20B-X	Z DIODE			C202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D612	UDZW20B-X	Z DIODE			C203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D613	UDZW20B-X	Z DIODE			C207	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	
D615	1SS355W-X	DIODE			C208	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	
D616	UDZW3.3B-X	Z DIODE			C211	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
D618	1SS355W-X	DIODE			C212	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
D619	UDZW6.2B-X	Z DIODE			C221	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D903	PTZ11B-X	Z DIODE			C222	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D904	PTZ6.8B-X	Z DIODE			C223	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C102	NCB11CK-225X	C CAPACITOR	2.2uF 16V K		C224	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C103	NCB11CK-225X	C CAPACITOR	2.2uF 16V K		C225	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C106	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M		C226	NDC31HJ-181X	C CAPACITOR	180pF 50V J	
C107	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C227	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
					C228	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
					C229	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
					C240	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
					C241	NDC31HJ-100X	C CAPACITOR	10pF 50V J	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C242	NDC31HJ-100X	C CAPACITOR	10pF 50V J	C687	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C245	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C688	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C246	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C689	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C291	NCB11AK-106X	C CAPACITOR	10uF 10V K	C690	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C306	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M	C691	NEHL1EM-226X	E CAPACITOR	22uF 25V M
C307	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M	C692	NEHL1EM-226X	E CAPACITOR	22uF 25V M
C401	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C693	NCB11EK-105X	C CAPACITOR	1uF 25V K
C402	NEHL1CM-106X	E CAPACITOR	10uF 16V M	C694	NCB11EK-105X	C CAPACITOR	1uF 25V K
C403	NEHL1CM-106X	E CAPACITOR	10uF 16V M	C697	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C404	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C698	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C405	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C699	QETM1HM-226	E CAPACITOR	22uF 50V M
C406	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C700	QETM1HM-226	E CAPACITOR	22uF 50V M
C407	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C701	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C408	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C702	QETM1EM-477	E CAPACITOR	470uF 25V M
C409	NEHL1CM-106X	E CAPACITOR	10uF 16V M	C704	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C410	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C705	QETM1EM-477	E CAPACITOR	470uF 25V M
C411	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C707	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C412	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C708	NCB31HK-561X	C CAPACITOR	560pF 50V K
C413	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C709	NCB31HK-561X	C CAPACITOR	560pF 50V K
C414	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C711	NCB31HK-561X	C CAPACITOR	560pF 50V K
C418	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C712	NCB31HK-561X	C CAPACITOR	560pF 50V K
C419	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C713	QFVF1HJ-224Z	MF CAPACITOR	0.22uF 50V J
C422	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C716	NEHL1CM-476X	E CAPACITOR	47uF 16V M
C423	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C717	NCB31CK-105X	C CAPACITOR	1uF 16V K
C451	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	C719	QFVF1HJ-224Z	MF CAPACITOR	0.22uF 50V J
C452	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	C720	QFVF1HJ-224Z	MF CAPACITOR	0.22uF 50V J
C453	NCB11CK-105X	C CAPACITOR	1uF 16V K	C721	QFVF1HJ-224Z	MF CAPACITOR	0.22uF 50V J
C461	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C722	NCB31HK-153X	C CAPACITOR	0.015uF 50V K
C462	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C723	NCB31HK-153X	C CAPACITOR	0.015uF 50V K
C463	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C724	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C464	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C727	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C465	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C728	QETM1EM-477	E CAPACITOR	470uF 25V M
C466	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	C734	NENA1CM-475X	BP E CAPACITOR	4.7uF 16V M
C468	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C739	NENA1CM-475X	BP E CAPACITOR	4.7uF 16V M
C469	NDC31HJ-101X	C CAPACITOR	100pF 50V J	C740	NEHL1CM-476X	E CAPACITOR	47uF 16V M
C491	NEHL1CM-106X	E CAPACITOR	10uF 16V M	C741	NEHL1CM-476X	E CAPACITOR	47uF 16V M
C492	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C742	NEHL1HM-105X	E CAPACITOR	1uF 50V M
C493	NEHL1CM-107X	E CAPACITOR	100uF 16V M	C743	NEHL1HM-105X	E CAPACITOR	1uF 50V M
C494	NCB31HK-102X	C CAPACITOR	1000pF 50V K	C744	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C601	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C745	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C602	NEHL1EM-336X	E CAPACITOR	33uF 25V M	C904	NCB11AK-106X	C CAPACITOR	10uF 10V K
C603	NEHL1EM-336X	E CAPACITOR	33uF 25V M	C905	NEHM1CM-476X	E CAPACITOR	47uF 16V M
C604	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	C911	NEX51CM-335X	E CAPACITOR	3.3uF 16V M
C605	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	C913	NEX51CM-335X	E CAPACITOR	3.3uF 16V M
C606	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C914	NEX50JM-156X	E CAPACITOR	15uF 6.3V M
C607	QETM1EM-477	E CAPACITOR	470uF 25V M	C916	NEX50JM-156X	E CAPACITOR	15uF 6.3V M
C616	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M				
C617	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M	R136	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C623	NCB21CK-184X	C CAPACITOR	0.18uF 16V K	R137	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C624	NCB31HK-222X	C CAPACITOR	2200pF 50V K	R140	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C625	NCB31HK-183X	C CAPACITOR	0.018uF 50V K	R141	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C628	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	R142	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C629	NCB31HK-222X	C CAPACITOR	2200pF 50V K	R143	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C630	NCB21CK-184X	C CAPACITOR	0.18uF 16V K	R144	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C632	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R145	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C633	NCB31HK-822X	C CAPACITOR	8200pF 50V K	R146	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C634	NCB31HK-822X	C CAPACITOR	8200pF 50V K	R147	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C635	NCB31HK-681X	C CAPACITOR	680pF 50V K	R148	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C636	NCB31HK-681X	C CAPACITOR	680pF 50V K	R149	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C638	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	R150	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C639	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R151	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C643	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R152	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C644	NEHL1EM-475X	E CAPACITOR	4.7uF 25V M	R153	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C647	NCB31CK-105X	C CAPACITOR	1uF 16V K	R154	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C648	NCB31CK-105X	C CAPACITOR	1uF 16V K	R157	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C649	NCB31CK-105X	C CAPACITOR	1uF 16V K	R158	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C650	NCB31CK-105X	C CAPACITOR	1uF 16V K	R159	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C651	NCB31CK-105X	C CAPACITOR	1uF 16V K	R160	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C653	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	R161	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C654	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	R164	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C655	NEHL1CM-106X	E CAPACITOR	10uF 16V M	R165	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C659	NEHL1CM-106X	E CAPACITOR	10uF 16V M	R166	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C660	NCB31CK-105X	C CAPACITOR	1uF 16V K	R167	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C661	NCB31CK-105X	C CAPACITOR	1uF 16V K	R168	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C662	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R169	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C663	NCB31CK-105X	C CAPACITOR	1uF 16V K	R170	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C664	NCB31CK-105X	C CAPACITOR	1uF 16V K	R171	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C665	NCB31CK-105X	C CAPACITOR	1uF 16V K	R172	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C666	NEHL1CM-106X	E CAPACITOR	10uF 16V M	R174	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C667	NCB31CK-105X	C CAPACITOR	1uF 16V K	R175	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C668	NCB31CK-105X	C CAPACITOR	1uF 16V K	R176	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C669	NCB31CK-105X	C CAPACITOR	1uF 16V K	R178	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C679	NDC31HJ-101X	C CAPACITOR	100pF 50V J	R181	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C680	NDC31HJ-101X	C CAPACITOR	100pF 50V J	R184	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C681	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R189	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C682	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C683	NCB31HK-332X	C CAPACITOR	3300pF 50V K	R205	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C684	NCB31HK-332X	C CAPACITOR	3300pF 50V K	R206	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
C685	NCB31HK-222X	C CAPACITOR	2200pF 50V K	R207	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
C686	NCB31HK-222X	C CAPACITOR	2200pF 50V K	R208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R476	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R210	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R491	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J
R219	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R584	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R585	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R221	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R588	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R223	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R589	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R224	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R590	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R591	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R228	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R592	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R229	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R593	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R230	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R594	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R231	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R597	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R232	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R598	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J
R233	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R599	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J
R234	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R601	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R235	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R602	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R241	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R603	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R243	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J
R245	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R605	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R246	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R606	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R247	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R607	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R248	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R608	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R249	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R620	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R623	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R253	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R628	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R255	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R634	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R256	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R635	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R257	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R636	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R259	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R638	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R260	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R641	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R261	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	R642	NRSA63J-163X	MG RESISTOR	16kΩ 1/16W J
R262	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R644	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R263	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R645	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R264	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R647	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R265	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R649	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J
R266	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R650	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R267	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R651	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R282	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R652	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R283	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R653	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R286	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R659	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R299	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R660	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R301	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R672	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R673	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R316	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R674	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R317	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R675	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R318	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R676	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R319	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R677	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R324	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R678	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R325	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R679	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R395	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R680	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R401	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R681	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J
R402	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R682	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J
R403	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R683	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R404	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R684	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R405	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R685	QRJ149J-102	UNF C RESISTOR	1kΩ 1/4W J
R407	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R687	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R408	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R694	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R409	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R695	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R410	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R696	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R411	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R700	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R412	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R701	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R413	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R702	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R414	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R703	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R415	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R704	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R419	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R706	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R420	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R718	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R422	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R719	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R423	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R720	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R451	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R722	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R452	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	R723	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R453	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	R724	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R454	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R725	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R455	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	R726	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R456	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	R727	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J
R457	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R728	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J
R458	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	R729	QRK129J-5R6	UNF C RESISTOR	5.6Ω 1/2W J
R461	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R730	QRK129J-5R6	UNF C RESISTOR	5.6Ω 1/2W J
R462	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R731	QRK129J-220	UNF C RESISTOR	22Ω 1/2W J
R463	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R732	QRK129J-220	UNF C RESISTOR	22Ω 1/2W J
R464	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R733	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R465	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R735	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R466	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R736	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R467	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R737	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R468	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R738	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R469	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R739	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R470	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R740	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J
R472	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R741	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R474	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R742	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R475	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R743	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R744	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	IC3104	HY5DU281622ETPJ	IC	
R751	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	IC3105	HY5DU281622ETPJ	IC	
R771	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	IC3108	R1141Q331B-X	IC	
R772	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	IC3109	RC4558D-X	IC	
R773	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	IC3110	RC4558D-X	IC	
R774	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	IC3111	RC4558D-X	IC	
R775	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	IC3112	SC2595STRT-X	IC	
R776	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	IC3113	SC2595STRT-X	IC	
R777	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	IC3114	SC2595STRT-X	IC	
R778	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	IC3301	ASI6100	IC	
R781	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3302	HY5DU281622ETPJ	IC	
R782	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3303	HY5DU281622ETPJ	IC	
R791	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3304	HY5DU281622ETPJ	IC	
R792	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3305	HY5DU281622ETPJ	IC	
R793	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3307	HD74ALVC1G00VXS	IC	
R794	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3308	R1141Q331B-X	IC	
R795	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3309	RC4558D-X	IC	
R796	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3310	RC4558D-X	IC	
R797	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3311	RC4558D-X	IC	
R798	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3312	SC2595STRT-X	IC	
R905	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	IC3313	SC2595STRT-X	IC	
R909	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3314	SC2595STRT-X	IC	
R910	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3501	ASI6100	IC	
R917	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	IC3502	HY5DU281622ETPJ	IC	
R931	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3503	HY5DU281622ETPJ	IC	
R932	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3504	HY5DU281622ETPJ	IC	
R937	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3505	HY5DU281622ETPJ	IC	
R938	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3508	R1141Q331B-X	IC	
R945	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3509	RC4558D-X	IC	
R946	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3510	RC4558D-X	IC	
R951	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	IC3511	RC4558D-X	IC	
R952	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	IC3512	SC2595STRT-X	IC	
R953	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	IC3513	SC2595STRT-X	IC	
R954	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3514	SC2595STRT-X	IC	
R957	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3701	AT89C51RD2RLTUM	IC	
R958	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3702	SN74LVC1G66V-X	IC	
R967	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3703	SN74LVC1G66V-X	IC	
R968	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3704	SN74AHC1G08V-X	IC	
R969	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3751	CD74HC4053PW-X	IC	
R971	NRSA63J-680X	MG RESISTOR	68Ω 1/16W J	IC3754	SN74LVC541APW-X	IC	
R972	NRSA63J-680X	MG RESISTOR	68Ω 1/16W J	IC3755	SN74LVC1G66V-X	IC	
R973	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3756	SN74LVC1G66V-X	IC	
R974	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3901	SI-8511NVS-X	IC	
R975	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	IC3902	PQ1CY1032Z-W	IC	
R976	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	IC3903	BA80BC0WFP-X	IC	
L101	NQL79GM-100X	COIL	10uH M	IC3904	NJM79M08DL1A-X	IC	
L601	QQR0621-002Z	FERRITE BEADS		IC3905	BA50BC0FP-X	IC	
L602	QQR0621-002Z	FERRITE BEADS		IC3906	R1170H331B-X	IC	
L605	NQLC8CM-560X	COIL	56uH M	IC3907	R1170H181B-X	IC	
L606	NQLC8CM-560X	COIL	56uH M	IC3908	R1170H251B-X	IC	
L901	NQL52EM-220X	COIL	22uH M	IC3909	R1170H251B-X	IC	
L902	NQL52EM-220X	COIL	22uH M	IC3910	R1170H251B-X	IC	
L903	NQL52EM-220X	COIL	22uH M	IC3911	R1170H181B-X	IC	
L904	NQL52EM-220X	COIL	22uH M	IC3912	R1170H251B-X	IC	
CN011	QGF0508C2-50W	CONNECTOR	FFC/FPC (1-50)	IC3913	R1170H251B-X	IC	
CN012	QGF0508C2-40W	CONNECTOR	FFC/FPC (1-40)	IC3914	R1170H251B-X	IC	
CN1T1	QGF1201C2-25	CONNECTOR	FFC/FPC (1-25)	IC3915	R1170H251B-X	IC	
J401	QNZ0888-001	AV JACK	INPUT-1(S/V/L/R)	IC3916	R1170H251B-X	IC	
J402	QNN0794-001	PIN JACK	INPUT-1(COMONENT)	IC3917	R1170H251B-X	IC	
J403	QNN0795-001	PIN JACK	INPUT-2(V/L/R)	IC3918	R1170H251B-X	IC	
J404	QNN0794-001	PIN JACK	INPUT-2(COMONENT)	IC3930	R1170H251B-X	IC	
J405	QNN0807-001	PIN JACK	INPUT-3(L/R)	IC3931	MM1701CH-X	IC	
J406	QNN0796-001	PIN JACK	HDMI1(L/R)	IC8001	LM2941S-W	IC	
J409	QNN0796-001	PIN JACK	AUDIO-OUT	IC8002	PQ20WZ11-X	IC	
J410	QNZ0561-001	D CONNECTOR	PC-IN	IC8003	PQ20WZ11-X	IC	
K601	NQR0499-002X	FERRITE BEADS		IC8005	SN74HCT32APW-X	IC	
K602	NQR0499-002X	FERRITE BEADS					
K603	NQR0499-002X	FERRITE BEADS					
K604	NQR0499-002X	FERRITE BEADS					

DRIVE P.W. BOARD ASS'Y (SRA-3013A-M2)

△Ref No.	Part No.	Part Name	Description Local
IC3001	THC63LVD104AF	IC	
IC3002	THC63LVD104AF	IC	
IC3003	M12L64322A-6TG	IC	
IC3004	M12L64322A-6TG	IC	
IC3005	XC3S10004FGG456	IC	
IC3007	THC63LVDM83R-W	IC	
IC3008	THC63LVDF84B-W	IC	
IC3009	HD74ALVC1G00VXS	IC	
IC3101	ASI6100	IC	
IC3102	HY5DU281622ETPJ	IC	
IC3103	HY5DU281622ETPJ	IC	

Q3701	UN2211-X	TRANSISTOR
Q3753	2SK1374-X	MOS FET
Q3754	2SK1374-X	MOS FET
Q3901	TPCA8003-H-X	POWER MOS FET
Q3902	UN2211-X	TRANSISTOR
Q3903	UN2211-X	TRANSISTOR
Q3905	UN2211-X	TRANSISTOR
Q3906	UN2211-X	TRANSISTOR
Q3907	IMD14-W	TRANSISTOR
Q3909	UPA2708GR-X	POWER MOS FET
Q3910	UN2211-X	TRANSISTOR
Q8001	2SC3928A/QR/-X	TRANSISTOR
Q8004	2SC3928A/QR/-X	TRANSISTOR
Q8005	2SC3928A/QR/-X	TRANSISTOR
D3701	STZ6.8N-X	Z DIODE
D3702	STZ6.8N-X	Z DIODE
D3703	STZ6.8N-X	Z DIODE
D3704	STZ6.8N-X	Z DIODE
D3706	STZ6.8N-X	Z DIODE
D3707	STZ6.8N-X	Z DIODE
D3751	STZ6.8N-X	Z DIODE
D3752	STZ6.8N-X	Z DIODE

3-20(No.YA463)

(No.YA463)3-21

3-22(No.YA463)

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C3705	NDC31HJ-3R0X	C CAPACITOR	3pF 50V J	C3960	NEZ0032-476X	E CAPACITOR	47uF
C3706	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3961	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3707	NEZ0032-106X	E CAPACITOR	10uF	C3965	NEZ0032-106X	E CAPACITOR	10uF
C3708	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3966	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3709	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3967	NEZ0032-476X	E CAPACITOR	47uF
C3710	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3968	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3716	NCB31HK-102X	C CAPACITOR	1000pF 50V K	C3969	NCB11AK-106X	C CAPACITOR	10uF 10V K
C3719	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C3970	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3720	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C3971	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3729	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3972	NBE50JM-107X	TA E CAPACITOR	100uF 6.3V M
C3751	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3973	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3752	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C3974	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C3754	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8001	NEZ0032-476X	E CAPACITOR	47uF
C3756	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8002	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3757	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8003	NEZ0032-476X	E CAPACITOR	47uF
C3758	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8004	NEZ0032-476X	E CAPACITOR	47uF
C3763	NCB21AK-105X	C CAPACITOR	1uF 10V K	C8005	NDC31HJ-101X	C CAPACITOR	100pF 50V J
C3801	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8008	NEZ0032-106X	E CAPACITOR	10uF
C3802	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8009	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3803	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8010	NEZ0032-476X	E CAPACITOR	47uF
C3804	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8011	NDC31HJ-101X	C CAPACITOR	100pF 50V J
C3805	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8018	NEZ0032-106X	E CAPACITOR	10uF
C3806	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8019	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3807	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8020	NEZ0032-476X	E CAPACITOR	47uF
C3808	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8021	NDC31HJ-101X	C CAPACITOR	100pF 50V J
C3809	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	C8031	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3810	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3001	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3811	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3002	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3812	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3003	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3813	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3004	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3814	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3005	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3815	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3006	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3816	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3007	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3817	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3008	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3818	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3009	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3819	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3010	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3820	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3011	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3821	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3012	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3822	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3013	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3823	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3014	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3824	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3015	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3825	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3016	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3826	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3017	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3827	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3018	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3828	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3019	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3829	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3021	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3830	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3022	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3831	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3023	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3832	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3024	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3833	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3025	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3834	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3026	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3835	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3027	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3836	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3028	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3837	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3029	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3838	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3030	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3839	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3031	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3840	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3032	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3841	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3033	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3842	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3034	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3843	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3035	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3844	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3036	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3845	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3037	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3901	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	CA3901	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3902	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	CA3902	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3904	NDC31HJ-221X	C CAPACITOR	220pF 50V J	CA3903	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3905	NDC31HJ-470X	C CAPACITOR	47pF 50V J	CA3904	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3906	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3905	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3907	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	CA3906	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3908	NCB31HK-272X	C CAPACITOR	2700pF 50V K	CA3907	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3909	NCB11AK-475X	C CAPACITOR	4.7uF 10V K	CA3908	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3910	NCB11AK-475X	C CAPACITOR	4.7uF 10V K	CA3909	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3911	NBZ0010-396X	SP E CAPACITOR	39uF 16V M	CA3910	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3914	NEX60GM-337X	E CAPACITOR	330uF 4V M	CA3911	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3915	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3912	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3916	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3913	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3917	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	CA3914	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3931	NBZ0010-396X	SP E CAPACITOR	39uF 16V M	CA3915	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3932	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	CA3916	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3933	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3917	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3934	NEX61AM-127X	E CAPACITOR	120uF 10V M	CA3918	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3941	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	CA3919	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3942	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3920	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3951	NEZ0032-476X	E CAPACITOR	47uF	CA3921	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3952	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3922	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3953	NEZ0032-476X	E CAPACITOR	47uF	CA3923	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3954	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3924	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3955	NCB31HK-102X	C CAPACITOR	1000pF 50V K	CA3925	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C3956	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3926	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3958	NEZ0032-476X	E CAPACITOR	47uF	CA3927	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M
C3959	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	CA3928	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z

3-24(No.YA463)

(No.YA463)3-25

3-26(No.YA463)

(No.YA463)3-27

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R3875	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8024	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D
R3876	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8025	NRSA63D-681X	MG RESISTOR	680Ω 1/16W D
R3877	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R8026	NRSA63D-202X	MG RESISTOR	2kΩ 1/16W D
R3878	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R8031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R3879	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R8032	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R3880	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R8033	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R3881	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8034	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R3882	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8035	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R3883	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8036	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R3884	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	R8041	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R3885	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R8042	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4
R3886	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	RB3001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3887	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	RB3002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3888	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J				
R3889	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	L	WJW0031-002A-E	E-TWISTED ASSY	
R3890	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	L3901	NQLD4EM-3R3X	COIL	3.3uH M
R3891	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	L3931	NQL63EM-101X	COIL	100uH M
R3892	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J				
R3893	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	CNB1	QGF0401F1-80W	CONNECTOR	FFC/FPC (1-80)
R3894	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	CNBG1	QGF0508F5-10X	CONNECTOR	FFC/FPC (1-10)
R3895	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	CNG1	QGF0401F1-80W	CONNECTOR	FFC/FPC (1-80)
R3896	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	CNGG1	QGF0508F5-10X	CONNECTOR	FFC/FPC (1-10)
R3897	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	CNR1	QGF0401F1-80W	CONNECTOR	FFC/FPC (1-80)
R3898	NRSA63J-510X	MG RESISTOR	51Ω 1/16W J	CNRG1	QGF0508F5-10X	CONNECTOR	FFC/FPC (1-10)
R3901	NRSA63J-1R0X	MG RESISTOR	1Ω 1/16W J	EF3001	NQR0416-002X	EMI FILTER	84pF 16V M
R3902	NRSA63J-751X	MG RESISTOR	750Ω 1/16W J	EF3002	NQR0416-002X	EMI FILTER	84pF 16V M
R3903	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	EF3701	NQR0470-001X	EMI FILTER	22pF 50V
R3904	NRSA63D-202X	MG RESISTOR	2kΩ 1/16W D	EF3702	NQR0416-002X	EMI FILTER	84pF 16V M
R3905	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	EF3703	NQR0416-002X	EMI FILTER	84pF 16V M
R3906	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	EF3704	NQR0416-002X	EMI FILTER	84pF 16V M
R3908	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	EF3708	NQR0470-001X	EMI FILTER	22pF 50V
R3909	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	EF3709	NQR0470-001X	EMI FILTER	22pF 50V
R3910	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	EF3710	NQR0416-002X	EMI FILTER	84pF 16V M
R3911	NRSA63J-180X	MG RESISTOR	18Ω 1/16W J	EF3715	NQR0416-002X	EMI FILTER	84pF 16V M
R3912	NRSA63J-1R0X	MG RESISTOR	1Ω 1/16W J	EF3901	NQR0483-005X	EMI FILTER	100uF 25V Z
R3913	NRZ0093-R010X	MP RESISTOR	0.01Ω	EF3903	NQR0483-005X	EMI FILTER	100uF 25V Z
R3914	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	EF3904	NQR0483-005X	EMI FILTER	100uF 25V Z
R3915	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	EF3905	NQR0483-005X	EMI FILTER	100uF 25V Z
R3916	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	EF3906	NQR0483-005X	EMI FILTER	100uF 25V Z
R3917	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	EF3907	NQR0483-005X	EMI FILTER	100uF 25V Z
R3918	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	EF3909	NQR0470-007X	EMI FILTER	2200pF 50V
R3919	NRSA63J-3R9X	MG RESISTOR	3.9Ω 1/16W J	EF3910	NQR0470-007X	EMI FILTER	2200pF 50V
R3920	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	EF3911	NQR0470-007X	EMI FILTER	2200pF 50V
R3921	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	EF3912	NQR0470-007X	EMI FILTER	2200pF 50V
R3922	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	EF3913	NQR0483-005X	EMI FILTER	100uF 25V Z
R3923	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	EF3914	NQR0470-007X	EMI FILTER	2200pF 50V
R3924	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	EF3915	NQR0483-005X	EMI FILTER	100uF 25V Z
R3931	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	EF3916	NQR0470-007X	EMI FILTER	2200pF 50V
R3932	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	EF3917	NQR0483-005X	EMI FILTER	100uF 25V Z
R3933	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	K3001	NQR0504-001X	EMI FILTER	
R3934	NRSA63D-822X	MG RESISTOR	8.2kΩ 1/16W D	K3002	NQR0504-001X	EMI FILTER	
R3935	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	K3003	NQR0504-001X	EMI FILTER	
R3936	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	K3004	NQR0504-001X	EMI FILTER	
R3937	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	K3005	NQR0504-001X	EMI FILTER	
R3938	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	K3006	NQR0504-001X	EMI FILTER	
R3939	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	K3012	NQR0499-001X	FERRITE BEADS	
R3940	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3013	NQR0499-001X	FERRITE BEADS	
R3941	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3014	NQR0499-001X	FERRITE BEADS	
R3942	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3015	NQR0499-001X	FERRITE BEADS	
R3943	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3016	NQR0499-001X	FERRITE BEADS	
R3944	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3021	NQR0504-001X	EMI FILTER	
R3945	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3022	NQR0504-001X	EMI FILTER	
R3946	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3023	NQR0504-001X	EMI FILTER	
R3947	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3024	NQR0504-001X	EMI FILTER	
R3948	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3025	NQR0504-001X	EMI FILTER	
R3949	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3026	NQR0504-001X	EMI FILTER	
R3950	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3105	NQR0499-001X	FERRITE BEADS	
R3951	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3107	NQR0499-001X	FERRITE BEADS	
R3953	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	K3291	NQR0499-001X	FERRITE BEADS	
R3954	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	K3292	NQR0499-001X	FERRITE BEADS	
R3971	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3305	NQR0499-001X	FERRITE BEADS	
R3981	NRS12BJ-102W	MG RESISTOR	1kΩ 1/2W J	K3306	NQR0499-001X	FERRITE BEADS	
R3982	NRS12BJ-102W	MG RESISTOR	1kΩ 1/2W J	K3307	NQR0499-001X	FERRITE BEADS	
R3983	NRS12BJ-471W	MG RESISTOR	470Ω 1/2W J	K3491	NQR0499-001X	FERRITE BEADS	
R3985	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3492	NQR0499-001X	FERRITE BEADS	
R3987	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3505	NQR0499-001X	FERRITE BEADS	
R3990	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	K3507	NQR0499-001X	FERRITE BEADS	
R3991	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	K3691	NQR0499-001X	FERRITE BEADS	
R3995	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	K3692	NQR0499-001X	FERRITE BEADS	
R3996	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	K3701	NQR0499-001X	FERRITE BEADS	
R3997	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3708	NQR0499-001X	FERRITE BEADS	
R8001	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K3711	NQR0499-001X	FERRITE BEADS	
R8002	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	K3712	NQR0499-001X	FERRITE BEADS	
R8003	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	K3713	NQR0499-001X	FERRITE BEADS	
R8004	NRSA63D-681X	MG RESISTOR	680Ω 1/16W D	K3717	NQR0499-001X	FERRITE BEADS	
R8005	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	K3901	NQR0499-001X	FERRITE BEADS	
R8006	NRSA63D-102X	MG RESISTOR	1kΩ 1/16W D	K3902	NQR0499-001X	FERRITE BEADS	
R8014	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	K3903	NQR0499-001X	FERRITE BEADS	
R8015	NRSA63D-681X	MG RESISTOR	680Ω 1/16W D	K3904	NQR0499-001X	FERRITE BEADS	
R8016	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	K3905	NQR0499-001X	FERRITE BEADS	

△Ref No.	Part No.	Part Name	Description	Local
K3906	NQR0499-001X	FERRITE BEADS		
K3907	NQR0499-001X	FERRITE BEADS		
K3908	NQR0499-001X	FERRITE BEADS		
K3909	NQR0499-001X	FERRITE BEADS		
K3910	NQR0499-001X	FERRITE BEADS		
K3911	NQR0499-001X	FERRITE BEADS		
K3912	NQR0499-001X	FERRITE BEADS		
K3913	NQR0499-001X	FERRITE BEADS		
K3914	NQR0499-001X	FERRITE BEADS		
K3915	NQR0499-001X	FERRITE BEADS		
K3916	NQR0499-001X	FERRITE BEADS		
K3917	NQR0499-001X	FERRITE BEADS		
K3918	NQR0499-001X	FERRITE BEADS		
K3919	NQR0499-001X	FERRITE BEADS		
K3920	NQR0499-001X	FERRITE BEADS		
K3921	NQR0499-001X	FERRITE BEADS		
K3922	NQR0499-001X	FERRITE BEADS		
K3950	NQR0499-001X	FERRITE BEADS		
K3951	NQR0499-001X	FERRITE BEADS		
K3952	NQR0499-001X	FERRITE BEADS		
X3001	NAX0587-001X	CXO	54.0000MHz	
X3301	NAX0673-001X	CRYSTAL	14.31818MHz	
X3701	NAX0713-001X	CRYSTAL	24.000MHz	

REMOCON P.W. BOARD ASS'Y (SRA-8011A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC0821	KSM-2013SY22EL	IR DETECT UNIT		
D0821	UDZW6.8B-X	Z DIODE		
C0821	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C0822	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
R0821	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R0822	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R0823	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	

TEMP P.W. BOARD ASS'Y (SRA-8211A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC2001	LM75BIM-5-X	IC		
D2001	STZ6.8N-X	Z DIODE		
C2002	NCB21CK-105X	C CAPACITOR	1uF 16V K	
R2001	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2002	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2003	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
K2001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

USB P.W. BOARD ASS'Y (SRA-8521A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC8001	TPS2041BD-X	IC		
IC8501	GP1FAV31TK0F	OPT TRANSMITTER		
D8001	EDZC6.8B-X	Z DIODE		
D8002	EDZC6.8B-X	Z DIODE		
D8003	EDZC6.8B-X	Z DIODE		
D8004	EDZC6.8B-X	Z DIODE		
C8001	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C8002	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C8003	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
C8004	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
C8005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8006	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8007	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C8501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R8001	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R8002	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R8501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
J8001	QNZ0851-001	USB CONNECTOR		

POWER P.W. BOARD ASS'Y (SRA-9017A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC9101	BA50BC0FP-X	IC		
IC9301	BAJ5CC0FP-X	IC		
IC9501	STR-W6754-F5	SW IC		
IC9701	PQ120RDA1SZ	IC		
IC9721	PQ15RW11	IC		
IC9741	PQ1CG2032FZ	IC		
IC9761	PQ1CG2032FZ	IC		
IC9762	SI-3011ZF-F3	IC		
Q9021	2SC3928A/QR/-X	TRANSISTOR		
Q9281	2SC3928A/QR/-X	TRANSISTOR		
Q9282	2SC3928A/QR/-X	TRANSISTOR		
Q9283	2SC3928A/QR/-X	TRANSISTOR		
Q9284	2SC3928A/QR/-X	TRANSISTOR		
Q9821	2SC3928A/QR/-X	TRANSISTOR		
Q9831	2SC3928A/QR/-X	TRANSISTOR		
Q9841	2SC3928A/QR/-X	TRANSISTOR		
Q9842	2SC3928A/QR/-X	TRANSISTOR		
Q9851	2SA1530A/QR/-X	TRANSISTOR		
Q9852	UN2213-X	DIGI TRANSISTOR		
Q9853	UN2213-X	DIGI TRANSISTOR		
Q9861	2SC3928A/QR/-X	TRANSISTOR		
D9021	1SS355W-X	DIODE		
D9101	1N4003SG-T2	SI DIODE		
D9102	1N4003SG-T2	SI DIODE		
D9103	1N4003SG-T2	SI DIODE		
D9104	1N4003SG-T2	SI DIODE		
D9106	1N4003SG-T2	SI DIODE		
△D9201	GBJ6JU	BRIDGE DIODE		
D9281	1SS355W-X	DIODE		
D9282	UDZW4.7B-X	Z DIODE		
D9283	UDZW2.4B-X	Z DIODE		
D9301	SK14-GA-X	SB DIODE		
D9501	SARS01-T2	FR DIODE		
D9502	SARS01-T2	FR DIODE		
D9503	FR105SGT-T2	SI DIODE		
D9504	FR105SGT-T2	SI DIODE		
D9505	MTZJ33B-T2	Z DIODE		
D9506	FR105SGT-T2	SI DIODE		
D9507	1SS355W-X	DIODE		
D9510	1SS355W-X	DIODE		
D9512	FR105SGT-T2	SI DIODE		
D9514	MTZJ13B-T2	Z DIODE		
D9551	HER202G-FL	SI DIODE		
D9552	HER202G-FL	SI DIODE		
D9553	FME-220A	SB DIODE		
D9554	FR105SGT-T2	SI DIODE		
D9555	MTZJ15B-T2	Z DIODE		
D9556	MTZJ16C-T2	Z DIODE		
D9557	FR105SGT-T2	SI DIODE		
D9601	UTCTL431-T	IC		
D9701	SK14-GA-X	SB DIODE		
D9702	1SS355W-X	DIODE		
D9721	SK14-GA-X	SB DIODE		
D9741	FMB-G14L	SB DIODE		
D9743	MTZJ6.8B-T2	Z DIODE		
D9762	FMB-G14L	SB DIODE		
D9763	MTZJ3.9B-T2	Z DIODE		
D9801	1SS355W-X	DIODE		
D9821	1SS355W-X	DIODE		
D9831	1SS355W-X	DIODE		
D9832	UDZW3.3B-X	Z DIODE		
D9841	1SS355W-X	DIODE		
D9842	1SS355W-X	DIODE		
D9851	UDZW5.1B-X	SB DIODE		
D9852	1SS355W-X	DIODE		
D9861	1SS355W-X	DIODE		
D9862	1SS355W-X	DIODE		
△C9001	QFZ9072-105	MM CAPACITOR	1uF AC250V K	
△C9002	QFZ9072-224	MM CAPACITOR	0.22uF AC250V K	
△C9011	QCZ9079-102	C CAPACITOR	1000pF AC250V M	
△C9013	QCZ9079-102	C CAPACITOR	1000pF AC250V M	
C9101	QEHR1CM-108Z	E CAPACITOR	1000uF 16V M	
C9103	QEHR1CM-108Z	E CAPACITOR	1000uF 16V M	
C9104	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	
△C9192	QCZ9079-102	C CAPACITOR	1000pF AC250V M	
△C9193	QCZ9079-222	C CAPACITOR	2200pF AC250V M	
△C9201	QCZ9078-222	C CAPACITOR	2200pF AC250V M	
△C9202	QCZ9078-222	C CAPACITOR	2200pF AC250V M	
△C9203	QCZ9078-222	C CAPACITOR	2200pF AC250V M	
△C9204	QCZ9078-222	C CAPACITOR	2200pF AC250V M	
C9205	QEZO802-108	E CAPACITOR	1000uF	
C9206	QEZO802-108	E CAPACITOR	1000uF	
C9219	QCZO122-471	C CAPACITOR	470pF 2kV K	
C9281	QEHR1HM-226Z	E CAPACITOR	22uF 50V M	
C9282	NCB31HK-102X	C CAPACITOR	1000pF 50V K	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C9301	QEHR1EM-107Z	E CAPACITOR	100uF 25V M	R9508	NRS12BJ-122W	MG RESISTOR	1.2kΩ 1/2W J
C9302	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R9510	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9303	NCF11EZ-105X	C CAPACITOR	1uF 25V Z	R9511	QRK126J-101X	UNF C RESISTOR	100Ω 1/2W J
C9501	QFP32JK-332	PP CAPACITOR	3300pF 630V K	R9512	QRX01GJ-R33	MF RESISTOR	0.33Ω 1W J
C9503	NCB31HK-332X	C CAPACITOR	3300pF 50V K	R9513	QRX01GJ-5R6	MF RESISTOR	5.6Ω 1W J
C9504	QEHR1VM-476Z	E CAPACITOR	47uF 35V M	R9514	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9505	NCB31HK-152X	C CAPACITOR	1500pF 50V K	△R9515	QRZ9009-4R7	FUSI RESISTOR	4.7Ω 1/2W J
C9506	QEHR1HM-105Z	E CAPACITOR	1uF 50V M	R9516	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C9507	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R9556	QRG01GJ-152	OMF RESISTOR	1.5kΩ 1W J
C9508	QCZ0340-471	C CAPACITOR	470pF 2Kv K	R9557	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J
C9511	QEHR1HM-107Z	E CAPACITOR	100uF 50V M	R9563	QRT039J-R47	MF RESISTOR	0.47Ω 3W J
C9512	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9566	QRT039J-R47	MF RESISTOR	0.47Ω 3W J
C9555	QECQ1EM-188	E CAPACITOR	1800uF 25V M	R9567	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9556	QECQ1EM-188	E CAPACITOR	1800uF 25V M	R9601	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9557	QECQ1EM-188	E CAPACITOR	1800uF 25V M	R9602	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9559	QEHR2AM-106Z	E CAPACITOR	100uF 100V M	R9605	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
C9560	QEHR1HM-105Z	E CAPACITOR	1uF 50V M	R9606	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
C9562	QEHR1EM-477Z	E CAPACITOR	470uF 25V M	R9607	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D
C9563	QEHQ1VM-108	E CAPACITOR	1000uF 35V M	R9608	NRSA63D-183X	MG RESISTOR	18kΩ 1/16W D
C9564	QEHQ1VM-108	E CAPACITOR	1000uF 35V M	R9701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C9568	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9721	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C9569	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9722	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D
C9570	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9723	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D
C9571	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9741	NRSA63D-333X	MG RESISTOR	33kΩ 1/16W D
C9572	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9742	NRSA63D-302X	MG RESISTOR	3kΩ 1/16W D
C9603	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R9743	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
C9701	QEHR1HM-106Z	E CAPACITOR	100uF 50V M	R9744	NRSA63D-153X	MG RESISTOR	15kΩ 1/16W D
C9702	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9771	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D
C9721	QEHR1EM-107Z	E CAPACITOR	100uF 25V M	R9772	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D
C9723	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9773	NRSA63D-182X	MG RESISTOR	1.8kΩ 1/16W D
C9741	QEHR1EM-108Z	E CAPACITOR	1000uF 25V M	R9775	NRS12BJ-331W	MG RESISTOR	330Ω 1/2W J
C9742	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R9776	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C9743	QECR1AM-128Z	E CAPACITOR	1200uF 10V M	R9789	NRSA63D-153X	MG RESISTOR	15kΩ 1/16W D
C9761	QEHR1EM-108Z	E CAPACITOR	1000uF 25V M	R9790	NRSA63D-113X	MG RESISTOR	11kΩ 1/16W D
C9762	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R9801	QRG01GJ-470	OMF RESISTOR	47Ω 1W J
C9763	QECR1AM-128Z	E CAPACITOR	1200uF 10V M	R9802	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C9768	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9821	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
C9770	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9822	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
C9771	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9823	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C9772	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9831	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C9773	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9832	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
C9774	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9833	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C9777	QEHR1HM-105Z	E CAPACITOR	1uF 50V M	R9834	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9778	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9841	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
C9779	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9842	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
C9801	QEHR1HM-106Z	E CAPACITOR	100uF 50V M	R9844	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C9831	NCB31CK-105X	C CAPACITOR	1uF 16V K	R9845	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J
C9851	QEHR1CM-107Z	E CAPACITOR	100uF 16V M	R9846	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
C9852	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R9847	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C9876	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9851	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C9877	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9852	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C9878	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9853	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C9879	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9854	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9880	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9855	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C9881	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9861	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9882	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9862	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9883	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9863	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
C9884	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9864	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
C9895	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R9865	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
△R9001	QRZ9046-105Z	C RESISTOR	1MΩ 1/2W K	R9866	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R9021	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	R9873	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R9022	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R9877	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R9112	QRE121J-330Y	C RESISTOR	33Ω 1/2W J	R9878	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R9113	QRE121J-330Y	C RESISTOR	33Ω 1/2W J	R9898	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
△R9191	QRZ9046-685Z	C RESISTOR	6.8MΩ 1/2W K	R9899	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
△R9201	QRF154K-2R2	UNF WW RESISTOR	2.2Ω 15W K	L9551	QQL26AM-3R3Z	CHOKE COIL	3.3uH M
△R9202	QRF154K-2R2	UNF WW RESISTOR	2.2Ω 15W K	L9552	QQL26AM-3R3Z	CHOKE COIL	3.3uH M
R9204	QRE121J-124Y	C RESISTOR	120kΩ 1/2W J	L9741	QQR1401-001	CHOKE COIL	
R9205	QRE121J-124Y	C RESISTOR	120kΩ 1/2W J	L9761	QQR1401-001	CHOKE COIL	
R9282	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	△T9101	QQT0520-001	POWER TRANSF	
R9283	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	△T9501	QQS0365-001	SW TRANSF	
R9284	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	△CP9211	QMFZ043-5R0Z-J1	FUSE	5A AC250V
R9285	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	△CP9554	ICP-N50-T	IC PROTECTOR	2.0A
R9286	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	△CP9555	ICP-N50-T	IC PROTECTOR	2.0A
R9287	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	△CP9556	ICP-N70-T	IC PROTECTOR	2.5A
R9288	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	△CP9557	ICP-N70-T	IC PROTECTOR	2.5A
R9289	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	△F9001	QMF5AD2-6R3-J1	FUSE	6.3A AC250V
R9290	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	K9501	QQR1139-001	FERRITE BEADS	
R9291	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	K9502	QQR0621-002Z	FERRITE BEADS	
R9292	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	K9551	QQR0621-002Z	FERRITE BEADS	
R9293	NDC31HJ-101X	C CAPACITOR	100pF 50V J	K9552	QQR0621-002Z	FERRITE BEADS	
R9301	NRS12BJ-122W	MG RESISTOR	1.2kΩ 1/2W J	△LF9001	QQR1542-001	LINE FILTER	
R9501	QRL039J-104	OMF RESISTOR	100kΩ 3W J	△LF9002	QQR1466-001	LINE FILTER	
R9502	QRL039J-333	OMF RESISTOR	33kΩ 3W J	△LF9003	QQR1467-001	LINE FILTER	
R9503	QRE121J-394Y	C RESISTOR	390kΩ 1/2W J	△PC9501	PS2581AL1/QW/	PHOTO COUPLER	
R9504	QRE121J-394Y	C RESISTOR	390kΩ 1/2W J	△RY9021	QSK0162-001	RELAY	
R9505	QRL039J-220	OMF RESISTOR	22Ω 3W J	△VA9001	QAF0060-621	VARISTOR	620V
△R9506	QRZ9017-470	FUSI RESISTOR	47Ω 1/4W J				
R9507	NRS12BJ-100W	MG RESISTOR	10Ω 1/2W J				

DIGITAL P.W. BOARD ASS'Y (SRA0D161A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC6001	JCC5068	IC		
IC6002	SN74LVC1G08V-X	IC		
IC6003	MK2302S-01LF-X	IC		
IC6004	ICS574MLF-X	IC		
IC6101	EDD1232AAFA-6B	IC		
IC6102	LP2996MR-X	IC		
IC6250	UPC5702GS-027-X	IC		
IC6251	R1170H331B-X	IC		
IC6501	THC63LVD1023	IC		
IC6724	S-80928CLNB-G-W	IC		
IC6901	R1141Q331B-X	IC		
IC7033	CD74HC4094PW-X	IC		
IC7036	ADC081S021CIS-X	IC		
IC7201	39VF800A7IEKDG9	IC(MICRO C ROM)		
IC7203	HY57V161610FTP7	IC		
IC7204	S-80928CLNB-G-W	IC		
IC7206	74LVC1G17GW-X	IC		
IC7601	M306V7MG-154FP	IC(MCU)		
IC7602	ATF16-52FA97	IC	(SERVICE)	
IC7603	SN74AHCT1G08V-X	IC		
IC7604	SN74LVC1G04V-X	IC		
IC7605	MM1673XN-X	IC		
IC7606	MM1673XN-X	IC		
IC9001	MP2263DN-C053-X	IC		
IC9101	MM1662FT-X	IC		
IC9201	MP2263DN-C053-X	IC		
IC9301	MM1701CH-X	IC		
Q6201	2SA1530A/QR/-X	TRANSISTOR		
Q6202	2SA1530A/QR/-X	TRANSISTOR		
Q6203	2SA1022/BC/-X	TRANSISTOR		
Q6204	2SA1022/BC/-X	TRANSISTOR		
Q6205	2SA1022/BC/-X	TRANSISTOR		
Q6206	2SA1022/BC/-X	TRANSISTOR		
Q6207	2SC3837K/NP/-X	TRANSISTOR		
Q6208	2SC3837K/NP/-X	TRANSISTOR		
Q6209	2SC3837K/NP/-X	TRANSISTOR		
Q6210	2SC3837K/NP/-X	TRANSISTOR		
Q6211	2SC3837K/NP/-X	TRANSISTOR		
Q6212	2SC3837K/NP/-X	TRANSISTOR		
Q6213	2SC3837K/NP/-X	TRANSISTOR		
Q6214	2SC3837K/NP/-X	TRANSISTOR		
Q6250	2SC3928A/QR/-X	TRANSISTOR		
Q6251	2SC3928A/QR/-X	TRANSISTOR		
Q7030	RT1N441C-X	TRANSISTOR		
Q7032	RT1P441C-X	DIGI TRANSISTOR		
Q7033	RT1P441C-X	DIGI TRANSISTOR		
Q7501	RT1N441C-X	TRANSISTOR		
D7201	RB501V-40-X	SB DIODE		
D7502	1SS355W-X	DIODE		
D7608	RB521S-30-X	SB DIODE		
D9001	EC30HA03L-X	SB DIODE		
D9002	EC30HA03L-X	SB DIODE		
D9003	PTZ3.9B-X	Z DIODE		
D9201	EC30HA03L-X	SB DIODE		
D9202	EC30HA03L-X	SB DIODE		
D9203	PTZ3.9B-X	Z DIODE		
D9204	1SS355W-X	DIODE		
C6002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6101	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6103	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6107	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6111	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6113	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6114	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6116	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6117	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6118	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6119	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6121	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6122	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M	
C6123	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6124	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M	
C6125	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6126	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6128	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6130	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6132	NEHL1EM-226X	E CAPACITOR	22uF 25V M	
C6133	NCB31CK-154X	C CAPACITOR	0.15uF 16V K	
C6134	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6135	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6139	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

△Ref No.	Part No.	Part Name	Description	Local
C6205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6217	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6218	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6219	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6220	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6227	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6228	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6229	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6236	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6237	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6238	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6239	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6240	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6241	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6242	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6243	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6244	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6245	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6246	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6247	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6248	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6249	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6250	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6251	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6252	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6253	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6254	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6255	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6260	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6261	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6262	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6263	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6268	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6270	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6271	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6272	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6273	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6274	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6276	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6277	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6278	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6279	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6280	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6282	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6283	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6284	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6285	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6286	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6288	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6289	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6291	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6293	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6294	NBZ0007-107X	SP E CAPACITOR	100uF 4V M	
C6295	NBZ0007-107X	SP E CAPACITOR	100uF 4V M	
C6296	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6297	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6299	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6300	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6301	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6503	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6504	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6505	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6507	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6508	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6509	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6510	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6511	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6512	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6513	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6514	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6515	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6520	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6571	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C6572	NCB21CK-104X	C CAPACITOR	0.1uF 16V K	
C6601	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6602	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6603	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

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△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C9304	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9313	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6253	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C9314	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6254	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6255	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6256	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6257	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6258	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6009	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6259	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6260	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6261	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6262	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6263	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6264	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6026	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6265	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6028	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6266	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R6031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6267	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6032	NRSA63D-470X	MG RESISTOR	47Ω 1/16W D	R6268	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6269	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6270	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6037	NRSA63D-330X	MG RESISTOR	33Ω 1/16W D	R6271	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6273	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6074	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6274	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J
R6075	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6275	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6080	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6276	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6101	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6277	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6102	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6279	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6103	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6280	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6104	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6281	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6105	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6282	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6106	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6283	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6107	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6284	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6108	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6285	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6109	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6286	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6110	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6287	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6111	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6288	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6112	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6289	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6113	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6290	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6114	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6291	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6115	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6292	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6116	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6300	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6117	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6118	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6119	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6332	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6120	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6333	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6121	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6338	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6122	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6339	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6127	NRSA63J-1R5X	MG RESISTOR	1.5Ω 1/16W J	R6501	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6141	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6502	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6142	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6505	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6509	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6511	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6205	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R6514	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6534	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6568	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6571	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6572	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6216	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6573	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6217	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6574	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6220	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R6575	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6223	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6576	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6224	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6598	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R6225	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6607	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6226	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6609	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6227	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	R6611	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6228	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R6707	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6229	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R6712	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6230	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6713	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6231	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6730	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6232	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6731	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6233	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6732	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6234	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	R6921	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6235	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R6923	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6236	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R6924	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6237	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R6943	NRSA63J-150X	MG RESISTOR	15Ω 1/16W J
R6238	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R6946	NRSA63D-220X	MG RESISTOR	22Ω 1/16W D
R6239	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R6953	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6240	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R7030	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6241	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6242	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7032	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6243	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R7033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6244	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6245	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7040	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6246	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R7041	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R6247	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R7042	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R6248	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R7047	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6249	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R7049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
				R7051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R7052	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R7608	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J
R7054	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7609	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7055	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7610	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7056	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7611	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7057	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7612	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J
R7058	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7613	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7059	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7615	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7062	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7616	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7618	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7064	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R7619	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7065	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R7620	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7066	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R7622	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7067	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R7623	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7068	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7624	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7069	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7625	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7070	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7626	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7071	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7627	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7077	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7628	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R7078	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7631	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J
R7081	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R7632	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R7084	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R7634	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J
R7085	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R7635	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R7086	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7643	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7087	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7644	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7646	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7649	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7658	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7091	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7659	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J
R7092	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7661	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7093	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7662	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7094	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R8796	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8797	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7097	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8798	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7098	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8799	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7099	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9001	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R7100	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9002	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9003	NRSA63D-273X	MG RESISTOR	27kΩ 1/16W D
R7106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9004	NRSA63J-684X	MG RESISTOR	680kΩ 1/16W J
R7110	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9005	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
R7113	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9006	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J
R7123	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7124	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7128	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R7170	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9202	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7171	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9203	NRSA63D-302X	MG RESISTOR	3kΩ 1/16W D
R7172	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9205	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
R7173	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9206	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R7174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R9207	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7175	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7176	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9302	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7177	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7178	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9308	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7179	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9510	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R7184	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6001	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7186	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	RA6002	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7187	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6007	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7192	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6008	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6009	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7202	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6010	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7203	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6011	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7207	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	RA6101	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
R7208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6102	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
R7211	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6103	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
R7214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6104	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
R7215	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6105	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
R7216	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6106	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
R7217	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6107	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
R7221	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6108	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
R7223	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6109	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
R7224	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6110	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
R7225	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	RA6111	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
R7239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6112	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
R7240	NQR0599-003X	FERRITE BEADS		RA6113	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
R7349	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6114	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
R7350	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6115	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
R7351	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6116	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
R7504	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	RA6501	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7505	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6502	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6503	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
R7513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6504	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7514	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6505	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7515	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	RA6506	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7601	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6541	NRZ0033-0R0W	NET RESISTOR	0Ω
R7602	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	RA6542	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7603	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6543	NRZ0033-0R0W	NET RESISTOR	0Ω
R7604	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	RA6544	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7605	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	RA6545	NRZ0033-0R0W	NET RESISTOR	0Ω
R7606	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	RA6546	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
R7607	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	RA7202	NRZ0080-473X	NET RESISTOR	47kΩ

△Ref No.	Part No.	Part Name	Description	Local
RA7203	NRZ0080-473X	NET RESISTOR	47kΩ	
RA7204	NRZ0080-473X	NET RESISTOR	47kΩ	
RA7205	NRZ0080-473X	NET RESISTOR	47kΩ	
RA7503	NQR0271-004X	EMI FILTER		
RA7601	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
RA7602	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
RA7603	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
RA7605	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
RA7606	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
L6101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L6102	NQLE3GK-220X	COIL	22uH K	
L6103	NQLE3GK-220X	COIL	22uH K	
L6115	NQR0499-001X	FERRITE BEADS		
L6254	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L6265	NQR0499-001X	FERRITE BEADS		
L6266	NQR0499-001X	FERRITE BEADS		
L6511	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6512	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6513	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6514	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6515	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6516	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4	
L6531	NQR0199-007X	FERRITE BEADS		
L6701	NQR0413-003X	FERRITE BEADS		
L6911	NQR0499-001X	FERRITE BEADS		
L6912	NQR0499-001X	FERRITE BEADS		
L6922	NQLE3GK-220X	COIL	22uH K	
L6924	NQLE3GK-220X	COIL	22uH K	
L6925	NQLE3GK-220X	COIL	22uH K	
L6931	NQR0499-001X	FERRITE BEADS		
L7501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L7502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L9001	NQLC8CM-150X	COIL	15uH M	
L9201	NQLC8CM-150X	COIL	15uH M	
L9204	NQR0562-014X	CHOKO COIL		
L9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN011	QGF0508F4-50X	CONNECTOR	FFC/FPC (1-50)	
CN012	QGF0508F4-40X	CONNECTOR	FFC/FPC (1-40)	
J8501	NNZ0117-001	CONNECTOR	DIGITAL IN-2	
J8502	NNZ0117-001	CONNECTOR	DIGITAL IN-1	
K6052	NQR0489-002X	FERRITE BEADS		
K6250	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K6268	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K6271	NQR0499-001X	FERRITE BEADS		
K6272	NQR0499-001X	FERRITE BEADS		
K6274	NQR0499-001X	FERRITE BEADS		
K6921	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K7032	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K7033	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K7034	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K7202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K7211	NQR0499-002X	FERRITE BEADS		
K7501	NQR0413-002X	FERRITE BEADS		
K7504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K7601	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
LC7505	NQR0483-005X	EMI FILTER	100uF 25V Z	
LC9301	NQR0470-003X	EMI FILTER	100pF 50V	
LC9303	NQR0483-005X	EMI FILTER	100uF 25V Z	
LC9305	NQR0483-005X	EMI FILTER	100uF 25V Z	
LC9307	NQR0483-005X	EMI FILTER	100uF 25V Z	
X6250	NAX0580-001X	CXO	27.0000MHz	
X7001	NAX0669-001X	C RESONATOR	6.000MHz	
X7601	NAX0613-001X	C RESONATOR	16.000MHz	

SIDE CONTROL P.W. BOARD ASS'Y (SRA0L013A-M2)

△Ref No.	Part No.	Part Name	Description	Local
D0843	UDZW10B-X	Z DIODE		
D0844	UDZW10B-X	Z DIODE		
D0845	UDZW10B-X	Z DIODE		
C0843	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C0844	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C0845	NCB21CK-105X	C CAPACITOR	1uF 16V K	
R0844	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R0845	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R0846	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R0849	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R0851	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R0852	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R0853	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R0854	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	

△Ref No.	Part No.	Part Name	Description	Local
J0841	QNN0787-001	PIN JACK	INPUT-4(V/L/R)	
S0851	QSW0619-003Z	PUSH SWITCH	MENU	
S0852	QSW0619-003Z	PUSH SWITCH	CH+	
S0853	QSW0619-003Z	PUSH SWITCH	CH-	
S0854	QSW0619-003Z	PUSH SWITCH	VOL-	
S0855	QSW0619-003Z	PUSH SWITCH	VOL+	
S0856	QSW0619-003Z	PUSH SWITCH	INPUT	

FRONT LED P.W. BOARD ASS'Y (SRA0L111A-M2)

△Ref No.	Part No.	Part Name	Description	Local
Q0701	2SC3928A/QR/-X	TRANSISTOR		
Q0702	2SC3928A/QR/-X	TRANSISTOR		
Q0704	2SC3928A/QR/-X	TRANSISTOR		
Q0705	2SC3928A/QR/-X	TRANSISTOR		
Q0706	2SC3928A/QR/-X	TRANSISTOR		
Q0707	2SC3928A/QR/-X	TRANSISTOR		
D0701	SELU5E20C/EF/-T	LED	POWER	
D0703	MA8068-X	Z DIODE		
D0704	MA8068-X	Z DIODE		
D0705	LE22440	LED	LAMP	
D0706	MA8068-X	Z DIODE		
D0707	MA8068-X	Z DIODE		
C0701	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C0702	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C0703	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0704	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0705	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0706	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
R0706	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R0707	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R0708	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0709	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0710	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R0711	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R0712	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0713	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0714	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0715	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0716	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
S0701	QSW0619-003Z	PUSH SWITCH	POWER	

LAMP COVER SW P.W. BOARD ASS'Y (SRA0L211A-M2)

△Ref No.	Part No.	Part Name	Description	Local
C0861	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
CN08G3	QUB130-32EMZ4-E	SIN TWIST WIRE		
S0861	QSW1064-001	DETECT SWITCH	LAMP COVER SW	

TUNER P.W. BOARD ASS'Y (SRA0R012A-M2)

△Ref No.	Part No.	Part Name	Description	Local
IC001	PQ050RDA1SZ	IC		
IC061	CXA2205Q-X	IC		
Q004	2SA1530A/QR/-X	TRANSISTOR		
Q005	2SC3928A/QR/-X	TRANSISTOR		
Q006	2SA1530A/QR/-X	TRANSISTOR		
C001	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C002	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C006	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C007	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C010	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C013	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C015	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C016	NDC31HJ-560X	C CAPACITOR	56pF 50V J	
C017	NDC31HJ-680X	C CAPACITOR	68pF 50V J	
C061	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C062	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M	
C063	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C064	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	

△Ref No.	Part No.	Part Name	Description Local
C065	NCB31CK-105X	C CAPACITOR	1uF 16V K
C066	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C067	NCB11AK-106X	C CAPACITOR	10uF 10V K
C068	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C069	QETN1CM-476Z	E CAPACITOR	47uF 16V M
C070	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C071	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C072	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C073	NCB31HK-272X	C CAPACITOR	2700pF 50V K
C074	NCB31HK-473X	C CAPACITOR	0.047uF 50V K
C075	NCB11AK-335X	C CAPACITOR	3.3uF 10V K
C076	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
C077	NCB11AK-106X	C CAPACITOR	10uF 10V K
C078	NCB31CK-105X	C CAPACITOR	1uF 16V K
C079	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C080	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C081	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C082	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C083	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C084	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C085	NCB11AK-106X	C CAPACITOR	10uF 10V K
C086	NCB31HK-223X	C CAPACITOR	0.022uF 50V K
C087	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C088	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C089	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C090	NCB31HK-472X	C CAPACITOR	4700pF 50V K
C091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C092	NCB11CK-225X	C CAPACITOR	2.2uF 16V K
C093	NCB11CK-225X	C CAPACITOR	2.2uF 16V K
C094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
R001	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R003	QRT029J-6R8	MF RESISTOR	6.8Ω 2W J
R004	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R005	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R006	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R007	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
R008	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R013	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R028	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R029	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J
R030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R047	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R061	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R062	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R063	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J
R064	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R065	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R066	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R067	NRSA63D-683X	MG RESISTOR	68kΩ 1/16W D
R068	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R069	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J
R070	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J
R071	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J
R072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R074	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R076	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R077	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
L002	NQLE3GK-100X	COIL	10uH K
L004	NQL953J-120X	COIL	12uH J
CN0T1	QGF1201C2-25	CONNECTOR	FFC/FPC (1-25)
CN0T2	WJK0235-001A-E	E-SI C WIRE C-B	
TU001	QAU0467-001	TUNER	

ATSC TUNER MODULE P.W. BOARD ASS'Y (SSD-2205A-M2)

△Ref No.	Part No.	Part Name	Description Local
△MD001	SSD-2205A-M2	ATSC TUNER MODULE PWB	

PRINTED WIRING BOARD PARTS LIST [HD-56FB97]

ANALOG P.W. BOARD ASS'Y (SRA-1024A-M2)

REFER TO PARTS LIST IN PAGE 3-16 FOR THIS P.W. BOARD.

DRIVE P.W. BOARD ASS'Y (SRA-3013A-M2)

REFER TO PARTS LIST IN PAGE 3-19 FOR THIS P.W. BOARD.

REMOCON P.W. BOARD ASS'Y (SRA-8011A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

TEMP P.W. BOARD ASS'Y (SRA-8211A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

USB P.W. BOARD ASS'Y (SRA-8521A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

POWER P.W. BOARD ASS'Y (SRA-9017A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

DIGITAL P.W. BOARD ASS'Y (SRA0D160A-M2)

△Ref No.	Part No.	Part Name	Description	Local
	SRA0D160A-M2	DIGITAL BOARD ASSY		
IC6001	JCC5068	IC		
IC6002	SN74LVC1G08V-X	IC		
IC6003	MK2302S-01LF-X	IC		
IC6004	ICS574MLF-X	IC		
IC6101	EDD1232AAFA-6B	IC		
IC6102	LP2996MR-X	IC		
IC6250	UPC5702GS-027-X	IC		
IC6251	R1170H331B-X	IC		
IC6501	THC63LVD1023	IC		
IC6724	S-80928CLNB-G-W	IC		
IC6901	R1141Q331B-X	IC		
IC7033	CD74HC4094PW-X	IC		
IC7036	ADC081S021CIS-X	IC		
IC7201	39VF800A7IEKDHO	IC(MICRO C ROM)		
IC7203	HY57V161610FTP7	IC		
IC7204	S-80928CLNB-G-W	IC		
IC7206	74LVC1G17GW-X	IC		
IC7601	M306V7MG-154FP	IC(MCU)		
IC7602	ATF16-52FA97	IC	(SERVICE)	
IC7603	SN74AHCT1G08V-X	IC		
IC7604	SN74LVC1G04V-X	IC		
IC7605	MM1673XN-X	IC		
IC7606	MM1673XN-X	IC		
IC9001	MP2263DN-C053-X	IC		
IC9101	MM1662FT-X	IC		
IC9201	MP2263DN-C053-X	IC		
IC9301	MM1701CH-X	IC		
Q6201	2SA1530A/QR/-X	TRANSISTOR		
Q6202	2SA1530A/QR/-X	TRANSISTOR		
Q6203	2SA1022/BC/-X	TRANSISTOR		
Q6204	2SA1022/BC/-X	TRANSISTOR		
Q6205	2SA1022/BC/-X	TRANSISTOR		
Q6206	2SA1022/BC/-X	TRANSISTOR		
Q6207	2SC3837K/NP/-X	TRANSISTOR		
Q6208	2SC3837K/NP/-X	TRANSISTOR		
Q6209	2SC3837K/NP/-X	TRANSISTOR		
Q6210	2SC3837K/NP/-X	TRANSISTOR		
Q6211	2SC3837K/NP/-X	TRANSISTOR		
Q6212	2SC3837K/NP/-X	TRANSISTOR		
Q6213	2SC3837K/NP/-X	TRANSISTOR		
Q6214	2SC3837K/NP/-X	TRANSISTOR		
Q6250	2SC3928A/QR/-X	TRANSISTOR		
Q6251	2SC3928A/QR/-X	TRANSISTOR		
Q7030	RT1N441C-X	TRANSISTOR		

△Ref No.	Part No.	Part Name	Description	Local
Q7032	RT1P441C-X	DIGI TRANSISTOR		
Q7033	RT1P441C-X	DIGI TRANSISTOR		
Q7501	RT1N441C-X	TRANSISTOR		
D7201	RB501V-40-X	SB DIODE		
D7502	1SS355W-X	DIODE		
D7608	RB521S-30-X	SB DIODE		
D9001	EC30HA03L-X	SB DIODE		
D9002	EC30HA03L-X	SB DIODE		
D9003	PTZ3.9B-X	Z DIODE		
D9201	EC30HA03L-X	SB DIODE		
D9202	EC30HA03L-X	SB DIODE		
D9203	PTZ3.9B-X	Z DIODE		
D9204	1SS355W-X	DIODE		
C6002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6101	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6103	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6107	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6111	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6113	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6114	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6116	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6117	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6118	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6119	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6121	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C6122	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M	
C6123	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6124	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M	
C6125	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6126	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6128	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6130	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K	
C6132	NEHL1EM-226X	E CAPACITOR	22uF 25V M	
C6133	NCB31CK-154X	C CAPACITOR	0.15uF 16V K	
C6134	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6135	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6139	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6217	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6218	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6219	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6220	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6227	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6228	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6229	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6236	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6237	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6238	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6239	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6240	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6241	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6242	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6243	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6244	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6245	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6246	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6247	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6248	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6249	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C6250	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6251	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6252	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6253	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6254	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6255	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C6260	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6261	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6262	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6263	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C6268	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6270	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6271	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6272	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6273	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6274	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6276	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6277	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6278	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6279	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6280	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

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△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C7517	NDC31HJ-100X	C CAPACITOR	10pF 50V J	R6119	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
C7601	NCB11CK-105X	C CAPACITOR	1uF 16V K	R6120	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
C7602	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6121	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
C7603	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6122	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
C7604	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6127	NRSA63J-1R5X	MG RESISTOR	1.5Ω 1/16W J
C7605	NCB31HK-221X	C CAPACITOR	220pF 50V K	R6141	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7606	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R6142	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7607	NCB31HK-681X	C CAPACITOR	680pF 50V K	R6201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7609	NCB31HK-681X	C CAPACITOR	680pF 50V K	R6203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7610	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7611	NDC31HJ-221X	C CAPACITOR	220pF 50V J	R6205	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C7612	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R6207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7618	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	R6216	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7619	NCB11AK-106X	C CAPACITOR	10uF 10V K	R6217	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7620	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	R6220	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C7621	NCB11AK-106X	C CAPACITOR	10uF 10V K	R6223	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6224	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7631	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	R6225	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7632	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	R6226	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7633	NDC31HJ-151X	C CAPACITOR	150pF 50V J	R6227	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C9001	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6228	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9002	NCJ41EK-106X-U	C CAPACITOR	10mF 25V K	R6229	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9003	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R6230	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9004	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6231	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9005	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6232	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9006	NDC31HJ-120X	C CAPACITOR	12pF 50V J	R6233	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9007	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6234	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C9010	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6235	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9101	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6236	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9103	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	R6237	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9201	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6238	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9202	NCJ41EK-106X-U	C CAPACITOR	10mF 25V K	R6239	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9204	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6240	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9205	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6241	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9206	NDC31HJ-120X	C CAPACITOR	12pF 50V J	R6242	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9207	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	R6243	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9208	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6244	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9209	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6245	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9211	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	R6246	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9301	NDC31HJ-101X	C CAPACITOR	100pF 50V J	R6247	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9302	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6248	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C9303	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6249	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C9304	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9313	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6253	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C9314	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6254	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6255	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6256	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6257	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6258	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6009	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6259	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6260	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6261	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6262	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6263	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6264	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6026	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6265	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6028	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6266	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R6031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6267	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6032	NRSA63D-470X	MG RESISTOR	47Ω 1/16W D	R6268	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6269	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6270	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6037	NRSA63D-330X	MG RESISTOR	33Ω 1/16W D	R6271	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6273	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6074	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6274	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J
R6075	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6275	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6080	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6276	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6101	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6277	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6102	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6279	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6103	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6280	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6104	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6281	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6105	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6282	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6106	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6283	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6107	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6284	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6108	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6285	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6109	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6286	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6110	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6287	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6111	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6288	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6112	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6289	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6113	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6290	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6114	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6291	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6115	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6292	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6116	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6300	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6117	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6118	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
				R6332	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

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△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
R9202	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K6268	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R9203	NRSA63D-302X	MG RESISTOR	3kΩ 1/16W D		K6271	NQR0499-001X	FERRITE BEADS		
R9205	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D		K6272	NQR0499-001X	FERRITE BEADS		
R9206	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		K6274	NQR0499-001X	FERRITE BEADS		
R9207	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K6921	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R9209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		K7032	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R9302	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K7033	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K7034	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R9308	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		K7202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R9510	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		K7211	NQR0499-002X	FERRITE BEADS		
RA6001	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J		K7501	NQR0413-002X	FERRITE BEADS		
RA6002	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4		K7504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA6007	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J		K7601	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA6008	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J		LC7505	NQR0483-005X	EMI FILTER	100uF 25V Z	
RA6009	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4		LC9301	NQR0470-003X	EMI FILTER	100pF 50V	
RA6010	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4		LC9303	NQR0483-005X	EMI FILTER	100uF 25V Z	
RA6011	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J		LC9305	NQR0483-005X	EMI FILTER	100uF 25V Z	
RA6101	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		LC9307	NQR0483-005X	EMI FILTER	100uF 25V Z	
RA6102	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J		X6250	NAX0580-001X	CXO	27.0000MHz	
RA6103	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		X7001	NAX0669-001X	C RESONATOR	6.000MHz	
RA6104	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		X7601	NAX0613-001X	C RESONATOR	16.000MHz	
RA6105	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J						
RA6106	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4						
RA6107	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J						
RA6108	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J						
RA6109	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4						
RA6110	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J						
RA6111	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4						
RA6112	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4						
RA6113	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J						
RA6114	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4						
RA6115	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J						
RA6116	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J						
RA6501	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA6502	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA6503	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA6504	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA6505	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA6506	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA6541	NRZ0033-0R0W	NET RESISTOR	0Ω						
RA6542	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA6543	NRZ0033-0R0W	NET RESISTOR	0Ω						
RA6544	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA6545	NRZ0033-0R0W	NET RESISTOR	0Ω						
RA6546	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J						
RA7202	NRZ0080-473X	NET RESISTOR	47kΩ						
RA7203	NRZ0080-473X	NET RESISTOR	47kΩ						
RA7204	NRZ0080-473X	NET RESISTOR	47kΩ						
RA7205	NRZ0080-473X	NET RESISTOR	47kΩ						
RA7503	NQR0271-004X	EMI FILTER							
RA7601	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA7602	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA7603	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA7605	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
RA7606	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4						
L6101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
L6102	NQLE3GK-220X	COIL	22uH K						
L6103	NQLE3GK-220X	COIL	22uH K						
L6115	NQR0499-001X	FERRITE BEADS							
L6254	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
L6265	NQR0499-001X	FERRITE BEADS							
L6266	NQR0499-001X	FERRITE BEADS							
L6511	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6512	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6513	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6514	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6515	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6516	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4						
L6531	NQR0199-007X	FERRITE BEADS							
L6701	NQR0413-003X	FERRITE BEADS							
L6911	NQR0499-001X	FERRITE BEADS							
L6912	NQR0499-001X	FERRITE BEADS							
L6922	NQLE3GK-220X	COIL	22uH K						
L6924	NQLE3GK-220X	COIL	22uH K						
L6925	NQLE3GK-220X	COIL	22uH K						
L6931	NQR0499-001X	FERRITE BEADS							
L7501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
L7502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
L9001	NQLC8CM-150X	COIL	15uH M						
L9201	NQLC8CM-150X	COIL	15uH M						
L9204	NQR0562-014X	CHOKE COIL							
L9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
CN011	QGF0508F4-50X	CONNECTOR	FFC/FPC (1-50)						
CN012	QGF0508F4-40X	CONNECTOR	FFC/FPC (1-40)						
J8501	NNZ0117-001	CONNECTOR	DIGITAL IN-2						
J8502	NNZ0117-001	CONNECTOR	DIGITAL IN-1						
K6052	NQR0489-002X	FERRITE BEADS							
K6250	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						

SIDE CONTROL P.W. BOARD ASS'Y (SRA0L013A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

FRONT LED P.W. BOARD ASS'Y (SRA0L113A-M2)

△Ref No.	Part No.	Part Name	Description	Local
Q0901	2SC3928A/QR/-X	TRANSISTOR		
Q0902	2SC3928A/QR/-X	TRANSISTOR		
Q0904	2SC3928A/QR/-X	TRANSISTOR		
Q0905	2SC3928A/QR/-X	TRANSISTOR		
Q0906	2SC3928A/QR/-X	TRANSISTOR		
Q0907	2SC3928A/QR/-X	TRANSISTOR		
D0901	SELU5E20C/EF/-T	LED		POWER
D0903	MA8068-X	Z DIODE		
D0904	MA8068-X	Z DIODE		
D0905	SLR-343DC	LED		LAMP
D0906	MA8068-X	Z DIODE		
D0907	MA8068-X	Z DIODE		
C0901	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C0902	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C0903	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0904	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0905	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C0906	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
R0906	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R0907	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R0908	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0909	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0910	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R0911	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R0912	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0913	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0914	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0915	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R0916	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
S0901	QSW0619-003Z	PUSH SWITCH		POWER

LAMP COVER SW P.W. BOARD ASS'Y (SRA0L211A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

TUNER P.W. BOARD ASS'Y (SRA0R012A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

ATSC TUNER MODULE P.W. BOARD ASS'Y (SSD-2205A-M2)

REFER TO PARTS LIST IN PAGE 3-36 FOR THIS P.W. BOARD.

PRINTED WIRING BOARD PARTS LIST [HD-61FB97]

ANALOG P.W. BOARD ASS'Y (SRA-1024A-M2)

REFER TO PARTS LIST IN PAGE 3-16 FOR THIS P.W. BOARD.

DRIVE P.W. BOARD ASS'Y (SRA-3013A-M2)

REFER TO PARTS LIST IN PAGE 3-19 FOR THIS P.W. BOARD.

REMOCON P.W. BOARD ASS'Y (SRA-8011A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

TEMP P.W. BOARD ASS'Y (SRA-8211A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

USB P.W. BOARD ASS'Y (SRA-8521A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

POWER P.W. BOARD ASS'Y (SRA-9017A-M2)

REFER TO PARTS LIST IN PAGE 3-29 FOR THIS P.W. BOARD.

DIGITAL P.W. BOARD ASS'Y (SRA0D159A-M2)

△Ref No.	Part No.	Part Name	Description Local
IC6001	JCC5068	IC	
IC6002	SN74LVC1G08V-X	IC	
IC6003	MK2302S-01LF-X	IC	
IC6004	ICS574MLF-X	IC	
IC6101	EDD1232AFA-6B	IC	
IC6102	LP2996MR-X	IC	
IC6250	UPC5702GS-027-X	IC	
IC6251	R1170H331B-X	IC	
IC6501	THC63LVD1023	IC	
IC6724	S-80928CLNB-G-W	IC	
IC6901	R1141Q331B-X	IC	
IC7033	CD74HC4094PW-X	IC	
IC7036	ADC081S021CIS-X	IC	
IC7201	39VF800A7IEKDH0	IC(MICRO C ROM)	
IC7203	HY57V161610FTP7	IC	
IC7204	S-80928CLNB-G-W	IC	
IC7206	74LVC1G17GW-X	IC	
IC7601	M306V7MG-154FP	IC(MCU)	
IC7602	ATF16-52FA97	IC	(SERVICE)
IC7603	SN74AHCT1G08V-X	IC	
IC7604	SN74LVC1G04V-X	IC	
IC7605	MM1673XN-X	IC	
IC7606	MM1673XN-X	IC	
IC9001	MP2263DN-C053-X	IC	
IC9101	MM1662FT-X	IC	
IC9201	MP2263DN-C053-X	IC	
IC9301	MM1701CH-X	IC	
Q6201	2SA1530A/QRI-X	TRANSISTOR	
Q6202	2SA1530A/QRI-X	TRANSISTOR	
Q6203	2SA1022/BC/-X	TRANSISTOR	
Q6204	2SA1022/BC/-X	TRANSISTOR	
Q6205	2SA1022/BC/-X	TRANSISTOR	
Q6206	2SA1022/BC/-X	TRANSISTOR	
Q6207	2SC3837K/NP/-X	TRANSISTOR	
Q6208	2SC3837K/NP/-X	TRANSISTOR	
Q6209	2SC3837K/NP/-X	TRANSISTOR	
Q6210	2SC3837K/NP/-X	TRANSISTOR	
Q6211	2SC3837K/NP/-X	TRANSISTOR	
Q6212	2SC3837K/NP/-X	TRANSISTOR	
Q6213	2SC3837K/NP/-X	TRANSISTOR	
Q6214	2SC3837K/NP/-X	TRANSISTOR	
Q6250	2SC3928A/QRI-X	TRANSISTOR	
Q6251	2SC3928A/QRI-X	TRANSISTOR	
Q7030	RT1N441C-X	TRANSISTOR	
Q7032	RT1P441C-X	DIGI TRANSISTOR	
Q7033	RT1P441C-X	DIGI TRANSISTOR	
Q7501	RT1N441C-X	TRANSISTOR	

△Ref No.	Part No.	Part Name	Description Local
D7201	RB501V-40-X	SB DIODE	
D7502	1SS355W-X	DIODE	
D7608	RB521S-30-X	SB DIODE	
D9001	EC30HA03L-X	SB DIODE	
D9002	EC30HA03L-X	SB DIODE	
D9003	PTZ3.9B-X	Z DIODE	
D9201	EC30HA03L-X	SB DIODE	
D9202	EC30HA03L-X	SB DIODE	
D9203	PTZ3.9B-X	Z DIODE	
D9204	1SS355W-X	DIODE	
C6002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6101	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K
C6103	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6107	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6111	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6113	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6114	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6116	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6117	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K
C6118	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6119	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6121	NCB31AK-474X	C CAPACITOR	0.47uF 10V K
C6122	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M
C6123	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6124	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M
C6125	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6126	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K
C6128	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K
C6130	NCB30JK-225X	C CAPACITOR	2.2uF 6.3V K
C6132	NEHL1EM-226X	E CAPACITOR	22uF 25V M
C6133	NCB31CK-154X	C CAPACITOR	0.15uF 16V K
C6134	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6135	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6139	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6217	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6218	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6219	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6220	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6227	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6228	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6229	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6236	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6237	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6238	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6239	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6240	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6241	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6242	NCB31AK-105X	C CAPACITOR	1uF 10V K
C6243	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6244	NCB31AK-105X	C CAPACITOR	1uF 10V K
C6245	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6246	NCB31AK-105X	C CAPACITOR	1uF 10V K
C6247	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6248	NCB31AK-105X	C CAPACITOR	1uF 10V K
C6249	NCB31AK-105X	C CAPACITOR	1uF 10V K
C6250	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6251	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6252	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6253	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6254	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6255	NCB11AK-106X	C CAPACITOR	10uF 10V K
C6260	NCB21AK-225X	C CAPACITOR	2.2uF 10V K
C6261	NCB21AK-225X	C CAPACITOR	2.2uF 10V K
C6262	NCB21AK-225X	C CAPACITOR	2.2uF 10V K
C6263	NCB21AK-225X	C CAPACITOR	2.2uF 10V K
C6268	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6270	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6271	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6272	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6273	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6274	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6276	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6277	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6278	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6279	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6280	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6282	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6283	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C6284	NCB31CK-104X	C CAPACITOR	0.1uF 16V K

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△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C7603	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6122	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
C7604	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6127	NRSA63J-1R5X	MG RESISTOR	1.5Ω 1/16W J
C7605	NCB31HK-221X	C CAPACITOR	220pF 50V K	R6141	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7606	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R6142	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7607	NCB31HK-681X	C CAPACITOR	680pF 50V K	R6201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7609	NCB31HK-681X	C CAPACITOR	680pF 50V K	R6203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7610	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7611	NDC31HJ-221X	C CAPACITOR	220pF 50V J	R6205	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C7612	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R6207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7618	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	R6216	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7619	NCB11AK-106X	C CAPACITOR	10uF 10V K	R6217	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7620	NCF11CZ-475X	C CAPACITOR	4.7uF 16V Z	R6220	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C7621	NCB11AK-106X	C CAPACITOR	10uF 10V K	R6223	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	R6224	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7631	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	R6225	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7632	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	R6226	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C7633	NDC31HJ-151X	C CAPACITOR	150pF 50V J	R6227	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C9001	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6228	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9002	NCJ41EK-106X-U	C CAPACITOR	10mF 25V K	R6229	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9003	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	R6230	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9004	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6231	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9005	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6232	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9006	NDC31HJ-120X	C CAPACITOR	12pF 50V J	R6233	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9007	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6234	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C9010	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6235	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9101	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6236	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9103	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	R6237	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9201	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	R6238	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9202	NCJ41EK-106X-U	C CAPACITOR	10mF 25V K	R6239	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9204	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6240	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9205	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6241	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9206	NDC31HJ-120X	C CAPACITOR	12pF 50V J	R6242	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9207	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	R6243	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C9208	NCJ41CK-226X-U	C CAPACITOR	22mF 16V K	R6244	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C9209	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6245	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
C9211	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	R6246	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
C9301	NDC31HJ-101X	C CAPACITOR	100pF 50V J	R6247	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
C9302	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6248	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C9303	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R6249	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C9304	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	R6251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C9313	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6253	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C9314	NCB31HK-102X	C CAPACITOR	1000pF 50V K	R6254	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6255	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6256	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6257	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6258	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6009	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6259	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6260	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6261	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R6018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6262	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R6019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6263	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6264	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6026	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6265	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6028	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6266	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R6031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6267	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R6032	NRSA63D-470X	MG RESISTOR	47Ω 1/16W D	R6268	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6269	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6270	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6037	NRSA63D-330X	MG RESISTOR	33Ω 1/16W D	R6271	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
R6073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6273	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6074	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6274	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J
R6075	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6275	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6080	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R6276	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6101	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6277	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6102	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6279	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6103	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6280	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6104	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6281	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6105	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6282	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R6106	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6283	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6107	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6284	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6108	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	R6285	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6109	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6286	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6110	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6287	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6111	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	R6288	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
R6112	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6289	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R6113	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6290	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6114	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6291	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6115	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6292	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6116	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6300	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6117	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6118	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6119	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6332	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6120	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6333	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6121	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R6338	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
				R6339	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R6501	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7173	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6502	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7175	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6505	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R7176	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7177	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6509	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R7178	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6511	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R7179	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6514	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7184	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6534	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7186	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
R6568	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7187	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6571	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7192	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6572	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6573	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7202	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6574	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7203	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6575	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7207	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R6576	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6598	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R7211	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6607	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6609	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7215	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6611	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R7216	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6707	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7217	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6712	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7221	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R6713	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7223	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6730	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7224	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6731	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7225	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R6732	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6921	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7240	NQR0599-003X	FERRITE BEADS	
R6923	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7349	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6924	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7350	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6943	NRSA63J-150X	MG RESISTOR	15Ω 1/16W J	R7351	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R6946	NRSA63D-220X	MG RESISTOR	22Ω 1/16W D	R7504	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R6953	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7505	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7030	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7032	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R7514	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7515	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7601	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7040	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7602	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7041	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R7603	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7042	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R7604	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7047	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7605	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J
R7049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7606	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J
R7051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7607	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R7052	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R7608	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J
R7054	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7609	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7055	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7610	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7056	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7611	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7057	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7612	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J
R7058	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7613	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7059	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7615	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7062	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7616	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7618	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7064	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R7619	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7065	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R7620	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R7066	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R7622	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7067	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R7623	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7068	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7624	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7069	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7625	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7070	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7626	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7071	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7627	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7077	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7628	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R7078	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R7631	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J
R7081	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R7632	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R7084	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R7634	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J
R7085	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R7635	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R7086	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7643	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7087	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7644	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7646	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7649	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7658	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R7091	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R7659	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J
R7092	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7661	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7093	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7662	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7094	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R8796	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8797	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7097	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8798	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7098	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R8799	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7099	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9001	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R7100	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9002	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9003	NRSA63D-273X	MG RESISTOR	27kΩ 1/16W D
R7106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9004	NRSA63J-684X	MG RESISTOR	680kΩ 1/16W J
R7110	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9005	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
R7113	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9006	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J
R7123	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7124	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R7128	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R7170	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9202	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R7171	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9203	NRSA63D-302X	MG RESISTOR	3kΩ 1/16W D
R7172	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R9205	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D

△Ref No.	Part No.	Part Name	Description Local
R9206	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R9207	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R9209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R9302	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R9308	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R9510	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
RA6001	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6002	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6007	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6008	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6009	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6010	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6011	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6101	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
RA6102	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
RA6103	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
RA6104	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
RA6105	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
RA6106	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4
RA6107	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
RA6108	NRZ0080-220X	NET RESISTOR	22Ω 1/16W J
RA6109	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
RA6110	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
RA6111	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
RA6112	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
RA6113	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
RA6114	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4
RA6115	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
RA6116	NRZ0080-470X	NET RESISTOR	47Ω 1/16W J
RA6501	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6502	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6503	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA6504	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6505	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6506	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6541	NRZ0033-0R0W	NET RESISTOR	0Ω
RA6542	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6543	NRZ0033-0R0W	NET RESISTOR	0Ω
RA6544	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA6545	NRZ0033-0R0W	NET RESISTOR	0Ω
RA6546	NRZ0080-0R0X	NET RESISTOR	0Ω 1/16W J
RA7202	NRZ0080-473X	NET RESISTOR	47kΩ
RA7203	NRZ0080-473X	NET RESISTOR	47kΩ
RA7204	NRZ0080-473X	NET RESISTOR	47kΩ
RA7205	NRZ0080-473X	NET RESISTOR	47kΩ
RA7503	NQR0271-004X	EMI FILTER	
RA7601	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA7602	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA7603	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA7605	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
RA7606	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4

△Ref No.	Part No.	Part Name	Description Local
K6274	NQR0499-001X	FERRITE BEADS	
K6921	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K7032	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K7033	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K7034	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K7202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
K7211	NQR0499-002X	FERRITE BEADS	
K7501	NQR0413-002X	FERRITE BEADS	
K7504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
K7601	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
LC7505	NQR0483-005X	EMI FILTER	100uF 25V Z
LC9301	NQR0470-003X	EMI FILTER	100pF 50V
LC9303	NQR0483-005X	EMI FILTER	100uF 25V Z
LC9305	NQR0483-005X	EMI FILTER	100uF 25V Z
LC9307	NQR0483-005X	EMI FILTER	100uF 25V Z
X6250	NAX0580-001X	CXO	27.0000MHz
X7001	NAX0669-001X	C RESONATOR	6.000MHz
X7601	NAX0613-001X	C RESONATOR	16.000MHz

SIDE CONTROL P.W. BOARD ASS'Y (SRA0L013A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

FRONT LED P.W. BOARD ASS'Y (SRA0L113A-M2)

REFER TO PARTS LIST IN PAGE 3-41 FOR THIS P.W. BOARD.

LAMP COVER SW P.W. BOARD ASS'Y (SRA0L211A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

TUNER P.W. BOARD ASS'Y (SRA0R012A-M2)

REFER TO PARTS LIST IN PAGE 3-35 FOR THIS P.W. BOARD.

ATSC TUNER MODULE P.W. BOARD ASS'Y (SSD-2205A-M2)

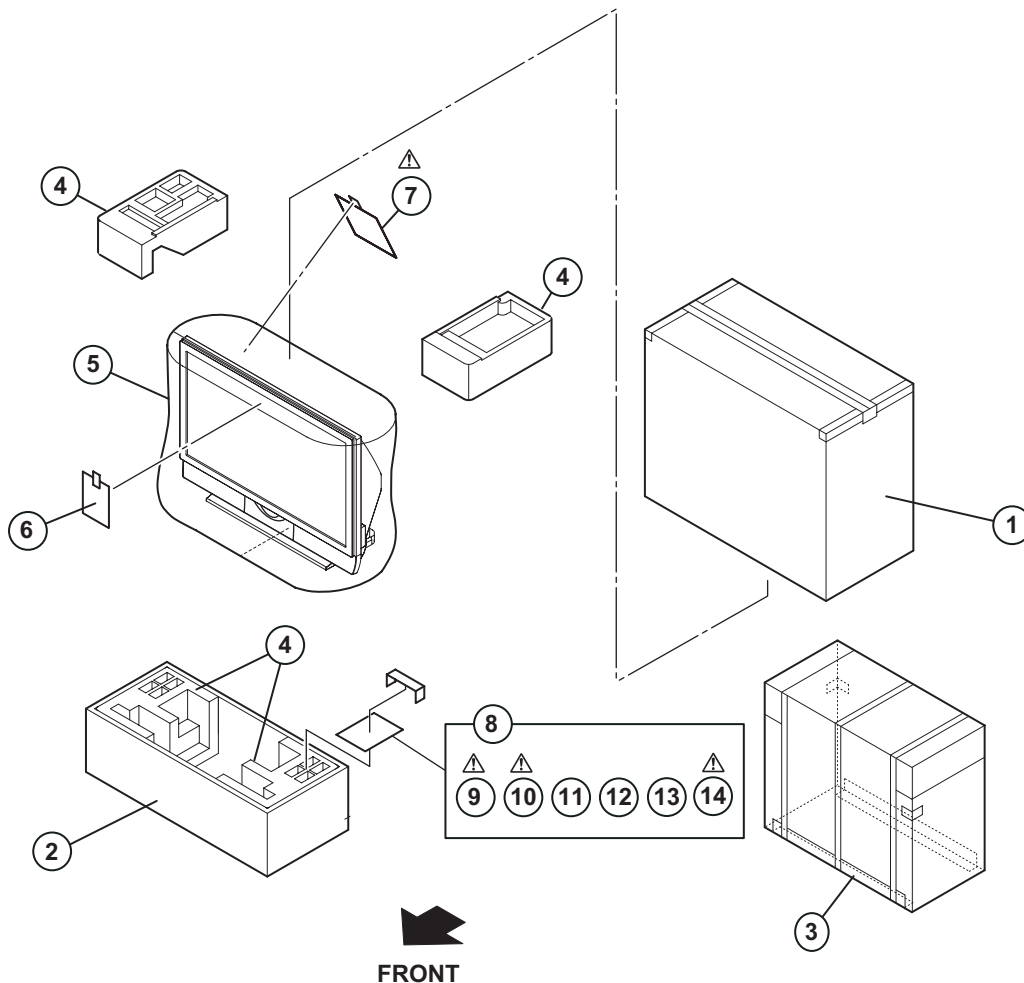
REFER TO PARTS LIST IN PAGE 3-36 FOR THIS P.W. BOARD.

L6101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
L6102	NQLE3GK-220X	COIL	22uH K
L6103	NQLE3GK-220X	COIL	22uH K
L6115	NQR0499-001X	FERRITE BEADS	
L6254	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
L6265	NQR0499-001X	FERRITE BEADS	
L6266	NQR0499-001X	FERRITE BEADS	
L6511	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6512	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6513	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6514	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6515	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6516	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J x4
L6531	NQR0199-007X	FERRITE BEADS	
L6701	NQR0413-003X	FERRITE BEADS	
L6911	NQR0499-001X	FERRITE BEADS	
L6912	NQR0499-001X	FERRITE BEADS	
L6922	NQLE3GK-220X	COIL	22uH K
L6924	NQLE3GK-220X	COIL	22uH K
L6925	NQLE3GK-220X	COIL	22uH K
L6931	NQR0499-001X	FERRITE BEADS	
L7501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
L7502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
L9001	NQLC8CM-150X	COIL	15uH M
L9201	NQLC8CM-150X	COIL	15uH M
L9204	NQR0562-014X	CHOKE COIL	
L9306	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
CN011	QGF0508F4-50X	CONNECTOR	FFC/FPC (1-50)
CN012	QGF0508F4-40X	CONNECTOR	FFC/FPC (1-40)
J8501	NNZ0117-001	CONNECTOR	DIGITAL IN-2
J8502	NNZ0117-001	CONNECTOR	DIGITAL IN-1
K6052	NQR0489-002X	FERRITE BEADS	
K6250	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K6268	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
K6271	NQR0499-001X	FERRITE BEADS	
K6272	NQR0499-001X	FERRITE BEADS	

REMOTE CONTROL UNIT PARTS LIST (RM-C18G-1H)

△ Ref.No.	Part No.	Part Name	Description	Local
	UR77EC1403A	BATTERY COVER		

PACKING



PACKING PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
1	LC12022-012A-A	PACKING CASE		HD-52FA97
1	LC12428-009A-A	PACKING CASE		HD-56FB97
1	LC12022-013A-A	PACKING CASE		HD-61FB97
2	LC12767-001A-A	PACKING TRAY		HD-52FA97
2	LC12726-001A-A	PACKING TRAY		HD-56FB97
2	LC12757-001A-A	PACKING TRAY		HD-61FB97
3	LC22193-001A-A	SUPPORT TRAY		HD-52FA97
3	LC22203-001A-A	SUPPORT TRAY		HD-56FB97
3	LC22205-001A-A	SUPPORT TRAY		HD-61FB97
4	LC12770-001C-A	CUSHION ASSY	4pcs in 1set	HD-52FA97
4	LC12723-001A-A	CUSHION ASSY	4pcs in 1set	HD-56FB97
4	LC12754-001A-A	CUSHION ASSY	4pcs in 1set	HD-61FB97
5	LC22040-001A-A	POLY BAG		
6	LCT1910-001A-A	INST BOOK	English	
△ 7	LCT1721-001A-A	INST SHEET	English/French	
8	QPA02503505P	POLY BAG	25cm x 35cm	
△ 9	LCT2170-001A-A	INST BOOK	English	
△ 10	LCT2171-001A-A	INST BOOK	French	
11	-----	BATTERY	R6P/AA(x2)	
12	RM-C18G-1H	REMOTE CONTROL UNIT		
13	BT-51041-1A	REGI. CARD		
△ 14	LCT1728-001B-A	INST SHEET	English/French	