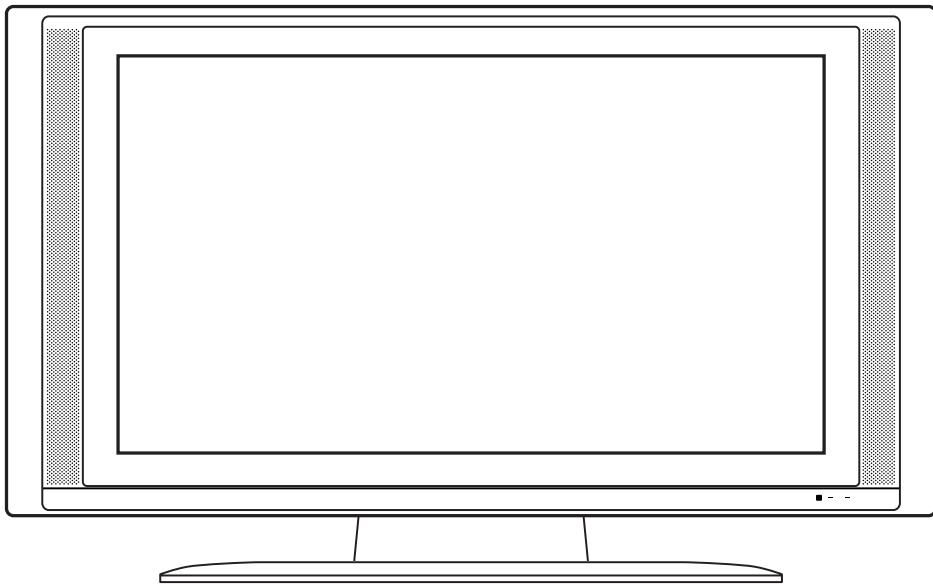




SERVICE MANUAL

**27" COLOR LCD TELEVISION
LCD-A2706/LCD-B2706/
LCD-C2706/LCD-D2706**



27" COLOR LCD TELEVISION

LCD-A2706/LCD-B2706/ LCD-C2706/LCD-D2706

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The LCD panel is manufactured to provide many years of useful life. Occasionally a few non active pixels may appear as a tiny spec of color. This is not to be considered a defect in the LCD screen.

SPECIFICATIONS

< TUNER >

ANT. Input ----- 75 ohm Unbal., F type
 Reference Level ----- 20 Vp-p (LCD Green Cathode)
 Test Input Signal ----- 400 Hz 30% modulation

Description	Condition	Unit	Nominal	Limit
1. Intermediate Freq.	Picture Sound	MHz MHz	45.75 41.25	--- ---
2. Color Killer Sens.	CH-2 CH-10 CH-55	dB μ V dB μ V dB μ V	17 17 17	23 23 23
3. AFT Pull In Range (10 mV input)	---	MHz	\pm 2.4	\pm 2.1

< LCD PANEL >

Description	Condition	Unit	Nominal	Limit
1. Number of Pixels	Horizontal Vertical	pixels pixels	1280x 3 720	--- ---
2. Brightness		cd/m ²	550	---
3. Response Time (tr+tf)	---	msec	25	---
4. Support Color	---	-	16.7 mil. (8 bit)	---
5. Viewing Angle	Horizontal Vertical	° °	-85 to 85 -85 to 85	--- ---

< VIDEO >

Description	Condition	Unit	Nominal	Limit
1. Over Scan	Horizontal Vertical	% %	5 5	--- ---
2. Color Temperature	---	°K	12000 0.272 0.278	--- \pm 0.03 \pm 0.03
3. Resolution	Horizontal Vertical	line line	400 350	--- ---

< AUDIO >

All items are measured across 8 Ω load at speaker output terminal with L.P.F.

Description	Condition	Unit	Nominal	Limit
1. Audio Output Power	10% THD: Lch/Rch	W	5.0/5.0	4.5/4.5
2. Audio Distortion	500mW: Lch/Rch	%	1.0/1.0	4.0/4.0
3. Audio Freq. Response	-6dB: Lch -6dB: Rch	Hz Hz	100 to 10 k 100 to 10 k	--- ---

Note: Nominal specifications represent the design specifications. All units should be able to approximate these. Some will exceed and some may drop slightly below these specifications. Limit specifications represent the absolute worst condition that still might be considered acceptable. In no case should a unit fail to meet limit specifications.

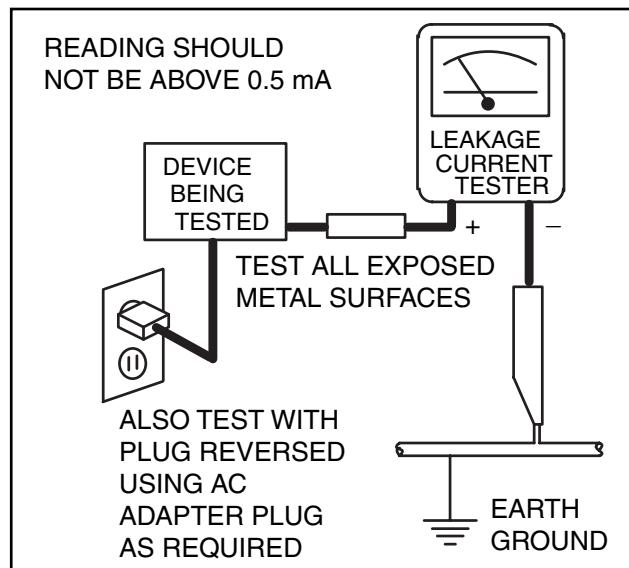
IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Safety Precautions for LCD TV Circuit

1. **Before returning an instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:
 - a. Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**
 - b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the LCD module and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
 - c. **Antenna Cold Check** - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.
 - d. **Leakage Current Hot Check** - With the instrument completely reassembled, plug the AC line cord directly into a 230 V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American

National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the LCD module.
3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this LCD TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

- 4. Hot Chassis Warning -**
 - a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and maybe safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.
 - b. Some TV receiver chassis normally have 85V AC(RMS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.
 - c. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.
- 5. Observe original lead dress. Take extra care to assure correct lead dress in the following areas:**
 - a. near sharp edges,
 - b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts,
 - c. the AC supply,
 - d. high voltage, and,
 - e. antenna wiring.

Always inspect in all areas for pinched, out of place, or frayed wiring. Check AC power cord for damage.
- 6. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications.**

Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
- 7. Product Safety Notice -** Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc.. Parts that have special safety characteristics are identified by a  on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The product's safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm they comply with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

- A. Parts identified by the  symbol are critical for safety.
Replace only with part number specified.
- B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
- D. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers
 - 4) Insulators for transistors.
- E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F. Observe that the wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.)
- G. Check that replaced wires do not contact sharp edged or pointed parts.
- H. When a power cord has been replaced, check that 5~6 kg of force in any direction will not loosen it.
- I. Also check areas surrounding repaired locations.
- J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K. Crimp type wire connector
The power transformer uses crimp type connectors which connect the power cord and the primary side of the transformer. When replacing the transformer, follow these steps carefully and precisely to prevent shock hazards.
Replacement procedure
 - 1) Remove the old connector by cutting the wires at a point close to the connector.
Important: Do not re-use a connector (discard it).
 - 2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
 - 3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
 - 4) Use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.
- L. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC supply outlet.
- M. When installing parts or assembling the cabinet parts, be sure to use the proper screws and tighten certainly.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

Table 1 : Ratings for selected area

AC Line Voltage	Clearance Distance (d), (d')
230 V	$\geq 3\text{mm}(d)$ $\geq 6\text{ mm}(d')$

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z . See Fig. 2 and following table.

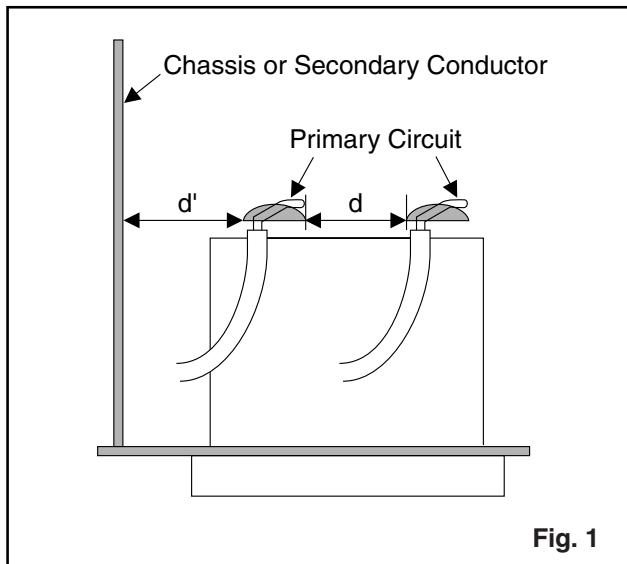


Fig. 1

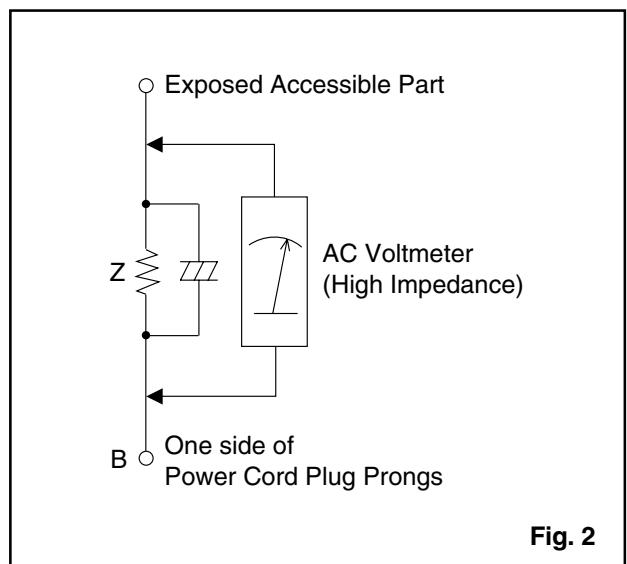


Fig. 2

Table 2: Leakage current ratings for selected areas

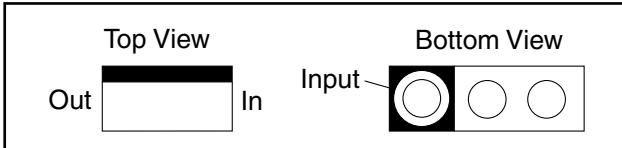
AC Line Voltage	Load Z	Leakage Current (i)	One side of power cord plug prongs (B) to:
230 V	2k Ω RES. Connected in parallel	i $\leq 0.7\text{mA}$ AC Peak i $\leq 2\text{mA}$ DC	RF or Antenna terminals
	50k Ω RES. Connected in parallel	i $\leq 0.7\text{mA}$ AC Peak i $\leq 2\text{mA}$ DC	A/V Input, Output

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

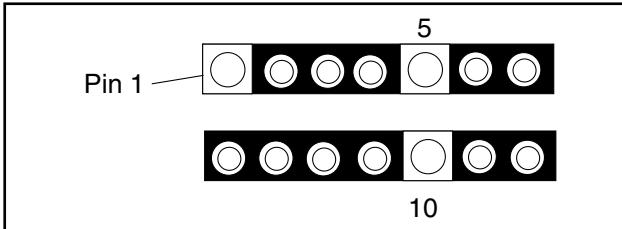
STANDARD NOTES FOR SERVICING

Circuit Board Indications

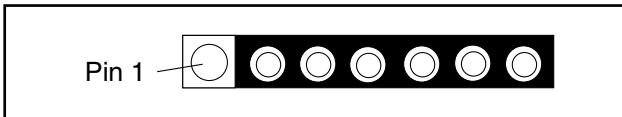
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.

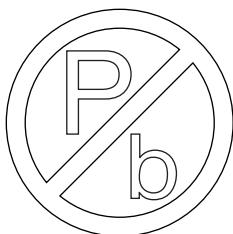


3. The 1st pin of every male connector is indicated as shown.



Pb (Lead) Free Solder

Pb free mark will be found on PCBs which use Pb free solder. (Refer to figure.) For PCBs with Pb free mark, be sure to use Pb free solder. For PCBs without Pb free mark, use standard solder.



Pb free mark

How to Remove / Install Flat Pack-IC

1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

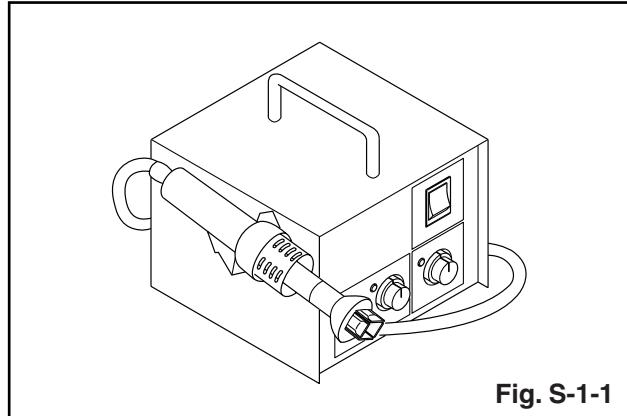


Fig. S-1-1

2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

CAUTION:

1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)
3. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

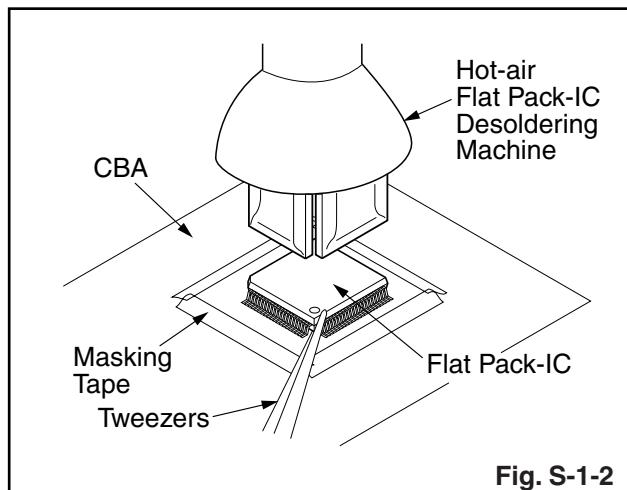
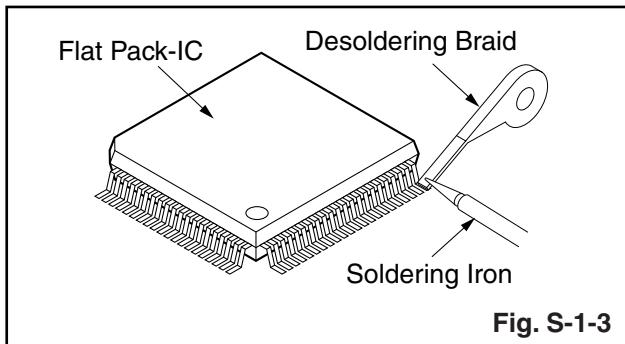


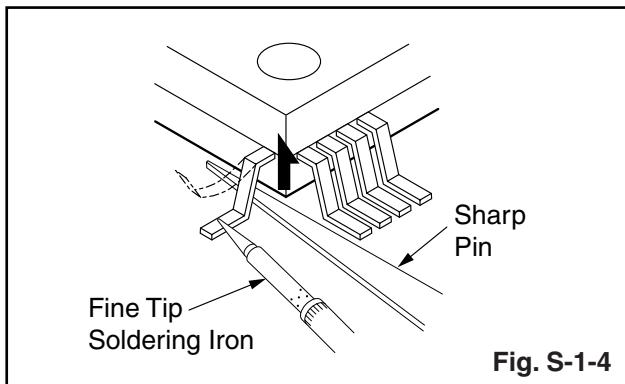
Fig. S-1-2

With Soldering Iron:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)



2. Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

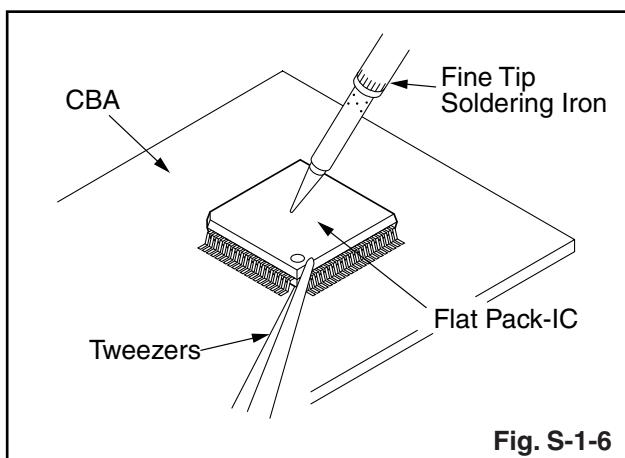
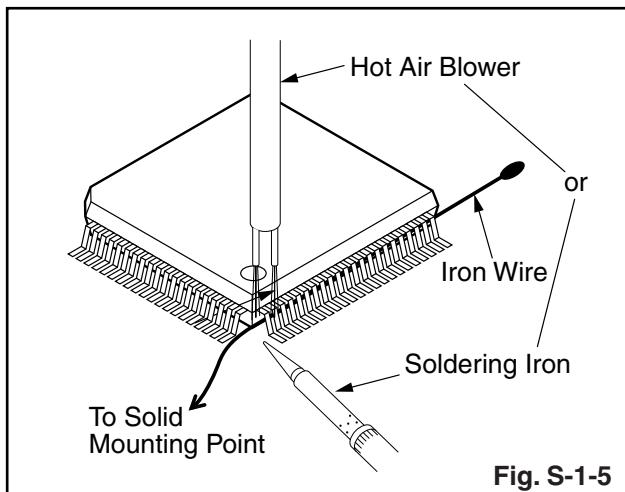


3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

With Iron Wire:

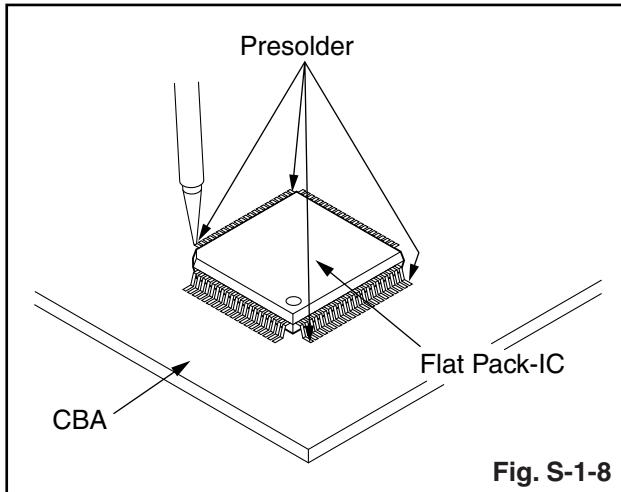
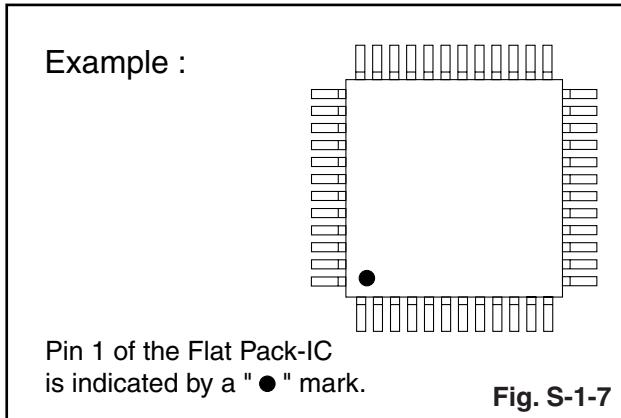
1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

Note: When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.



2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The “●” mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.



Instructions for Handling Semiconductors

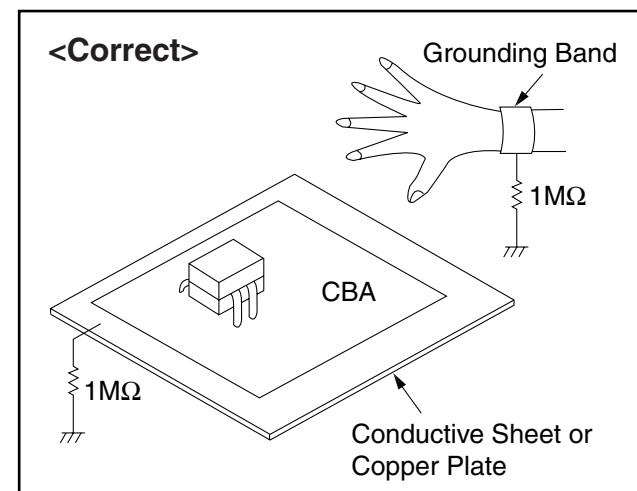
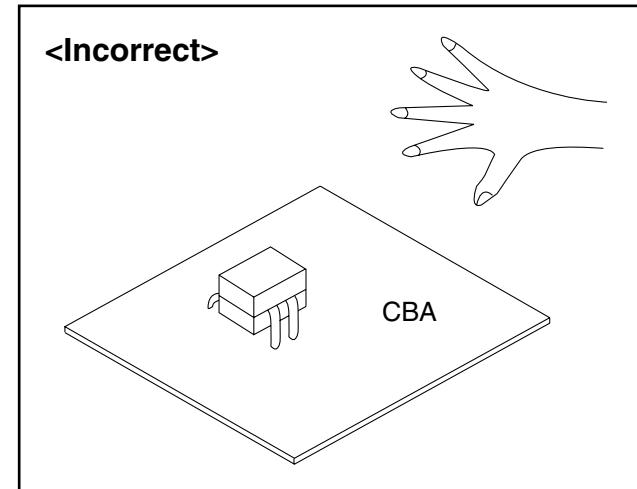
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

1. Ground for Human Body

Be sure to wear a grounding band ($1\text{ M}\Omega$) that is properly grounded to remove any static electricity that may be charged on the body.

2. Ground for Workbench

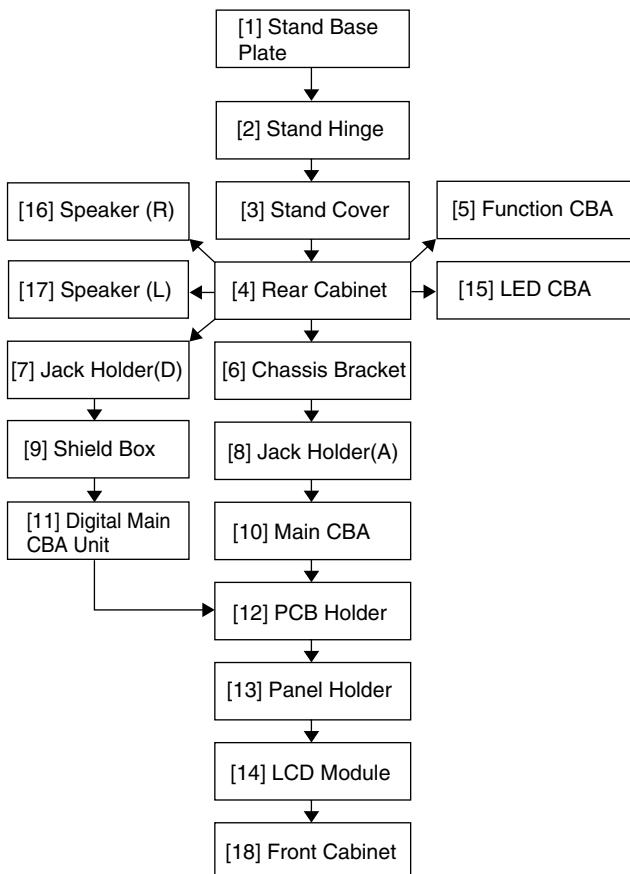
Be sure to place a conductive sheet or copper plate with proper grounding ($1\text{ M}\Omega$) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing.



CABINET DISASSEMBLY INSTRUCTIONS

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.



2. Disassembly Method

Step/ Loc. No.	Part	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Unclamp/ Desolder	Note
[1]	Stand Base Plate	D1	4(S-1), 6(S-2), 5(S-3)	---
[2]	Stand Hinge	D1	-----	---
[3]	Stand Cover	D1	-----	---
[4]	Rear Cabinet	D1	12(S-4), 4(S-5)	---
[5]	Function CBA	D1 D5	3(S-6), *CN10, *CN11, *CN11B	---
[6]	Chassis Bracket	D2	12(S-7)	---
[7]	Jack Holder(D)	D2	(S-8)	---

Step/ Loc. No.	Part	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Unclamp/ Desolder	Note
[8]	Jack Holder(A)	D2	5(S-9)	---
[9]	Shield Box	D2	4(S-10)	---
[10]	Main CBA	D3 D5	6(S-11), *CN54, *CN101A, *CN102A, *CN103A, *CN104A, *CN701, *CN702	---
[11]	Digital Main CBA Unit	D3 D5	4(S-12), *CN111, *CN400	---
[12]	PCB Holder	D3	-----	---
[13]	Panel Holder	D4	6(S-13), 4(S-14)	---
[14]	LCD Module	D4	-----	---
[15]	LED CBA	D4	(S-15)	---
[16]	Speaker (R)	D4	4(S-16)	---
[17]	Speaker (L)	D4	4(S-17)	---
[18]	Front Cabinet	D4	-----	---

Note:

- (1) Order of steps in procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the Identification (location) No. of parts in figures.
- (2) Parts to be removed or installed.
- (3) Fig. No. showing procedure of part location
- (4) Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
N = Nut, L = Locking Tab, S = Screw,
CN = Connector
* = Unhook, Unlock, Release, Unplug, or Desolder
e.g. 2(S-2) = two Screws (S-2),
2(L-2) = two Locking Tabs (L-2)
- (5) Refer to the following "Reference Notes in the Table."

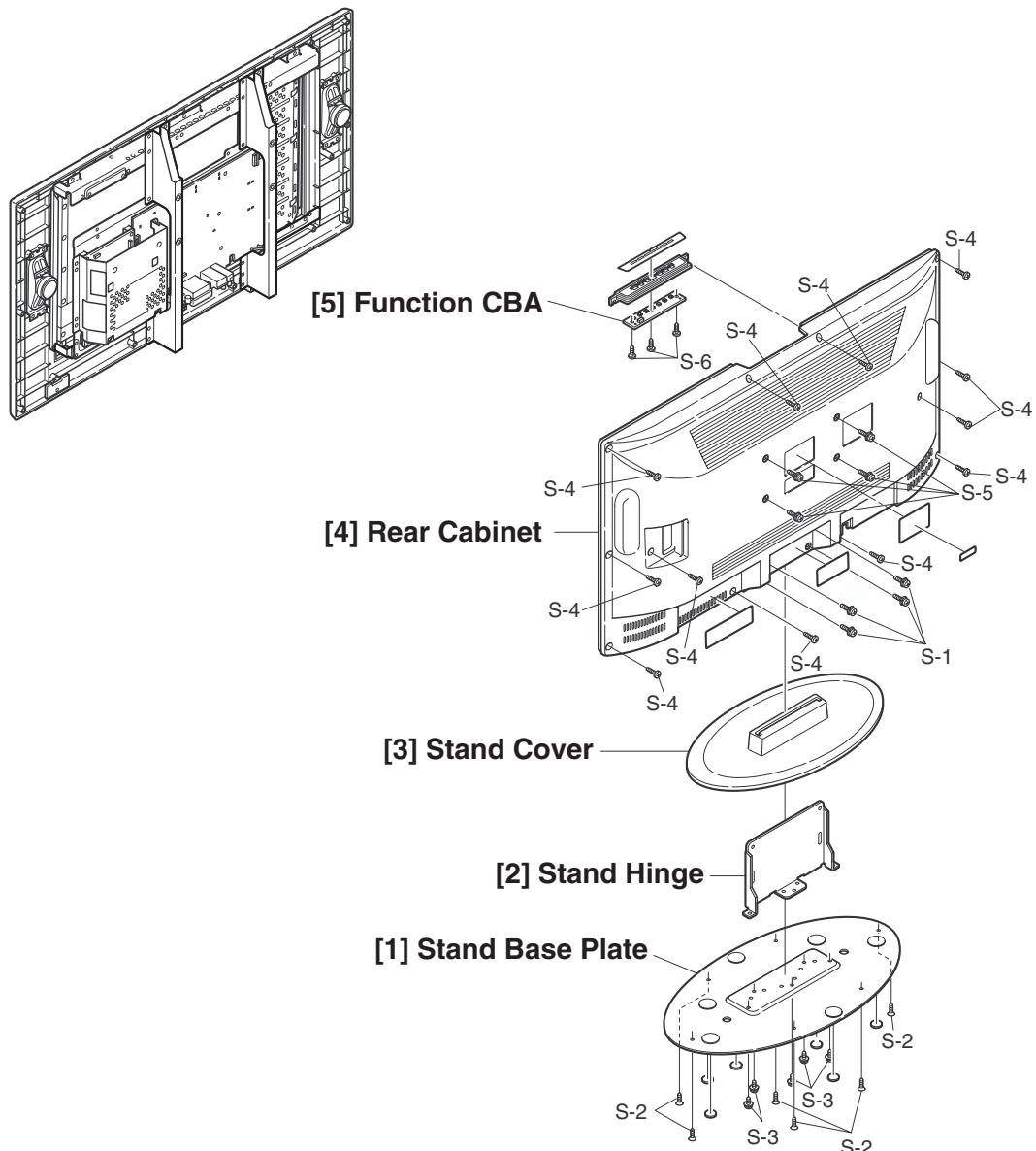


Fig. D1

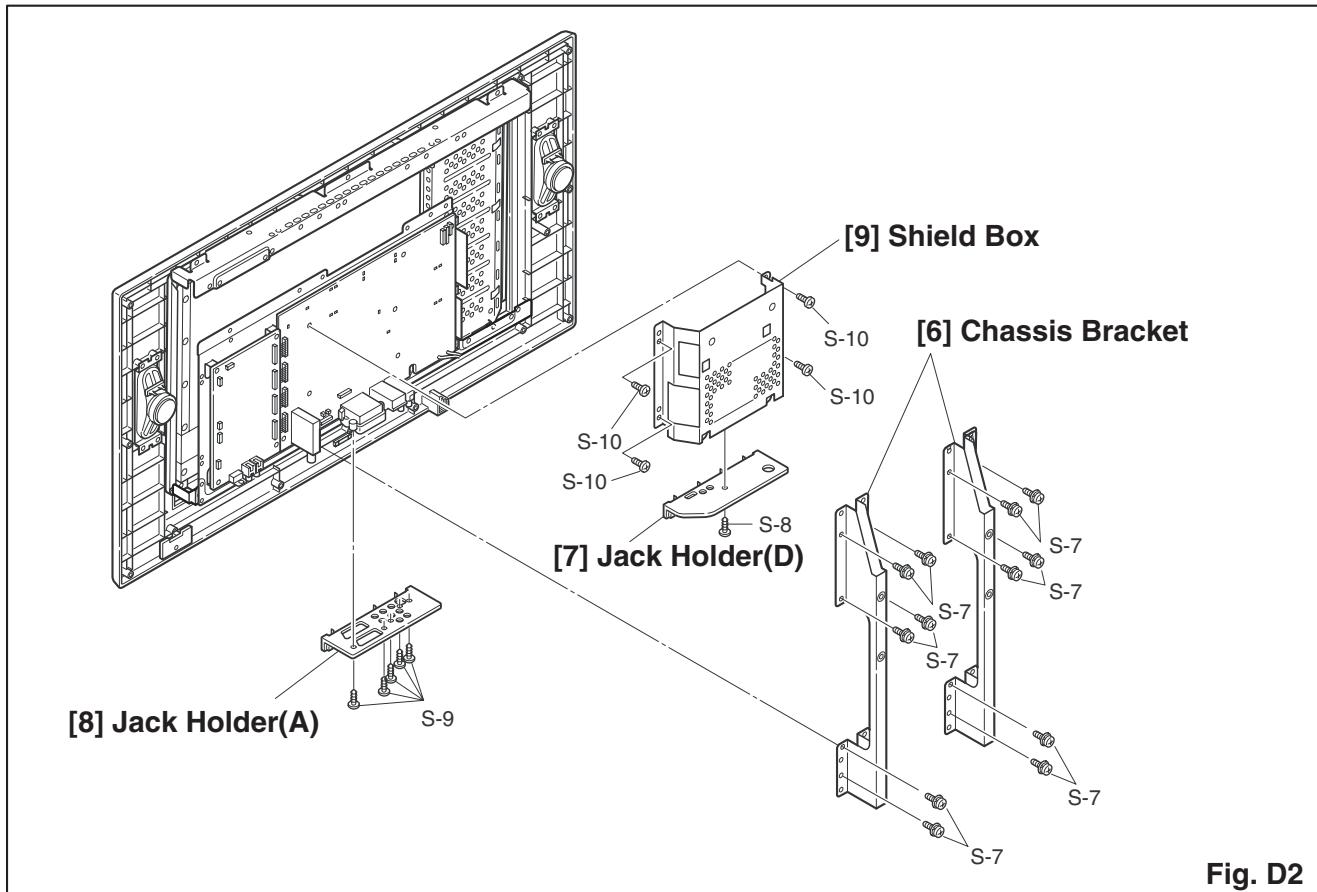


Fig. D2

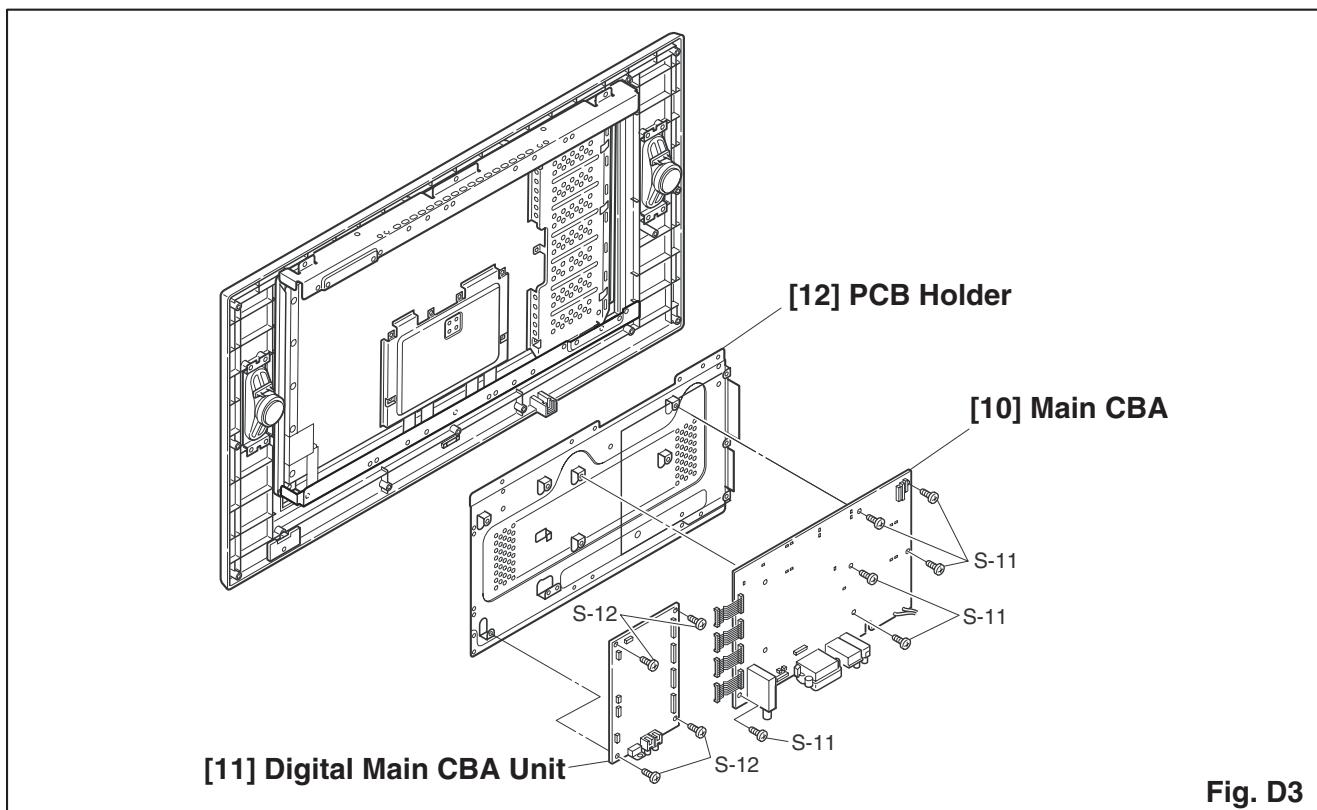


Fig. D3

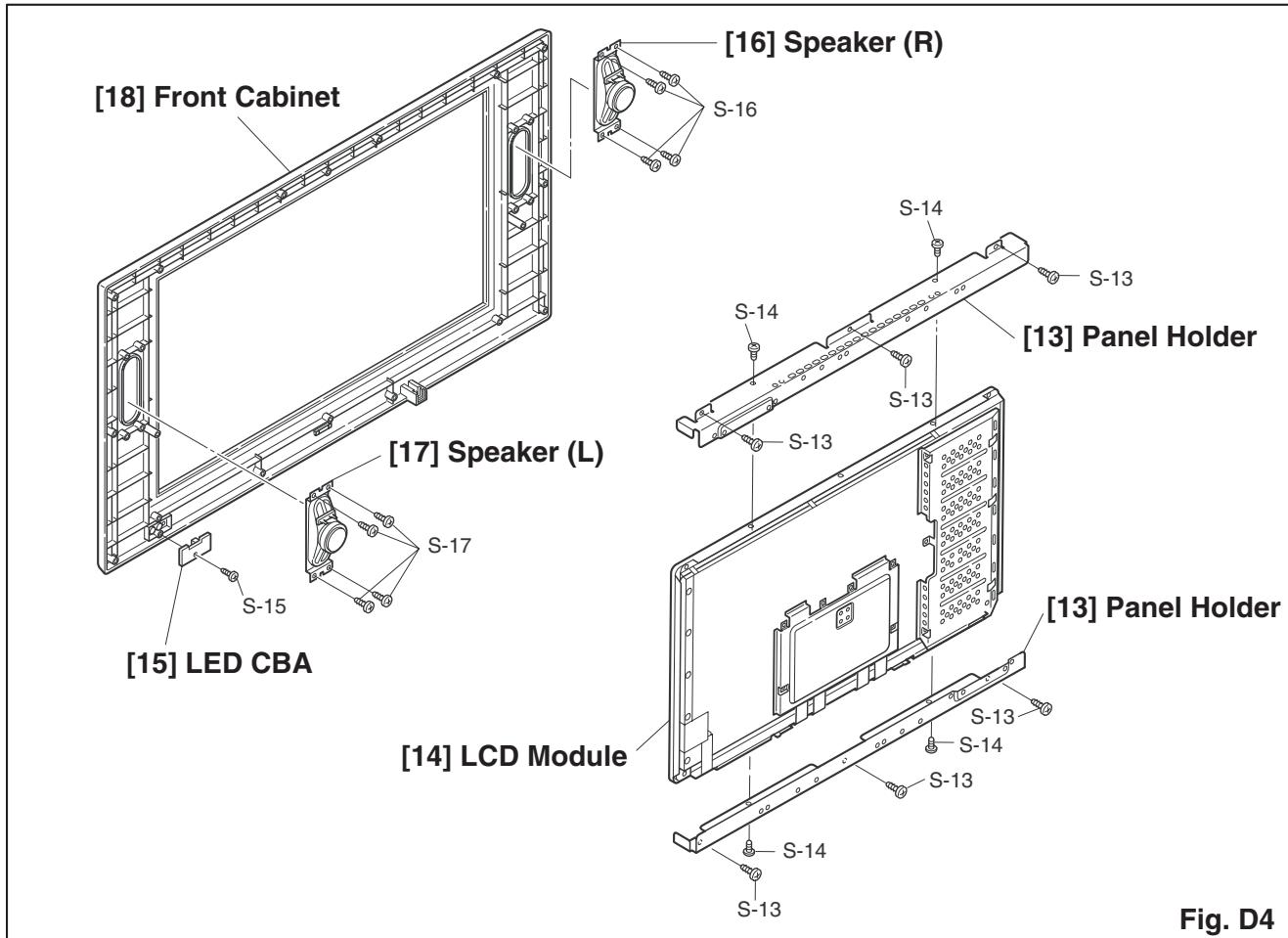


Fig. D4

TV Cable Wiring Diagram

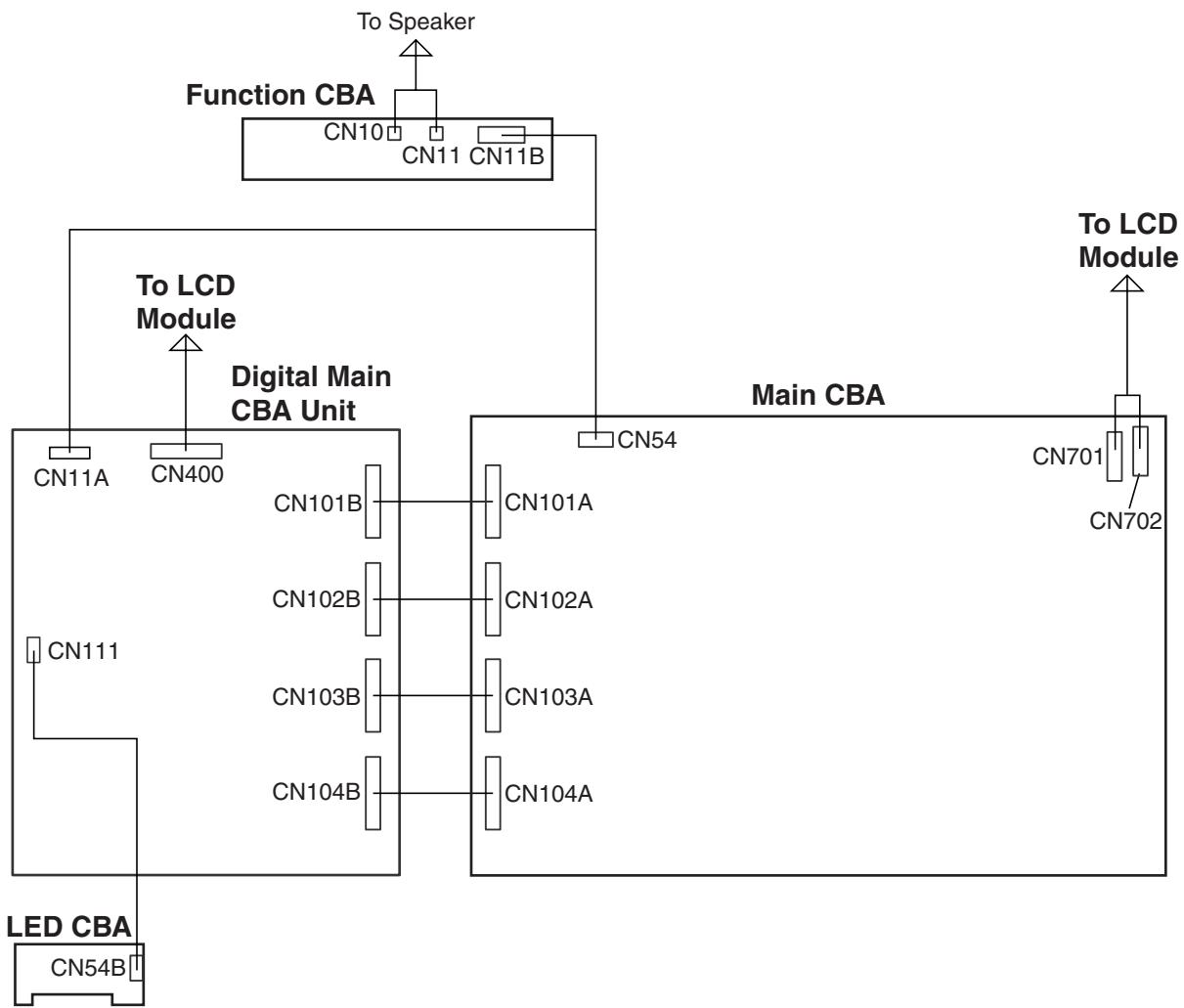


Fig. D5

HOW TO INITIALIZE THE LCD TELEVISION

To put the program back at the factory-default, initialize the LCD television as the following procedure.

How to initialize the LCD television:

1. Turn the power off.
2. To enter the service mode, while pressing [SETUP] button, press [STANDBY-ON] button on the TV unit.
 - To cancel the service mode, press [STANDBY-ON] button on the remote control.
3. To initialize the LCD television, press "DISPLAY" button on the remote control unit.
4. Confirm "FF" indication on the upper left of the screen.

ELECTRICAL ADJUSTMENT INSTRUCTIONS

General Note:

"CBA" is abbreviation for "Circuit Board Assembly."

NOTE:

Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.

Test Equipment Required

1. DC Voltmeter
2. Pattern Generator
3. Color Analyzer

How to Set up the Service mode:

1. Turn the power off.
2. While pressing [SETUP] button, press [STANDBY-ON] button on the TV unit
- To cancel the service mode, press [STANDBY-ON] button on the TV unit.

1. Initial Setting

General

Enter the Service mode.

Set the each initial data as shown on table 1 below.

Table 1: Initial Data

ITEM	BUTTON (on the remote control)	DATA VALUE
D1-BRT	MENU → 1	128
D1-CNT		128
D1-CLR-R		128
D1-CLR-B		128
D1-TNT		128
D1-SHR		70
D2-BRT		128
D2-CNT	MENU → 2	128
D2-CLR-R		128
D2-CLR-B		128
D2-TNT		128
D2-SHR		70
D3-BRT		128
D3-CNT		120
D3-CLR-R	MENU → 3	128
D3-CLR-B		128
D3-TNT		128
D3-SHR		27
D4-BRT		128
D4-CNT		123
D4-CLR-R		128
D4-CLR-B	MENU → 4	128
D4-TNT		128
D4-SHR		27
BRT		128
CNT		160
CLR-R		128
CLR-B		128
TNT	MENU → 5	128
SHR		45
S-BRT		128
S-CNT		160
S-CLR-R		128
S-CLR-B		128
S-TNT		128
S-SHR	MENU → 6	45
C-BRT		128
C-CNT		128
C-CLR-R		128
C-CLR-B		128
C-TNT		128
C-SHR		70

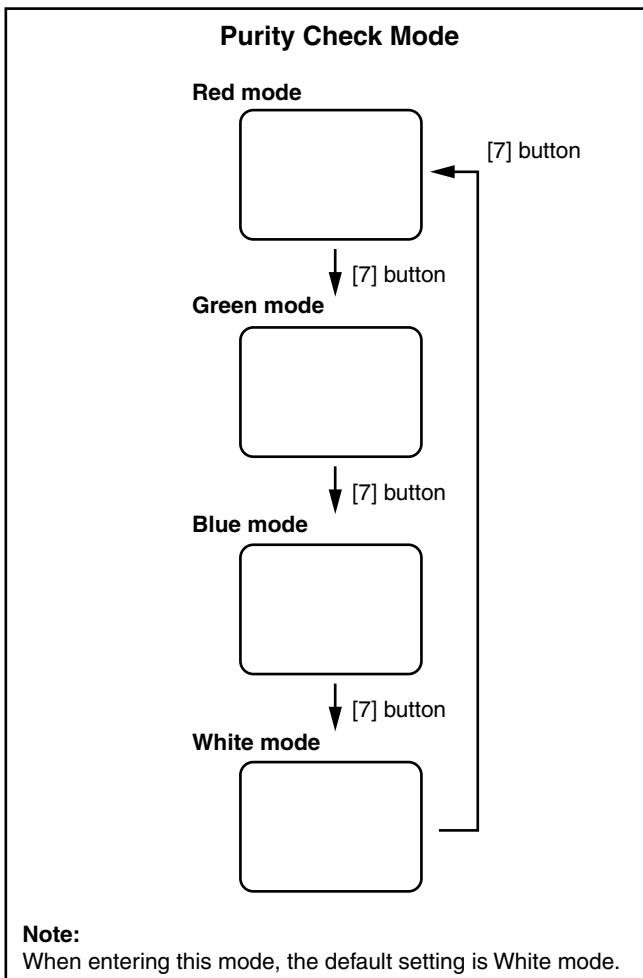
ITEM	BUTTON (on the remote control)	DATA VALUE
DT-BRT	MENU → 8	128
DT-CNT		160
DT-CLR-R		128
DT-CLR-B		128
DT-TNT		128
DT-SHR		45
BRIGHT		0
NORMAL		255
DARK	VOL. ▼	176
7F		112
LAST POWER		FF
NCM		ON
XV100		OFF
*COR 1(C/D/S 1)	VOL. ▼ → 1	125
COG 1(C/D/S 1)	VOL. ▼ → 2	128
*COB 1(C/D/S 1)	VOL. ▼ → 3	128
*DR 1(C/D/S 1)	VOL. ▼ → 4	131
DG 1(C/D/S 1)	VOL. ▼ → 5	128
*DB 1(C/D/S 1)	VOL. ▼ → 6	142
SBR 1(C/D/S 1)	VOL. ▼ → 7	63
SBB 1(C/D/S 1)	VOL. ▼ → 9	63
*COR 2(C/D/S 2)	VOL. ▼ → 1	108
COG 2(C/D/S 2)	VOL. ▼ → 2	110
*COB 2(C/D/S 2)	VOL. ▼ → 3	95
*DR 2(C/D/S 2)	VOL. ▼ → 4	118
DG 2(C/D/S 2)	VOL. ▼ → 5	115
*DB 2(C/D/S 2)	VOL. ▼ → 6	134
SBR 2(C/D/S 2)	VOL. ▼ → 7	63
SBB 2(C/D/S 2)	VOL. ▼ → 9	63
*COR 3(C/D/S 3)	VOL. ▼ → 1	125
COG 3(C/D/S 3)	VOL. ▼ → 2	128
*COB 3(C/D/S 3)	VOL. ▼ → 3	128
*DR 3(C/D/S 3)	VOL. ▼ → 4	131
DG 3(C/D/S 3)	VOL. ▼ → 5	128
*DB 3(C/D/S 3)	VOL. ▼ → 6	142
SBR 3(C/D/S 3)	VOL. ▼ → 7	63
SBB 3(C/D/S 3)	VOL. ▼ → 9	63

NOTE: * These data value will be changed by the White Balance Adjustment.

2. Purity Check Mode

This mode cycles through full-screen displays of red, green, blue, and white to check for non-active pixels.

1. Enter the Service mode.
2. Each time pressing [7] button on the service remote control unit, the display changes as follows.



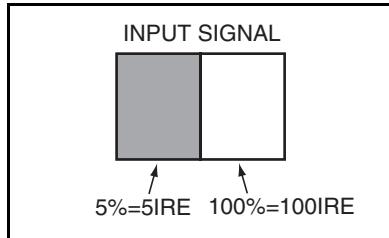
3. Auto Calibration

Purpose: To bring the color adjustment of each component into standard alignment.

Symptom of Misadjustment: If this adjustment is incorrect, component signals do not reproduce the corresponding color.

Gain Adjustment

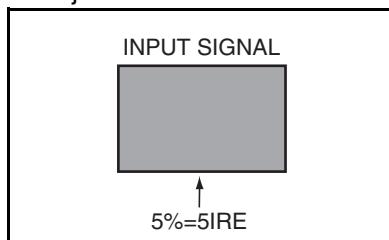
1. Input white raster signal (5% = 5 IRE, 100% = 100 IRE) from Component jack.



2. Enter the service mode.
3. To enter the Auto Calibration adjustment mode, press [5] button on the service remote control unit.
4. To start auto adjustment, press [CH ▲] button on the service remote control unit.
 - In the auto adjustment mode, "Please Wait" appears on the screen.
 - Upon completion, "OK" and appears on the screen.
 - If the auto adjustment failure, "NG" appears on the screen.

Offset Adjustment

5. Input white raster signal (5% = 5 IRE) from Component jack.



6. Enter the service mode.
7. To enter the Auto Calibration adjustment mode, press [6] button on the service remote control unit.
8. To start auto adjustment, press [CH ▲] button on the service remote control unit.
 - In the auto adjustment mode, "Please Wait" appears on the screen.
 - Upon completion, "OK" and appears on the screen.
 - If the auto adjustment failure, "NG" appears on the screen.

The following adjustment normally are not attempted in the field. Only when replacing the LCD Panel then adjust as a preparation.

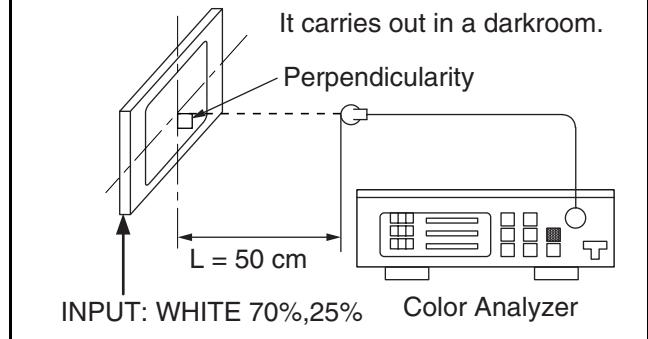
4. White Balance Adjustment

Purpose: To mix red, green and blue beams correctly for pure white.

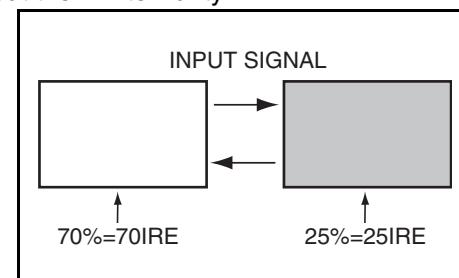
Symptom of Misadjustment: White becomes bluish or reddish.

Test Point	Adj. Point	Mode	Input
Screen	VOL. ▼ buttons	[CVBS] C/D/S 1 [YUV] C/D/S 2 [RGB] C/D/S 3	White Purity (APL 70%) or (APL 25%)
M. EQ.	Spec.		
Pattern Generator, Color analyzer	(APL 70%) x: 0.242 to 0.302, y: 0.248 to 0.308 (APL 25%) x: 0.262 to 0.282, y: 0.268 to 0.288		

Figure



1. Operate the unit for more than 20 minutes.
2. Input the White Purity.



3. Set the color analyzer to the CHROMA mode and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.

Note: The optical receptor must be set perpendicularly to the LCD Panel surface.

4. **[CVBS]**
Enter the Service mode. Press "VOL ▼" button on the remote control unit and select "C/D/S 1" mode.
[YUV]
Enter the Service mode. Press "VOL ▼" button on the remote control unit and select "C/D/S 2" mode.

[RGB]

Enter the Service mode. Press “VOL ▼” button on the remote control unit and select “C/D/S 3” mode.

5. [CVBS]---(APL 70%)

Press “6” button to select “DB 1(C/D/S 1)” for Blue adjustment. Press “4” button to select “DR 1(C/D/S 1)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “DB 1(C/D/S 1)” or “DR 1(C/D/S 1)”. Refer to “1. Initial Setting.”

[CVBS]---(APL 25%)

Press “3” button to select “COB 1(C/D/S 1)” for Blue adjustment. Press “1” button to select “COR 1(C/D/S 1)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “COB 1(C/D/S 1)” or “COR 1(C/D/S 1)”. Refer to “1. Initial Setting.”

After adjusting (APL 25%), verify (APL 70%) again and adjust repeatedly until both values are within specification.

6. [YUV]---(APL 70%)

Press “6” button to select “DB 2(C/D/S 2)” for Blue adjustment. Press “4” button to select “DR 2(C/D/S 2)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “DB 2(C/D/S 2)” or “DR 2(C/D/S 2)”. Refer to “1. Initial Setting.”

[YUV]---(APL 25%)

Press “3” button to select “COB 2(C/D/S 2)” for Blue adjustment. Press “1” button to select “COR 2(C/D/S 2)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “COB 2(C/D/S 2)” or “COR 2(C/D/S 2)”. Refer to “1. Initial Setting.”

After adjusting (APL 25%), verify (APL 70%) again and adjust repeatedly until both values are within specification.

7. [RGB]---(APL 70%)

Press “6” button to select “DB 3(C/D/S 3)” for Blue adjustment. Press “4” button to select “DR 3(C/D/S 3)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “DB 3(C/D/S 3)” or “DR 3(C/D/S 3)”. Refer to “1. Initial Setting.”

[RGB]---(APL 25%)

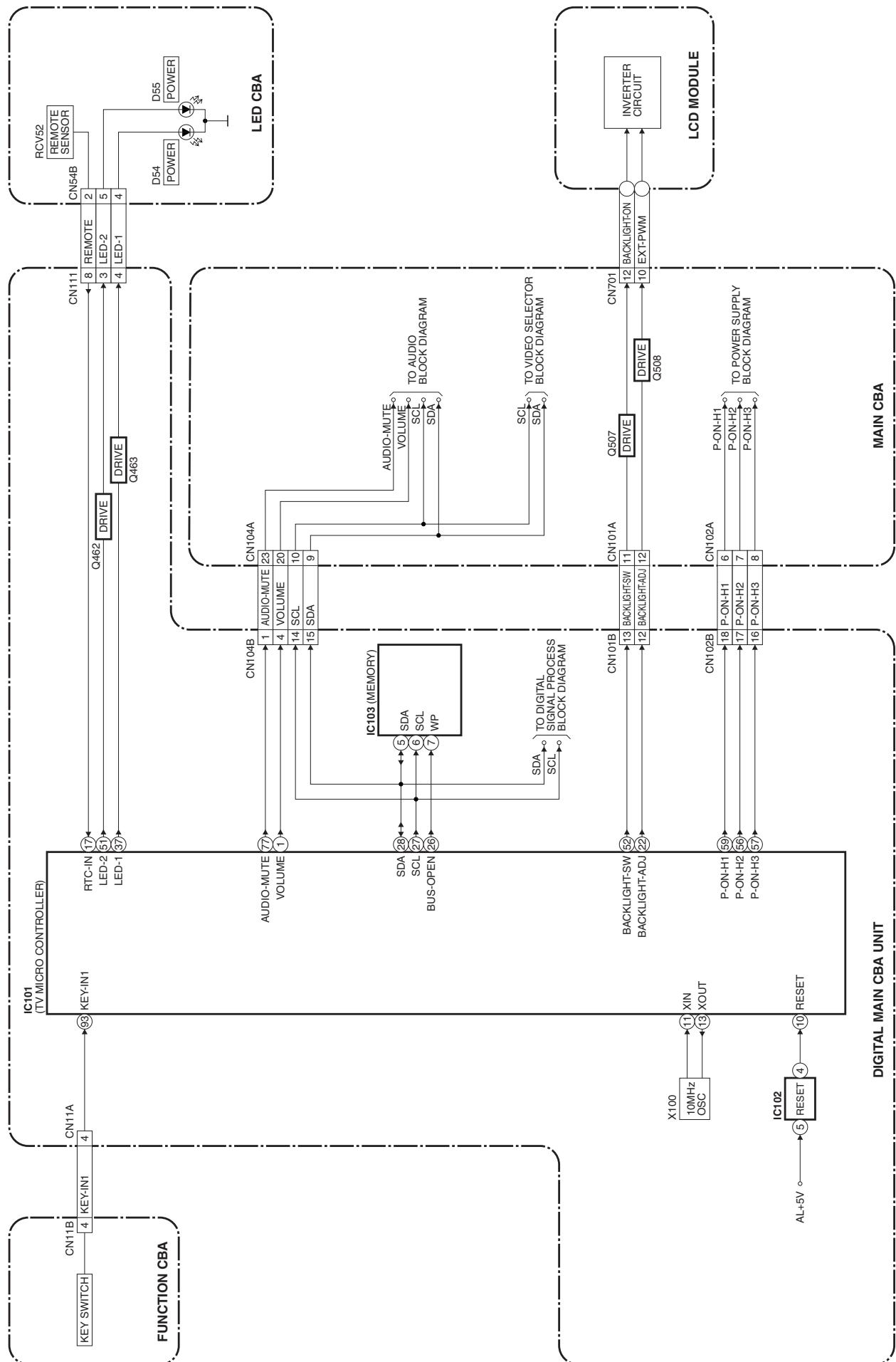
Press “3” button to select “COB 3(C/D/S 3)” for Blue adjustment. Press “1” button to select “COR 3(C/D/S 3)” for Red adjustment. When “x” value and “y” value are not within specification, adjust “COB 3(C/D/S 3)” or “COR 3(C/D/S 3)”. Refer to “1. Initial Setting.”

After adjusting (APL 25%), verify (APL 70%) again and adjust repeatedly until both values are within specification.

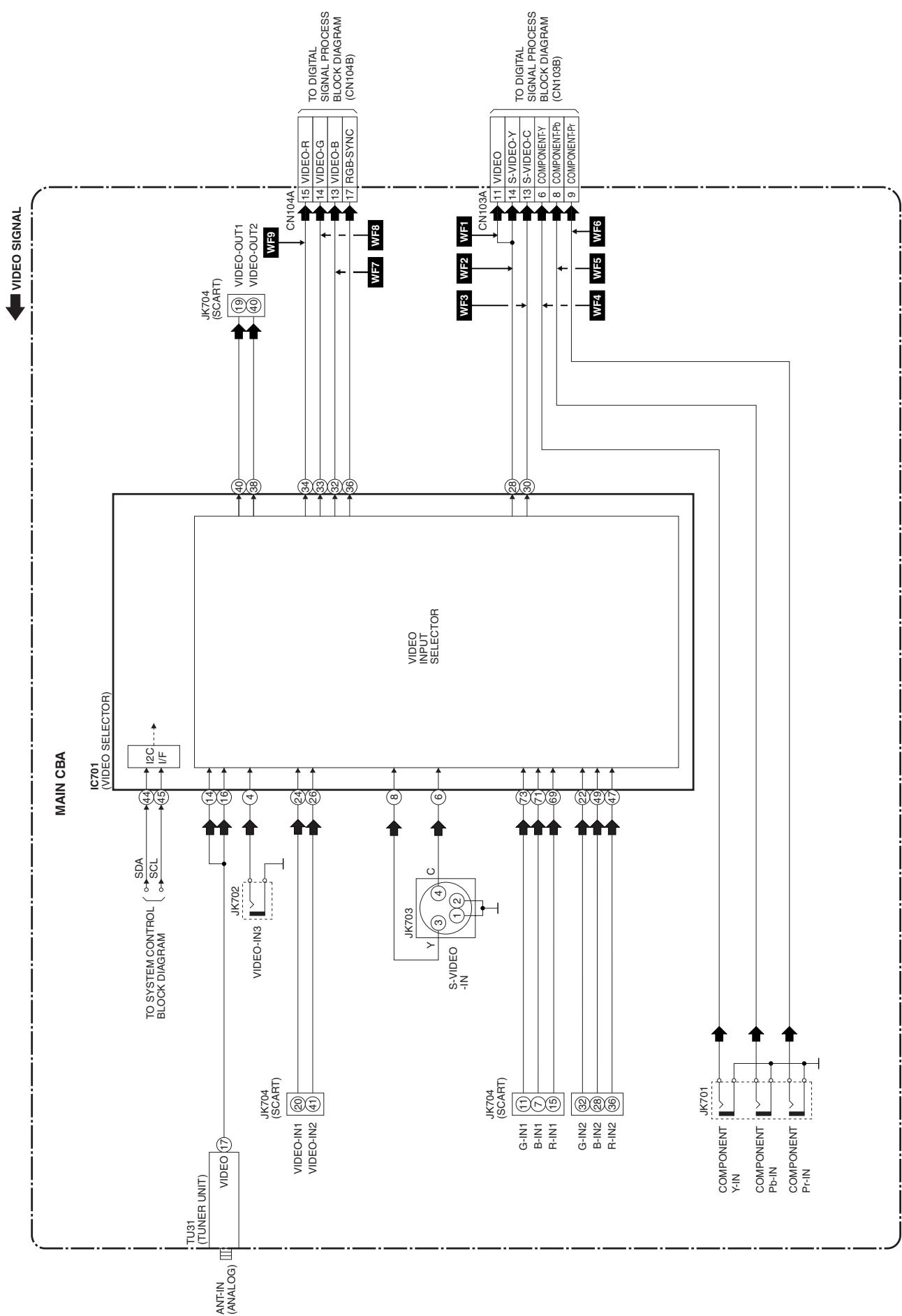
8. Turn the power off and on again. (Main power button on the TV unit.)

BLOCK DIAGRAMS

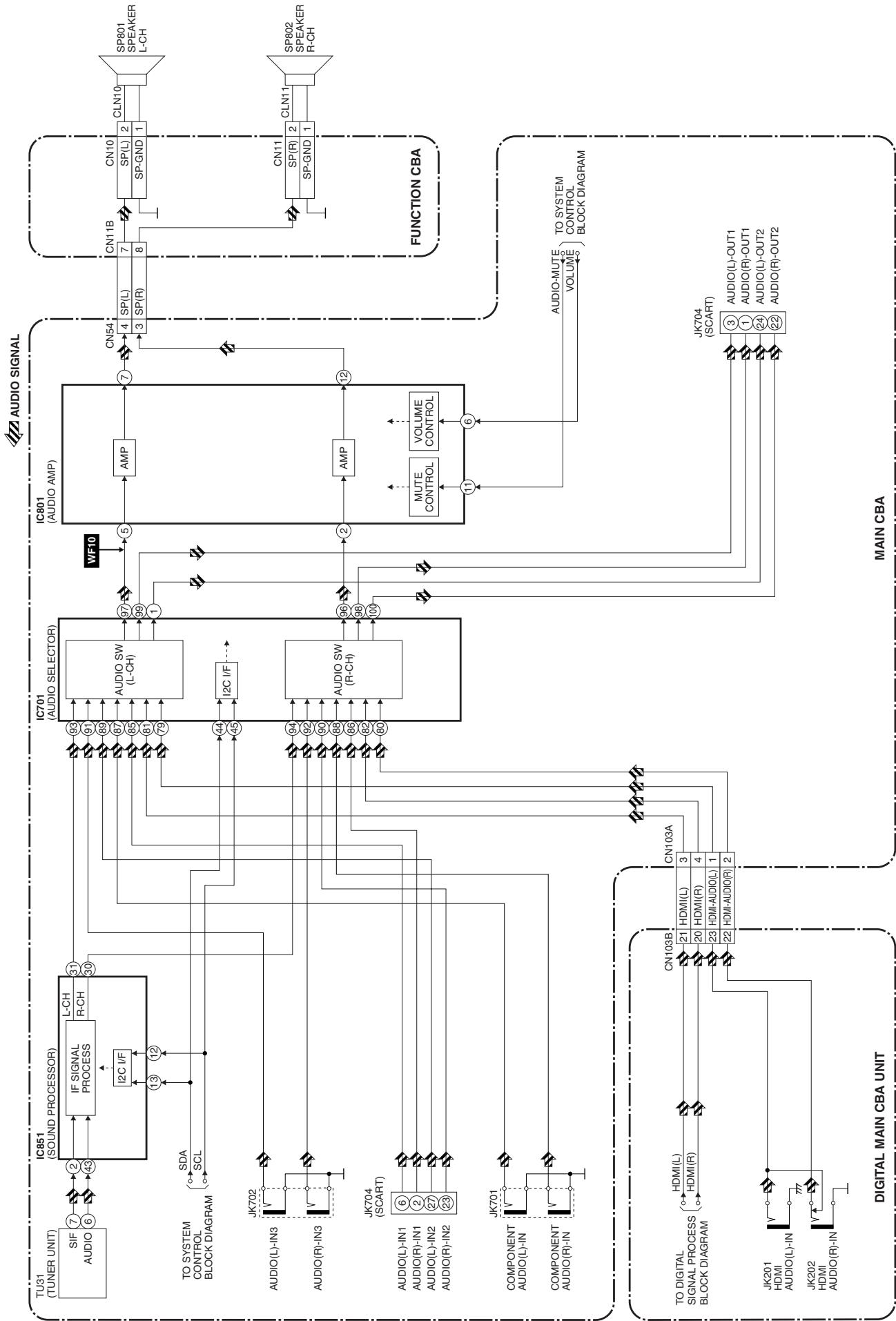
System Control Block Diagram



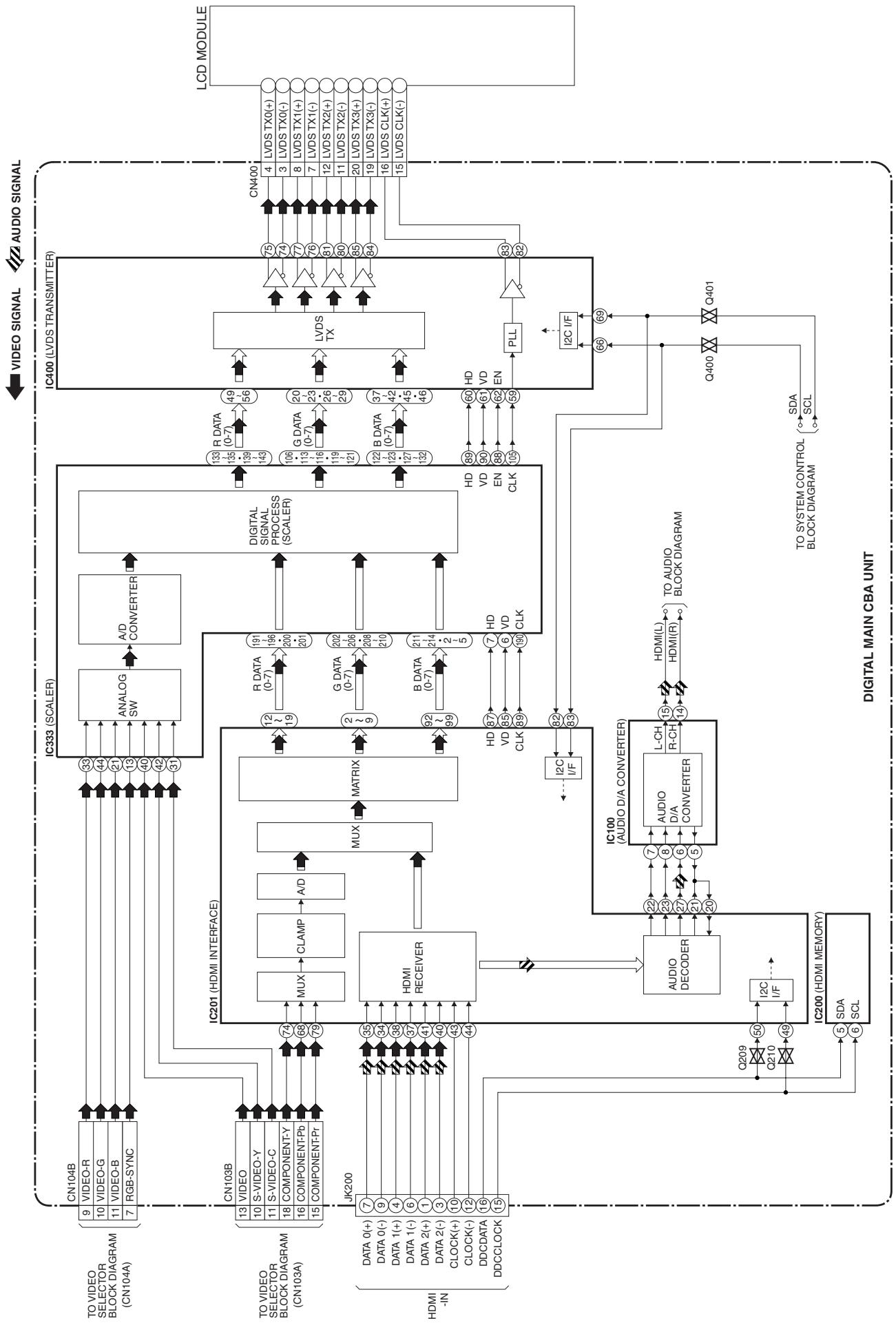
Video Selector Block Diagram



Audio Block Diagram



Digital Signal Process Block Diagram

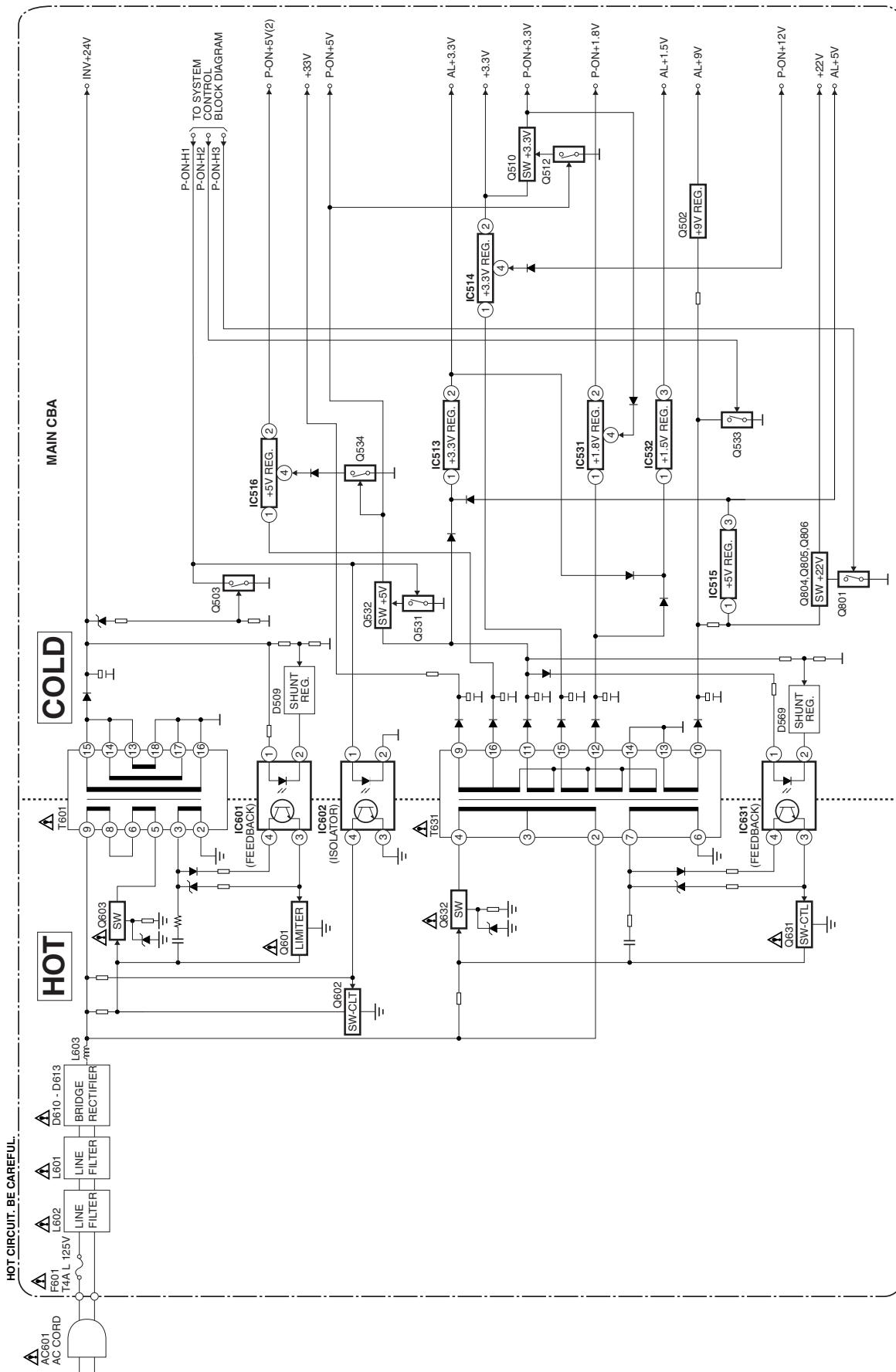


Power Supply Block Diagram

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

CAUTION !
For continued protection against fire hazard,
replace only with the same type fuse.

NOTE:
The voltage for parts in hot circuit is measured using
hot GND as a common terminal.



SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark "⚠" in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ($K = 10^3$, $M = 10^6$).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in μF ($P = 10^{-6} \mu F$).
5. All voltages are DC voltages unless otherwise specified.

Note of Capacitors:

ML --- Mylar Cap. PP --- Metallized Film Cap. SC --- Semiconductor Cap. L --- Low Leakage type

Temperature Characteristics of Capacitors are noted with the following:

B --- $\pm 10\%$ CH --- 0 ± 60 ppm/ $^{\circ}C$ CSL --- $+350 \sim 1000$ ppm/ $^{\circ}C$

Tolerance of Capacitors are noted with the following:

Z --- $+80 \sim -20\%$

Note of Resistors:

CEM --- Cement Res. MTL --- Metal Res. F --- Fuse Res.

Capacitors and transistors are represented by the following symbols.

CBA Symbols

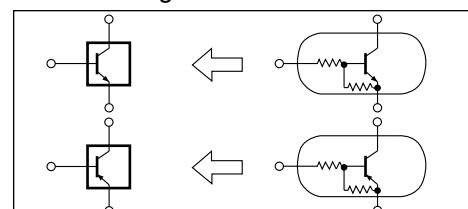
(Top View) (Bottom View)



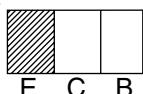
: : Electrolytic Capacitor

Schematic Diagram Symbols

Digital Transistor

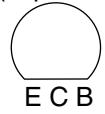


(Bottom View)



: Transistor or Digital Transistor

(Top View)



NPN Transistor

(Top View)



PNP Transistor

(Top View)



NPN Digital Transistor

(Top View)



PNP Digital Transistor

LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

1. CAUTION:

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.

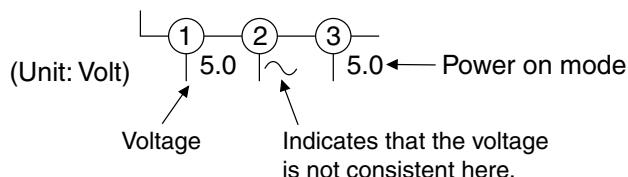
If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

3. Note:

1. Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
2. To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Voltage indications on the schematics are as shown below:

Plug the TV power cord into a standard AC outlet.:

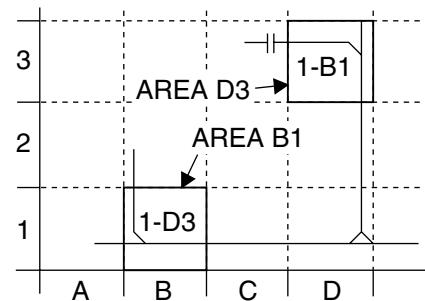


5. How to read converged lines

1-D3
↑
Distinction Area
Line Number
(1 to 3 digits)

Examples:

1. "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
2. "1-B1" means that line number "1" goes to the line number "1" of the area "B1".



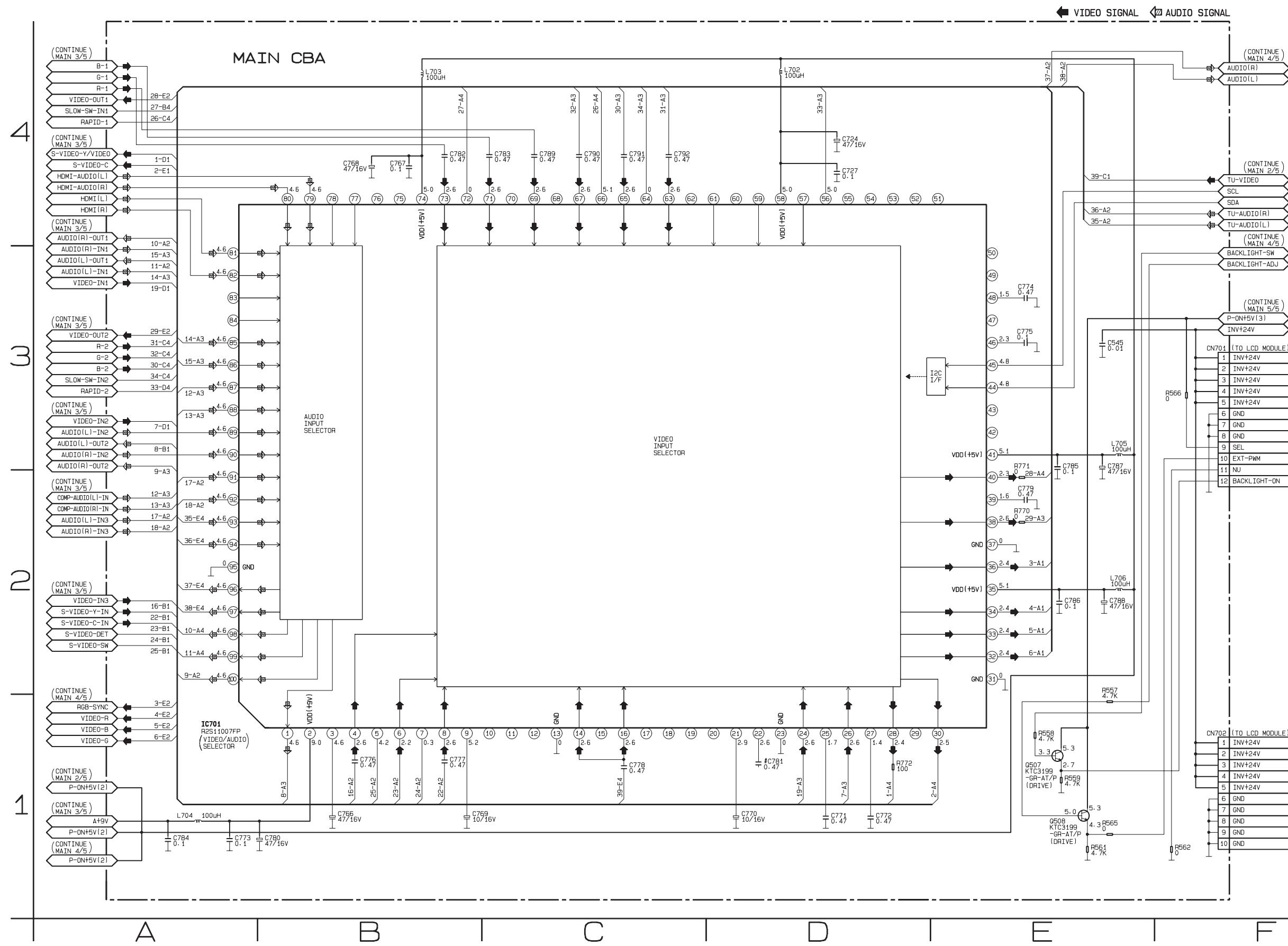
6. Test Point Information

- : Indicates a test point with a jumper wire across a hole in the PCB.
- : Used to indicate a test point with a component lead on foil side.
- ◎ : Used to indicate a test point with no test pin.
- : Used to indicate a test point with a test pin.

Main 1/5 Schematic Diagram

NOTE:

is an unnecessary part of the circuit configuration;
therefore servicing is not required, for this product operates independently of this part



VOLTAGE CHART

CN701	
Pin No.	Voltage
1	23.8
2	23.8
3	23.8
4	23.8
5	23.8
6	0
7	0
8	0
9	5.3
10	4.3
11	0.1
12	2.7

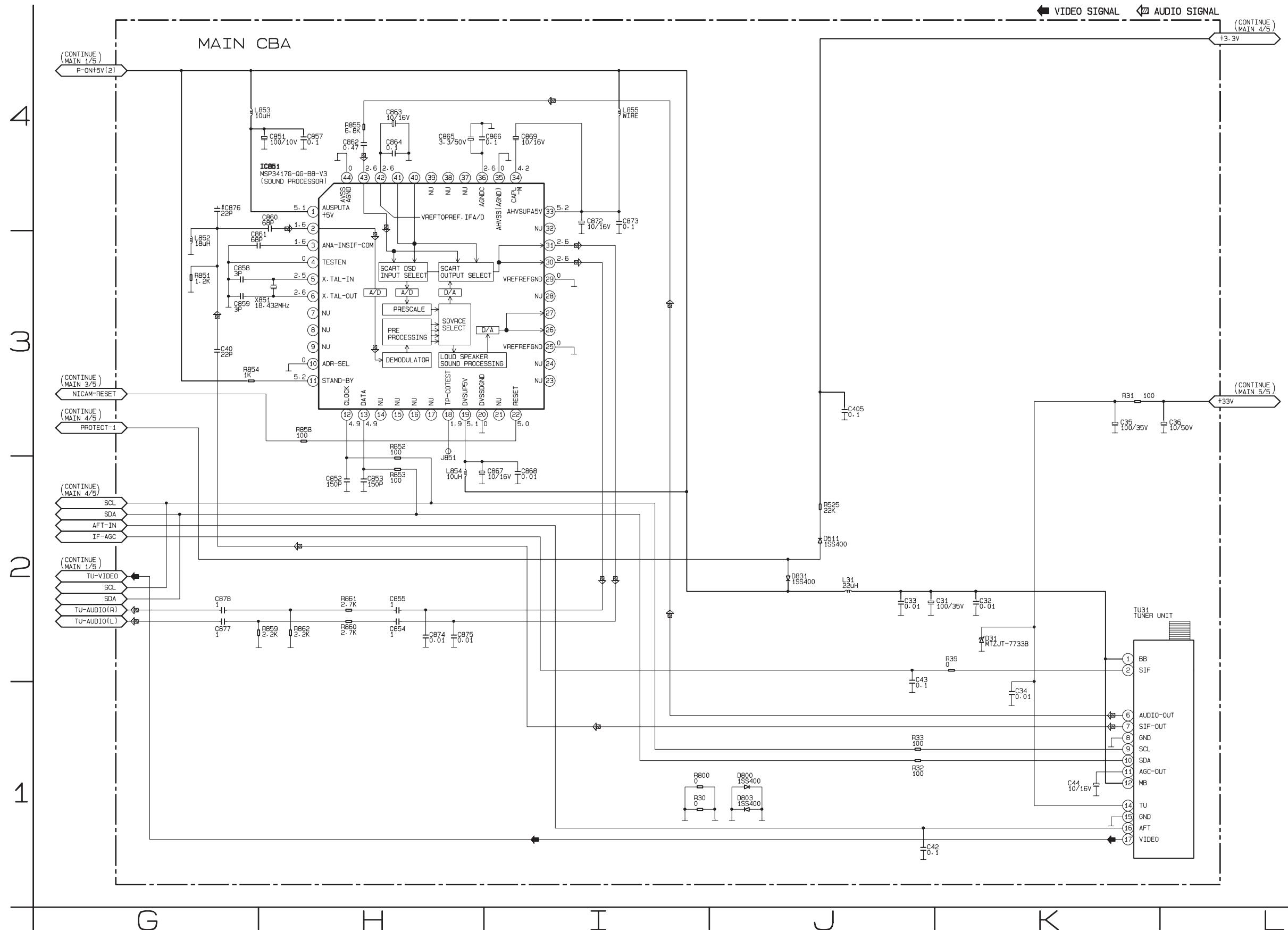
CN702

Pin No.	Voltage
1	23.8
2	23.8
3	23.8
4	23.8
5	23.8
6	0
7	0
8	0
9	0
10	0

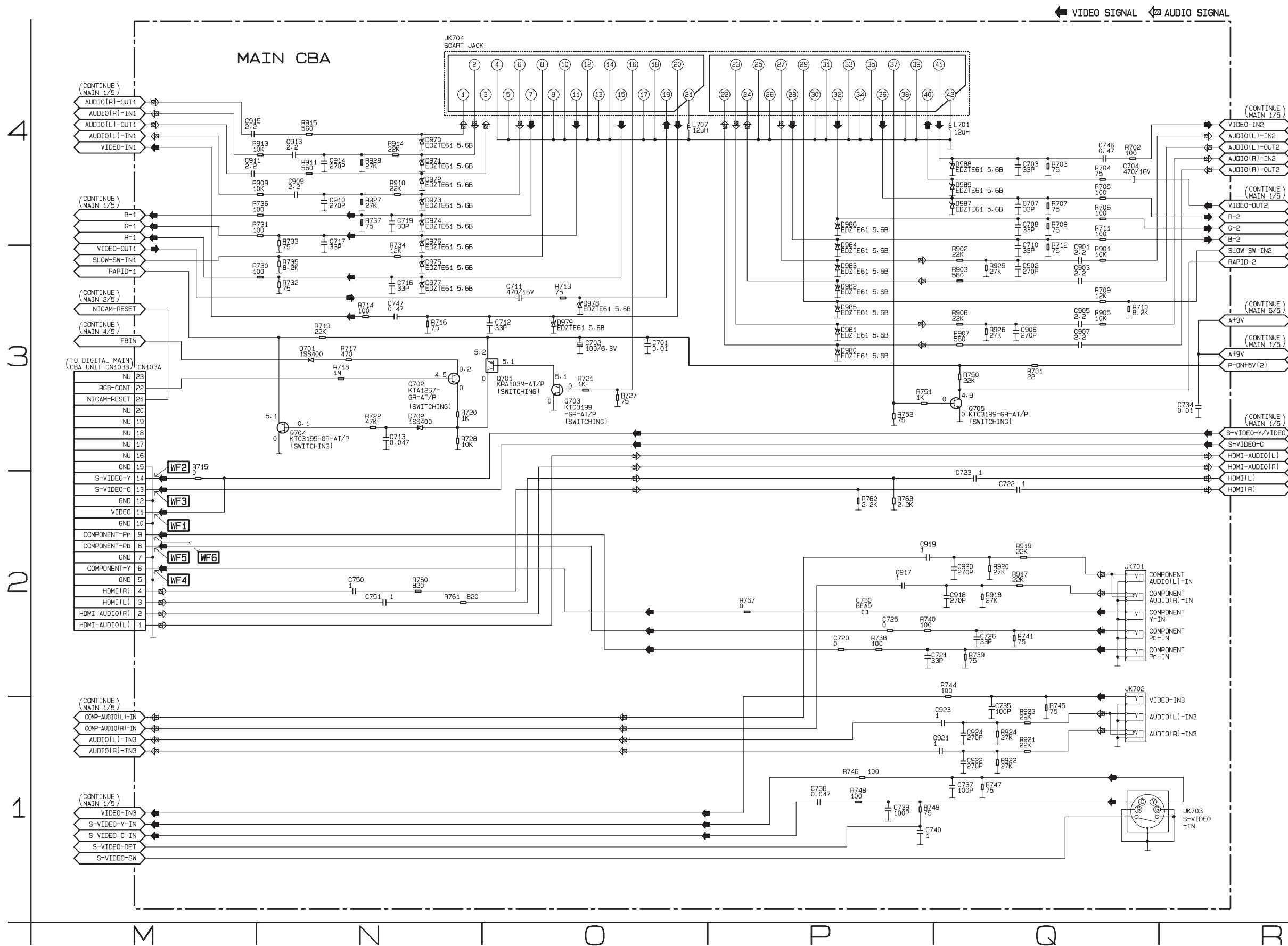
Main 2/5 Schematic Diagram

NOTE:

is an unnecessary part of the circuit configuration;
therefore servicing is not required, for this product operates independently of this part.



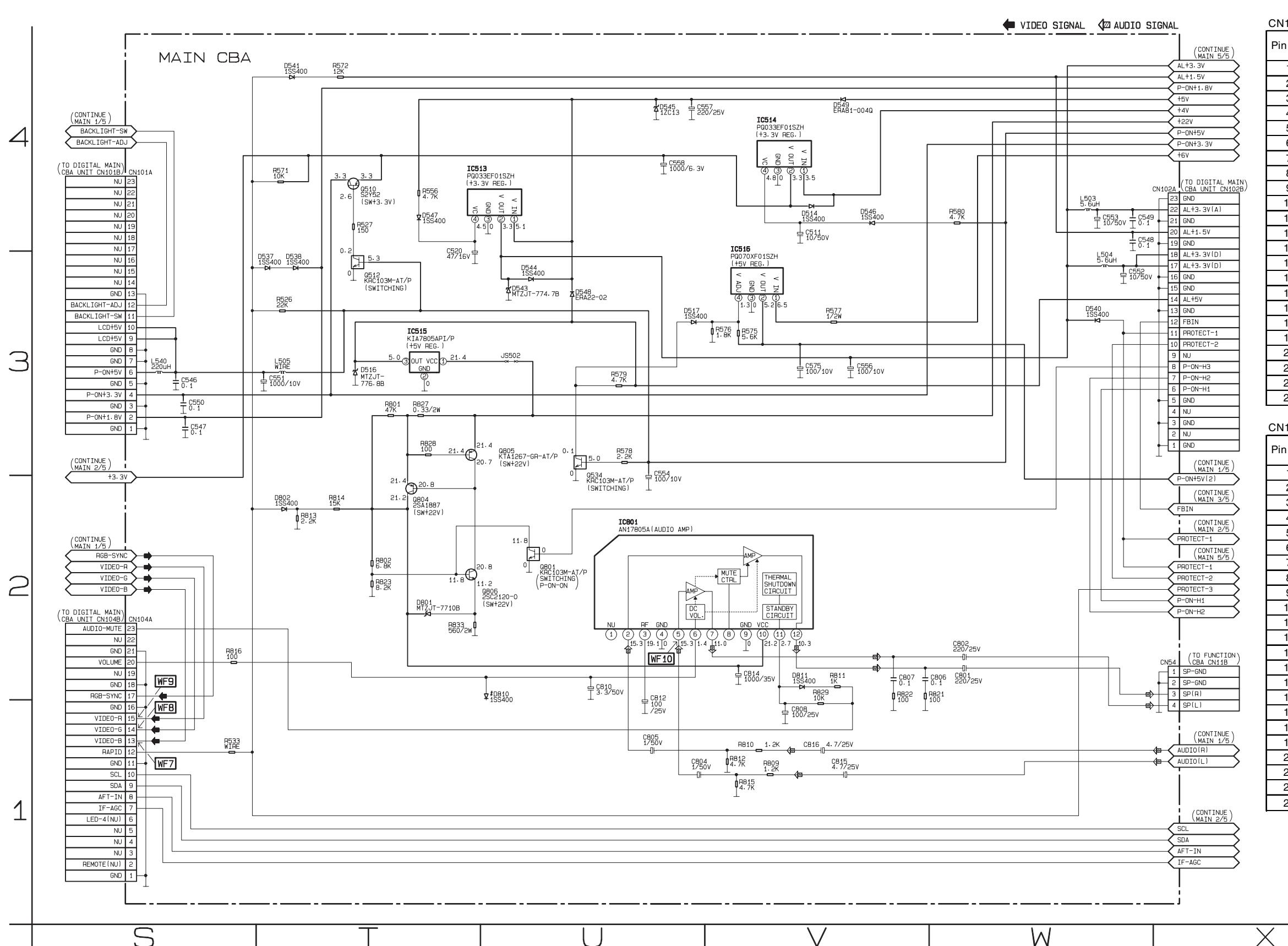
Main 3/5 Schematic Diagram



Main 4/5 Schematic Diagram

NOTE:

is an unnecessary part of the circuit configuration;
therefore servicing is not required, for this product operates independently of this part.



VOLTAGE CHART

CN101A	CN104A
Pin No.	Pin No.
Voltage	Voltage
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23

Main 5/5 Schematic Diagram

CAUTION !

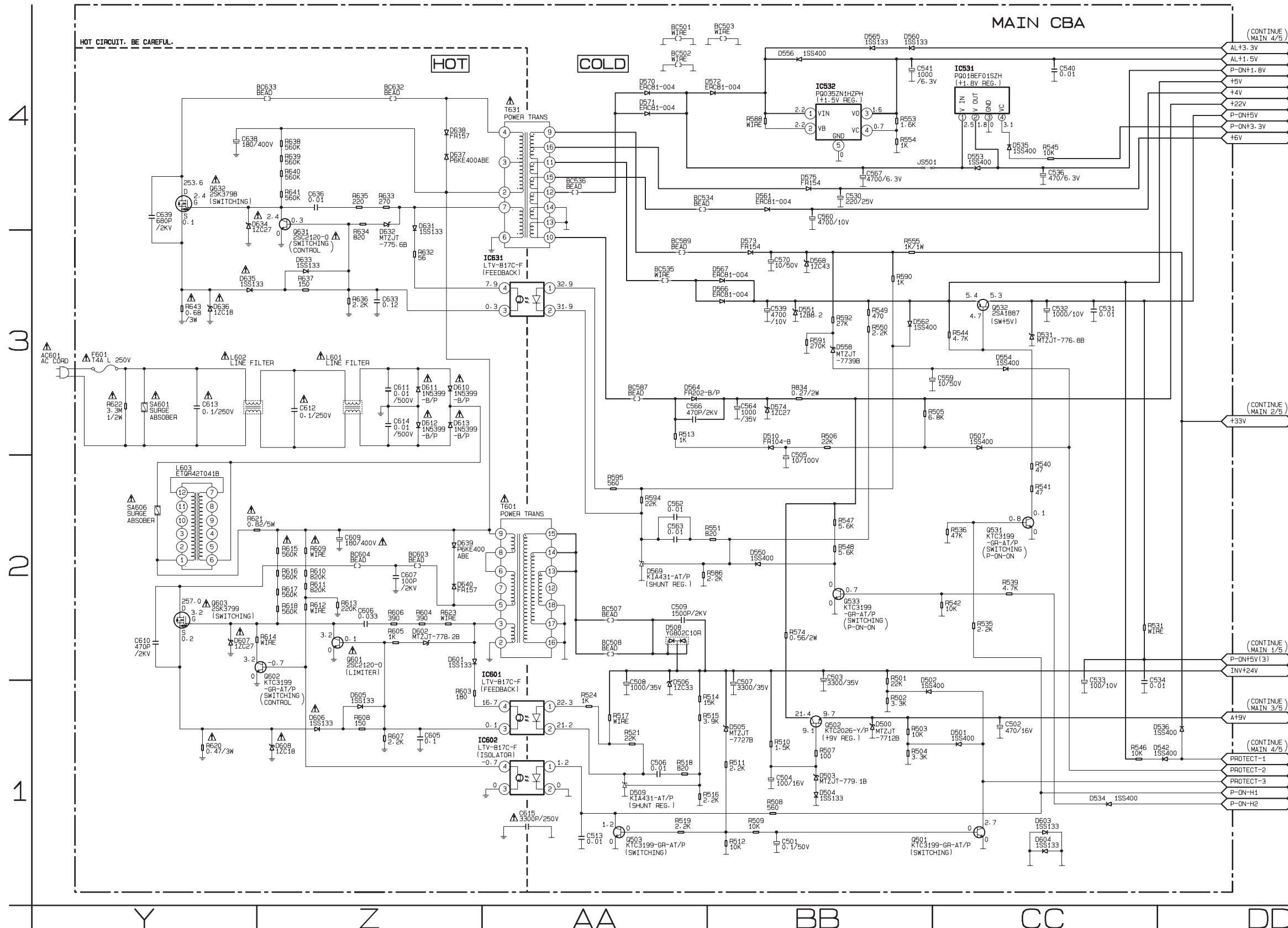
For continued protection against fire hazard, replace only with the same type fuse.

NOTE:

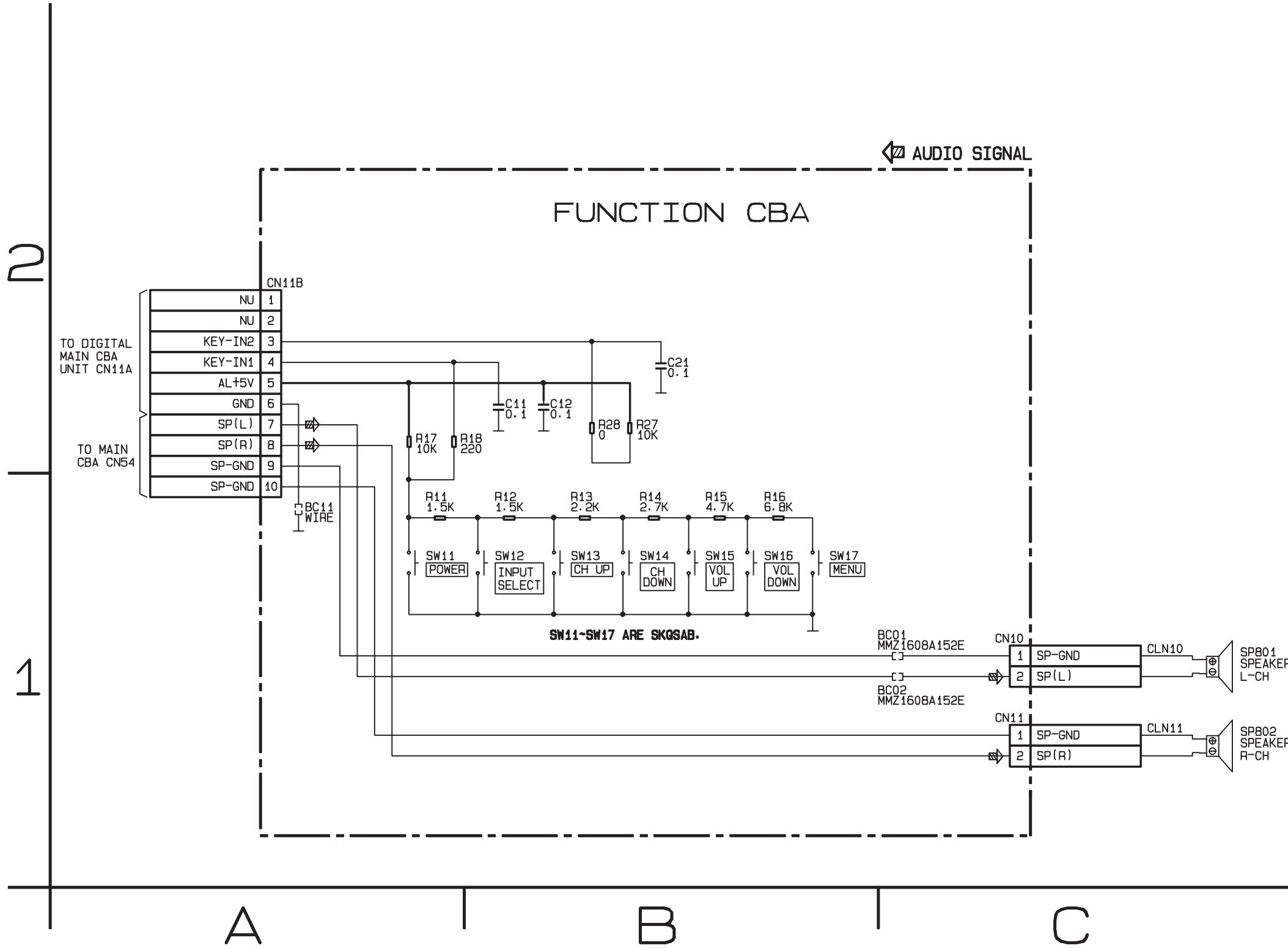
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION

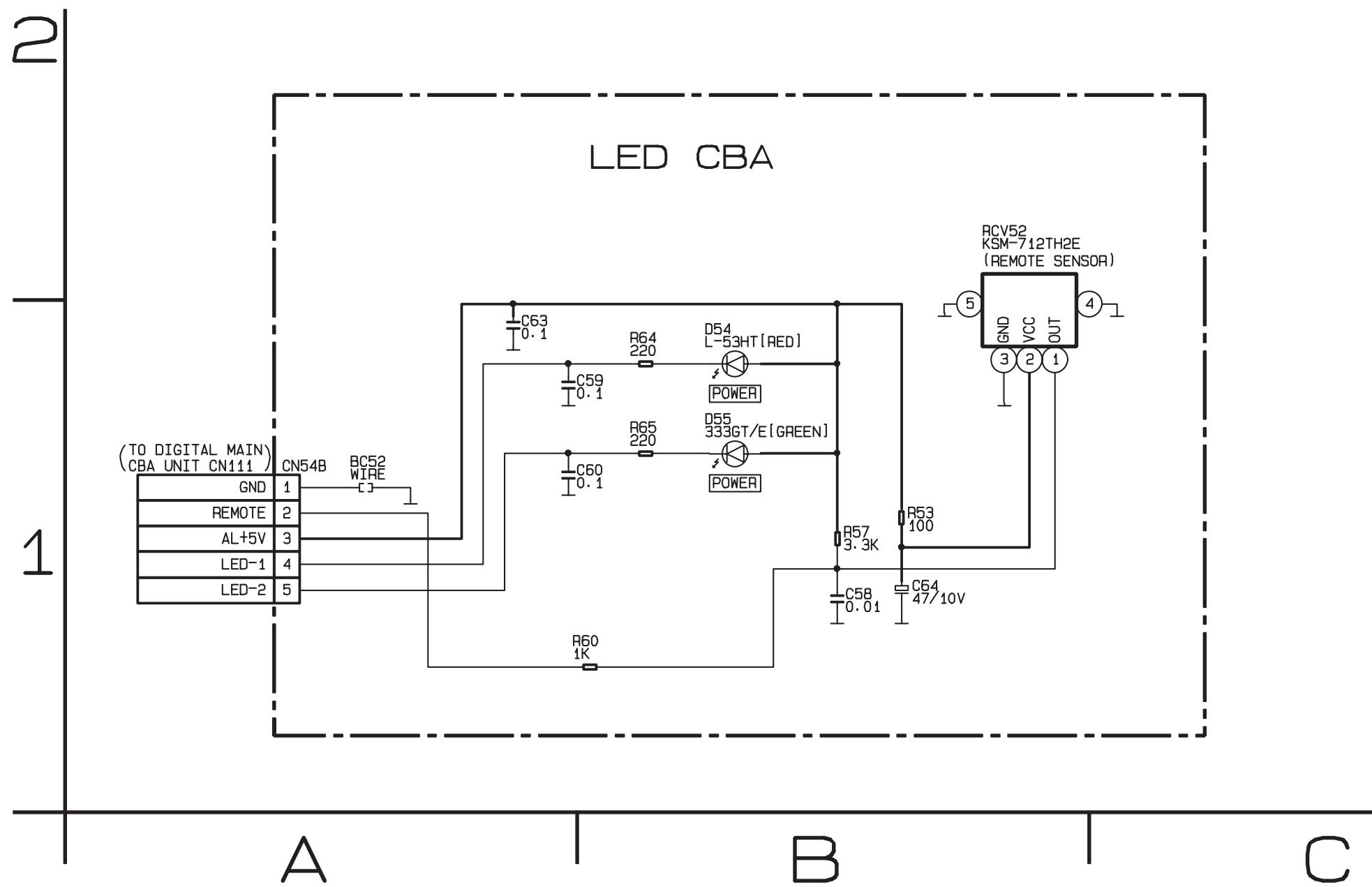
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



Function Schematic Diagram



LED Schematic Diagram

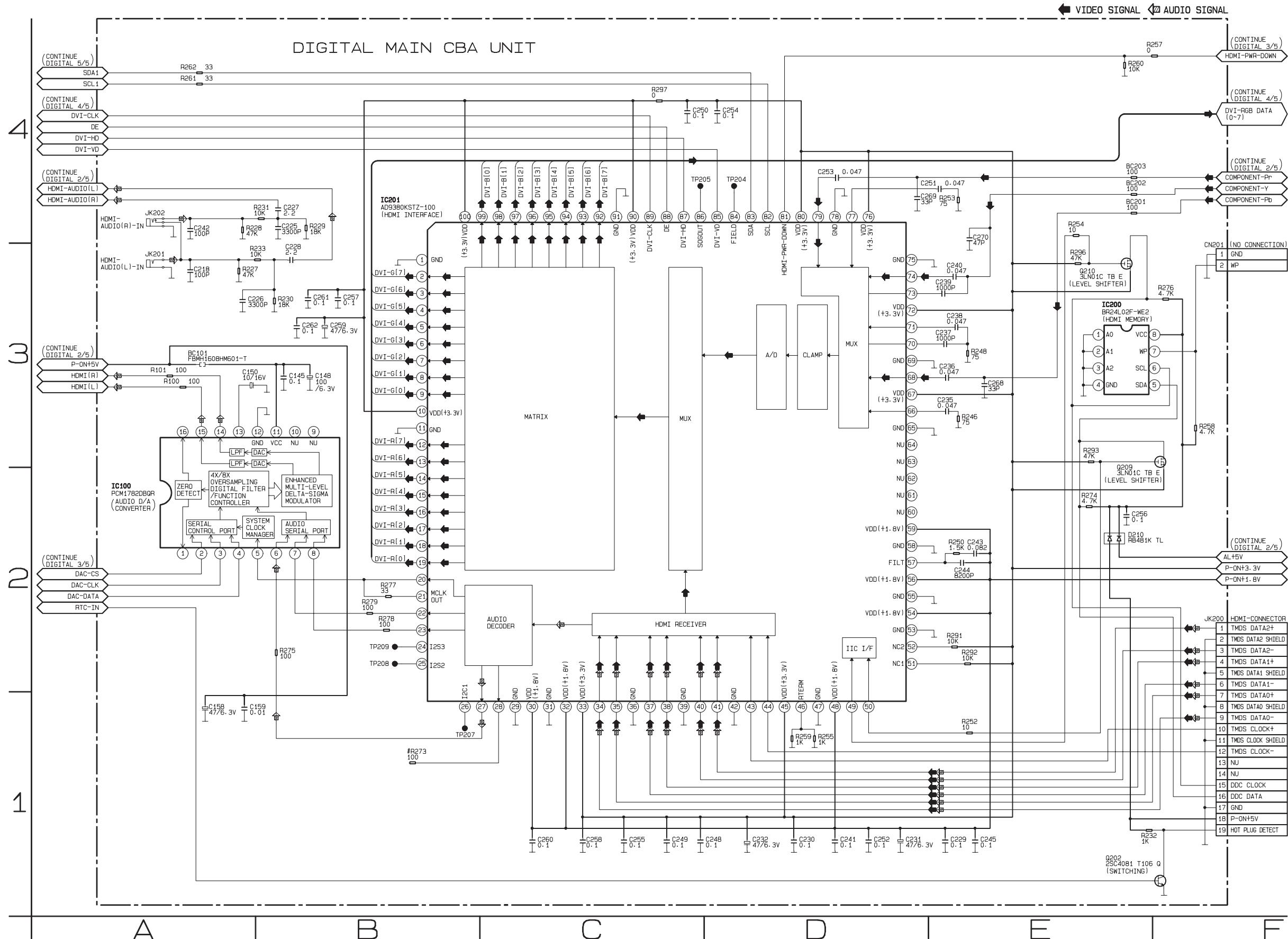


VOLTAGE CHART CN54B	
Pin No.	Voltage
1	0
2	5.0
3	5.0
4	3.5
5	0.1

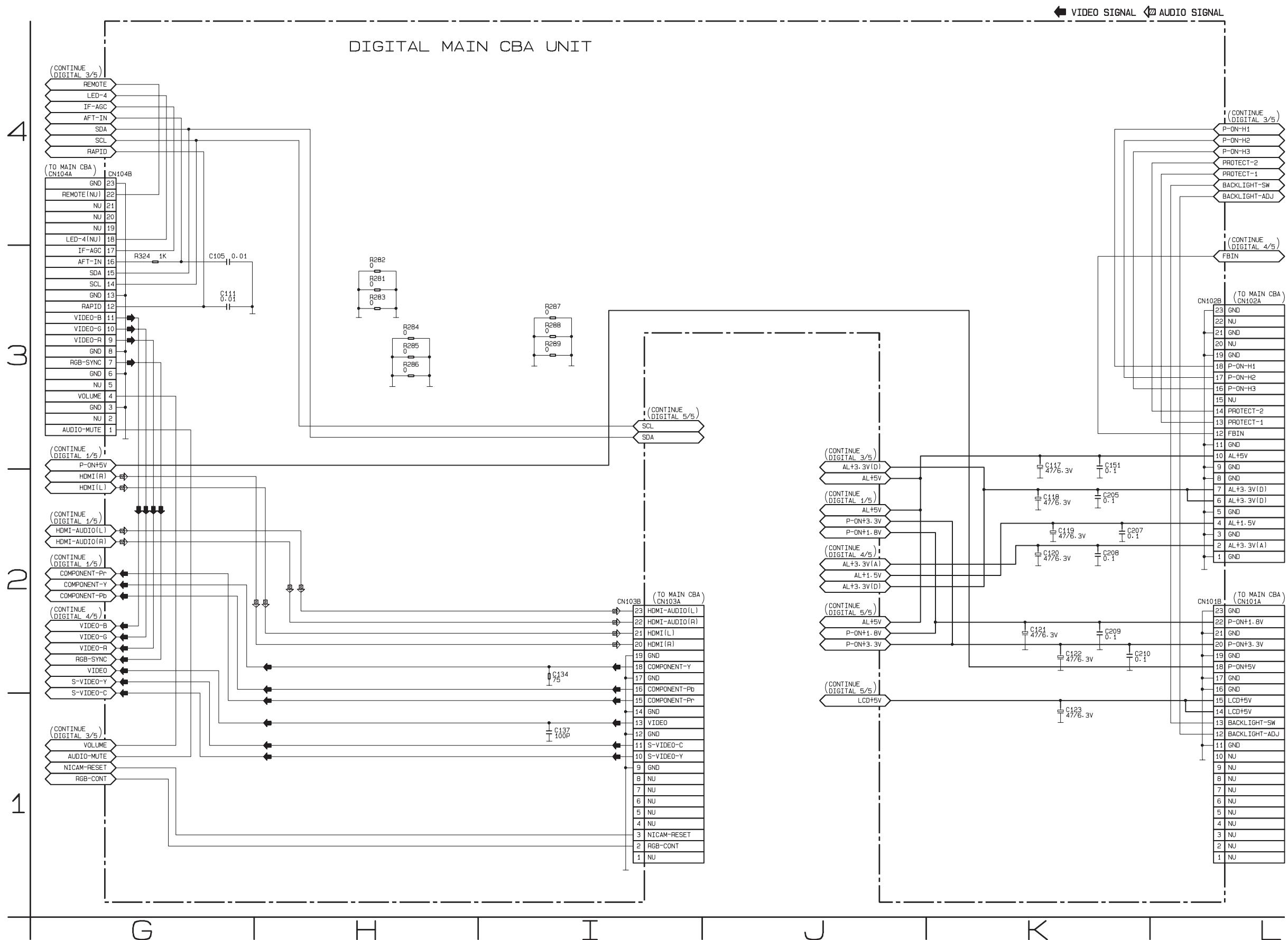
Digital Main 1/5 Schematic Diagram

NOTE:

is an unnecessary part of the circuit configuration;
therefore servicing is not required, for this product operates independently of this part.



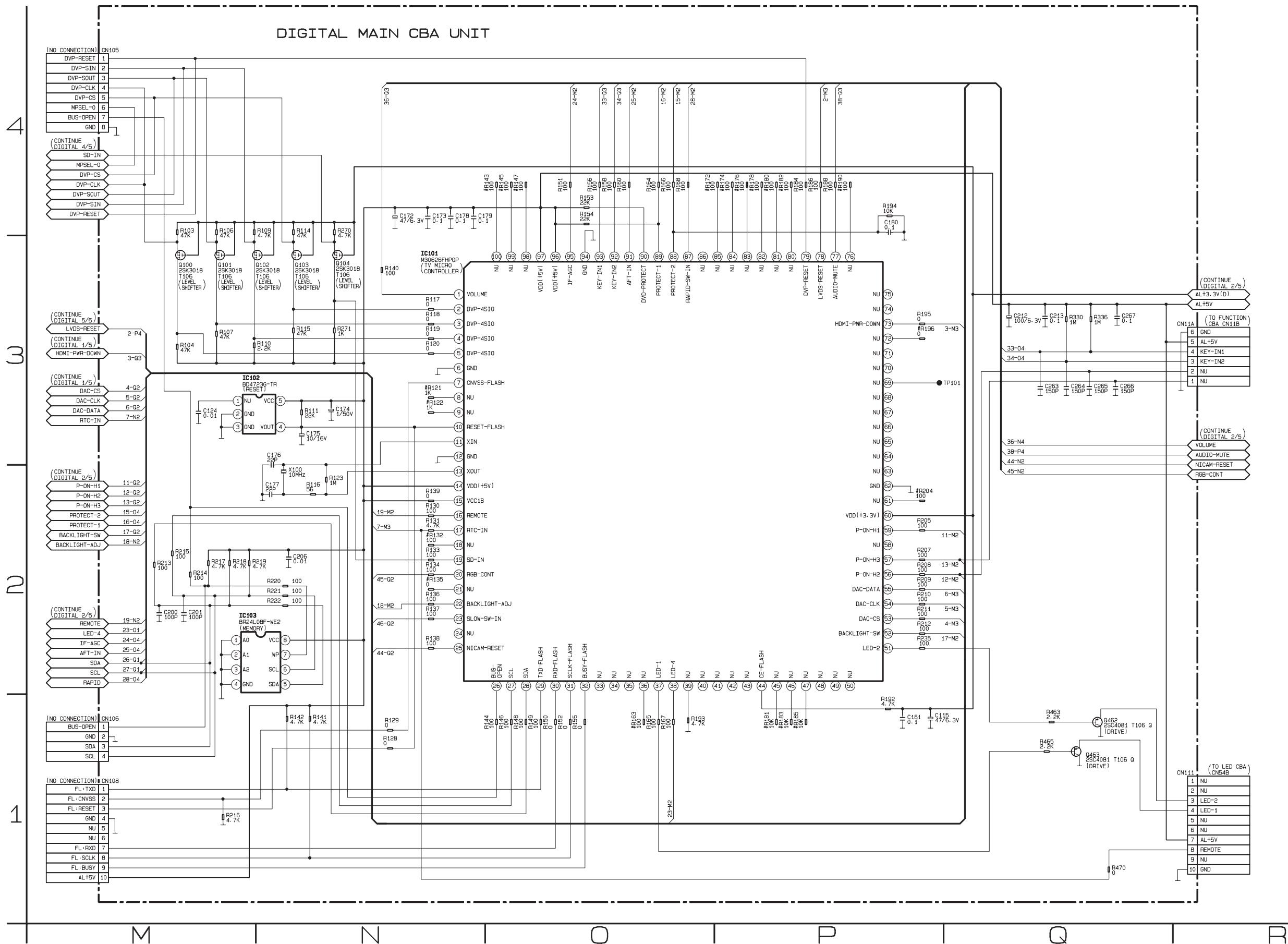
Digital Main 2/5 Schematic Diagram



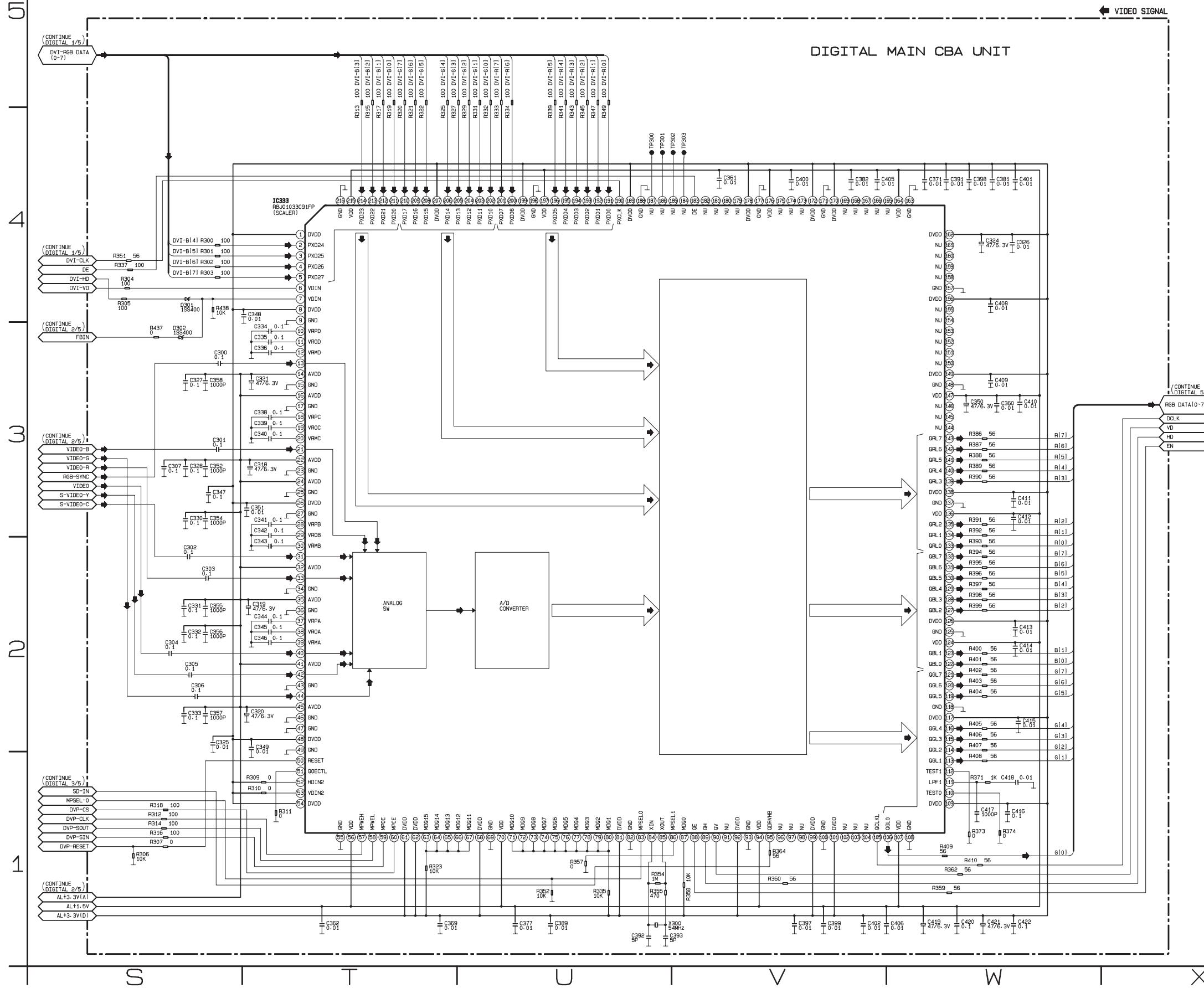
Digital Main 3/5 Schematic Diagram

NOTE

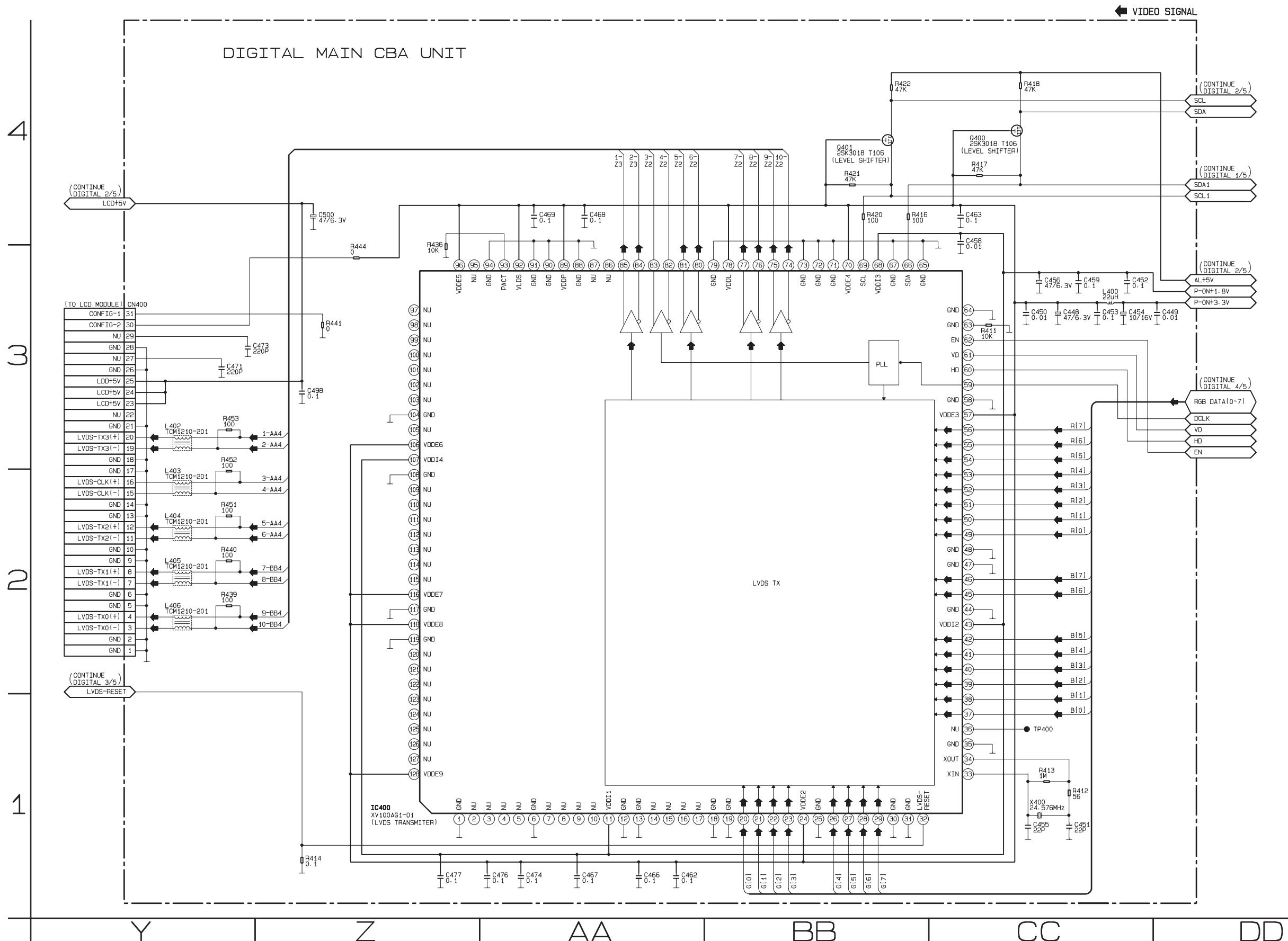
is an unnecessary part of the circuit configuration;
therefore servicing is not required, for this product operates independently of this part.



Digital Main 4/5 Schematic Diagram



Digital Main 5/5 Schematic Diagram



Main CBA Top View

CAUTION !

For continued protection against fire hazard,
replace only with the same type fuse.

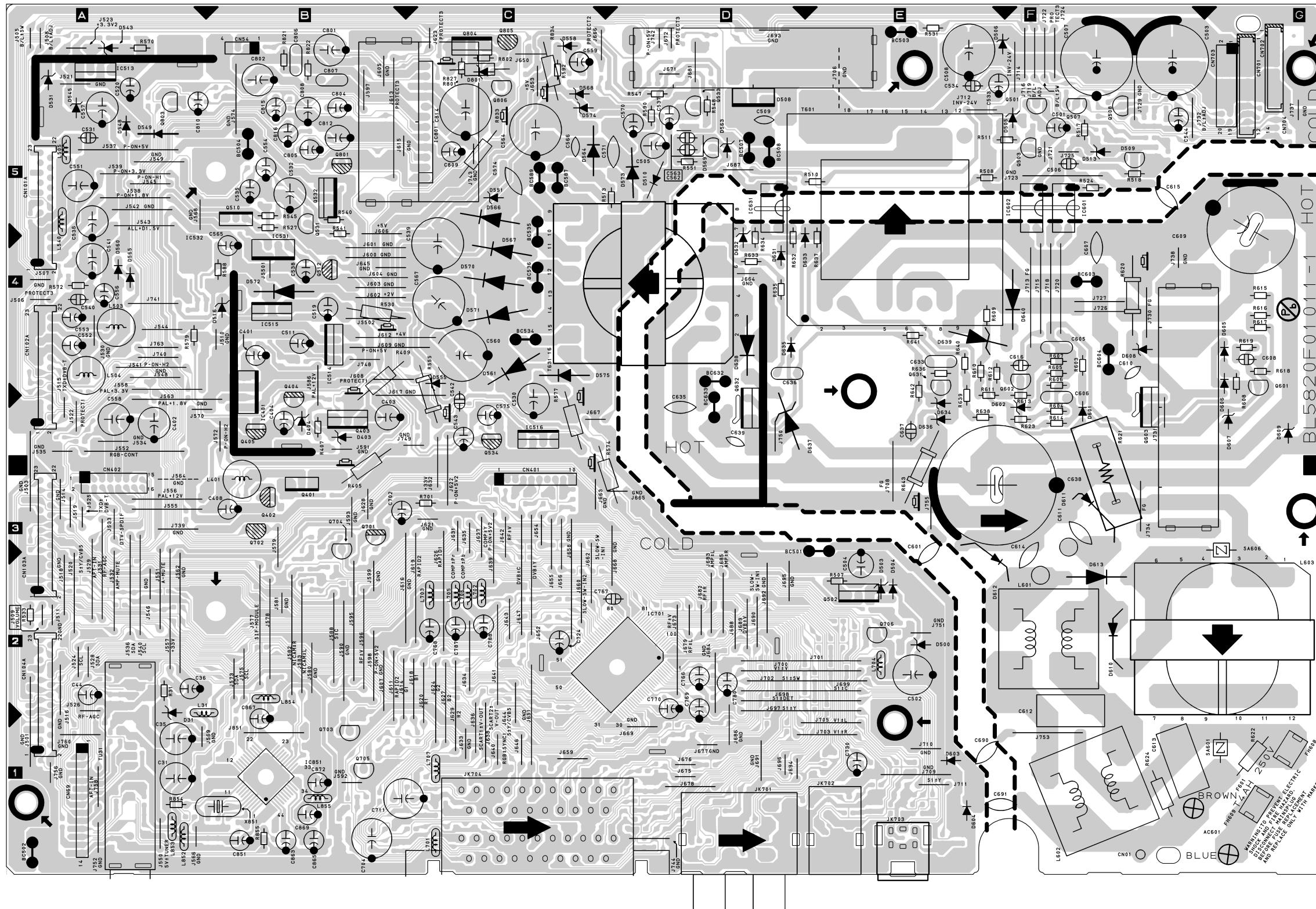
NOTE:

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used. Also, in order to have the ability to increase the input slowly, when troubleshooting this type power supply circuit, a variable isolation transformer is required.



Main CBA Bottom View

CAUTION !

For continued protection against fire hazard,
replace only with the same type fuse.

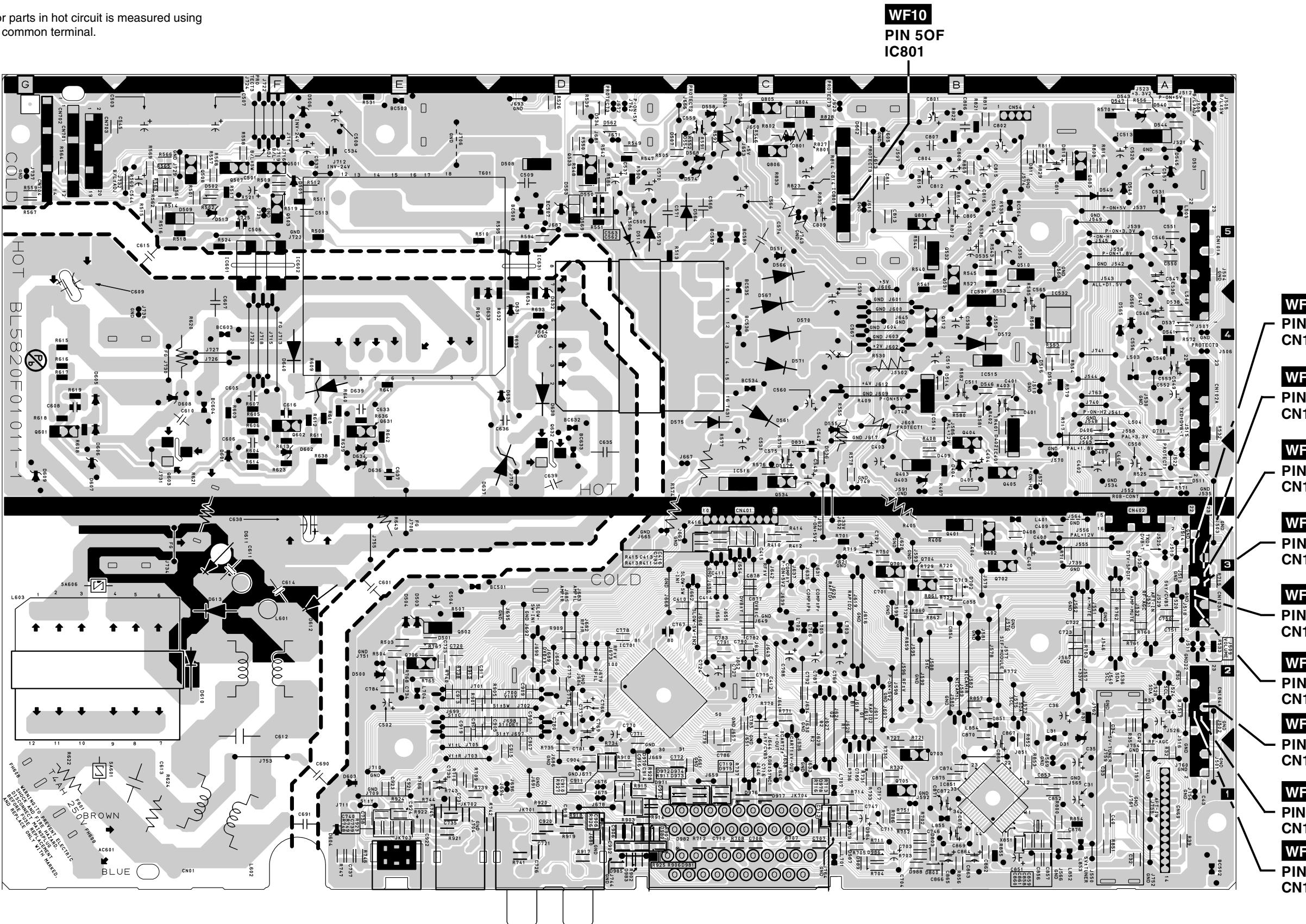
NOTE:

The voltage for parts in hot circuit is measured using
hot GND as a common terminal.

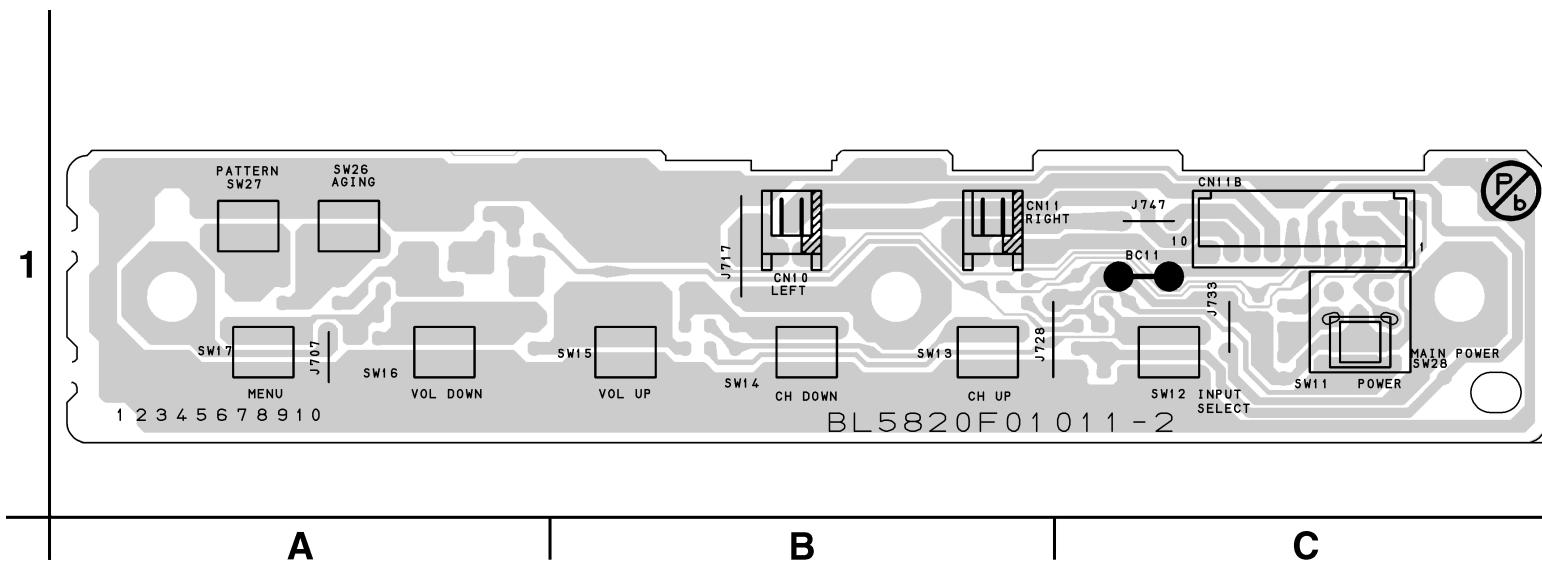
CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown , check to see that all components in the power supply
circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

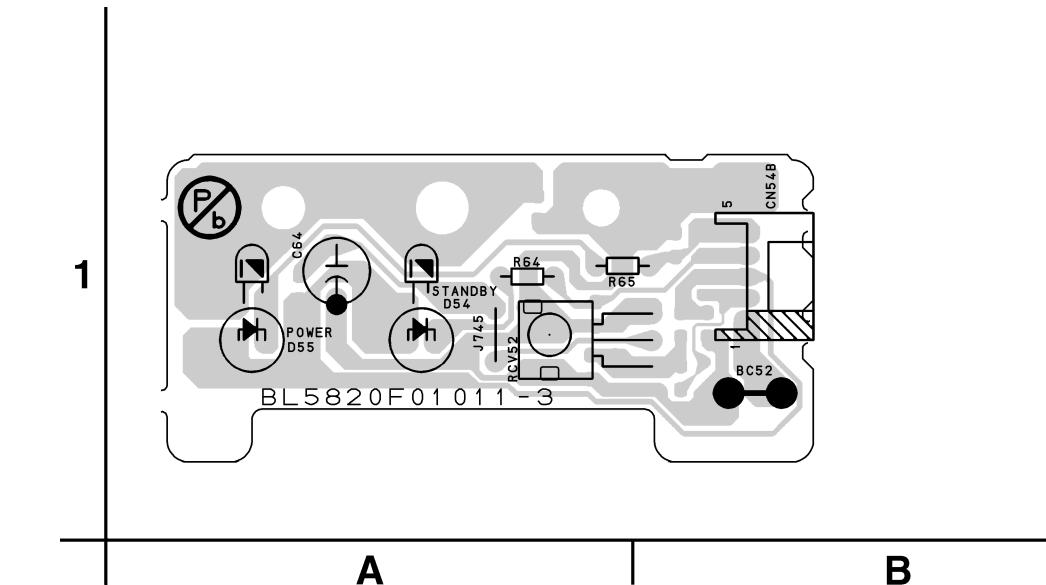
Because a hot chassis ground is present in the power
supply circuit, an isolation transformer must be used.
Also, in order to have the ability to increase the input
slowly, when troubleshooting this type power supply
circuit, a variable isolation transformer is required.



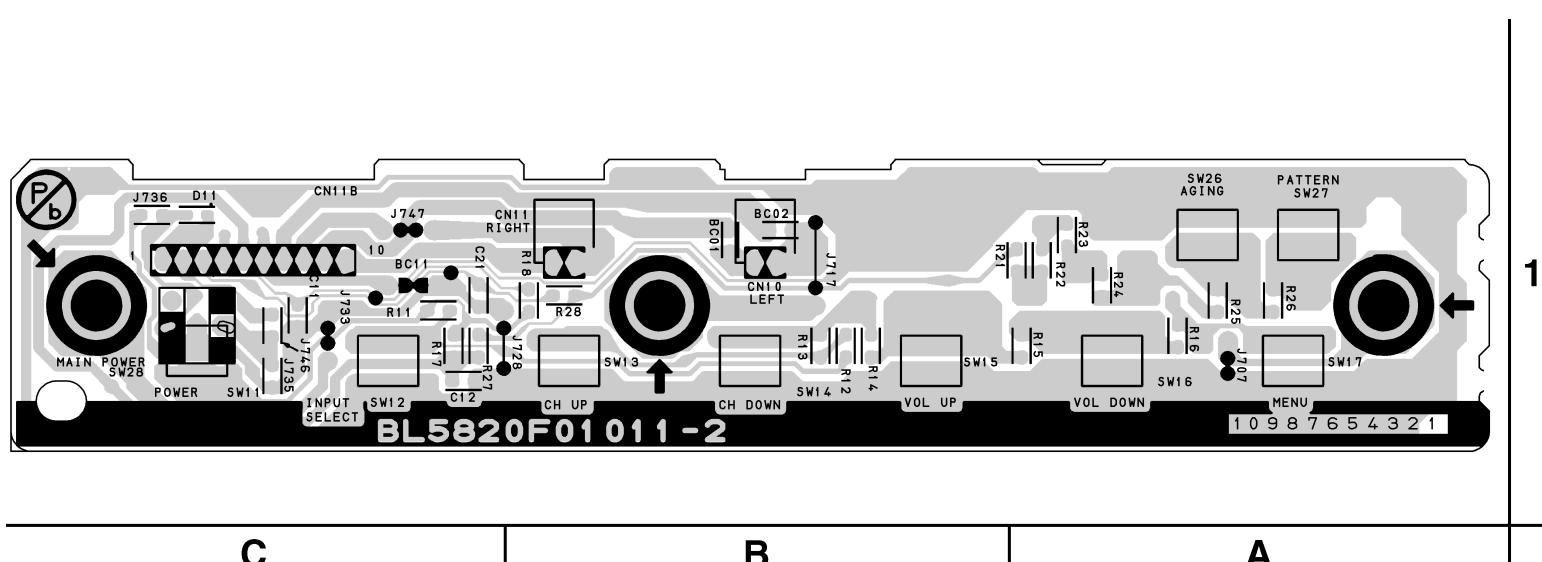
Function CBA Top View



LED CBA Top View

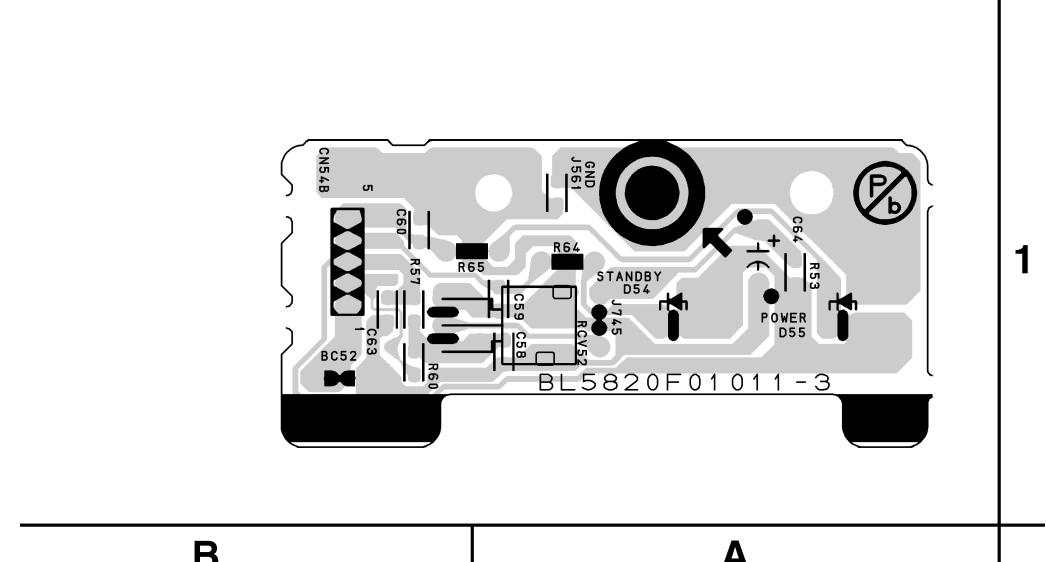


Function CBA Bottom View



BL5820F01011-2

LED CBA Bottom View



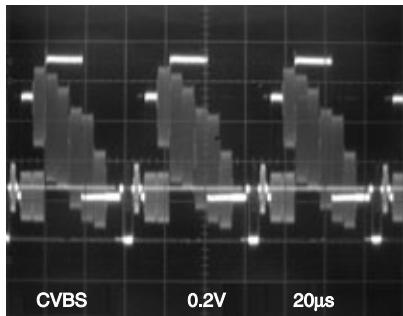
BL5820F01011-3

WAVEFORMS

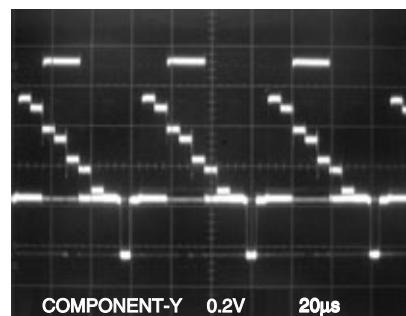
WF1 ~ WF6 = Waveforms to be observed at
Waveform check points.
(Shown in Schematic Diagram.)

Input: PAL Color Bar Signal (with 1kHz Audio Signal)

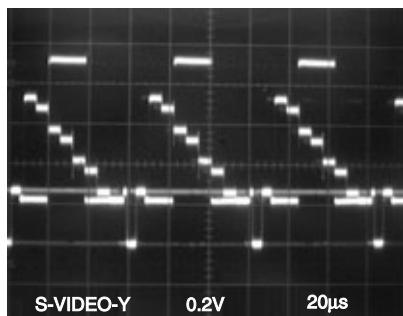
WF1 Pin 11 of CN103A



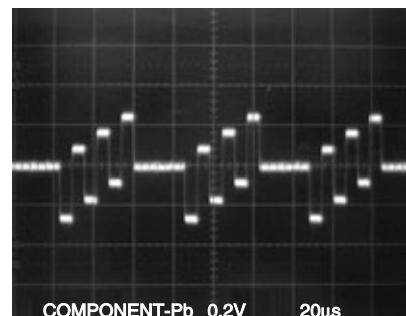
WF4 Pin 6 of CN103A



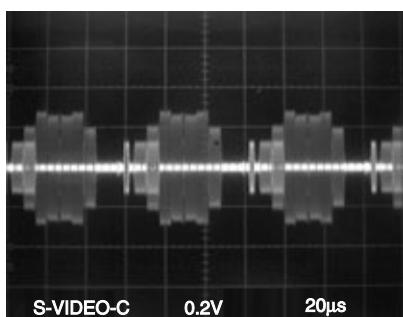
WF2 Pin 14 of CN103A



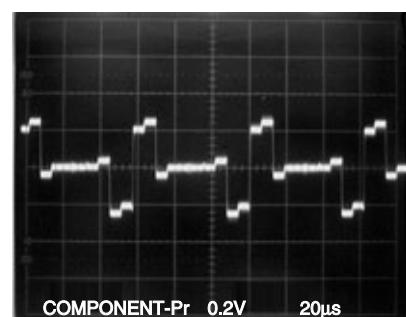
WF5 Pin 8 of CN103A



WF3 Pin 13 of CN103A



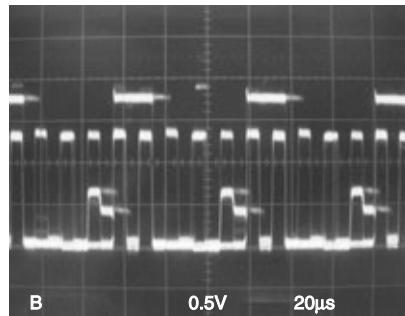
WF6 Pin 9 of CN103A



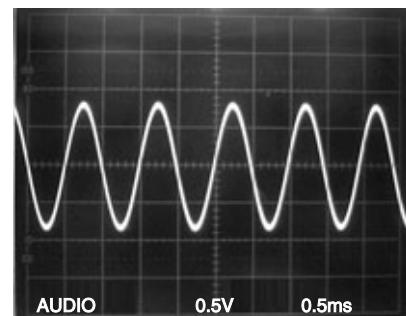
WF7 ~ WF10 = Waveforms to be observed at
Waveform check points.
(Shown in Schematic Diagram.)

Input: PAL Color Bar Signal (with 1kHz Audio Signal)

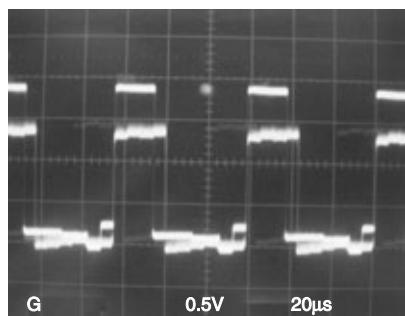
WF7 Pin 13 of CN104A



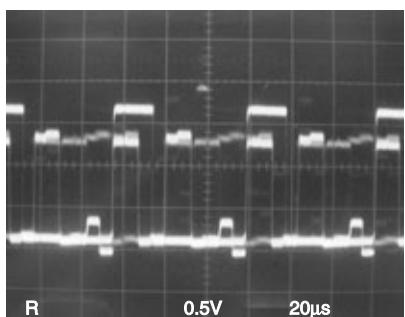
WF10 Pin 5 of IC801



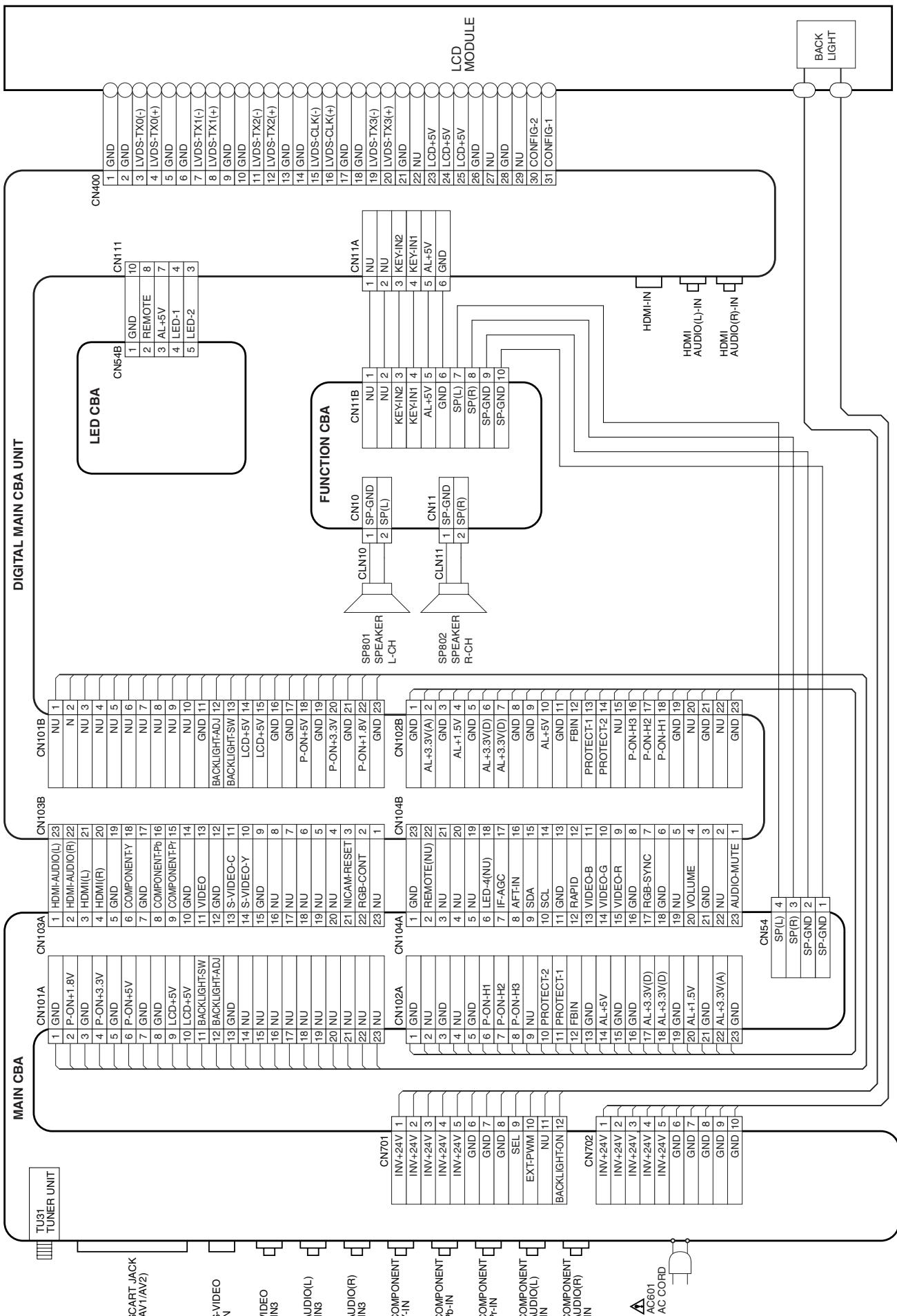
WF8 Pin 14 of CN104A



WF9 Pin 15 of CN104A

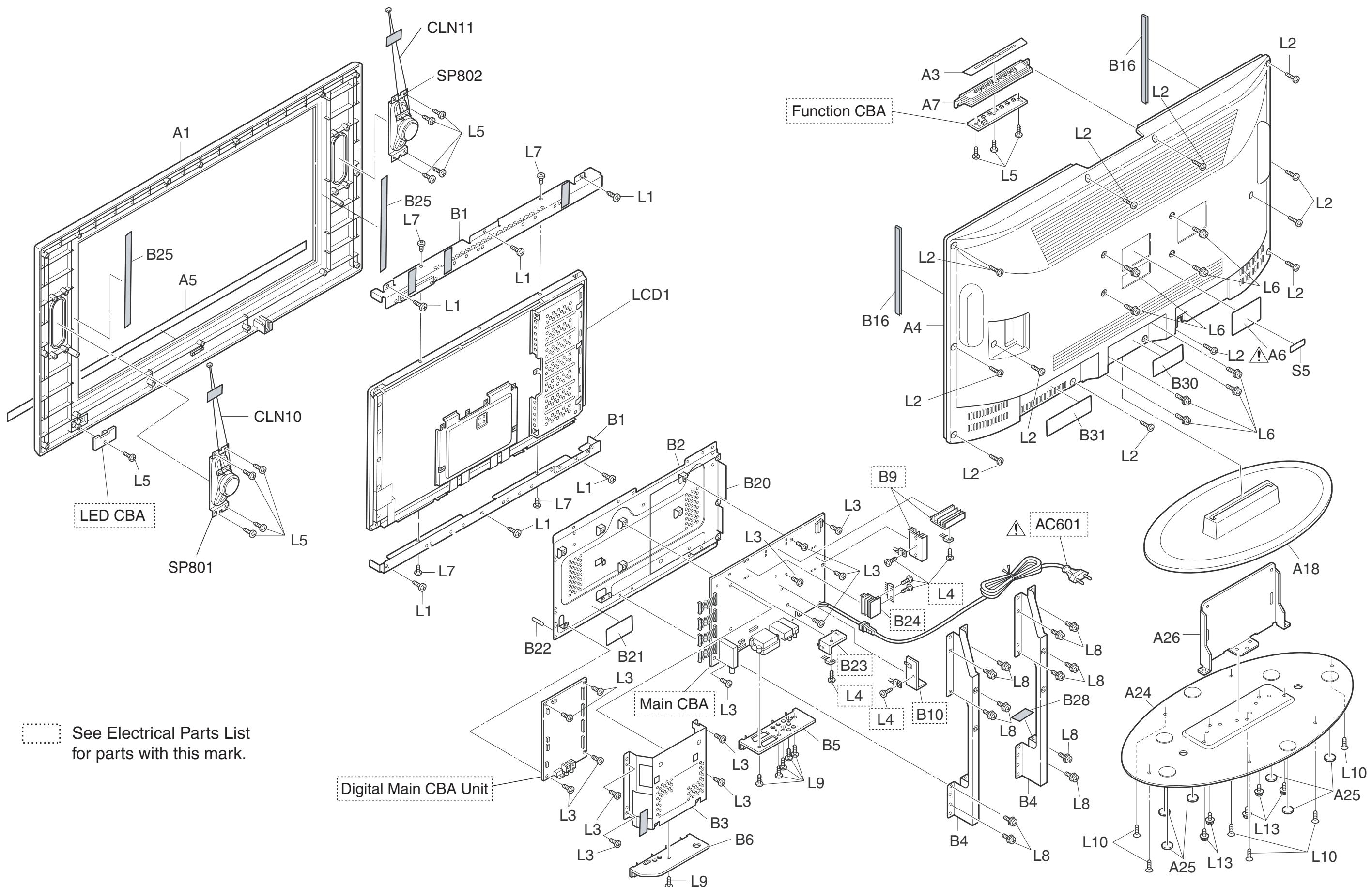


WIRING DIAGRAMS

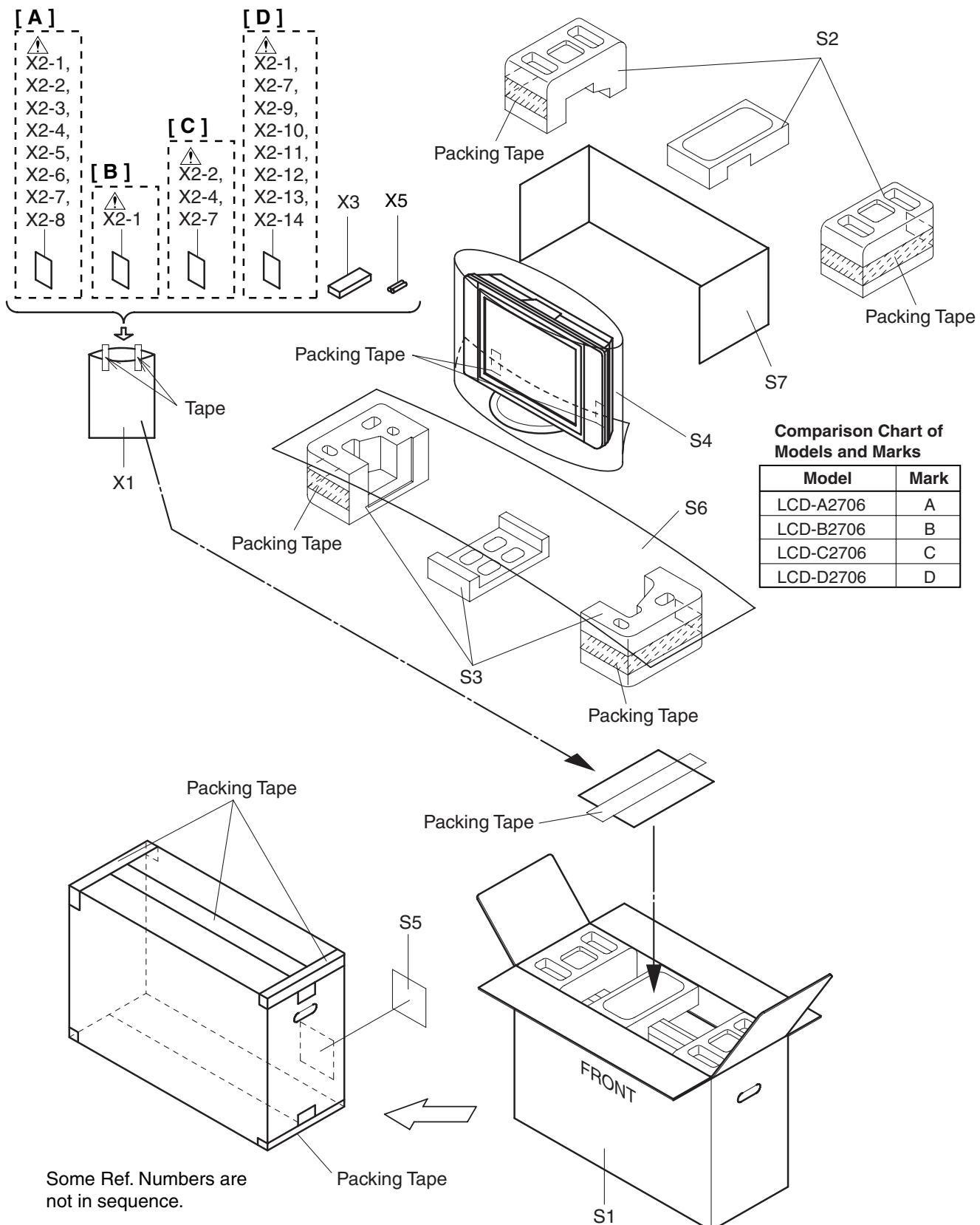


EXPLODED VIEWS

Cabinet



Packing



MECHANICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTE: Parts that are not assigned part numbers (-----) are not available.

Comparison Chart of Models and Marks

Model	Mark
LCD-A2706	A
LCD-B2706	B
LCD-C2706	C
LCD-D2706	D

Ref. No.	Mark	Description	Part No.
A1		FRONT CABINET L5820EA	1EM021473
A3		CONTROL PLATE L5820EA	1EM322257
A4		REAR CABINET L5820EA	1EM021474
A5		DECORATION PLATE L5820EA	1EM121715
A7		FUNCTION KNOB L5820EA	1EM121699
A18		STAND COVER L5820EA	1EM221422
A24		STAND BASE PLATE L4300UA	1EM121113
A25		STAND RUBBER FOOT L5001CB	1EM423855
A26		STAND HINGE L4300UA	1EM220784
B1		PANEL HOLDER L4300UA	1EM120994
B2		PCB HOLDER(JPN/PAL) L4430JA	1EM121626
B3		SHIELD BOX(PAL) L5820EA	1EM221411
B4		CHASSIS BLACKET L5820EA	1EM121698
B5		JACK HOLDER(A) L5820EA	1EM221412
B6		JACK HOLDER(D) L5820EA	1EM221413
B16		CLOTH(10X190XT0.3) L0200UA	1EM420019
B20		INSULATION SHEET L5820EA	1EM322281
B21		CAUTION LABEL L3207UH	-----
B25		CLOTH(15X220XT1.0) L4430JA	1EM423841
B28		CLOTH(10X30XT0.5) B5900UA	0EM404486
CLN10		WIRE ASSEMBLY 001 WIRE ASSEMBLY 001	WX1L5820-001
CLN11		WIRE ASSEMBLY 001 WIRE ASSEMBLY 001	WX1L5820-001
CLN11B		WIRE ASSEMBLY 002 WX1L5820-002	WX1L5820-002
CLN54B		WIRE ASSEMBLY 003 WIRE ASSEMBLY 003	WX1L5820-003
CLN400		WIRE ASSEMBLY 010 L5820EA	WX1L5820-010
CLN701		WIRE ASSEMBLY 004 L5820EA	WX1L5820-004
CLN704		WIRE ASSEMBLY 103 WX1L4300-103	WX1L4300-103
L1		SCREW P-TIGHT 4X14 BIND HEAD	GBJP4140
L2		SCREW P-TIGHT M4X14 PAN HEAD+BLK	GPHP4140
L3		SCREW S-TIGHT M3X6 BIND HEAD+	GBJS3060
L5		SCREW P-TIGHT 3X10 BIND HEAD+	GBJP3100
L6		DOUBLE SEMS SCREW M4X10 + BLK	FPH34100
L8		DOUBLE SEMS SCREW M4X6 M4X6	FPJ34060
L9		SCREW B-TIGHT 3X10 BIND HEAD+BLK	GBHB3100
L10		SCREW P-TIGHT M3X12 DISH HEAD+	GDJP3120
L13		DOUBLE SEMS SCREW M4X9 + BLACK L0130UA	0EM408146A
LCD1		LCD MODULE(CMO) V270B1-L01	TLCD100CME05
SP801		SPEAKER S0516F06	DSD0813XQ002
SP802		SPEAKER S0516F06	DSD0813XQ002

Ref. No.	Mark	Description	Part No.
ACCESSORY			
X3		REMOTE CONTROL NF004RD NF004RD	NF004RD

Ref. No.	Mark	Description	Part No.
A6 	A	RATING LABEL L5820EA	-----
A6 	B	RATING LABEL L5821BB	-----
A6 	C	RATING LABEL L5822FC	-----
A6 	D	RATING LABEL L5823RD	-----
B22		PCB POST L0650UA	1EM421819
B30		JACK LABEL(A) L5820EA	-----
B31		JACK LABEL(D) L5820EA	-----
L1		SCREW P-TIGHT 4X14 BIND HEAD	GBJP4140
L2		SCREW P-TIGHT M4X14 PAN HEAD+BLK	GPHP4140
L6		DOUBLE SEMS SCREW M4X10 + BLK	FPH34100
L7		SCREW S-TIGHT M3X4 BIND HEAD	GBJS3040
L8		DOUBLE SEMS SCREW M4X6 M4X6	FPJ34060
PACKING			
S1	A	CARTON L5820EA	1EM322202
S1	B	CARTON L5821BB	1EM322305
S1	C	CARTON L5822FC	1EM322306
S1	D	CARTON L5823RD	1EM322307
S2		STYROFOAM TOP L5820EA	1EM021475
S3		STYROFOAM BOTTOM L5820EA	1EM021476
S4		SET BAG L5820EA	1EM322297
S5	A	SERIAL NO.LABEL L5820EA	-----
S5	B	SERIAL NO. LABEL L5821BB	-----
S5	C	SERIAL NO. LABEL L5822FC	-----
S5	D	SERIAL NO. LABEL L5823RD	-----
S6		STAND SHEET L5820EA	1EM423791
S7		HOLD PAD L5820EA	1EM423853
ACCESSORIES			
X1		BAG POLYETHYLENE 235X365XT0.03	0EM408420A
X2-1 	A,B,D	OWNERS MANUAL(EN) L5820EA	1EMN21993
X2-2 	A,C	OWNERS MANUAL(FR) L5820EA	1EMN21994
X2-3 	A	OWNERS MANUAL(EL) L5820EA	1EMN21995
X2-4 	A,C	OWNERS MANUAL(IT) L5820EA	1EMN21996
X2-5 	A	OWNERS MANUAL(ES) L5820EA	1EMN21997
X2-6 	A	OWNERS MANUAL(NL) L5820EA	1EMN21998
X2-7 	A,C,D	OWNERS MANUAL(DE) L5820EA	1EMN21999
X2-8 	A	OWNERS MANUAL(SV) L5820EA	1EMN22000
X2-9 	D	OWNERS MANUAL(PL) L5820EA	1EMN22006
X2-10 	D	OWNERS MANUAL(RU) L5820EA	1EMN22007
X2-11 	D	OWNERS MANUAL(HU) L5820EA	1EMN22008
X2-12 	D	OWNERS MANUAL(CS) L5820EA	1EMN22009
X2-13 	D	OWNERS MANUAL(SK) L5820EA	1EMN22010
X2-14 	D	OWNERS MANUAL(AR) L5820EA	1EMN22011
X5		BATTERY R6RC/2P	XB0M601MS001

ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTES:

1. Parts that are not assigned part numbers (-----) are not available.
2. Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%	D.....±0.5%	F.....±1%
G.....±2%	J.....±5%	K.....±10%
M.....±20%	N.....±30%	Z.....+80/-20%

Comparison Chart of Models and Marks

Model	Mark
LCD-A2706	A
LCD-B2706	B
LCD-C2706	C
LCD-D2706	D

DIGITAL MAIN CBA UNIT

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	1ESA13573

MMA CBA

Ref. No.	Description	Part No.
	MMA CBA Consists of the following:	1ESA14775
	MAIN CBA FUNCTION CBA LED CBA	-----

MAIN CBA

Ref. No.	Description	Part No.
	MAIN CBA Consists of the following:	-----
CAPACITORS		
C31	ELECTROLYTIC CAP. 100µF/35V M or	CE1GMASDL101
	ELECTROLYTIC CAP. 100µF/35V M or	CE1CMASTM101
	ELECTROLYTIC CAP. 100µF/35V M	CA1G101SP085
C32	CHIP CERAMIC CAP(1608) B K 0.01µF/50V	CHD1JK30B103
C33	CHIP CERAMIC CAP(1608) B K 0.01µF/50V	CHD1JK30B103
C34	CHIP CERAMIC CAP(1608) B K 0.01µF/50V	CHD1JK30B103
C35	ELECTROLYTIC CAP. 100µF/35V M or	CE1GMASDL101
	ELECTROLYTIC CAP. 100µF/35V M or	CE1CMASTM101
	ELECTROLYTIC CAP. 100µF/35V M	CA1G101SP085
C36	ELECTROLYTIC CAP. 10µF/50V M or	CE1JMASDL100
	ALUMINUM ELECTROLYTIC CAP 10µF/50V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10µF/50V M	CA1J100SP085
C40	CHIP CERAMIC CAP(1608) CH J 22pF/50V	CHD1JJ3CH220
C42	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C43	CHIP CERAMIC CAP. F Z 0.1µF/50V	CHD1JZB0F104
C44	ELECTROLYTIC CAP. 10µF/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10µF/16V M or	CE1CMASTM100

Ref. No.	Description	Part No.
	ELECTROLYTIC CAP. 10µF/16V M	CA1C100SP085
C405	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C501	ELECTROLYTIC CAP. 0.1µF/50V M or	CE1JMASDL0R1
	ALUMINUM ELECTROLYTIC CAP 0.1µF/50V M or	CE1JMASTM100
	ELECTROLYTIC CAP. 0.1µF/50V M	CA1JR10SP085
C502	ELECTROLYTIC CAP. 470µF/16V M or	CE1CMASDL471
	ELECTROLYTIC CAP. 470µF/16V M or	CE1CMASTM471
	ELECTROLYTIC CAP. 470µF/16V M	CA1C471SP085
C503	ELECTROLYTIC CAP. 3300µF/35V M or	CE1GMZNDL332
	CAP ELE 3300µF/35V M	CE1GMZPDL332
C504	ELECTROLYTIC CAP. 100µF/16V M or	CE1CMASDL101
	ELECTROLYTIC CAP. 100µF/16V M or	CE1CMASTM101
	ELECTROLYTIC CAP. 100µF/16V M	CA1C101SP085
C505	ELECTROLYTIC CAP. 10µF/100V M or	CE2AMASDL100
	ALUMINUM ELECTROLYTIC CAP 10µF/100V M	CE2AMASTM100
C506	CERAMIC CAP.(AX) B K 0.1µF/50V	CA1J104TU011
C507	ELECTROLYTIC CAP. 3300µF/35V M or	CE1GMZNDL332
	CAP ELE 3300µF/35V M	CE1GMZPDL332
C508	ALUMINUM ELECTROLYTIC CAP 1000µF/35V M or	CE1GMZNTM102
	ELECTROLYTIC CAP. 1000µF/35V M or	CE1GMZPDL102
	ELECTROLYTIC CAP. 1000µF/35V M or	CE1GMZADL102
	ELECTROLYTIC CAP. 1000µF/35V M	CA1G102SP084
C509	CERAMIC CAP. R K 1500pF/2KV(HR) or	CCD3DKA0R152
	CERAMIC CAP. 1500pF/2KV or	CA3D152PAN04
	CERAMIC CAP. BL 1500pF/2KV	CA3D152XF003
C511	ELECTROLYTIC CAP. 10µF/50V M or	CE1JMASDL100
	ALUMINUM ELECTROLYTIC CAP 10µF/50V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10µF/50V M	CA1J100SP085
C513	CHIP CERAMIC CAP. F Z 0.01µF/50V	CHD1JJ30F103
C520	ELECTROLYTIC CAP. 47µF/16V M or	CE1CMASDL470
	ALUMINUM ELECTROLYTIC CAP 47µF/16V M or	CE1CMASTM470
	ELECTROLYTIC CAP. 47µF/16V M	CA1C470SP085
C530	ELECTROLYTIC CAP. 220µF/25V M or	CE1EMASDL221
	ELECTROLYTIC CAP. 220µF/25V M or	CE1EMASTM221
	ELECTROLYTIC CAP. 220µF/25V M	CA1E221SP085
C531	CERAMIC CAP.(AX) F Z 0.01µF/25V	CDA1EZT0F103
C532	ELECTROLYTIC CAP. 1000µF/10V M or	CE1AMASDL102
	ALUMINUM ELECTROLYTIC CAP 1000µF/10V M or	CE1AMASTM102
	ELECTROLYTIC CAP. 1000µF/10V M	CA1A102SP085
C533	ELECTROLYTIC CAP. 100µF/10V M or	CE1AMASDL101
	ELECTROLYTIC CAP. 100µF/10V M or	CE1AMASTM101
	ELECTROLYTIC CAP. 100µF/10V M	CA1A101SP085
C534	CERAMIC CAP.(AX) F Z 0.01µF/25V	CDA1EZT0F103
C536	ELECTROLYTIC CAP. 470µF/6.3V M or	CE0KMASDL471
	ELECTROLYTIC CAP. 470µF/6.3V M or	CE0KMASTM471
	ELECTROLYTIC CAP. 470µF/6.3V M	CA0K471SP085
C539	ELECTROLYTIC CAP. 4700µF/10V M P=7.5 or	CE1AMZNDL472
	ELECTROLYTIC CAP. 4700µF/10V M	CE1AMZPDL472
C540	CERAMIC CAP.(AX) F Z 0.01µF/25V	CDA1EZT0F103
C541	ELECTROLYTIC CAP. 1000µF/6.3V M or	CE0KMASDL102
	ELECTROLYTIC CAP. 1000µF/6.3V M or	CE0KMASTM102
	ELECTROLYTIC CAP. 1000µF/6.3V M	CA0K102SP085
C545	CHIP CERAMIC CAP. F Z 0.01µF/50V	CHD1JJZ30F103
C546	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C547	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C548	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C549	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C550	CHIP CERAMIC CAP(1608) B K 0.1µF/50V	CHD1JK30B104
C551	ELECTROLYTIC CAP. 1000µF/10V M or	CE1AMASDL102
	ALUMINUM ELECTROLYTIC CAP 1000µF/10V M or	CE1AMASTM102

Ref. No.	Description	Part No.
	ELECTROLYTIC CAP. 1000 μ F/10V M	CA1A102SP085
C552	ELECTROLYTIC CAP. 10 μ F/50V M or ALUMINUM ELECTROLYTIC CAP 10 μ F/50V M or	CE1JMASDL100
	ELECTROLYTIC CAP. 10 μ F/50V M	CA1J100SP085
C553	ELECTROLYTIC CAP. 10 μ F/50V M or ALUMINUM ELECTROLYTIC CAP 10 μ F/50V M or	CE1JMASDL100
	ELECTROLYTIC CAP. 10 μ F/50V M	CA1J100SP085
C554	ELECTROLYTIC CAP. 100 μ F/10V M or ELECTROLYTIC CAP. 100 μ F/10V M or	CE1AMASDL101
	ELECTROLYTIC CAP. 100 μ F/10V M	CE1AMASTM101
C556	ELECTROLYTIC CAP. 100 μ F/10V M or ELECTROLYTIC CAP. 100 μ F/10V M or	CE1AMASDL101
	ELECTROLYTIC CAP. 100 μ F/10V M	CE1AMASTM101
C557	ELECTROLYTIC CAP. 220 μ F/25V M or ELECTROLYTIC CAP. 220 μ F/25V M or	CE1EMASDL221
	ELECTROLYTIC CAP. 220 μ F/25V M	CA1E221SP085
C558	ELECTROLYTIC CAP. 1000 μ F/6.3V M or ELECTROLYTIC CAP. 1000 μ F/6.3V M or	CE0KMASDL102
	ELECTROLYTIC CAP. 1000 μ F/6.3V M	CE0KMASTM102
C559	ELECTROLYTIC CAP. 10 μ F/50V M or ALUMINUM ELECTROLYTIC CAP 10 μ F/50V M or	CE1JMASDL100
	ELECTROLYTIC CAP. 10 μ F/50V M	CA1J100SP085
C560	ELECTROLYTIC CAP. 4700 μ F/10V M P=7.5 or ELECTROLYTIC CAP. 4700 μ F/10V M	CE1AMZNDL472
C562	CERAMIC CAP.(AX) B K 0.01 μ F/50V	CA1J103TU011
C563	CERAMIC CAP.(AX) B K 0.01 μ F/50V	CA1J103TU011
C564	ALUMINUM ELECTROLYTIC CAP 1000 μ F/35V M or ELECTROLYTIC CAP. 1000 μ F/35V M or	CE1GMZNTM102
	ELECTROLYTIC CAP. 1000 μ F/35V M	CE1GMZPDL102
	ELECTROLYTIC CAP. 1000 μ F/35V M or	CE1GMZADL102
	ELECTROLYTIC CAP. 1000 μ F/35V M	CA1G102SP084
C566	CERAMIC CAP BN 470pF/2KV or CERAMIC CAP 470pF/2KV or	CCD3DKA0B471
	CERAMIC CAP. RB 470pF/2KV or	CA3D471PAN04
	CERAMIC CAP. BL 470pF/2KV or	CA3D471TE006
	CERAMIC CAP. HR 470pF/2KV	CCD3DKA0R471
C567	CAP ELE STD-85 4700 μ F 6.3V SL or ELECTROLYTIC CAP. 4700 μ F/6.3V SM	CE0KMZNDL472
C570	ELECTROLYTIC CAP. 10 μ F/50V M or ALUMINUM ELECTROLYTIC CAP 10 μ F/50V M or	CE1JMASDL100
	ELECTROLYTIC CAP. 10 μ F/50V M	CA1J100SP085
C575	ELECTROLYTIC CAP. 100 μ F/10V M or ELECTROLYTIC CAP. 100 μ F/10V M or	CE1AMASDL101
	ELECTROLYTIC CAP. 100 μ F/10V M	CA1A101SP085
C605	FILM CAP.(P) 0.1 μ F/50V J or FILM CAP.(P) 0.1 μ F/50V J or	CA1J104MS029
	CAP POLYESTER FILM 0.1 μ F/50V J	CMA1JJS00104
C606	FILM CAP.(P) 0.033 μ F/50V J or FILM CAP.(P) 0.033 μ F/50V J or	CA1J333MS029
	CAP POLYESTER FILM 0.033 μ F/50V J	CA1J333SER04
C607	CERAMIC CAP. 100pF/2KV or CERAMIC CAP. RB 100pF/2KV or	CA3D101PAN04
	CERAMIC CAP. BL 100pF/2KV	CA3D101XF003
C609 \triangle	ELECTROLYTIC CAPACITOR 180 μ F/400V	CA2H181NC229
C610	CERAMIC CAP. BN 470pF/2KV or CERAMIC CAP. 470pF/2KV or	CCD3DKA0B471
	CERAMIC CAP. RB 470pF/2KV or	CA3D471PAN04
	CERAMIC CAP. BL 470pF/2KV or	CA3D471TE006
	CERAMIC CAP. HR 470pF/2KV	CA3D471XF003
C611	CERAMIC CAP. B K 0.01 μ F/500V	CCD2JKP0B103
C612 \triangle	ACROSS THE LINE CAP. 0.1U/250V or	CT2E104DC015
\triangle	ACROSS THE LINE CAP. 0.1 μ F/250V K or	CT2E104DC011
\triangle	METALIZED FILM CAP. 0.1 μ F/250V	CT2E104MS037
C613 \triangle	ACROSS THE LINE CAP. 0.1U/250V or	CT2E104DC015
\triangle	ACROSS THE LINE CAP. 0.1 μ F/250V K or	CT2E104DC011

Ref. No.	Description	Part No.
\triangle	METALIZED FILM CAP. 0.1 μ F/250V	CT2E104MS037
C614	CERAMIC CAP. B K 0.01 μ F/500V	CCD2JKP0B103
C615 \triangle	SAFETY CAP 3300pF/250V KX	CA2E332MR050
C633	FILM CAP.(P) 0.12 μ F/50V J or STACKED FILM CAP. 0.12 μ F/50V J or	CA1J124MS029
	CAP POLYESTER FILM 0.12 μ F/50V J	CA1J124SER04
C636	FILM CAP.(P) 0.01 μ F/50V J or FILM CAP.(P) 0.01 μ F/50V J or	CA1J103MS029
	CAP POLYESTER FILM 0.01 μ F/50V J	CA1J103SER04
C638	ELECTROLYTIC CAPACITOR 180 μ F/400V	CA2H181NC226
C639	CERAMIC CAP. R K 680pF/2KV(HR) or CERAMIC CAP. 680pF/2KV or	CCD3DKA0R681
	CERAMIC CAP. BL 680pF/2KV	CA3D681PAN04
C701	CHIP CERAMIC CAP(1608) B K 0.01 μ F/50V	CHD1JK30B103
C702	ELECTROLYTIC CAP. 100 μ F/6.3V M or ELECTROLYTIC CAP. 100 μ F/6.3V M	CE0KMASDL101
	ELECTROLYTIC CAP. 100 μ F/6.3V M	CA0K101SP085
C703	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C704	ELECTROLYTIC CAP. 470 μ F/16V M or ELECTROLYTIC CAP. 470 μ F/16V M or	CE1CMASDL471
	ELECTROLYTIC CAP. 470 μ F/16V M	CE1CMASTM471
C707	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C708	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C710	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C711	ELECTROLYTIC CAP. 470 μ F/16V M or ELECTROLYTIC CAP. 470 μ F/16V M or	CE1CMASDL471
	ELECTROLYTIC CAP. 470 μ F/16V M	CA1C471SP085
C712	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C713	CHIP CERAMIC CAP(1608) B K 0.047 μ F/50V	CHD1JK30B473
C716	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C717	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C719	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C720	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W J 0 Ω	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
C721	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C722	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C723	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C724	ELECTROLYTIC CAP. 47 μ F/16V M or ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASDL470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C725	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W J 0 Ω	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
C726	CHIP CERAMIC CAP(1608) CH J 33pF/50V	CHD1JJ3CH330
C727	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/25V	CHD1EZ30F104
C730	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
C734	CHIP CERAMIC CAP(1608) B K 0.01 μ F/50V	CHD1JK30B103
C735	CHIP CERAMIC CAP(1608) CH J 100pF/50V	CHD1JJ3CH101
C737	CHIP CERAMIC CAP(1608) CH J 100pF/50V	CHD1JJ3CH101
C738	CHIP CERAMIC CAP. F Z 0.047 μ F/50V	CHD1JZ30F473
C739	CHIP CERAMIC CAP(1608) CH J 100pF/50V	CHD1JJ3CH101
C740	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C746	CHIP CERAMIC CAP. F Z 0.47 μ F/16V	CHD1CZ30F474
C747	CHIP CERAMIC CAP. F Z 0.47 μ F/16V	CHD1CZ30F474
C750	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C751	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C766	ELECTROLYTIC CAP. 47 μ F/16V M or ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASDL470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C767	CERAMIC CAP.(AX) F Z 0.1 μ F/50V	CA1J104TU014
C768	ELECTROLYTIC CAP. 47 μ F/16V M or ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASDL470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C769	ELECTROLYTIC CAP. 10 μ F/16V M or ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085

Ref. No.	Description	Part No.
C770	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085
C771	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C772	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C773	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/25V	CHD1EZ30F104
C774	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C775	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/25V	CHD1EZ30F104
C776	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C777	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C778	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C779	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C780	ELECTROLYTIC CAP. 47 μ F/16V M or	CE1CMASDL470
	ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASTM470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C781	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	-----
C782	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C783	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C784	CHIP CERAMIC CAP.(1608) B K 0.1 μ F/50V	CHD1JK30B104
C785	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/25V	CHD1EZ30F104
C786	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/25V	CHD1EZ30F104
C787	ELECTROLYTIC CAP. 47 μ F/16V M or	CE1CMASDL470
	ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASTM470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C788	ELECTROLYTIC CAP. 47 μ F/16V M or	CE1CMASDL470
	ALUMINUM ELECTROLYTIC CAP 47 μ F/16V M or	CE1CMASTM470
	ELECTROLYTIC CAP. 47 μ F/16V M	CA1C470SP085
C789	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C790	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C791	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C792	CHIP CERAMIC CAP. F Z 0.47 μ F/10V	CHD1AZ30F474
C801	ELECTROLYTIC CAP. 220 μ F/25V M or	CE1JMASDL221
	ELECTROLYTIC CAP. 220 μ F/25V M or	CE1CMASTM221
	ELECTROLYTIC CAP. 220 μ F/25V M	CA1E221SP085
C802	ELECTROLYTIC CAP. 220 μ F/25V M or	CE1JMASDL221
	ELECTROLYTIC CAP. 220 μ F/25V M or	CE1CMASTM221
	ELECTROLYTIC CAP. 220 μ F/25V M	CA1E221SP085
C804	ELECTROLYTIC CAP. 1 μ F/50V M or	CE1JMASDL1R0
	ELECTROLYTIC CAP 1 μ F/50V M or	CE1JMASTM1R0
	ELECTROLYTIC CAP 1 μ F/50V M	CA1J1R0SP085
C805	ELECTROLYTIC CAP. 1 μ F/50V M or	CE1JMASDL1R0
	ELECTROLYTIC CAP 1 μ F/50V M or	CE1JMASTM1R0
	ELECTROLYTIC CAP 1 μ F/50V M	CA1J1R0SP085
C806	FILM CAP(P) 0.1 μ F/50V J or	CA1J104MS029
	FILM CAP(P) 0.1 μ F/50V J or	CMA1JJS00104
	CAP POLYESTER FILM 0.1 μ F/50V J	CA1J104SER04
C807	FILM CAP(P) 0.1 μ F/50V J or	CA1J104MS029
	FILM CAP(P) 0.1 μ F/50V J or	CMA1JJS00104
	CAP POLYESTER FILM 0.1 μ F/50V J	CA1J104SER04
C808	ELECTROLYTIC CAP. 100 μ F/25V M or	CE1EMASDL101
	ALUMINUM ELECTROLYTIC CAP 100 μ F/25V M or	CE1CMASTM101
	ELECTROLYTIC CAP. 100 μ F/25V M	CA1E101SP085
C810	ELECTROLYTIC CAP. 3.3 μ F/50V M or	CE1JMASDL3R3
	ALUMINUM ELECTROLYTIC CAP 3.3 μ F/50V M or	CE1JMASTM3R3
	ELECTROLYTIC CAP. 3.3 μ F/50V M	CA1J3R3SP085
C812	ELECTROLYTIC CAP. 100 μ F/25V M or	CE1EMASDL101
	ALUMINUM ELECTROLYTIC CAP 100 μ F/25V M or	CE1CMASTM101
	ELECTROLYTIC CAP. 100 μ F/25V M	CA1E101SP085
C814	ALUMINUM ELECTROLYTIC CAP 1000 μ F/35V M or	CE1GMZNTM102
	ELECTROLYTIC CAP. 1000 μ F/35V M or	CE1GMZPDL102
	ELECTROLYTIC CAP. 1000 μ F/35V M or	CE1GMZADL102
	ELECTROLYTIC CAP. 1000 μ F/35V M	CA1G102SP084
C815	ELECTROLYTIC CAP. 4.7 μ F/25V M or	CE1EMASDL4R7

Ref. No.	Description	Part No.
	ELECTROLYTIC CAP. 4.7 μ F/25V M or	CA1E4R7SP085
	ALUMINUM ELECTROLYTIC CAP 4.7 μ F/25V M	CE1EMASTM4R7
C816	ELECTROLYTIC CAP. 4.7 μ F/25V M or	CE1EMASDL4R7
	ELECTROLYTIC CAP. 4.7 μ F/25V M or	CA1E4R7SP085
	ALUMINUM ELECTROLYTIC CAP 4.7 μ F/25V M	CE1EMASTM4R7
C851	ELECTROLYTIC CAP. 100 μ F/10V M or	CE1AMASDL101
	ELECTROLYTIC CAP. 100 μ F/10V M or	CE1AMASTM101
	ELECTROLYTIC CAP. 100 μ F/10V M	CA1A101SP085
C852	CHIP CERAMIC CAP. CH J 150pF/50V	CHD1JJ3CH151
C853	CHIP CERAMIC CAP. CH J 150pF/50V	CHD1JJ3CH151
C854	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C855	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C857	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C858	CHIP CERAMIC CAP. CH D 3pF/50V	CHD1JD3CH3R0
C859	CHIP CERAMIC CAP. CH D 3pF/50V	CHD1JD3CH3R0
C860	CHIP CERAMIC CAP.(1608) CH J 68pF/50V	CHD1JJ3CH680
C861	CHIP CERAMIC CAP.(1608) CH J 68pF/50V	CHD1JJ3CH680
C862	CHIP CERAMIC CAP. F Z 0.47 μ F/16V	CHD1CZ30F474
C863	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085
C864	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C865	ELECTROLYTIC CAP. 3.3 μ F/50V M or	CE1JMASDL3R3
	ALUMINUM ELECTROLYTIC CAP 3.3 μ F/50V M or	CE1JMASTM3R3
	ELECTROLYTIC CAP. 3.3 μ F/50V M	CA1J3R3SP085
C866	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C867	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085
C868	CHIP CERAMIC CAP. F Z 0.01 μ F/50V	CHD1JZ30F103
C869	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085
C872	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASDL100
	ELECTROLYTIC CAP. 10 μ F/16V M or	CE1CMASTM100
	ELECTROLYTIC CAP. 10 μ F/16V M	CA1C100SP085
C873	CHIP CERAMIC CAP.(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C874	CHIP CERAMIC CAP.(1608) B K 0.01 μ F/50V	CHD1JK30B103
C875	CHIP CERAMIC CAP.(1608) B K 0.01 μ F/50V	CHD1JK30B103
C876	CHIP CERAMIC CAP.(1608) CH J 22pF/50V	-----
C877	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C878	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C901	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C902	CHIP CERAMIC CAP.(1608) CH J 270pF/50V	CHD1JJ3CH271
C903	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C905	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C906	CHIP CERAMIC CAP.(1608) CH J 270pF/50V	CHD1JJ3CH271
C907	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C909	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C910	CHIP CERAMIC CAP.(1608) CH J 270pF/50V	CHD1JJ3CH271
C911	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C913	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C914	CHIP CERAMIC CAP.(1608) CH J 270pF/50V	CHD1JJ3CH271
C915	CHIP CERAMIC CAP. F Z 2.2 μ F/10V	CHD1AZ30F225
C917	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C918	CHIP CERAMIC CAP. B K 270pF/50V	CHD1JK30B271
C919	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C920	CHIP CERAMIC CAP. B K 270pF/50V	CHD1JK30B271
C921	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C922	CHIP CERAMIC CAP. B K 270pF/50V	CHD1JK30B271
C923	CHIP CERAMIC CAP. F Z 1 μ F/10V	CHD1AZ30F105
C924	CHIP CERAMIC CAP. B K 270pF/50V	CHD1JK30B271
CONNECTORS		
CN01	TERMINAL PRINTBORD PIN MS-PIN155155	JTEA001CHY01
CN54	PH CONNECTOR TOP 4P B4B-PH-K-S (LF)(SN)	J3PHC04JG029
CN101A	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001

Ref. No.	Description	Part No.
CN102A	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001
CN103A	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001
CN104A	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001
CN701	PH CONNECTOR TOP 12P B12B-PH-K-S(LF)(SN)	J3PHC12JG029
CN702	PH CONNECTOR TOP 10P B10B-PH-K-S(LF)(SN)	J3PHC10JG029
DIODES		
D31	ZENER DIODE MTZJT-7733B or	QDTB00MTZJ33
	ZENER DIODE DZ-33BSBT265	NDTB00DZ33BS
D500	ZENER DIODE MTZJT-7712B or	QDTB00MTZJ12
	ZENER DIODE DZ-12BSBT265	NDTB00DZ12BS
D501	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D502	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D503	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D504	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D505	ZENER DIODE MTZJT-7727B or	QDTB00MTZJ27
	ZENER DIODE DZ-27BSBT265	NDTB00DZ27BS
D506	DIODE 1ZC33(Q)	QDLZ001ZC33Q
D507	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D508	DIODE SCHOTTKY YG802C10R	QDQZYG802C10
D509	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D510	DIODE FR104-B or	NDLZ000FR104
	DIODE FR104BB	NDL1000FR104
D511	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D514	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D516	ZENER DIODE MTZJT-776.8B or	QDTB0MTZJ6R8
	ZENER DIODE DZ-6.8BSBT265	NDTB0DZ6R8BS
D517	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D531	ZENER DIODE MTZJT-776.8B or	QDTB0MTZJ6R8
	ZENER DIODE DZ-6.8BSBT265	NDTB0DZ6R8BS
D534	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D535	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D536	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D537	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D538	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D540	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D541	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D542	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D543	ZENER DIODE MTZJT-774.7B or	QDTB0MTZJ4R7
	ZENER DIODE DZ-4.7BSBT265	NDTB0DZ4R7BS
D544	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D545	DIODE 1ZC13(Q)	QDLZ001ZC13Q
D546	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D547	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D548	RECTIFIER DIODE ERA22-02	QDPZ0ERA2202
D549	SCHOTTKY BARRIER DIODE ERA81-004Q	QDLZRA81004Q
D550	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP

Ref. No.	Description	Part No.
D551	DIODE ZENER 1ZB8.2(Q)	QDLZ01ZB8R2Q
D553	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D554	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D556	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D558	ZENER DIODE MTZJT-7739B or	QDTB00MTZJ39
	ZENER DIODE DZ-39BSBT265	NDTB00DZ39BS
D560	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D561	SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D562	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D564	RECTIFIER DIODE FR202-B/P or	NDQZ000FR202
	FAST RECOVERY DIODE FR202	NDWZ000FR202
D565	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D566	SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D567	SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D568	DIODE 1ZC43(Q)	QDLZ001ZC43Q
D569	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D570	SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D571	SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D572	SCHOTTKY BARRIER DIODE ERB81-004 or	AERB81004***
	SCHOTTKY BARRIER DIODE 21DQ04	QDQZ0021DQ04
D573	DIODE FR154 or	NDLZ000FR154
	FAST RECOVERY DIODE ERB44-02 or	QDPZ0ERB4402
	DIODE FR154BD	NDL1000FR154
D574	DIODE ZENER 1ZC27(Q)	QDLZ001ZC27Q
D575	DIODE FR154 or	NDLZ000FR154
	FAST RECOVERY DIODE ERB44-02 or	QDPZ0ERB4402
	DIODE FR154BD	NDL1000FR154
D601	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D602	ZENER DIODE MTZJT-778.2B or	QDTB0MTZJ8R2
	ZENER DIODE DZ-8.2BSBT265	NDTB0DZ8R2BS
D603	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D604	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D605	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D606△	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
△	SWITCHING DIODE 1N4148	NDTZ001N4148
D607△	DIODE ZENER 1ZC27(Q)	QDLZ001ZC27Q
△	DIODE ZENER 1ZC18(Q)	QDLZ001ZC18Q
D610△	DIODE 1N5399-B/P or	NDLZ001N5399
△	DIODE 1N5397-B or	NDLZ001N5397
△	RECTIFIER DIODE ERB12-06 or	QDQZ0ERB1206
△	DIODE 1N5399BE	NDL1001N5399
D611△	DIODE 1N5399-B/P or	NDLZ001N5399
△	DIODE 1N5397-B or	NDLZ001N5397
△	RECTIFIER DIODE ERB12-06 or	QDQZ0ERB1206
△	DIODE 1N5399BE	NDL1001N5399
D612△	DIODE 1N5399-B/P or	NDLZ001N5399
△	DIODE 1N5397-B or	NDLZ001N5397
△	RECTIFIER DIODE ERB12-06 or	QDQZ0ERB1206
△	DIODE 1N5399BE	NDL1001N5399
D613△	DIODE 1N5399-B/P or	NDLZ001N5399
△	DIODE 1N5397-B or	NDLZ001N5397
△	RECTIFIER DIODE ERB12-06 or	QDQZ0ERB1206
△	DIODE 1N5399BE	NDL1001N5399
D631	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D632	ZENER DIODE MTZJT-775.6B or	QDTB0MTZJ5R6
	ZENER DIODE DZ-5.6BSBT265	NDTB0DZ5R6BS

Ref. No.	Description	Part No.
D633	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	SWITCHING DIODE 1N4148	NDTZ001N4148
D634△	DIODE ZENER 1ZC27(Q)	QDLZ001ZC27Q
D635△	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
△	SWITCHING DIODE 1N4148	NDTZ001N4148
D636△	DIODE ZENER 1ZC18(Q)	QDLZ001ZC18Q
D637	DIODE TRANSIENT VOLTAGE SUPPRE P6KE440ABE	NDLZP6KE440A
D638	DIODE FAST RECOVERY FR157	NDLZ000FR157
D639	DIODE TRANSIENT VOLTAGE SUPPRE P6KE440ABE	NDLZP6KE440A
D640	DIODE FAST RECOVERY FR157	NDLZ000FR157
D701	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D702	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D800	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D801	ZENER DIODE MTZJT-7710B or	QDTB00MTZJ10
	ZENER DIODE DZ-10BSBT265	NDTB00DZ10BS
D802	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D803	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D810	SWITCHING DIODE 1SS400 or	-----
	SWITCHING DIODE KDS160E-RTK/P	-----
D811	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D831	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D970	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D971	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D972	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D973	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D974	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D975	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D976	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D977	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D978	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D979	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D980	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D981	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D982	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D983	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D984	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D985	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D986	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D987	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
D988	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6

Ref. No.	Description	Part No.
D989	ZENER DIODE EDZTE61 5.6B or	QD1B00EDZ5R6
	DIODE ZENER SMD 015AZ5.6 Y	QD1Y015AZ5R6
ICS		
IC513	REGULATOR(PB FREE) PQ033EF01SZH	QSZBA0SSH060
IC514	REGULATOR(PB FREE) PQ033EF01SZH	QSZBA0SSH060
IC515	IC VOLTAGE REGULATOR 5V KIA7805API/P	NSZBA0SJY041
IC516	VOLTAGE REGULATOR PQ070XF01SZH	QSZBA0SSH054
IC531	REGULATOR PQ018EF01SZH	QSZBA0SSH075
IC532	REGULATOR IC(3.5V) PQ035ZN1HZPH	QSZBA0TSH078
IC601	PHOTOCOUPLER LTV-817C-F	NPEC0LT817F
IC602	PHOTOCOUPLER LTV-817C-F	NPEC0LT817F
IC631	PHOTOCOUPLER LTV-817C-F	NPEC0LT817F
IC701	IC INTERFACE R2S1100TFP	QSZBA0RHT054
IC801	AUDIO POWER IC AN17805A	QSZBA0SMS007
IC851	IC AUDIO PROCESSOR MSP3417G-QG-B8-V3	NSZBA0SP3005
COILS		
L31	INDUCTOR 22μH-K-5FT	LLARKBSTU220
L503	COIL CHOKE 5.6μH	LLC5R6MMS002
L504	COIL CHOKE 5.6μH	LLC5R6MMS002
L505	PCB JUMPER D0.6-P5.0	JW5.0T
L540	INDUCTOR 220μH-J-26T	LLAXJATTU221
L601△	LINE FILTER JLB2481 or	LLEG0Z0XB005
△	LINE FILTER ST0606ET24-009	LLEG0Z0Y2019
L602△	LINE FILTER JLB2481 or	LLEG0Z0XB005
△	LINE FILTER ST0606ET24-009	LLEG0Z0Y2019
L603	CHOKE COIL ETQR42T041B	LLEE0Z0MS002
L701	INDUCTOR 12μH-J-26T	LLAXJATTU120
L702	INDUCTOR 100μH-K-5FT	LLARKBSTU101
L703	INDUCTOR 100μH-K-5FT	LLARKBSTU101
L704	INDUCTOR 100μH-K-5FT	LLARKBSTU101
L705	INDUCTOR 100μH-J-26T	LLAXJATTU101
L706	INDUCTOR 100μH-J-26T	LLAXJATTU101
L707	INDUCTOR 12μH-J-26T	LLAXJATTU120
L852	INDUCTOR 18μH-K-26T	LLAXKATTU180
L853	INDUCTOR 10μH-K-26T	LLAXKATTU100
L854	INDUCTOR 10μH-K-26T	LLAXKATTU100
L855	PCB JUMPER D0.6-P5.0	JW5.0T
TRANSISTORS		
Q501	TRANSISTOR KTC3199-GR-AT/P or	NQS4KTC3199P
	TRANSISTOR KTC3198-GR-AT/P or	NQS4KTC3198P
	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
Q502	TRANSISTOR(PB FREE) KTC2026-Y/P	NQEYKTC2026P
Q503	TRANSISTOR KTC3199-GR-AT/P or	NQS4KTC3199P
	TRANSISTOR KTC3198-GR-AT/P or	NQS4KTC3198P
	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
Q507	TRANSISTOR KTC3199-GR-AT/P or	NQS4KTC3199P
	TRANSISTOR KTC3198-GR-AT/P or	NQS4KTC3198P
	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
Q508	TRANSISTOR KTC3199-GR-AT/P or	NQS4KTC3199P
	TRANSISTOR KTC3198-GR-AT/P or	NQS4KTC3198P
	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
Q510	TRANSISTOR S2Y52(FUNAI Q H)	QQWZ00S2Y52Q
Q512	NPN TRANSISTOR KRC103M-AT/P or	NQSZKRC103MP
	RES. BUILT-IN TRANSISTOR BA1F4M-T	QQSZ00BA1F4M
Q531	TRANSISTOR KTC3199-GR-AT/P or	NQS4KTC3199P
	TRANSISTOR KTC3198-GR-AT/P or	NQS4KTC3198P
	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785

Ref. No.	Description	Part No.
Q532	PNP TRANSISTOR POWER 2SA1887(F) or TRANSISTOR 2SA1931(Q)	QQWZ2SA1887F QQZ2SA1931Q
Q533	TRANSISTOR KTC3199-GR-AT/P or TRANSISTOR KTC3198-GR-AT/P or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J)	NQS4KTC3199P NQS4KTC3198P QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785
Q534	NPN TRANSISTOR KRC103M-AT/P or RES. BUILT-IN TRANSISTOR BA1F4M-T	NQSZKRC103MP QQSZ00BA1F4M
Q601△	TRANSISTOR 2SC2120-O(TE2 F T) or TRANSISTOR 2SC2120-Y(TE2 F T)	QQS02SC2120F QQSY2SC2120F
Q602	TRANSISTOR KTC3199-GR-AT/P or TRANSISTOR KTC3198-GR-AT/P or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J)	NQS4KTC3199P NQS4KTC3198P QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785
Q603△	FET MOS 2SK3799(Q)	QFQZ2SK3799Q
Q631△	TRANSISTOR 2SC2120-O(TE2 F T) or TRANSISTOR 2SC2120-Y(TE2 F T)	QQS02SC2120F QQSY2SC2120F
Q632△	MOS FET 2SK3798(Q)	QFWZ2SK3798Q
Q701	RES. BUILT-IN TRANSISTOR KRA103M-AT/P or RES. BUILT-IN TRANSISTOR BN1F4M-T	NQSZ0KRA103M QQSZ00BN1F4M
Q702	TRANSISTOR KTA1267-GR-AT/P or TRANSISTOR KTA-1266-GR-AT/P or TRANSISTOR 2SA1175(F) or TRANSISTOR 2SA1318(T)-AANP or TRANSISTOR 2SA1318(U)-AANP or TRANSISTOR 2SA1015-GR(TE2 F T)	NQS1KTA1267P NQS4KTA1266P QQSF02SA1175 2SA1318TZ 2SA1318UZ QQS12SA1015F
Q703	TRANSISTOR KTC3199-GR-AT/P or TRANSISTOR KTC3198-GR-AT/P or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J)	NQS4KTC3199P NQS4KTC3198P QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785
Q704	TRANSISTOR KTC3199-GR-AT/P or TRANSISTOR KTC3198-GR-AT/P or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J)	NQS4KTC3199P NQS4KTC3198P QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785
Q705	TRANSISTOR KTC3199-GR-AT/P or TRANSISTOR KTC3198-GR-AT/P or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J)	NQS4KTC3199P NQS4KTC3198P QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785
Q801	NPN TRANSISTOR KRC103M-AT/P or RES. BUILT-IN TRANSISTOR BA1F4M-T	NQSZKRC103MP QQSZ00BA1F4M
Q804	PNP TRANSISTOR POWER 2SA1887(F) or TRANSISTOR 2SA1931(Q)	QQWZ2SA1887F QQZ2SA1931Q
Q805	TRANSISTOR KTA1267-GR-AT/P or TRANSISTOR KTA-1266-GR-AT/P or TRANSISTOR 2SA1175(F) or TRANSISTOR 2SA1318(T)-AANP or TRANSISTOR 2SA1318(U)-AANP or TRANSISTOR 2SA1015-GR(TE2 F T)	NQS1KTA1267P NQS4KTA1266P QQSF02SA1175 2SA1318TZ 2SA1318UZ QQS12SA1015F
Q806	TRANSISTOR 2SC2120-O(TE2 F T) or TRANSISTOR 2SC2120-Y(TE2 F T)	QQS02SC2120F QQSY2SC2120F
RESISTORS		
R30	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W J 0 Ω	RRXAJR5Z0000 RRXA000YF002
R31	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R32	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R33	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R39	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W J 0 Ω	RRXAJR5Z0000 RRXA000YF002
R501	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002

Ref. No.	Description	Part No.
R502	CHIP RES. 1/10W J 3.3k Ω or RES CHIP 1608 1/10W J 3.3k Ω	RRXAJR5Z0332 RRXA332YF002
R503	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R504	CHIP RES. 1/10W J 3.3k Ω or RES CHIP 1608 1/10W J 3.3k Ω	RRXAJR5Z0332 RRXA332YF002
R505	CHIP RES. 1/10W F 6.8k Ω or CHIP RES. 1/10W F 6.8k Ω or RES CHIP 1608 1/10W F 6.80k Ω	RRXAFR5H6801 RRXAFR5Z6801 RTW6801YF002
R506	CHIP RES. 1/10W F 22k Ω or CHIP RES.(1608) 1/10W F 22k Ω or RES CHIP 1608 1/10W F 22.0k Ω	RRXAFR5H2202 RRXAFR5Z2202 RTW2202YF002
R507	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R508	CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R509	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R510	CARBON RES. 1/4W J 1.5k Ω	RCX4JATZ0152
R511	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R512	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R513	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R514	CHIP RES. 1/10W J 15k Ω or RES CHIP 1608 1/10W J 15k Ω	RRXAJR5Z0153 RRXA153YF002
R515	CHIP RES. 1/10W J 3.9k Ω or RES CHIP 1608 1/10W J 3.9k Ω	RRXAJR5Z0392 RRXA392YF002
R516	CHIP RES. 1/10W F 2.2k Ω or CHIP RES.(1608) 1/10W F 2.2k Ω or RES CHIP 1608 1/10W F 2.20k Ω	RRXAFR5H2201 RRXAFR5Z2201 RTW2201YF002
R517	PCB JUMPER D.0.6-P5.0	JW5.0T
R518	CARBON RES. 1/4W J 820 Ω	RCX4JATZ0821
R519	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R521	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R524	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R525	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R526	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R527	CARBON RES. 1/4W J 150 Ω	RCX4JATZ0151
R531	PCB JUMPER D.0.6-P5.0	JW5.0T
R533	PCB JUMPER D.0.6-P5.0	JW5.0T
R535	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R536	CHIP RES. 1/10W J 47k Ω or RES CHIP 1608 1/10W J 47k Ω	RRXAJR5Z0473 RRXA473YF002
R539	CHIP RES. 1/10W J 4.7k Ω or RES CHIP 1608 1/10W J 4.7k Ω	RRXAJR5Z0472 RRXA472YF002
R540	CARBON RES. 1/4W J 47 Ω	RCX4JATZ0470
R541	CARBON RES. 1/4W J 47 Ω	RCX4JATZ0470
R542	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R544	CHIP RES. 1/10W J 4.7k Ω or RES CHIP 1608 1/10W J 4.7k Ω	RRXAJR5Z0472 RRXA472YF002
R545	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R546	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R547	CARBON RES. 1/4W J 5.6k Ω	RCX4JATZ0562
R548	CARBON RES. 1/4W J 5.6k Ω	RCX4JATZ0562
R549	CHIP RES. 1/10W F 470 Ω or CHIP RES.(1608) 1/10W F 470 Ω or RES CHIP 1608 1/10W F 470 Ω	RRXAFR5H4700 RRXAFR5Z4700 RTW4700YF002
R550	CHIP RES. 1/10W F 2.2k Ω or CHIP RES.(1608) 1/10W F 2.2k Ω or RES CHIP 1608 1/10W F 2.20k Ω	RRXAFR5H2201 RRXAFR5Z2201 RTW2201YF002
R551	CARBON RES. 1/4W J 820 Ω	RCX4JATZ0821
R553	CHIP RES. 1/10W F 1.6k Ω or RES CHIP 1608 1/10W F 1.6k Ω	RRXAFR5H1601

Ref. No.	Description	Part No.
	CHIP RES.(1608) 1/10W F 1.6k Ω or	RRXAFR5Z1601
	RES CHIP 1608 1/10W F 1.60k Ω	RTW1601YF002
R554	CHIP RES. 1/10W F 1.0k Ω or	RRXAFR5H1001
	CHIP RES. 1/10W F 1kΩ or	RRXAFR5Z1001
	RES CHIP 1608 1/10W F 1.00k Ω	RTW1001YF002
R555	METAL OXIDE FILM RES. 1W J 1k Ω or	RN01102ZU001
	METAL OXIDE FILM RES. 1W J 1k Ω or	RN01102KE010
	METAL OXIDE FILM RES. 1W J 1k Ω	RN01102DP003
R556	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R557	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R558	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R559	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R561	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R562	CHIP RES.(1608) 1/10W 0 Ω or	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
R565	CHIP RES.(1608) 1/10W 0 Ω or	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
R566	CHIP RES.(1608) 1/10W 0 Ω or	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
R571	CHIP RES. 1/10W J 10k Ω or	RRXAJR5Z0103
	RES CHIP 1608 1/10W J 10k Ω	RRXA103YF002
R572	CARBON RES. 1/4W J 12k Ω	RCX4JATZ0123
R574	METAL OXIDE FILM RES. 2W J 0.56 Ω or	RN02R56KE009
	METAL OXIDE FILM RES. 2W J 0.56 Ω	RN02R56DP004
R575	CHIP RES. 1/10W F 5.6k Ω or	RRXAFR5H5601
	CHIP RES. 1/10W F 5.6k Ω or	RRXAFR5Z5601
	RES CHIP 1608 1/10W F 5.60k Ω	RTW5601YF002
R576	CHIP RES. 1/10W F 1.8k Ω or	RRXAFR5H1801
	CHIP RES. 1/10W F 1.8k Ω or	RRXAFR5Z1801
	RES CHIP 1608 1/10W F 1.80k Ω	RTW1801YF002
R577	METAL OXIDE FILM RES. 2W J 1 Ω	RN021R0DP004
R578	CHIP RES. 1/10W J 2.2k Ω or	RRXAJR5Z0222
	RES CHIP 1608 1/10W J 2.2k Ω	RRXA222YF002
R579	CARBON RES. 1/4W J 4.7k Ω	RCX4JATZ0472
R580	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R586	CHIP RES. 1/10W F 2.2k Ω or	RRXAFR5H2201
	CHIP RES.(1608) 1/10W F 2.2k Ω or	RRXAFR5Z2201
	RES CHIP 1608 1/10W F 2.20k Ω	RTW2201YF002
R588	PCB JUMPER D0.6-P5.0	JW5.0T
R590	CARBON RES. 1/4W J 1kΩ	RCX4JATZ0102
R591	CHIP RES. 1/10W J 270k Ω or	RRXAJR5Z0274
	RES CHIP 1608 1/10W J 270k Ω	RRXA274YF002
R592	CARBON RES. 1/4W J 27k Ω	RCX4JATZ0273
R594	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R595	CHIP RES. 1/10W J 560 Ω or	RRXAJR5Z0561
	RES CHIP 1608 1/10W J 560 Ω	RRXA561YF002
R603	CARBON RES. 1/4W J 180 Ω	RCX4JATZ0181
R604	CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R605	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R606	CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R607	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R608	CARBON RES. 1/4W J 150 Ω	RCX4JATZ0151
R609△	PCB JUMPER D0.6-P5.0	JW5.0T
R610	CARBON RES. 1/4W J 820k Ω	RCX4JATZ0824
R611	CARBON RES. 1/4W J 820k Ω	RCX4JATZ0824
R612	PCB JUMPER D0.6-P5.0	JW5.0T
R613	CARBON RES. 1/4W J 220k Ω	RCX4JATZ0224
R614	PCB JUMPER D0.6-P5.0	JW5.0T
R615△	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R616	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564

Ref. No.	Description	Part No.
R617	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R618	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R620△	RES METAL OXIDE 3W 0.47 Ω	RN03JZPZ0R47
R621△	CEMENT RESISTOR 5W J 0.82 Ω	RW05R82PAK10
R622△	CARBON RES. 1/2W J 3.3M Ω or	RCX2335DP001
△	GLASS GLAZE RES. 1/2W J 3.3M Ω	RXX2JZLZ0335
R623	PCB JUMPER D0.6-P5.0	JW5.0T
R632	CARBON RES. 1/4W J 56 Ω	RCX4JATZ0560
R633	CARBON RES. 1/4W J 270 Ω	RCX4JATZ0271
R634	CARBON RES. 1/4W J 820 Ω	RCX4JATZ0821
R635	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
R636	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R637	CARBON RES. 1/4W J 150 Ω	RCX4JATZ0151
R638	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R639	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R640	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R641	CARBON RES. 1/4W J 560k Ω	RCX4JATZ0564
R643△	RES METAL OXIDE 3W 0.68 Ω	RN03JZPZ0R68
R701	CARBON RES. 1/4W J 22 Ω	RCX4JATZ0220
R702	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R703	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R704	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R705	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R706	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R707	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R708	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R709	CHIP RES. 1/10W J 12k Ω or	RRXAJR5Z0123
	RES CHIP 1608 1/10W J 12k Ω	RRXA123YF002
R710	CHIP RES. 1/10W J 8.2k Ω or	RRXAJR5Z0822
	RES CHIP 1608 1/10W J 8.2k Ω	RRXA822YF002
R711	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R712	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R713	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R714	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R715	CHIP RES.(1608) 1/10W 0 Ω or	RRXAJR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
R716	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R717	CHIP RES. 1/10W J 470 Ω or	RRXAJR5Z0471
	RES CHIP 1608 1/10W J 470 Ω	RRXA471YF002
R718	CHIP RES. 1/10W J 1M Ω or	RRXAJR5Z0105
	RES CHIP 1608 1/10W J 1.0M Ω	RRXA105YF002
R719	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R720	CHIP RES. 1/10W J 1k Ω or	RRXAJR5Z0102
	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102YF002
R721	CHIP RES. 1/10W J 1k Ω or	RRXAJR5Z0102
	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102YF002
R722	CHIP RES. 1/10W J 47k Ω or	RRXAJR5Z0473
	RES CHIP 1608 1/10W J 47k Ω	RRXA473YF002
R727	CHIP RES. 1/10W J 75 Ω or	RRXAJR5Z0750
	RES CHIP 1608 1/10W J 75 Ω	RRXA750YF002
R728	CHIP RES. 1/10W J 10k Ω or	RRXAJR5Z0103
	RES CHIP 1608 1/10W J 10k Ω	RRXA103YF002
R730	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002

Ref. No.	Description	Part No.
R731	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R732	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R733	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R734	CHIP RES. 1/10W J 12k Ω or RES CHIP 1608 1/10W J 12k Ω	RRXAJR5Z0123 RRXA123YF002
R735	CHIP RES. 1/10W J 8.2k Ω or RES CHIP 1608 1/10W J 8.2k Ω	RRXAJR5Z0822 RRXA822YF002
R736	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R737	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R738	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R739	CHIP RES.(1608) 1/10W F 75 Ω or CHIP RES. 1/10W F 75 Ω or	RRXAFR5H75R0 RRXAFR5Z75R0
R740	RES CHIP 1608 1/10W F 75 Ω or CHIP RES. 1/10W F 75 Ω or	RTW75R0YF002 RRXAJR5Z0101
R741	CHIP RES.(1608) 1/10W F 75 Ω or CHIP RES. 1/10W F 75 Ω or	RRXAFR5H75R0 RRXAFR5Z75R0
R744	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R745	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R746	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R747	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R748	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R749	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R750	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R751	CHIP RES. 1/10W J 1k Ω or RES CHIP 1608 1/10W J 1.0k Ω	RRXAJR5Z0102 RRXA102YF002
R752	CHIP RES. 1/10W J 75 Ω or RES CHIP 1608 1/10W J 75 Ω	RRXAJR5Z0750 RRXA750YF002
R760	CHIP RES. 1/10W J 820 Ω or RES CHIP 1608 1/10W J 820 Ω	RRXAJR5Z0821 RRXA821YF002
R761	CHIP RES. 1/10W J 820 Ω or RES CHIP 1608 1/10W J 820 Ω	RRXAJR5Z0821 RRXA821YF002
R762	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R763	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R767	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W 0 Ω	RRXAJR5Z0000 RRXA000YF002
R770	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W 0 Ω	RRXAJR5Z0000 RRXA000YF002
R771	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W 0 Ω	RRXAJR5Z0000 RRXA000YF002
R772	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R800	CHIP RES.(1608) 1/10W 0 Ω or RES CHIP 1608 1/10W 0 Ω	RRXAJR5Z0000 RRXA000YF002
R801	CARBON RES. 1/4W J 47k Ω	RCX4JATZ0473
R802	CARBON RES. 1/4W J 6.8k Ω	RCX4JATZ0682
R809	CHIP RES. 1/10W J 1.2k Ω or RES CHIP 1608 1/10W J 1.2k Ω	RRXAJR5Z0122 RRXA122YF002
R810	CHIP RES. 1/10W J 1.2k Ω or RES CHIP 1608 1/10W J 1.2k Ω	RRXAJR5Z0122 RRXA122YF002
R811	CHIP RES. 1/10W J 1k Ω or	RRXAJR5Z0102

Ref. No.	Description	Part No.
R812	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102YF002
R813	CHIP RES. 1/10W J 4.7k Ω or RES CHIP 1608 1/10W J 4.7k Ω	RRXAJR5Z0472 RRXA472YF002
R814	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R815	CHIP RES. 1/10W J 15k Ω or RES CHIP 1608 1/10W J 15k Ω	RRXAJR5Z0153 RRXA153YF002
R816	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R821	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R822	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R823	CHIP RES. 1/10W J 8.2k Ω or RES CHIP 1608 1/10W J 8.2k Ω	RRXAJR5Z0822 RRXA822YF002
R827	METAL OXIDE FILM RES. 2W J 0.33 Ω or METAL OXIDE FILM RES. 2W J 0.33 Ω or	RN02R33ZU001 RN02R33KE010
R828	METAL OXIDE FILM RES. 2W J 0.33 Ω or CHIP RES. 1/10W J 100 Ω or	RN02R33DP004 RRXAJR5Z0101
R829	RES CHIP 1608 1/10W J 10k Ω or CHIP RES. 1/10W J 10k Ω or	RRXA103YF002 RRXA103YF002
R833	METAL OXIDE FILM RES. 2W J 560 Ω or METAL OXIDE FILM RES. 2W J 560 Ω or	RN02561ZU001 RN02561KE010
R834	METAL OXIDE FILM RES. 2W J 560 Ω or METAL OXIDE FILM RES. 2W J 0.27 Ω or	RN02561DP004 RN02R27ZU001
R851	RES CHIP 1608 1/10W J 1.2k Ω or CHIP RES. 1/10W J 1.2k Ω or	RRXA122YF002 RRXAJR5Z0122
R852	RES CHIP 1608 1/10W J 100 Ω or CHIP RES. 1/10W J 100 Ω or	RRXA101YF002 RRXA101YF002
R853	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R854	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R855	CARBON RES. 1/4W J 6.8k Ω	RCX4JATZ0682
R858	CHIP RES. 1/10W J 100 Ω or RES CHIP 1608 1/10W J 100 Ω	RRXAJR5Z0101 RRXA101YF002
R859	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R860	CHIP RES. 1/10W J 2.7k Ω or RES CHIP 1608 1/10W J 2.7k Ω	RRXAJR5Z0272 RRXA272YF002
R861	CHIP RES. 1/10W J 2.7k Ω or RES CHIP 1608 1/10W J 2.7k Ω	RRXAJR5Z0272 RRXA272YF002
R862	CHIP RES. 1/10W J 2.2k Ω or RES CHIP 1608 1/10W J 2.2k Ω	RRXAJR5Z0222 RRXA222YF002
R901	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R902	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R903	CHIP RES. 1/10W J 560 Ω or RES CHIP 1608 1/10W J 560 Ω	RRXAJR5Z0561 RRXA561YF002
R905	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R906	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R907	CHIP RES. 1/10W J 560 Ω or RES CHIP 1608 1/10W J 560 Ω	RRXAJR5Z0561 RRXA561YF002
R909	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R910	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA223YF002
R911	CHIP RES. 1/10W J 560 Ω or RES CHIP 1608 1/10W J 560 Ω	RRXAJR5Z0561 RRXA561YF002
R913	CHIP RES. 1/10W J 10k Ω or RES CHIP 1608 1/10W J 10k Ω	RRXAJR5Z0103 RRXA103YF002
R914	CHIP RES. 1/10W J 22k Ω or RES CHIP 1608 1/10W J 22k Ω	RRXAJR5Z0223 RRXA103YF002

Ref. No.	Description	Part No.
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R915	CHIP RES. 1/10W J 560 Ω or	RRXAJR5Z0561
	RES CHIP 1608 1/10W J 560 Ω	RRXA561YF002
R917	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R918	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R919	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R920	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R921	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R922	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R923	CHIP RES. 1/10W J 22k Ω or	RRXAJR5Z0223
	RES CHIP 1608 1/10W J 22k Ω	RRXA223YF002
R924	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R925	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R926	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R927	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
R928	CHIP RES. 1/10W J 27k Ω or	RRXAJR5Z0273
	RES CHIP 1608 1/10W J 27k Ω	RRXA273YF002
MISCELLANEOUS		
B9	HEAT SINK EAB ASSEMBLY L4300UA	1EM422612
B10	HEAT SINK PIS ASSEMBLY L0200UA or	0EM408833A
	HEAT SINK PKP ASSEMBLY L4200EA	1EM420855
B23	HEAT SINK PLT ASSEMBLY L0700UZ	1EM423290
B24	HEAT SINK EAF ASSEMBLY L5820EA	1EM423722
BC501	PCB JUMPER D0.6-P5.0	JW5.0T
BC502	PCB JUMPER D0.6-P5.0	JW5.0T
BC503	PCB JUMPER D0.6-P5.0	JW5.0T
BC507	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC508	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC534	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC535	PCB JUMPER D0.6-P5.0	JW5.0T
BC536	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC587	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC589	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC603	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC604	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC632	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
BC633	BEAD INDUCTOR FBR07HA121TB-00	LLBF00ZTU021
F601 Δ	FUSE 4A/250V(PB FREE) 0215004.MXP	PBGZ20BAG021
FH608	FUSE HOLDER MSF-015	XH01Z00LY001
FH609	FUSE HOLDER MSF-015	XH01Z00LY001
JK701	RCA JACK RCA-610CCT-02B-06	JYRL050YUQ10
JK702	JACK SW RCA PCB L YKC21-4399V	JYRL030JC011
JK703	JACK SW DIN PCB L DIN-435C	JYEL040YUQ02
JK704	JACK RGB PCB L SC-201Z4	JXGL420SNJ01
JS501	PCB JUMPER D0.6-P5.0	JW5.0T
JS502	PCB JUMPER D0.6-P15.0	JW15.0T
L4	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
SA601 Δ	SURGE ABSORBER 470V+-10PER or	NVQZ10D471KB
Δ	VARISTOR 10D 471K SVR	NVQZVR10D471
SA606 Δ	SURGE ABSORBER 470V+-10PER or	NVQZ10D471KB
Δ	VARISTOR 10D 471K SVR	NVQZVR10D471
T601 Δ	TRANS POWER ETS49BP186ND	LTT4PC0MS001
T631 Δ	TRANS POWER 6739	LTT3PC0KT013
TM601	EYELET TYPE D-1	0VM406868
TM602	EYELET TYPE D-1	0VM406868
X851	XTAL 18.432MHz	FXD186LLN001

FUNCTION CBA

Ref. No.	Description	Part No.
	FUNCTION CBA Consists of the following:	-----
CAPACITORS		
C11	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C12	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C21	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
CONNECTORS		
CN10	PH CONNECTOR SIDE 2P S2B-PH-K-S(LF)(SN)	J3PHC02JG030
CN11	PH CONNECTOR SIDE 2P S2B-PH-K-S(LF)(SN)	J3PHC02JG030
CN11B	PH CONNECTOR SIDE10PIN S10B-PH-K-S (LF)(SN)	J3PHC10JG030
RESISTORS		
R11	CHIP RES. 1/10W J 1.5k Ω or	RRXAJR5Z0152
	RES CHIP 1608 1/10W J 1.5k Ω	RRXA152YF002
R12	CHIP RES. 1/10W J 1.5k Ω or	RRXAJR5Z0152
	RES CHIP 1608 1/10W J 1.5k Ω	RRXA152YF002
R13	CHIP RES. 1/10W J 2.2k Ω or	RRXAJR5Z0222
	RES CHIP 1608 1/10W J 2.2k Ω	RRXA222YF002
R14	CHIP RES. 1/10W J 2.7k Ω or	RRXAJR5Z0272
	RES CHIP 1608 1/10W J 2.7k Ω	RRXA272YF002
R15	CHIP RES. 1/10W J 4.7k Ω or	RRXAJR5Z0472
	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472YF002
R16	CHIP RES. 1/10W J 6.8k Ω or	RRXAJR5Z0682
	RES CHIP 1608 1/10W J 6.8k Ω	RRXA682YF002
R17	CHIP RES. 1/10W J 10k Ω or	RRXAJR5Z0103
	RES CHIP 1608 1/10W J 10k Ω	RRXA103YF002
R18	CHIP RES. 1/10W J 220 Ω or	RRXAJR5Z0221
	RES CHIP 1608 1/10W J 220 Ω	RRXA221YF002
R27	CHIP RES. 1/10W J 10k Ω or	RRXAJR5Z0103
	RES CHIP 1608 1/10W J 10k Ω	RRXA103YF002
R28	CHIP RES.(1608) 1/10W J 0 Ω or	RRXAZR5Z0000
	RES CHIP 1608 1/10W J 0 Ω	RRXA000YF002
SWITCHES		
SW11	TACT SWITCH SKQSAB	SST0101AL038
SW12	TACT SWITCH SKQSAB	SST0101AL038
SW13	TACT SWITCH SKQSAB	SST0101AL038
SW14	TACT SWITCH SKQSAB	SST0101AL038
SW15	TACT SWITCH SKQSAB	SST0101AL038
SW16	TACT SWITCH SKQSAB	SST0101AL038
SW17	TACT SWITCH SKQSAB	SST0101AL038
MISCELLANEOUS		
BC01	CORE(CHIP BEADS) MMZ1608A152ET	LLEC030TE002
BC02	CORE(CHIP BEADS) MMZ1608A152ET	LLEC030TE002
BC11	PCB JUMPER D0.6-P5.0	JW5.0T
LED CBA		
Ref. No.	Description	Part No.
	LED CBA Consists of the following:	-----
CAPACITORS		
C58	CHIP CERAMIC CAP F Z 0.01 μ F/50V	CHD1JZ30F103
C59	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C60	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C63	CHIP CERAMIC CAP(1608) F Z 0.1 μ F/50V	CHD1JZ30F104
C64	ELECTROLYTIC CAP. 47 μ F/10V M H7 or	CE1AMASSM470
	ELECTROLYTIC CAP. 47 μ F/10V M H7	CE1AMASSL470
CONNECTOR		
CN54B	PH CONNECTOR SIDE 5P S5B-PH-K-S(LF)(SN)	J3PHC05JG030
DIODES		
D54	LED L-53HT	NP4Z000L53HT
D55	LED 333GT/E	NPHZ00333GTE
RESISTORS		
R53	CHIP RES. 1/10W J 100 Ω or	RRXAJR5Z0101

Ref. No.	Description	Part No.
	RES CHIP 1608 1/10W J 100 Ω	RRXA101YF002
R57	CHIP RES. 1/10W J 3.3k Ω or	RRXAJR5Z0332
	RES CHIP 1608 1/10W J 3.3k Ω	RRXA332YF002
R60	CHIP RES. 1/10W J 1k Ω or	RRXAJR5Z0102
	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102YF002
R64	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
R65	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
MISCELLANEOUS		
BC52	PCB JUMPER D0.6-P5.0	JW5.0T
RCV52	PHOTO LINK MODULE KSM-712TH2E	USESJRSKK044

Ref. No.	Mark	Description	Part No.
MISCELLANEOUS			
AC601△	A,C,D	AC CORD CEE 1800MM BLACK	WAE0182LW004
AC601△	B	AC CORD BS 1800MM BLACK	WAB0182LW017
TU31		TUNER UNIT TMFE2X402A	UTUNPSGAL012