PHILIPS

LCD TV
chassis PL10.1

Service Manual

Contents

22”	22PFL3505D/F7	(Serial No. : DS1A**********)
22”	22PFL3505D/F7	(Serial No. : DS2A**********)
22”	22PFL3505D/F7	(Serial No. : XA1A**********)

110511

IMPORTANT SAFETY NOTICE

Proper service and repair is important to the safe, reliable operation of all P&F Equipment. The service procedures recommended by P&F and described in this service manual are effective methods of performing service operations. Some of these service special tools should be used when and as recommended.

It is important to note that this service manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It also is important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. P&F could not possibly know, evaluate and advice the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, P&F has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by P&F must first use all precautions thoroughly so that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

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.

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SPECIFICATIONS

< TUNER / NTSC >

ANT. Input ---------- 75 Ω Unbal., F type

Description	Condition	Unit	Nominal	Limit
1. AFT Pull-In Range	---	MHz	±2.3	±2.1
2. Synchronizing Sens.	TV.ch.4 CA.ch.31 CA.ch.87	dBμ dBμ dBμ	18 18 18	20 20 23

< TUNER / ATSC >

Description	Condition	Unit	Nominal	Limit
1. Received Freq. Range (-28dBm)	---	kHz	---	±100
2. ATSC Dynamic Range (min / max)	ch.4 ch.10 ch.41	dBm dBm dBm	--- --- ---	-76/0 -76/0 -76/+4

< LCD PANEL >

Description	Condition	Unit	Nominal	Limit
1. Native Pixel Resolution	Horizontal Vertical	pixels pixels	1366 768	--- ---
2. Brightness (w / filter)	---	cd/m^2	280	---
3. Viewing Angle	Horizontal Vertical	° °	-85 to 85 -80 to 80	--- ---

< VIDEO >

Description	Condition	Unit	Nominal	Limit
1. Over Scan	Horizontal Vertical	% %	5 5	5±5 5±5
2. Color Temperature	--- x y	°K --- ---	12000 0.272 0.278	--- ±3% ±3%
3. Resolution (composite video)	Horizontal Vertical	line line	400 350	--- ---

< AUDIO >

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

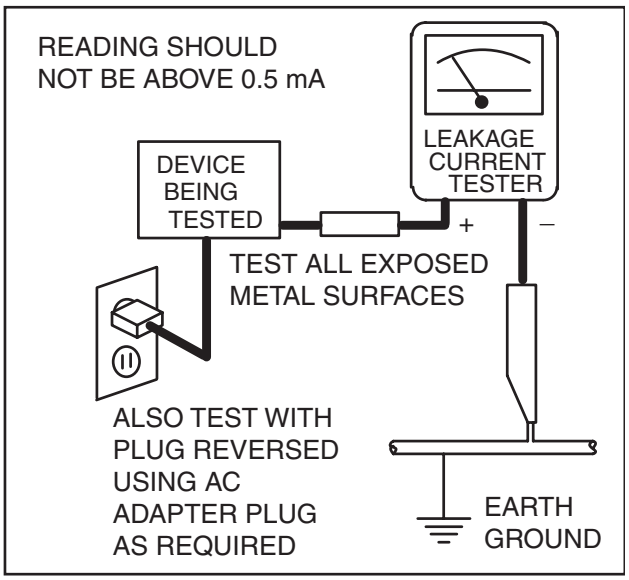
Description	Condition	Unit	Nominal	Limit
1. Audio Output Vol. Max (ATSC 0 dBfs)	Lch/Rch	W	3.3/3.3	3.0/3.0
2. Audio Distortion (NTSC)	500mW: Lch/Rch	%	0.5/0.5	2.0/2.0
3. Audio Freq. Response (NTSC)	–6dB: Lch –6dB: Rch	Hz Hz	70 to 10 k 70 to 10 k	--- ---

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 Liquid Crystal Panel 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 120 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 Liquid Crystal Panel.

3. **Design Alteration Warning -** Do not alter or add to the mechanical or electrical design of this 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 1.0 V 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 11~13 lb (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. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC supply outlet.

L. 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	Region	Clearance Distance (d), (d')
110 to 130 V	U.S.A. or Canada	≥ 3.2 mm (0.126 inches)

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

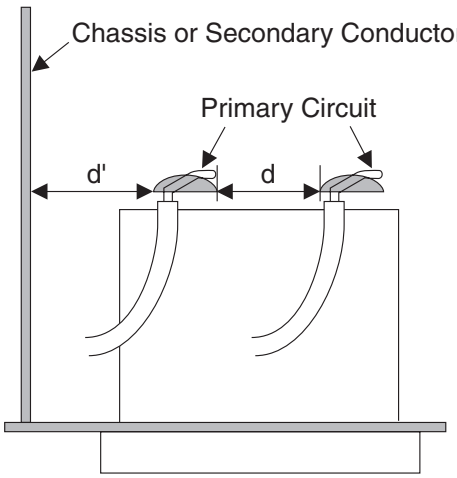


Fig. 1

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.) is lower than or equal to the specified value in the table below.

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.

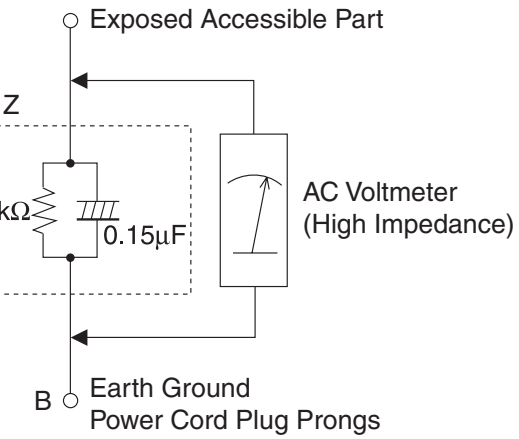


Fig. 2

Table 2: Leakage current ratings for selected areas

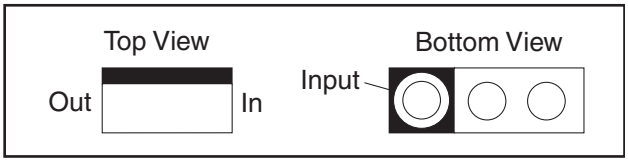
AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
110 to 130 V	U.S.A. or Canada	0.15 μF CAP. & 1.5 kΩ RES. Connected in parallel	i ≤ 0.5 mA rms	Exposed accessible parts

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

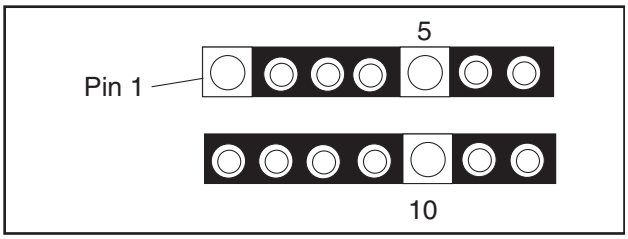
STANDARD NOTES FOR SERVICING

Circuit Board Indications

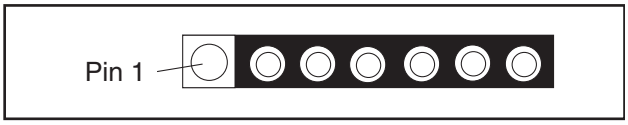
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



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

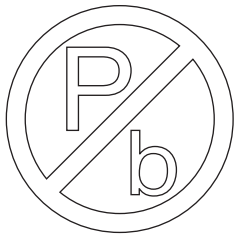


3. The 1st pin of every male connector is indicated as shown.



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)

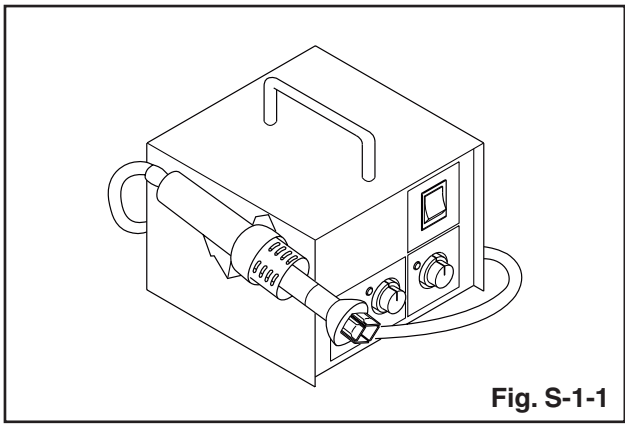


Fig. S-1-1

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.

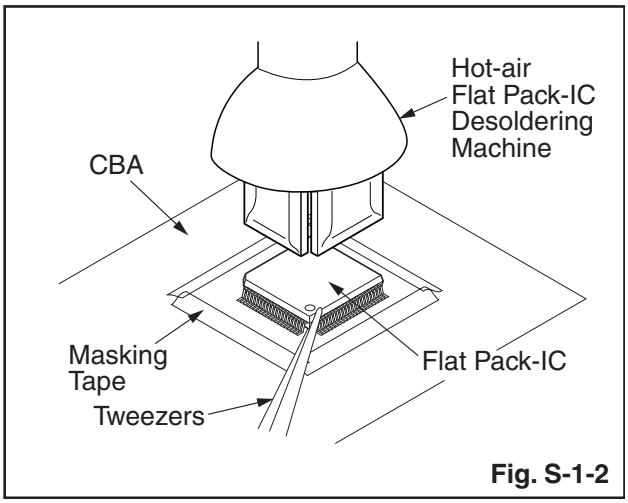


Fig. S-1-2

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)

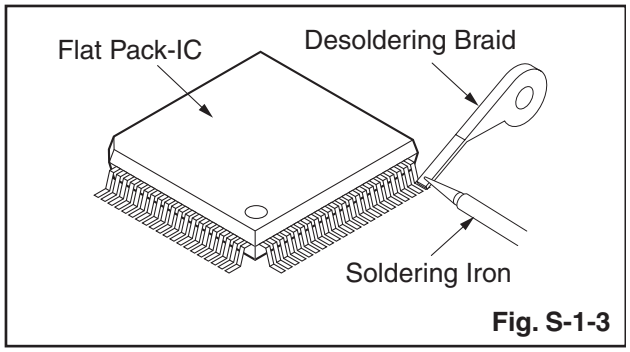


Fig. S-1-3

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)

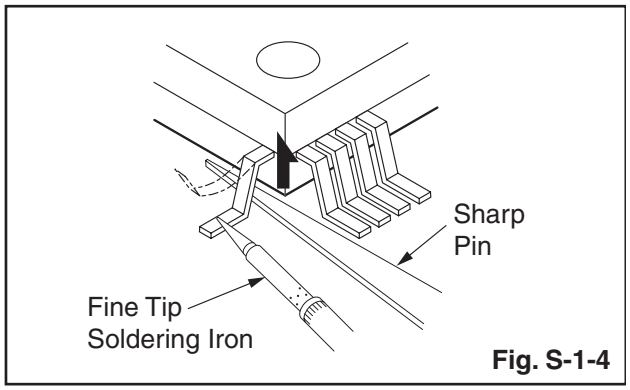


Fig. S-1-4

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.

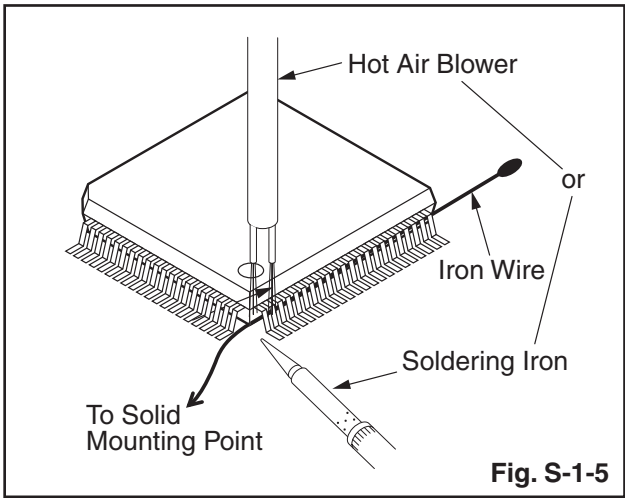


Fig. S-1-5

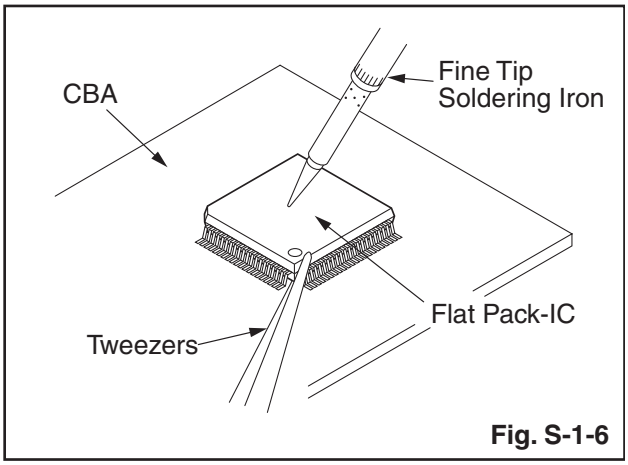


Fig. S-1-6

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 pin 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.

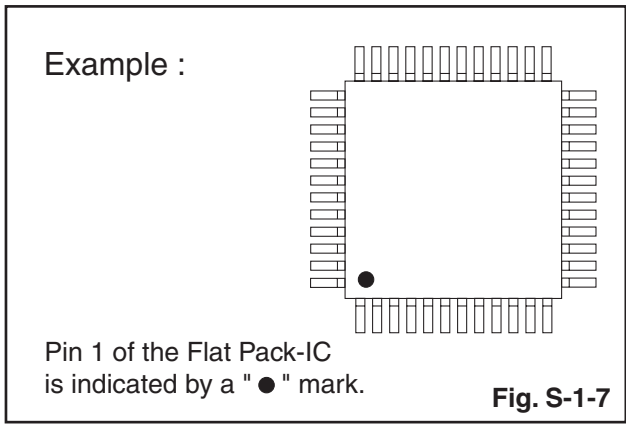


Fig. S-1-7

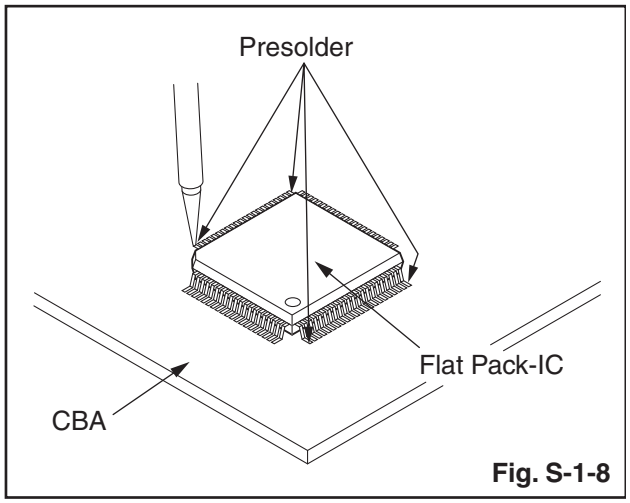


Fig. S-1-8

Instructions for Handling Semi-conductors

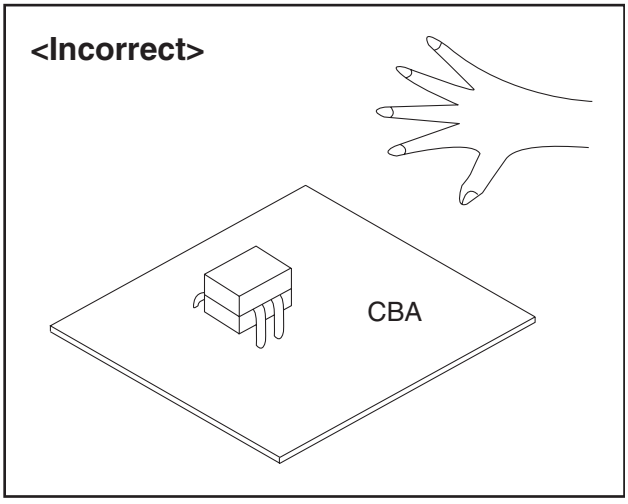
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

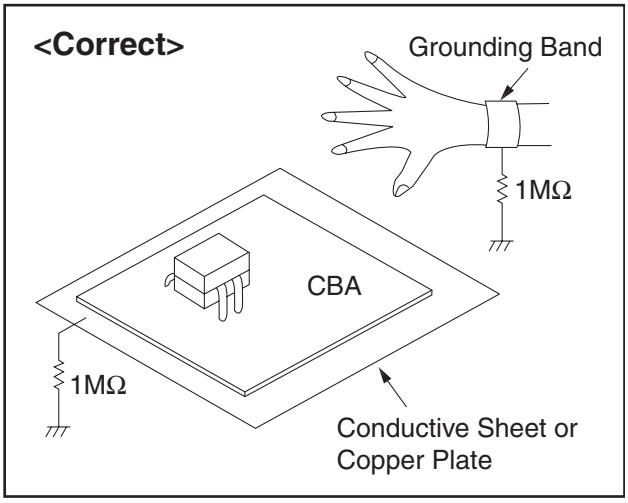
1. Ground for Human Body

Be sure to wear a grounding band (1 MΩ) 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 MΩ) 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.

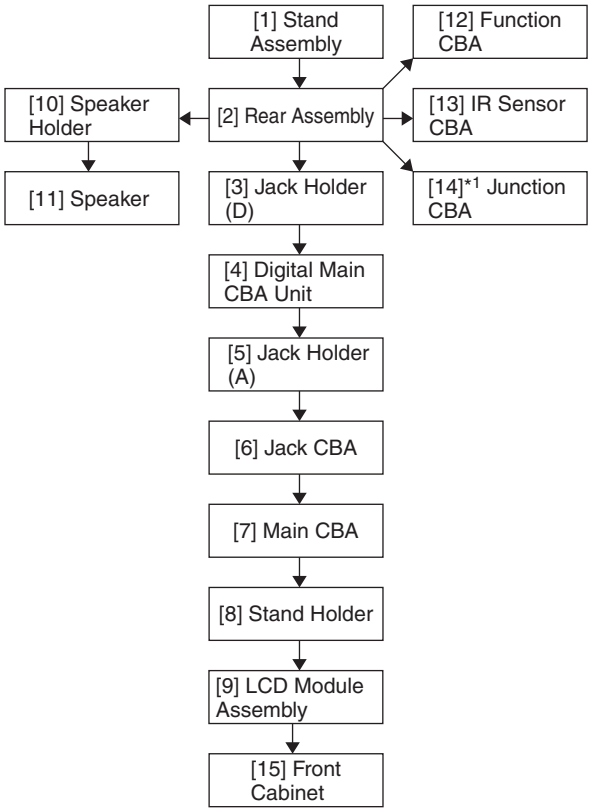




CABINET DISASSEMBLY INSTRUCTIONS

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts and the CBA in order to gain access to items 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	Fig. No.	Removal	Note
[1]	Stand Assembly	D1	4(S-1)	---
[2]	Rear Assembly	D1	9(S-2), (S-3)	---
[3]	Jack Holder(D)	D2	(S-4)	---
[4]	Digital Main CBA Unit	D2 D3	4(S-5), 4(S-6), 2(H-1), CN3701, CN3702, CN3902, Shield Box	---
[5]	Jack Holder(A)	D2	(S-7)	---
[6]	Jack CBA	D2 D3	4(S-8), CN701, CN871	---
[7]	Main CBA	D2 D3	12(S-9), CN102, CN201, CN872, CN1550, CN1650, CN1750	---
[8]	Stand Holder	D2	2(S-10), 3(S-11)	---
[9]	LCD Module Assembly	D2	----------	---
[10]	Speaker Holder	D2	4(S-12), 4(S-13), Speaker Cushion	---
[11]	Speaker	D2	----------	---
[12]	Function CBA	D2 D3	CL103B	---
[13]	IR Sensor CBA	D2 D3	(S-14), CL102A*1	---
[14]*1	Junction CBA	D2 D3	----------	---
[15]	Front Cabinet	D2	----------	---
	↓ (1)	↓ (2)	↓ (3)	↓ (4)	↓ (5)

***1: 22PFL3505D/F7 (Serial No.: DS1A)**

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.
P = Spring, L = Locking Tab, S = Screw,
H = Hex Screw, CN = Connector
e.g. 2(S-2) = two Screws of (S-2),
2(L-2) = two Locking Tabs of (L-2)

(5) Refer to the following "Reference Notes in the Table."

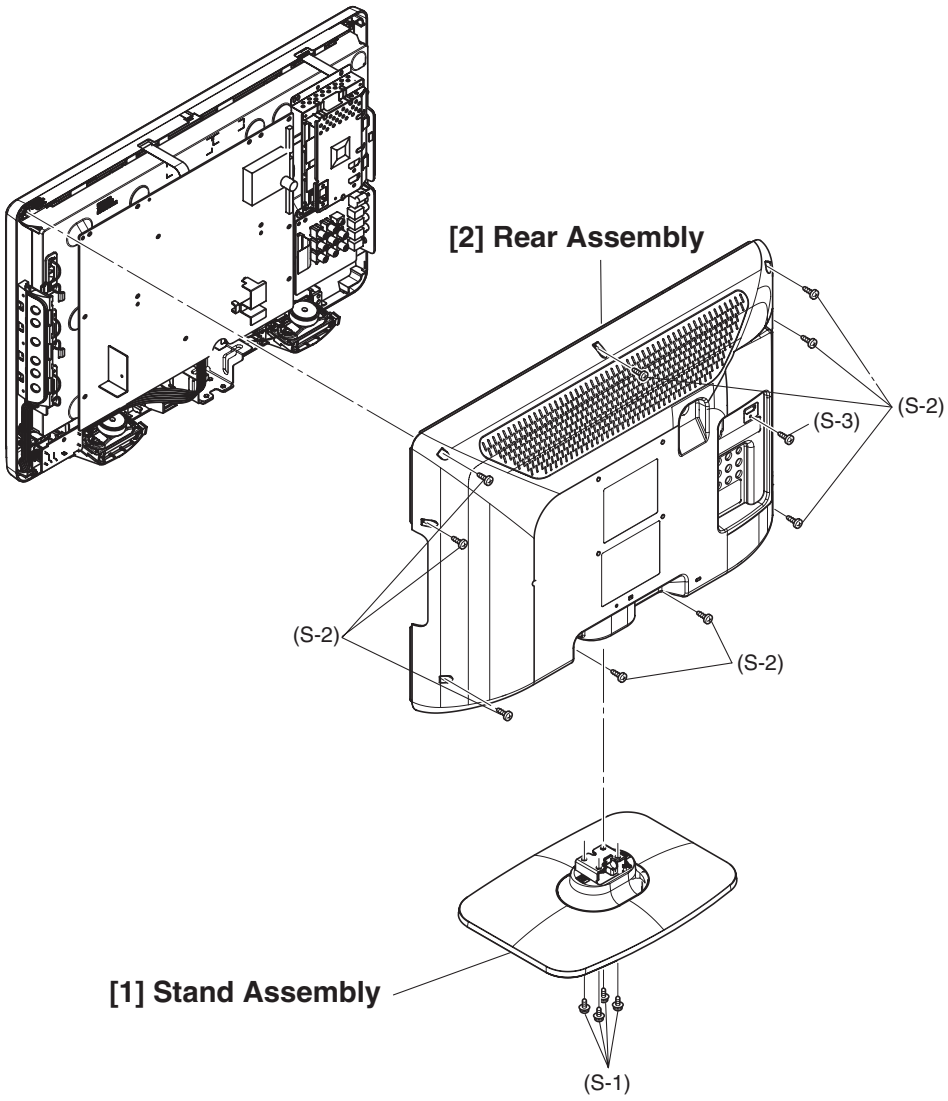


Fig. D1

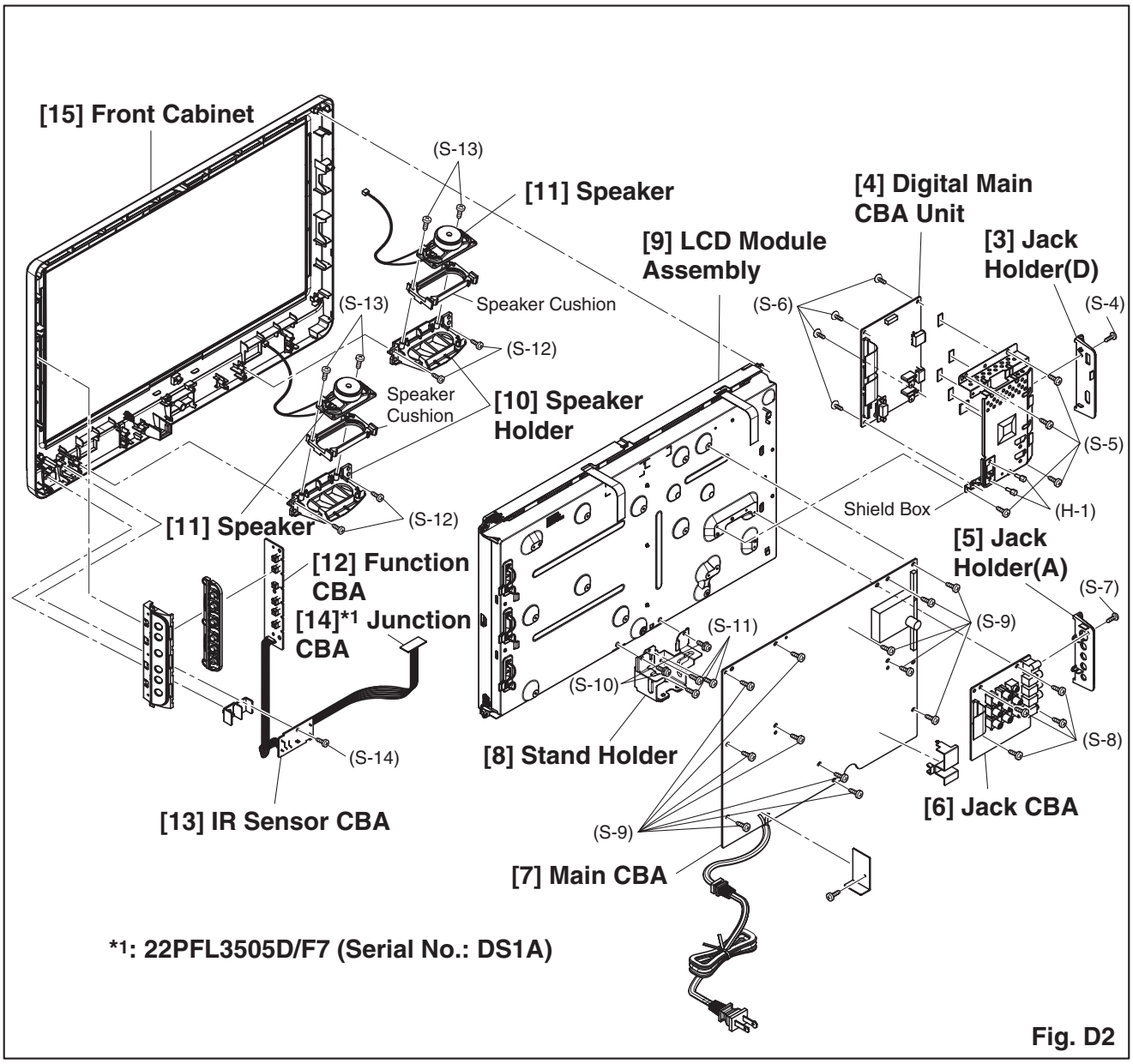

[15] Front Cabinet
(S-13)
[11] Speaker
[4] Digital Main CBA Unit
[9] LCD Module Assembly
[3] Jack Holder(D)
(S-6)
(S-4)
(S-13)
Speaker Cushion
(S-12)
Speaker Cushion
[10] Speaker Holder
(S-5)
Shield Box
(H-1)
[11] Speaker
(S-12)
[5] Jack Holder(A)
[12] Function CBA
[14]*1 Junction CBA
(S-7)
(S-11)
(S-9)
(S-10)
(S-14)
[8] Stand Holder
(S-8)
[6] Jack CBA
[13] IR Sensor CBA
(S-9)
[7] Main CBA
*1: 22PFL3505D/F7 (Serial No.: DS1A)

Fig. D2

TV Cable Wiring Diagram

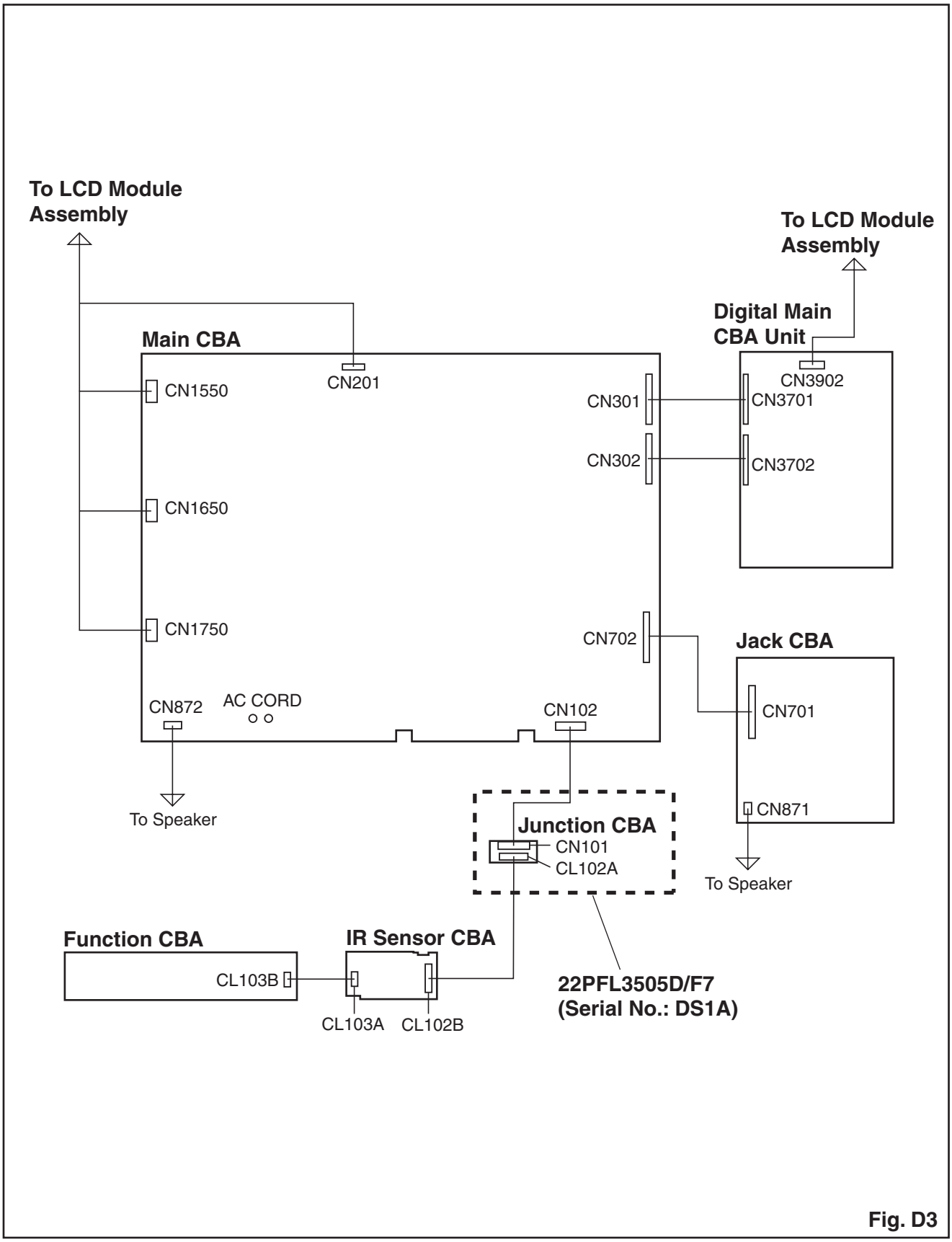


Fig. D3

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

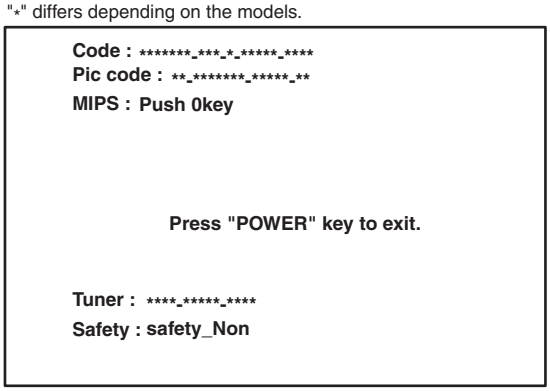
1. NTSC Pattern Generator (Color Bar W/White Window, Red Color, Dot Pattern, Gray Scale, Monoscope, Multi-Burst)
2. Remote control unit
3. Color Analyzer

How to set up the service mode:

Service mode:

1. Turn the power on.
2. Press [MENU] button to display Setup menu.
3. Select “Features”.
4. Select “Current Software Info”.
5. Press [0], [6], [2], [5], [9], [6] and [Info] buttons on the remote control unit in this order. The following screen appears.

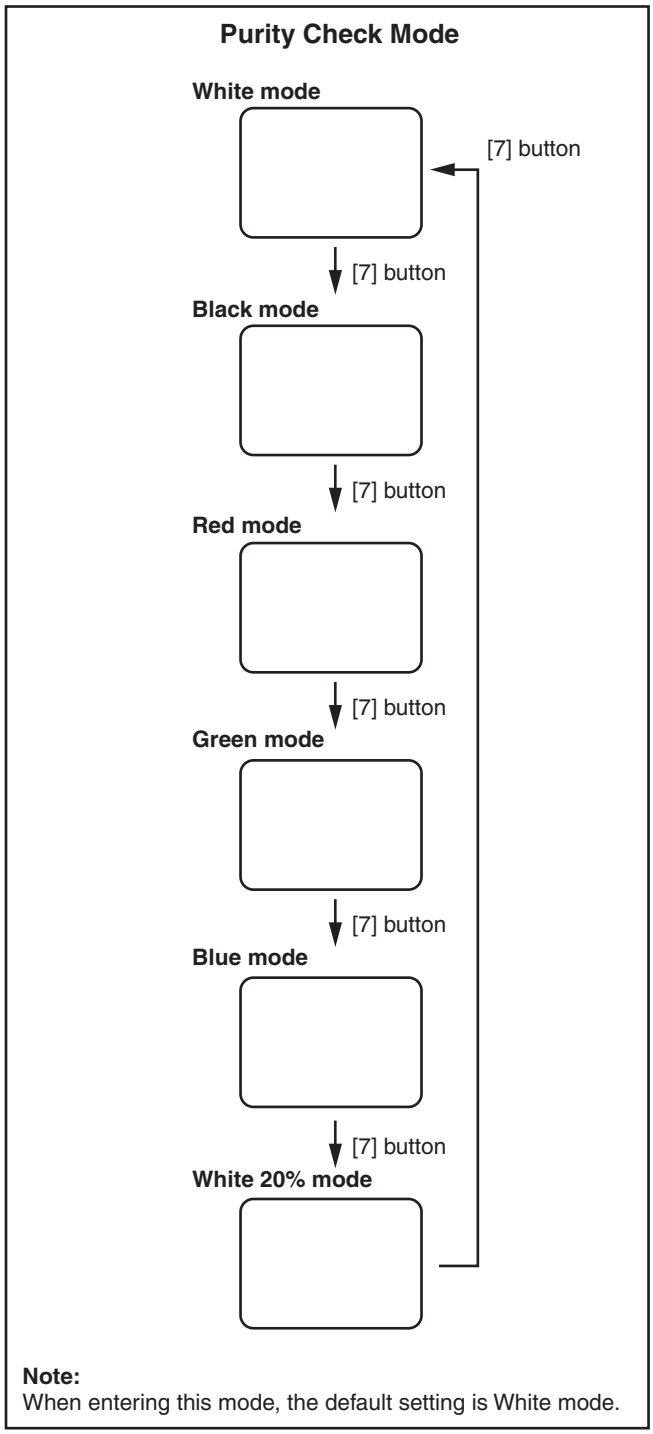
"⋆" differs depending on the models.



1. Purity Check Mode

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

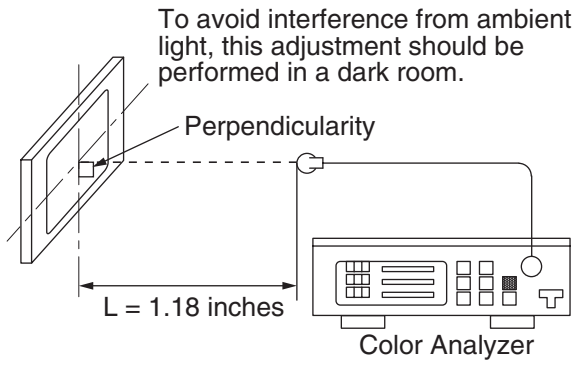
1. Enter the Service mode.
2. Each time the [7] button on the remote control unit is pressed, the display changes as follows.



3. To cancel or to exit from the Purity Check Mode, press [PREV CH] button.

2. VCOM Adjustment

Test Point	Adj. Point
Screen	[CHANNEL UP/DOWN] buttons
M. EQ.	**Spec.**
Color analyzer	See below
Figure	



1. Operate the unit for more than 60 minutes.
2. Set the color analyzer at the zero point calibration and bring the optical receptor pointing at the center of the LCD-Panel at a distance of 1.18 inches(3cm) away from the LCD-Panel surface.
   Note: The optical receptor must be set perpendicularly to the LCD Panel surface.
3. Enter the Service mode.
4. Press [3] button on the remote control unit.
5. Press [CHANNEL UP/DOWN] buttons on the remote control unit so that the color analyzer value becomes minimum.
6. To cancel or to exit from the VCOM Adjustment, press [PREV CH] button.

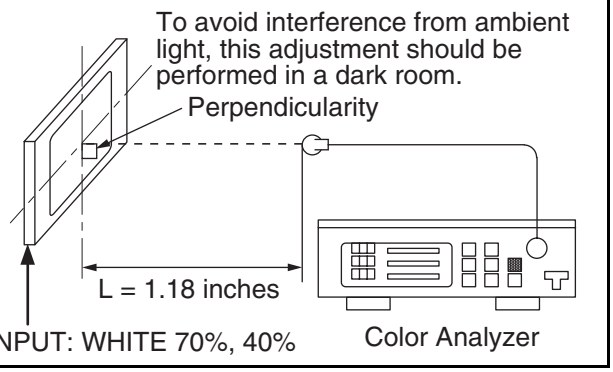
The White Balance Adjustment should be performed when replacing the LCD Panel or Digital Main CBA.

3. White Balance Adjustment

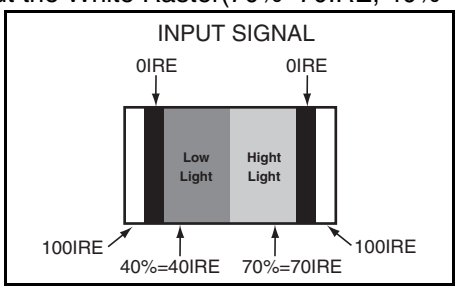
Purpose: To mix red, green and blue beams correctly for pure white.

Symptom of Misadjustment: White becomes bluish or reddish.

Test Point	Adj. Point	Mode	Input
Screen	[VOLUME DOWN] button	**[VIDEO1]** C/D	White Raster (APL 70%) or (APL 40%)
M. EQ.		**Spec.**	
Pattern Generator, Color analyzer		x= 0.272 ± 0.005 y= 0.278 ± 0.005	
Figure			



1. Operate the unit for more than 60 minutes.
2. Input the White Raster(70%=70IRE, 40%=40IRE).



3. Set the color analyzer at the CHROMA mode and zero point calibration. Bring the optical receptor pointing at the center of the LCD-Panel at a distance of 1.18 inches(3cm) away from the LCD-Panel surface.
   Note: The optical receptor must be set perpendicularly to the LCD Panel surface.
4. Enter the Service mode. Press [VOLUME DOWN] button on the remote control unit and select “C/D” mode.
5. **[CUTOFF]**
   Press [1] button to select “COR” for Red Cutoff adjustment. Press [3] button to select “COB” for Blue Cutoff adjustment.
   [DRIVE]
   Press [4] button to select “DR” for Red Drive adjustment. Press [6] button to select “DB” for Blue Drive adjustment.
6. In each color mode, press [CHANNEL UP/DOWN] buttons to adjust the values of color.
7. Adjust Cutoff and Drive so that the color temperature becomes 12000°K (x= 0.272 / y= 0.278 ±0.005).
8. To cancel or to exit from the White Balance Adjustment, press [PREV CH] button.

HOW TO INITIALIZE THE LCD TV

The purpose of initialization is to place the set in a new out of box condition. The customer will be prompted to select a language and program channels after the set has been initialized.
To put the program back at the factory-default, initialize the LCD TV using the following procedure.

1. Turn the power on.
2. Enter the service mode.
   - To cancel the service mode, press [POWER] button on the remote control unit.
3. Press [INFO] button on the remote control unit to initialize the LCD television.
4. "INITIALIZED" will appear in the upper right of the screen. "INITIALIZED" color will change to green from red when initializing is completed.

FIRMWARE RENEWAL MODE

Equipment Required

a. USB storage device
b. Remote Control Unit

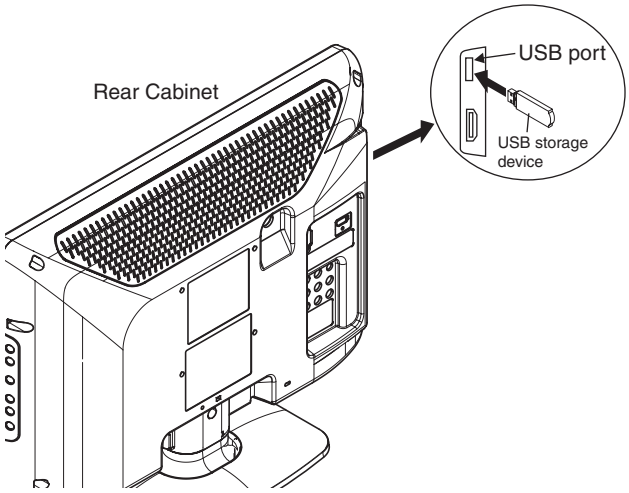
Firmware Update Procedure

Note: There are two states (the User Upgrade and the Factory Upgrade) in firmware update.

User Upgrade	Upgrade the firmware only. The setting values are not initialized.
Factory upgrade	Upgrade the firmware and initialize the setting values.

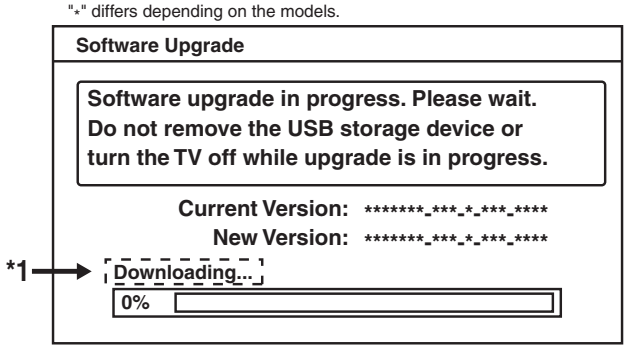
The identification of User Upgrade and Factory Upgrade are done by the filename.

1. Turn the power off and unplug the AC Cord.
2. Insert the USB storage device to the USB port as shown below.



3. Plug the AC cord in the wall outlet and turn the power on.
4. The update will start and the following will appear on the screen.

"∗" differs depending on the models.

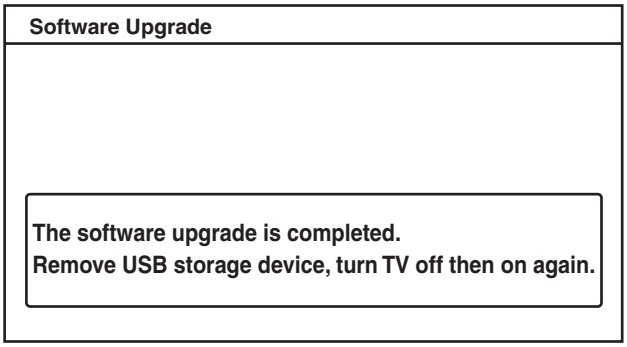


Note: If the above screen isn't displayed, repeat from step 1.

The appearance shown in *1 is described as follows.

Appearance	State
Downloading...	Downloading the firmware from the USB storage device.
Writing...	Writing the downloaded firmware in flash memory.
Checking...	Checking the new firmware.

5. When the firmware update is completed, the following will appear on the screen.



Remove the USB storage device from the USB port.
Turn the power off and turn the power on again.

Note:

When the Factory Upgrade is used, after restarting TV, shift to initial screen menu in service mode. "INITIALIZED" will appear on the upper right of the screen. "INITIALIZED" color will change to green from red when initializing is completed.

TROUBLESHOOTING

[Power Supply Section]

FLOW CHART NO.1

The power cannot be turned on.

↓

Is the fuse (F601) normal? — No → See FLOW CHART No.2 <The fuse blows out.>

↓ Yes

Is normal state restored when once unplugged power cord is plugged again several seconds? — No → Check if there is any leak or short-circuiting on the primary circuit component, and service it if defective. (D601, D602, D603, D604, Q601, Q602, Q603, IC602, T601)

↓ Yes

Is the INV+31V line voltage normal? — No → (same as above)

↓ Yes

Check each rectifying circuit of the secondary circuit and service it if defective.

FLOW CHART NO.2

The fuse blows out.

↓

Check the presence that the primary component is leaking or shorted and service it if defective.

Check the presence that the rectifying diode or circuit is shorted in each rectifying circuit of secondary side, and service it if defective.

↓

After servicing, replace the fuse.

FLOW CHART NO.3

When the output voltage fluctuates.

↓

Does the photocoupler circuit on the secondary side operate normally? — No → Check IC601, D633, D648, Q631 and their periphery circuit, and service it if defective.

↓ Yes

Check IC601, D615, D616 and their periphery, circuit and service it if defective.

FLOW CHART NO.4

When buzz sound can be heard in the vicinity of power circuit.

↓

Check if there is any short-circuit on the rectifying diode and the circuit in each rectifying circuit of the secondary side, and service it if defective. (IC631, Q201, Q205, Q206, Q634, Q636, Q637, Q640, Q641, Q643, D631, D632, D636, D638, D639, D641, D643)

FLOW CHART NO.5

INV+31V is not output.

↓

Is approximately +31V voltage supplied to the cathode of D632? — No → Check C632, D632, D633 and their periphery circuit, and service it if defective.

↓ Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.6

PANEL+24.5V is not output.

↓

Is approximately +30V voltage supplied to the collector of Q205?

No → See FLOW CHART No.5 <INV+31V is not output.>

↓ Yes

Check Q202, Q203, D203, D205, P-ON-H1 line and their periphery circuit, and service it if defective.

FLOW CHART NO.7

PANEL+13V is not output.

↓

Is approximately +15V voltage supplied to the collector of Q201?

No → Check C631, D631, D668 and their periphery circuit, and service it if defective.

↓ Yes

Is approximately +14V voltage supplied to the base of Q201?

No → Check Q202, Q203, D201, D202, D210 and their periphery circuit, and service it if defective.

↓ Yes

Replace Q201.

FLOW CHART NO.8

P-ON+7V is not output.

↓

Is approximately +7V voltage supplied to the cathde of D641?

No → Check C641, D641 and their periphery circuit, and service it if defective.

↓ Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.9

P-ON+5V is not output. (PANEL+13V is outputted normally.)

↓

Is approximately +6.3V voltage supplied to the collector of Q636?

No → See FLOW CHART No.8 <P-ON+7V is not output.>

↓ Yes

Is approximately +6V voltage supplied to the base of Q636?

No → Check D659 and their periphery circuit, and service it if defective.

↓ Yes

Replace Q636.

FLOW CHART NO.10

TUNER+5V is not output. (PANEL+13V is outputted normally.)

Is approximately +6.3V voltage supplied to the collector of Q637?

No → See FLOW CHART No.8 <P-ON+7V is not output.>

Yes

Is approximately +6V voltage supplied to the base of Q637?

No → Check D659 and their periphery circuit, and service it if defective.

Yes

Replace Q637.

FLOW CHART NO.11

P-ON+3V is not output.

Is approximately +3V voltage supplied to the cathode of D638?

No → Check C638, D638 and their periphery circuit, and service it if defective.

Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.12

P-ON+3.3V(PANEL+3.3V) is not output.

Is approximately +5V voltage supplied to the cathode of D639?

No → Check C639, D639 and their periphery circuit, and service it if defective.

Yes

Is the "H" signal inputted to the base of Q640?

No → Check Q638, Q639, P-ON-H2 line and their periphery circuit, and service it if defective.

Yes

Replace Q640.

FLOW CHART NO.13

P-ON+9V is not output. (PANEL+13V is outputted normally.)

Is approximately +14V voltage supplied to the collector of Q641?

No → Check C643, D643 and their periphery circuit, and service it if defective.

Yes

Is approximately +10V voltage supplied to the base of Q641?

No → Check D666 and their periphery circuit, and service it if defective.

Yes

Replace Q641.

FLOW CHART NO.14

AL+3.3V is not output. (P-ON+7V is outputted normally.)

Is approximately +5V voltage supplied to Pin(3) of IC631?

No → Check D654, D655, R659, R682 and their periphery circuit, and service it if defective.

Yes

Replace IC631.

FLOW CHART NO.15

LCD-7.1V is not output.

Is approximately -9V voltage supplied to the Anode of D636?

No → Check C636, D636, D637 and their periphery circuit, and service it if defective.

Yes

Is approximately -8V voltage supplied to the base of Q206?

No → Check Q202, Q203, D204, P-ON-H1 line and their periphery circuit, and service it if defective.

Yes

Replace Q206.

FLOW CHART NO.16

SP+14V is not output.

Is approximately +15V voltage supplied to the cathode of D643?

No → Check C643, D643 and their periphery circuit, and service it if defective.

Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

[Video Signal Section]

FLOW CHART NO.1

The key operation is not functioning.

↓

Are the contact point and installation state of the key switches (SW101, SW103~SW107) normal?

No → Re-install the switches (SW101, SW103~SW107) correctly or replace the poor switch.

↓ Yes

When pressing each switches (SW101, SW103~SW107) do the voltage of Pin(29) of CN302 increase?

No → Check the switches (SW101, SW103~SW107) and their periphery, and service it if defective.

↓ Yes

Replace Digital Main CBA Unit.

FLOW CHART NO.2

No operation is possible from the remote control unit.

↓

Operation is possible from the unit.

↓

Is 3.3V voltage supplied to Pin(2) terminal of the remote control receiver (RS101)?

No → Check AL+3.3V line and service it if defective.

↓ Yes

Is the "L" pulse sent out Pin(1) terminal of remote control receiver (RS101) when the infrared remote control is activated?

No → Replace the remote control receiver(RS101) or the remote control unit.

↓ Yes

Is the "L" pulse supplied to Pin(25) of CN301?

No → Check the line between Pin(1) terminal of remote control receiver(RS101) and Pin(25) of CN301, and service it if defective.

↓ Yes

Replace Digital Main CBA Unit.

FLOW CHART NO.3

Picture does not appear normally.(Video input)

↓

Are the video signal inputted to Pin(4) of CN302?

No → Check the line between Pin(4) of CN302 and JK752, and service it if defective.

↓ Yes

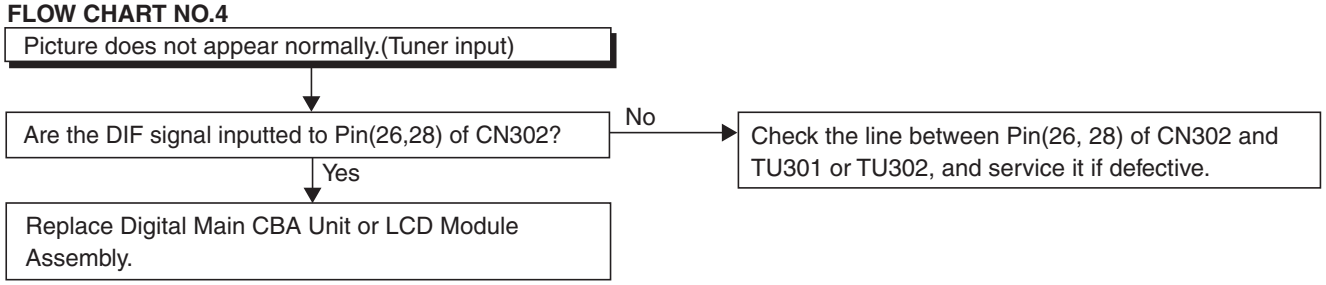
Is the "H" level inputted to the Pin(5) of CN302?

No → Check JK751, R678 and their periphery, and service it if defective.

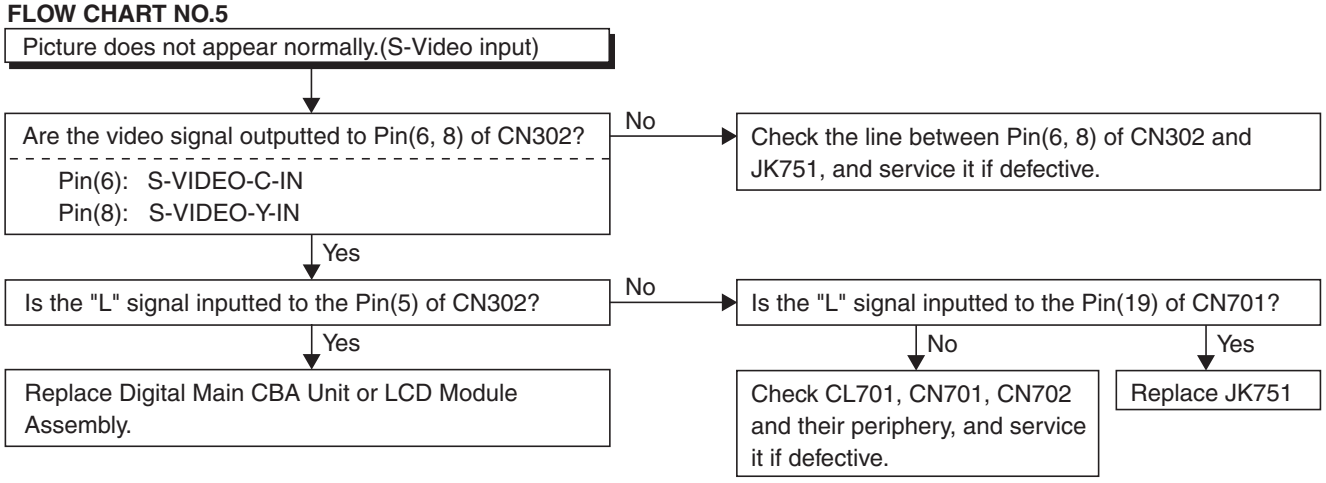
↓ Yes

Replace Digital Main CBA Unit or LCD Module Assembly.

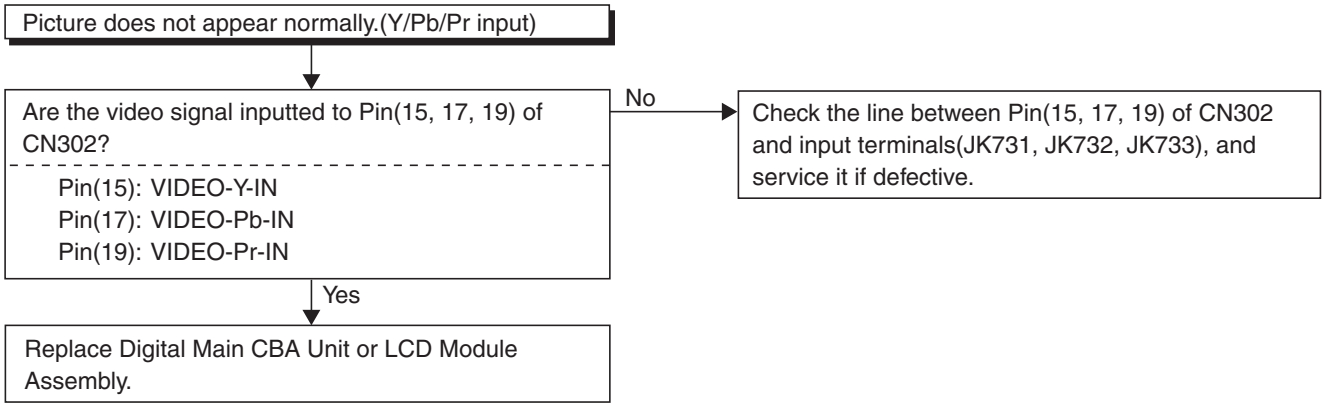
FLOW CHART NO.4



FLOW CHART NO.5



FLOW CHART NO.6



[Audio Signal Section]

FLOW CHART NO.1

Audio is not outputted normally.(Audio input)

Are the audio(L/R) signals inputted to Pin(2, 15) of IC771?
- No → Check the line between Pin(2, 15) of IC771 and input terminal(JK753, JK754), and service it if defective.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(6, 8) of CN301?
- No → Replace Digital Main CBA Unit.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(3, 5) of IC803?
- No → Check the line between Pin(6, 8) of CN301 and Pin(3, 5) of IC803, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(1, 7) of IC803?
- No → Replace IC803
- Yes ↓

Are the audio(L/R) signals inputted to Pin(1, 9) of IC801?
- No → Check the line between Pin(1, 7) of IC803 and Pin(1, 9) of IC801, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(4, 6) of IC801?
- No → Check IC801 and their periphery circuit, and service it if defective.
- Yes ↓

Check JK851, SP861,SP862 and their periphery circuit, and service it if defective.

FLOW CHART NO.2

Audio is not outputted normally.(Component Audio input)

Are the audio(L/R) signals inputted to Pin(4, 11) of IC771?
- No → Check the line between Pin(4, 11) of IC771 and input terminal(JK741, JK742), and service it if defective.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(6, 8) of CN301?
- No → Replace Digital Main CBA Unit.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(3, 5) of IC803?
- No → Check the line between Pin(6, 8) of CN301 and Pin(3, 5) of IC803, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(1, 7) of IC803?
- No → Replace IC803
- Yes ↓

Are the audio(L/R) signals inputted to Pin(1, 9) of IC801?
- No → Check the line between Pin(1, 7) of IC803 and Pin(1, 9) of IC801, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(4, 6) of IC801?
- No → Check IC801 and their periphery circuit, and service it if defective.
- Yes ↓

Check JK851, SP861,SP862 and their periphery circuit, and service it if defective.

FLOW CHART NO.3

Audio is not outputted normally.(Tuner input)

Are the DIF signals outputted to Pin(26, 28) of CN302?
- No → Check TU301 or TU302 and their periphery circuit, and service it if defective.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(6, 8) of CN301?
- No → Replace Digital Main CBA Unit.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(3, 5) of IC803?
- No → Check the line between Pin(6, 8) of CN301 and Pin(3, 5) of IC803, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(1, 7) of IC803?
- No → Replace IC803
- Yes ↓

Are the audio(L/R) signals inputted to Pin(1, 9) of IC801?
- No → Check the line between Pin(1, 7) of IC803 and Pin(1, 9) of IC801, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(4, 6) of IC801?
- No → Check IC801 and their periphery circuit, and service it if defective.
- Yes ↓

Check JK851, SP861,SP862 and their periphery circuit, and service it if defective.

FLOW CHART NO.4

Audio is not outputted normally.(HDMI Audio input)

Are the audio(L/R) signals inputted to Pin(5, 14) of IC771?
- No → Check the line between Pin(5, 14) of IC771 and input terminal(JK721, JK722), and service it if defective.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(6, 8) of CN301?
- No → Replace Digital Main CBA Unit.
- Yes ↓

Are the audio(L/R) signals inputted to Pin(3, 5) of IC803?
- No → Check the line between Pin(6, 8) of CN301 and Pin(3, 5) of IC803, and service it if defective.
- Yes ↓

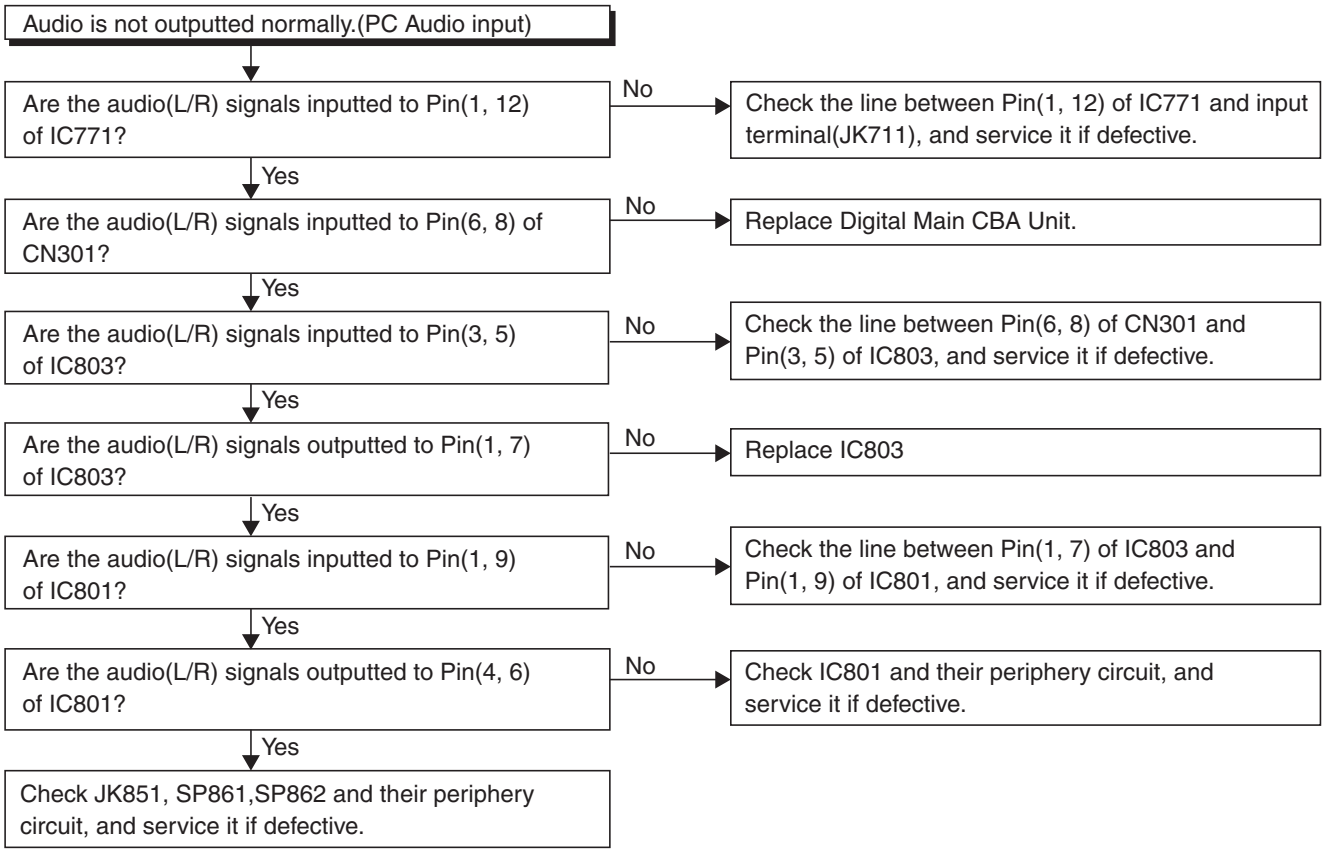
Are the audio(L/R) signals outputted to Pin(1, 7) of IC803?
- No → Replace IC803
- Yes ↓

Are the audio(L/R) signals inputted to Pin(1, 9) of IC801?
- No → Check the line between Pin(1, 7) of IC803 and Pin(1, 9) of IC801, and service it if defective.
- Yes ↓

Are the audio(L/R) signals outputted to Pin(4, 6) of IC801?
- No → Check IC801 and their periphery circuit, and service it if defective.
- Yes ↓

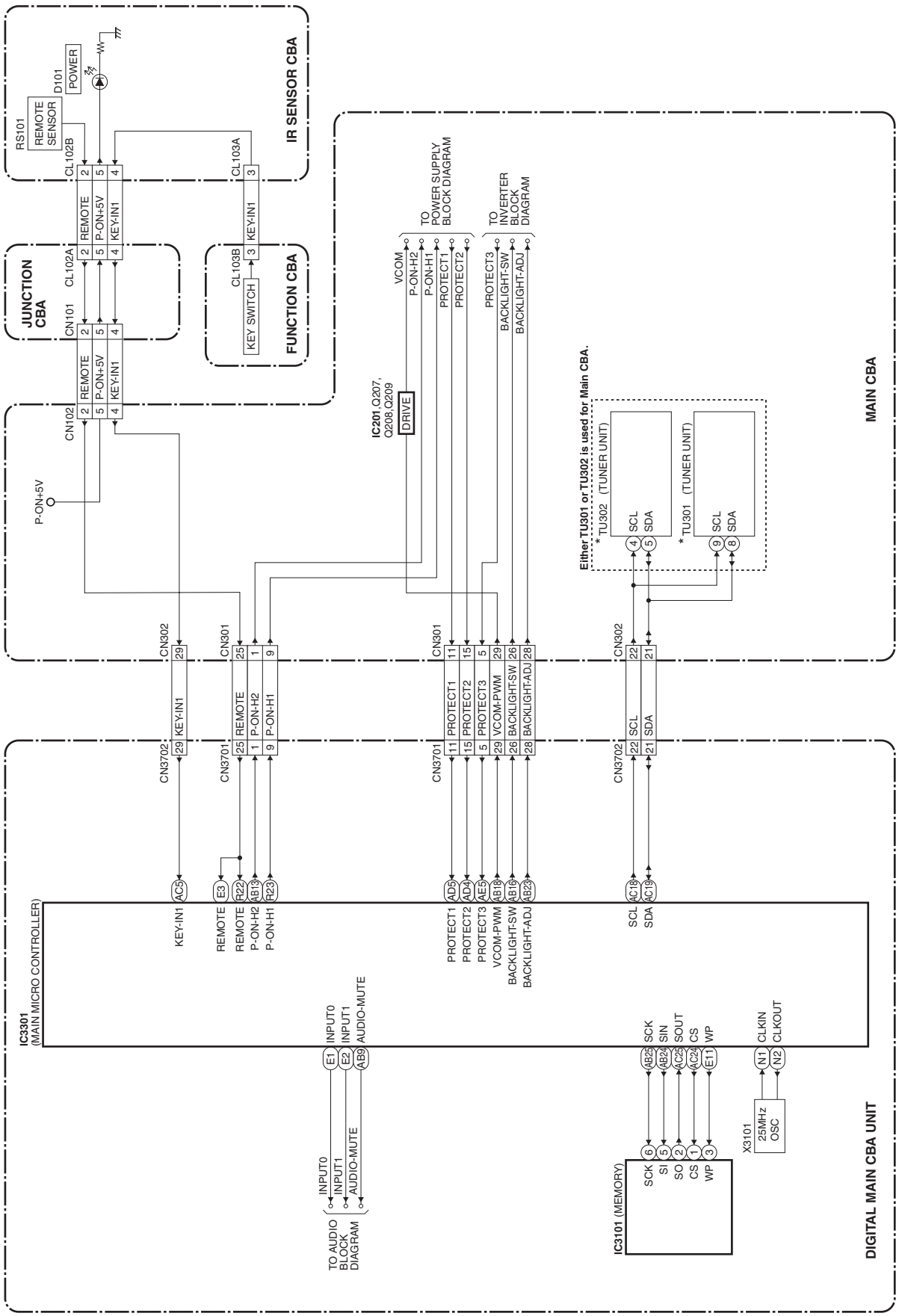
Check JK851, SP861,SP862 and their periphery circuit, and service it if defective.

FLOW CHART NO.5

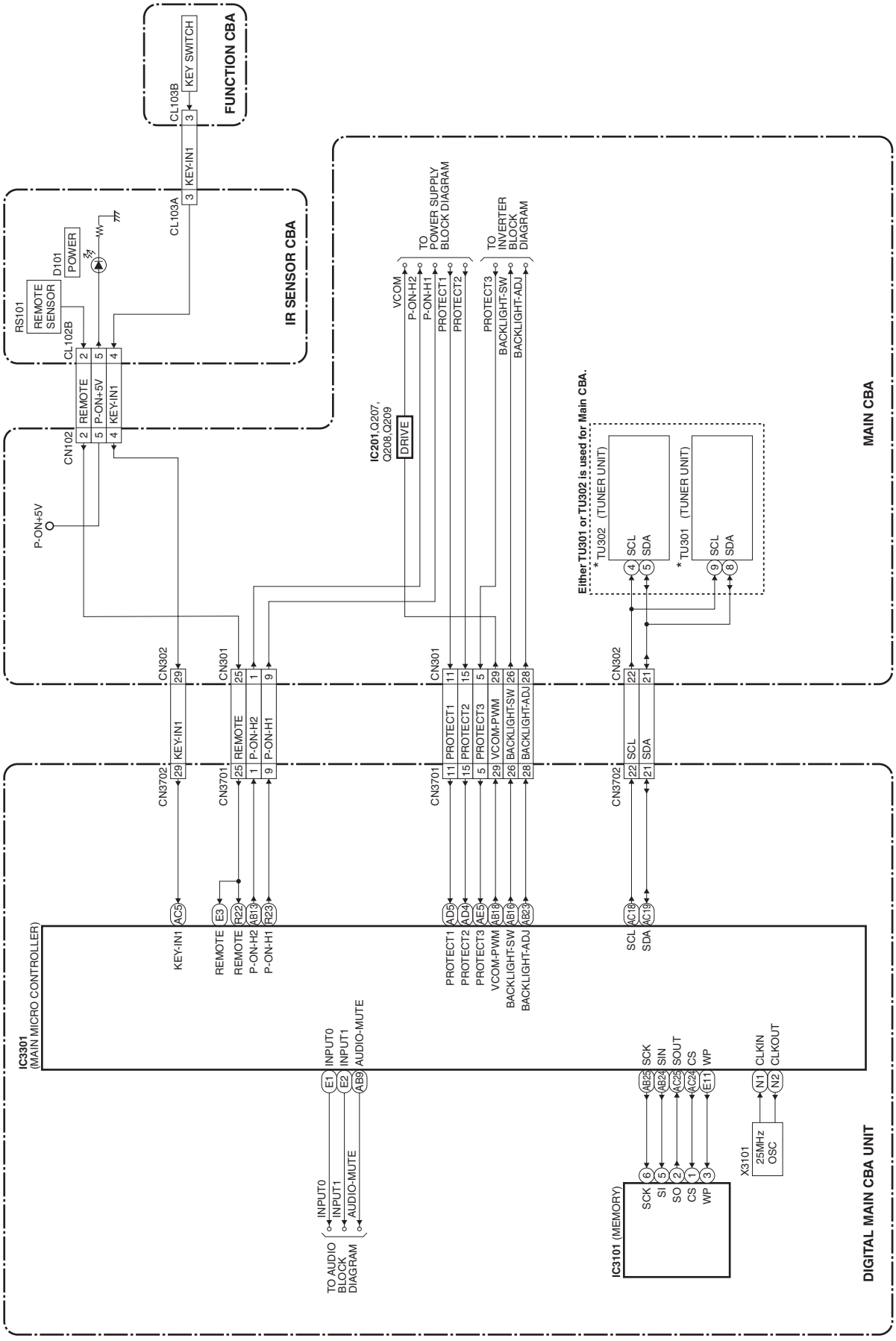


BLOCK DIAGRAMS

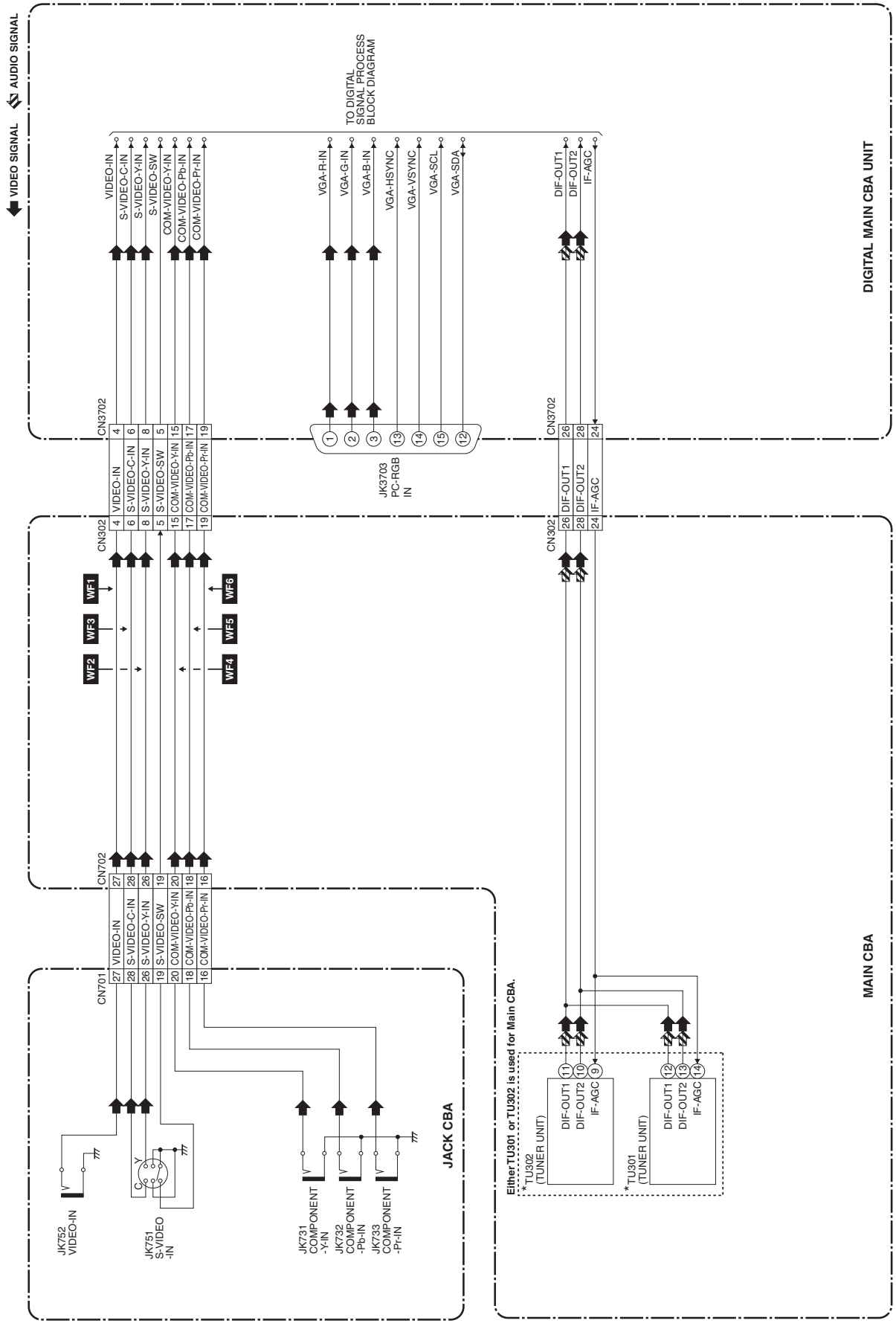
System Control Block Diagram [22PFL3505D/F7 (Serial No.:DS1A)]



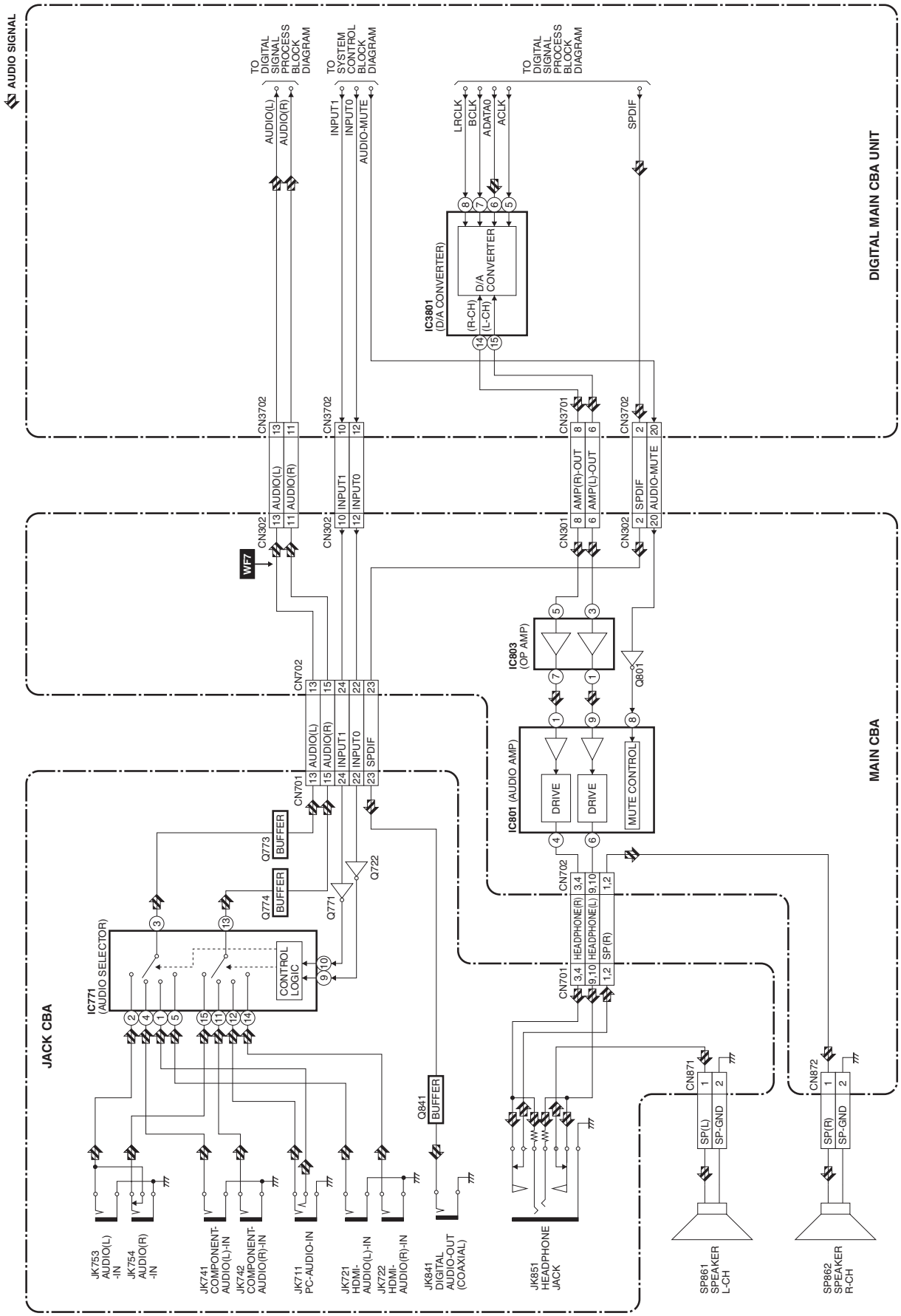
System Control Block Diagram [22PFL3505D/F7 (Serial No.:DS2A, XA1A)]



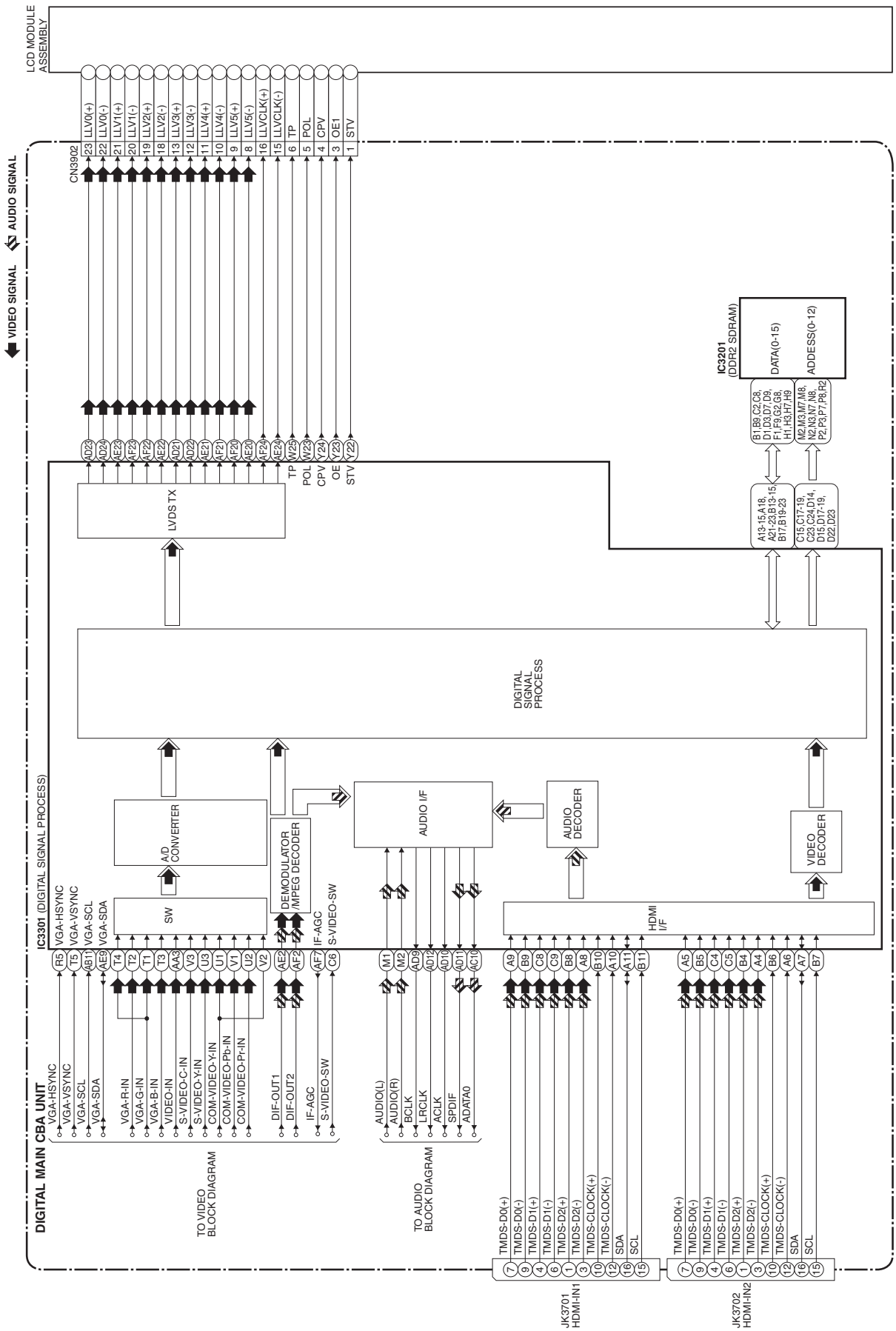
Video Block Diagram



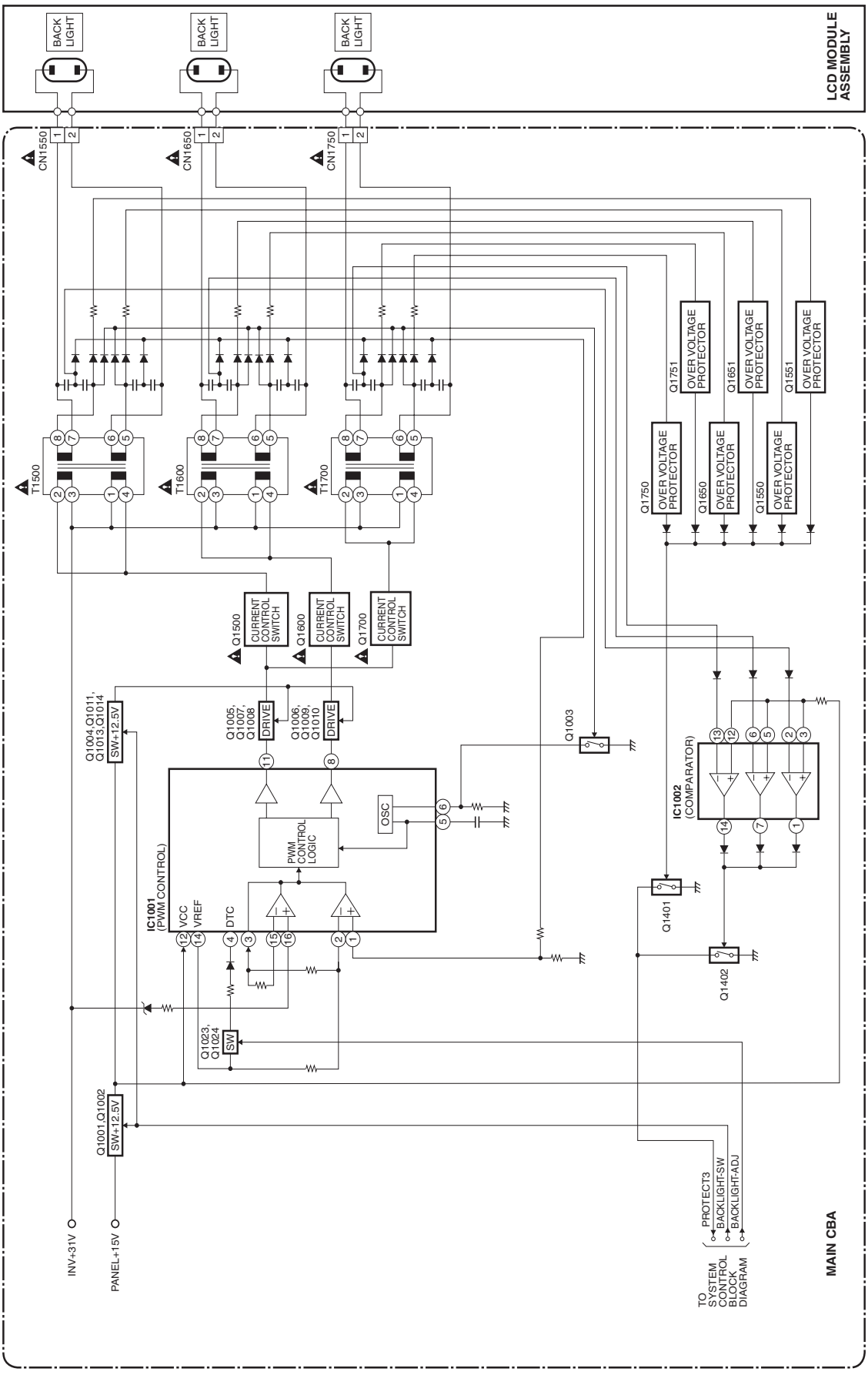
Audio Block Diagram



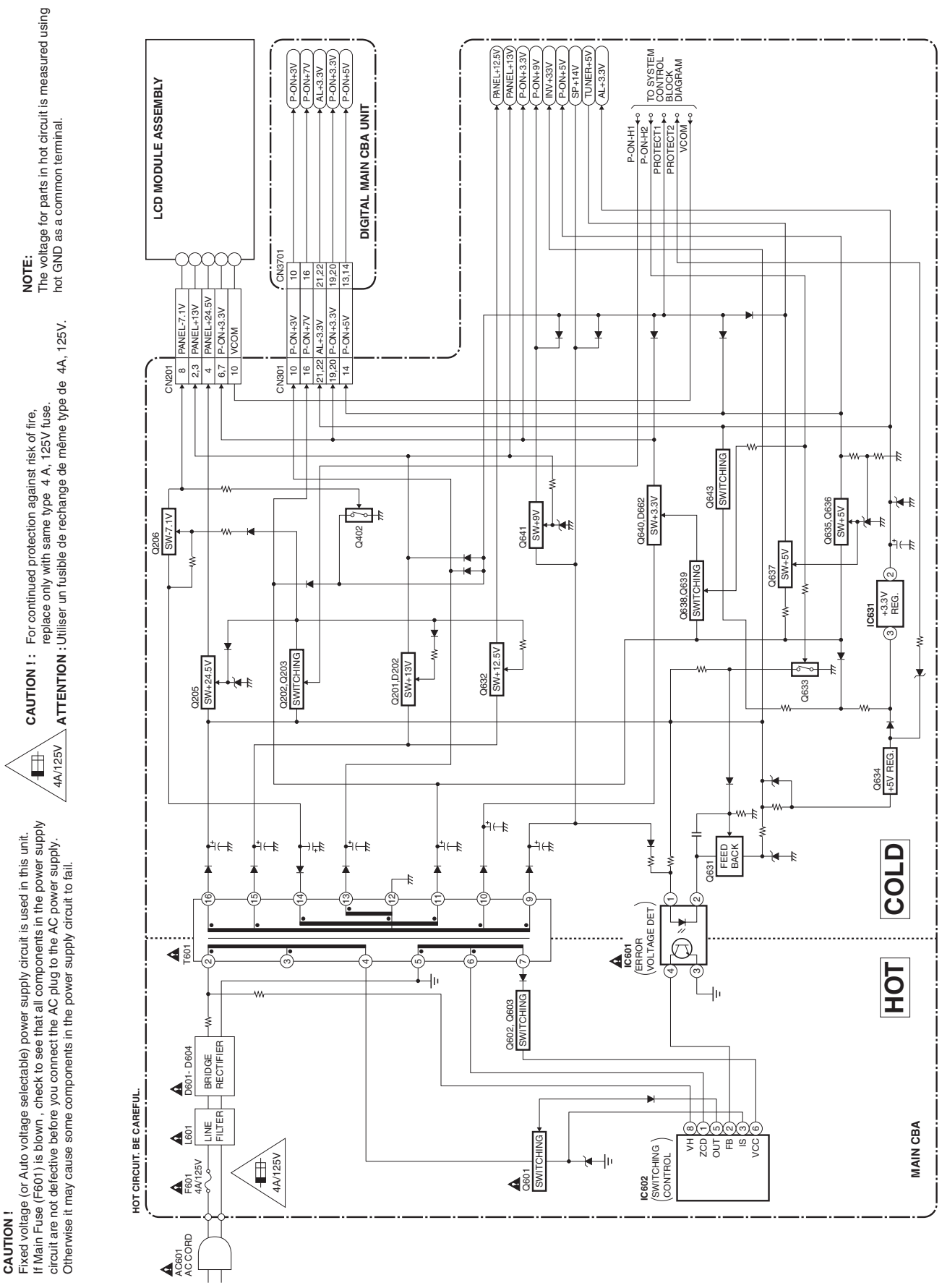
Digital Signal Process Block Diagram



Inverter Block Diagram



Power Supply Block Diagram



SCHEMATIC DIAGRAMS / CBA AND TEST POINTS

Standard Notes

WARNING

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 ($P = 10^{-6}$ μF).
5. All voltages are DC voltages unless otherwise specified.
6. This schematic diagrams are masterized version that should cover the entire PL10.1 chassis models. Thus some parts in detail illustrated on this schematic diagrams may vary depend on the model within the PL10.1 chassis.
   Please refer to the parts lists for each models.
7. The Circuit Board layout illustrated on this service manual is the latest version for this chassis at the moment of making this service manual.
   Depend on the mass production date of each model, the actual layout of each Board may differ slightly from this version.

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

1. CAUTION:

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE_A,_V FUSE.

ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE_A,_V.

2. CAUTION:

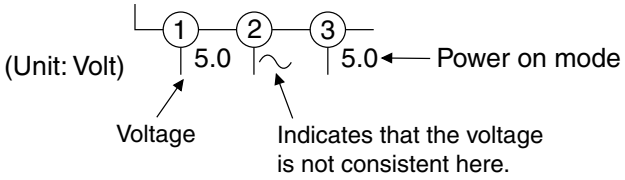
Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the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

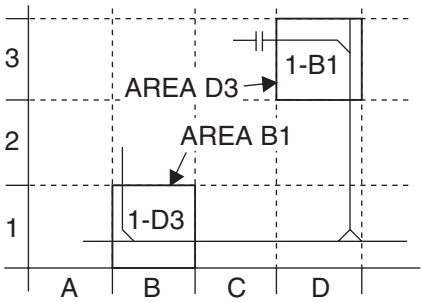
Plug the TV power cord into a standard AC outlet.:



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

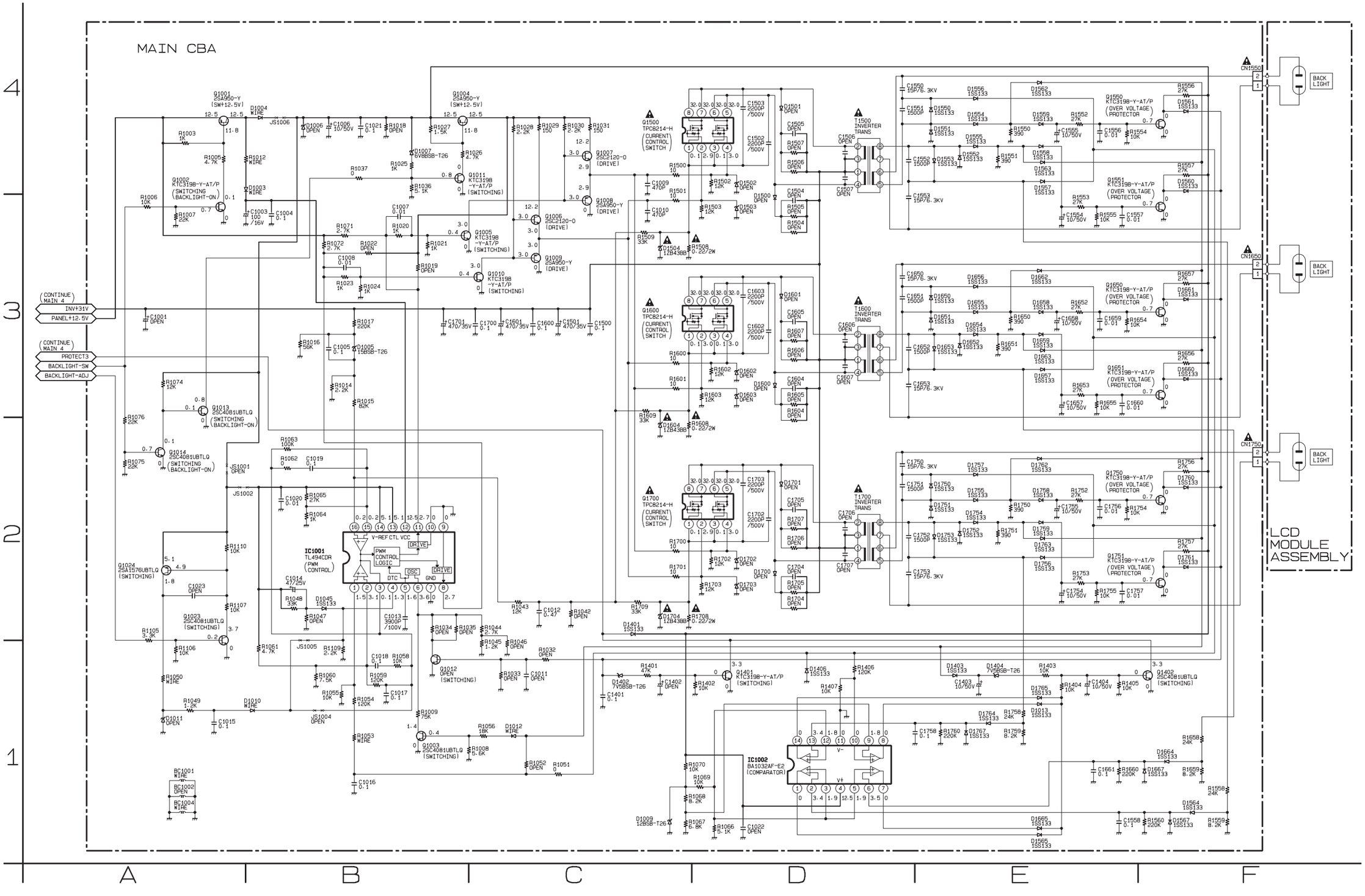
: Indicates a test point with a jumper wire across a hole in the PCB.

: Used to indicate a test point with a component lead on foil side.

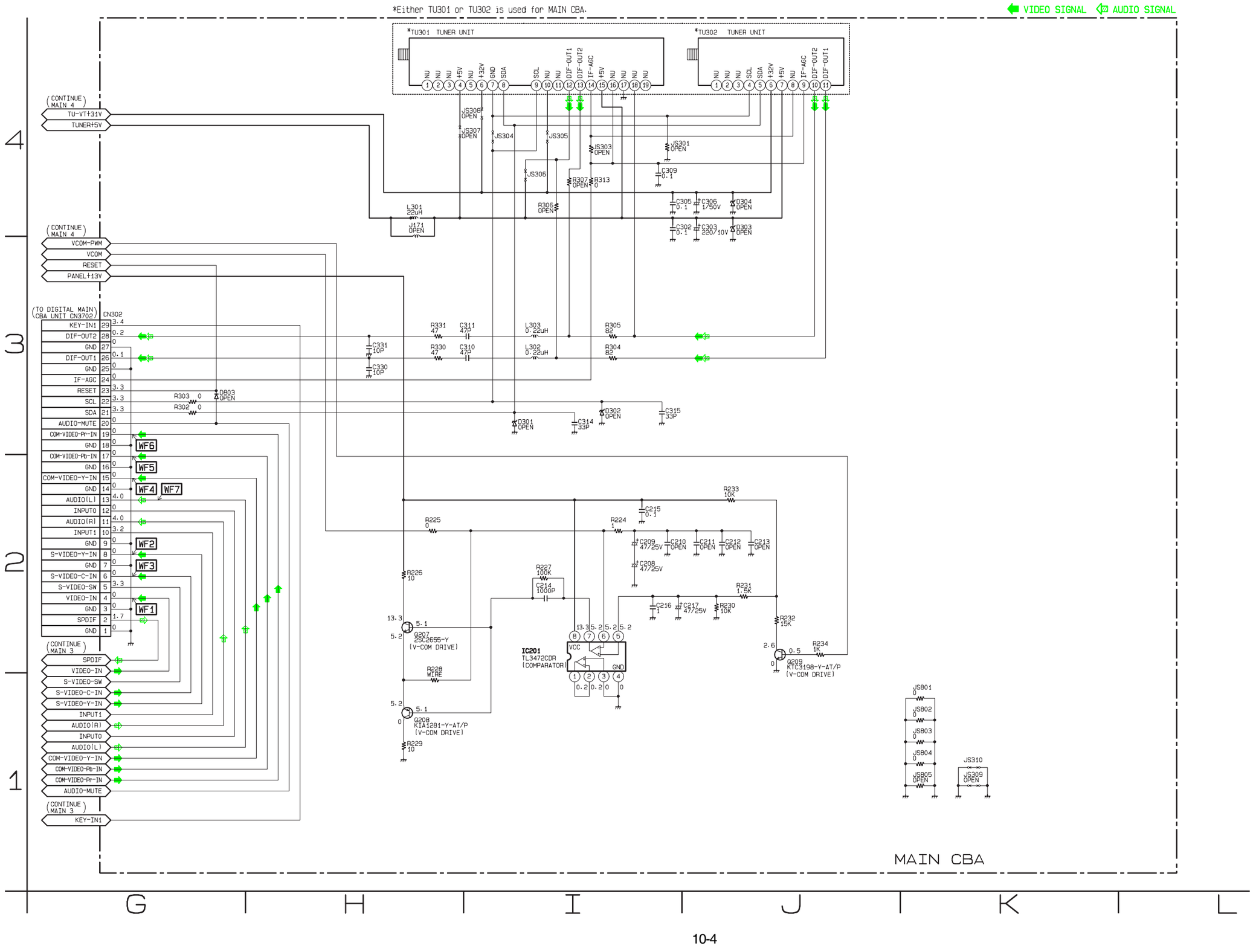
: Used to indicate a test point with no test pin.

: Used to indicate a test point with a test pin.

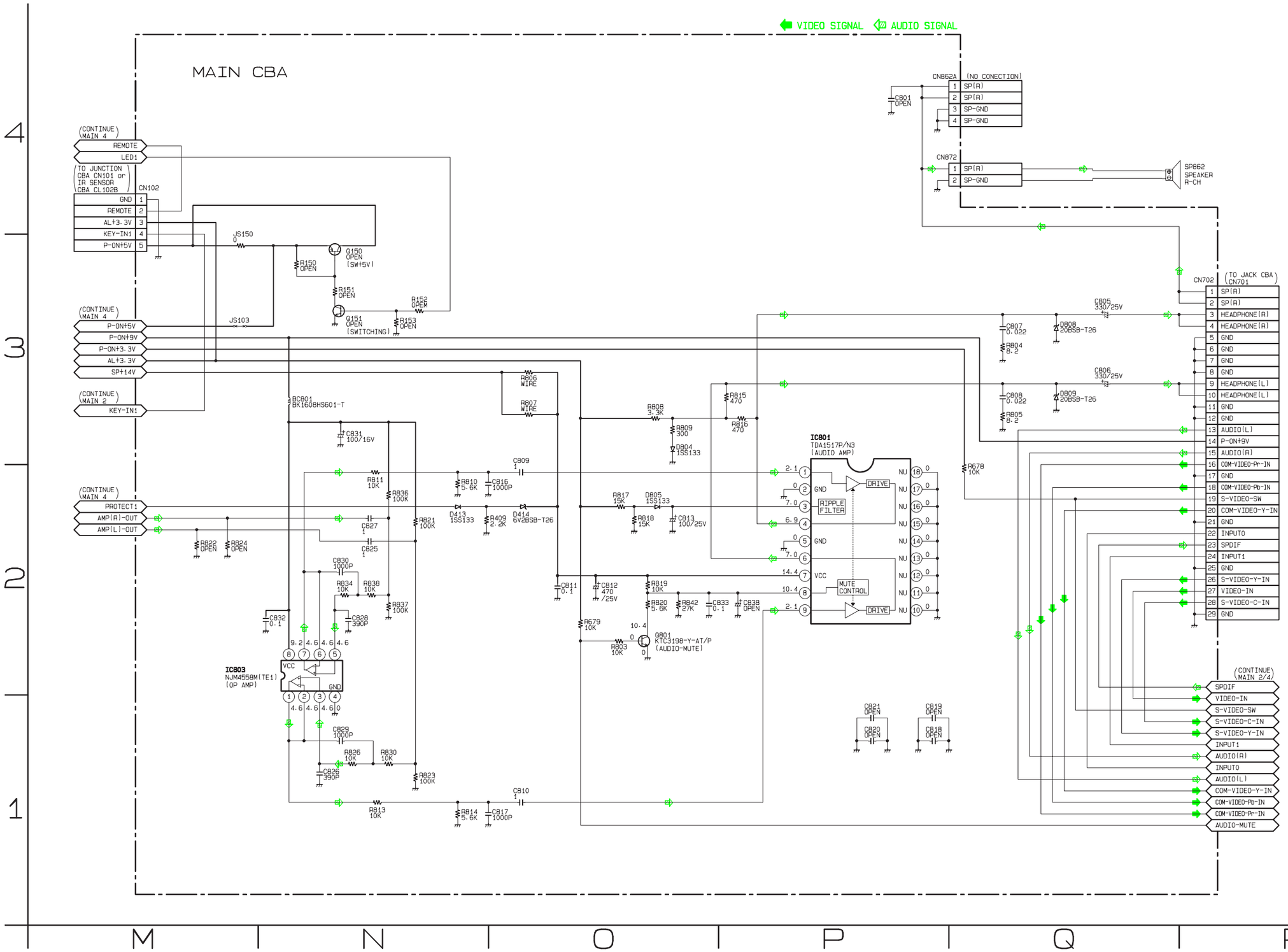
Main 1 Schematic Diagram



Main 2 Schematic Diagram



Main 3 Schematic Diagram

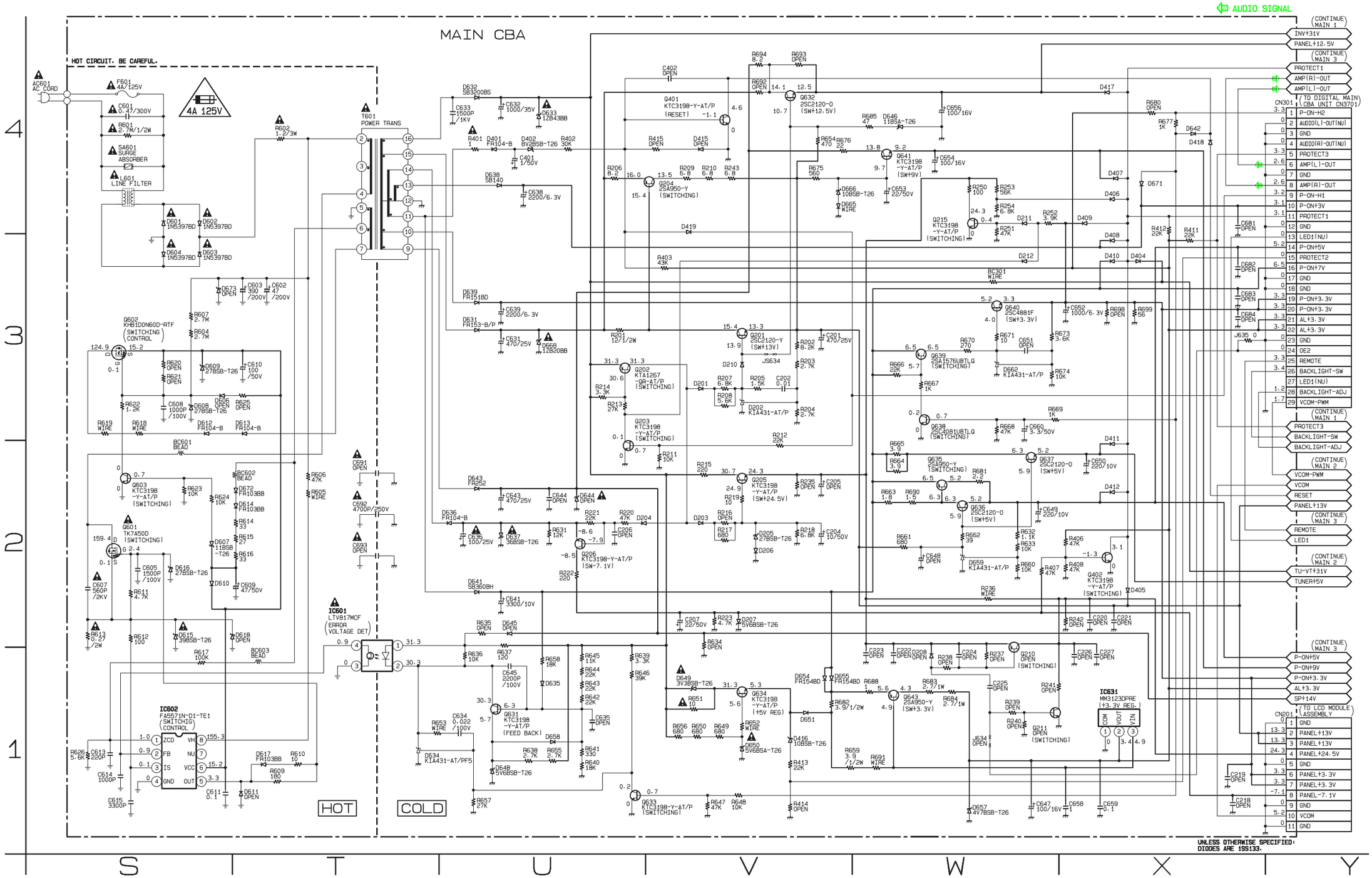


Main 4 Schematic Diagram

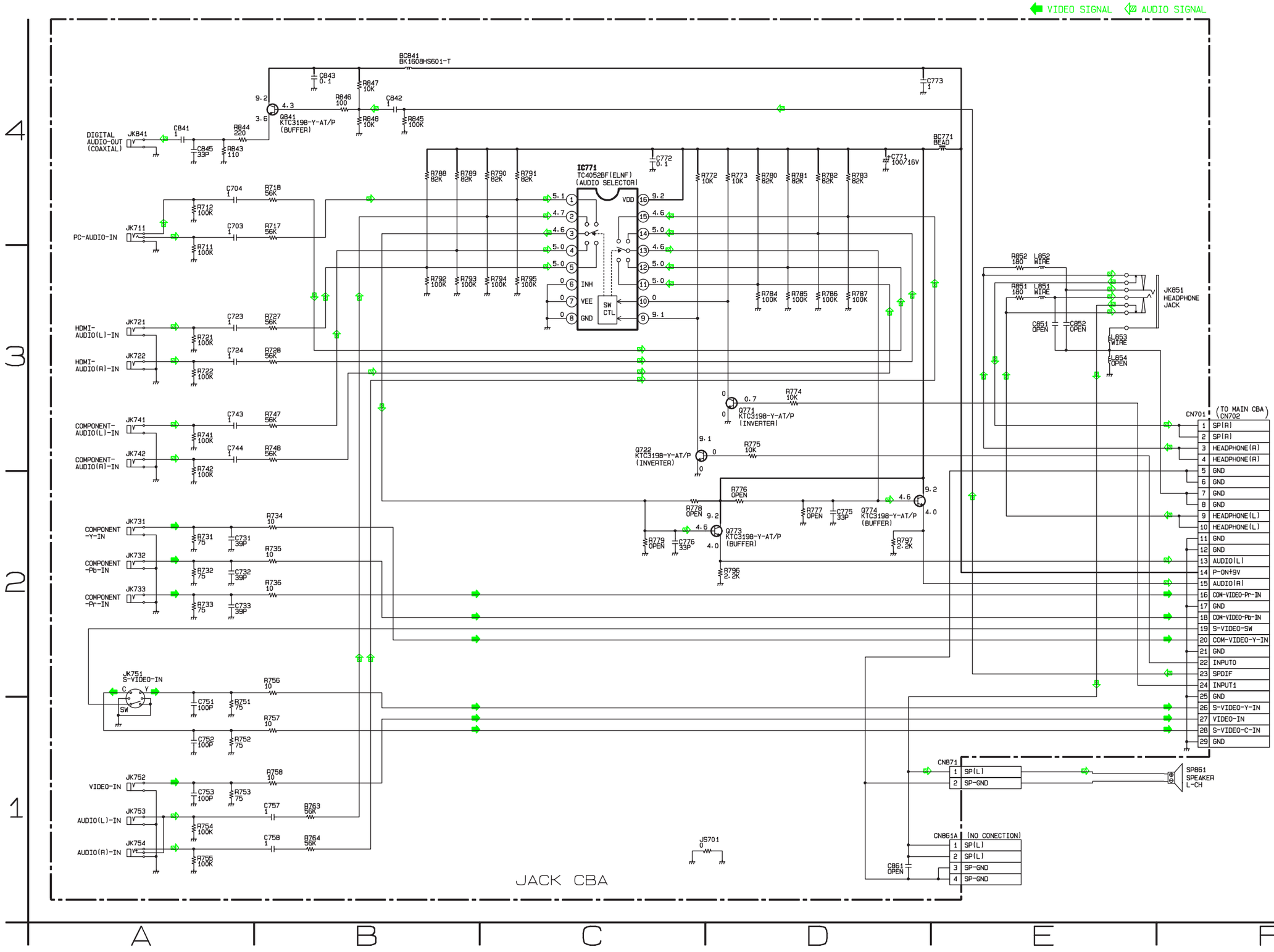
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in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

CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

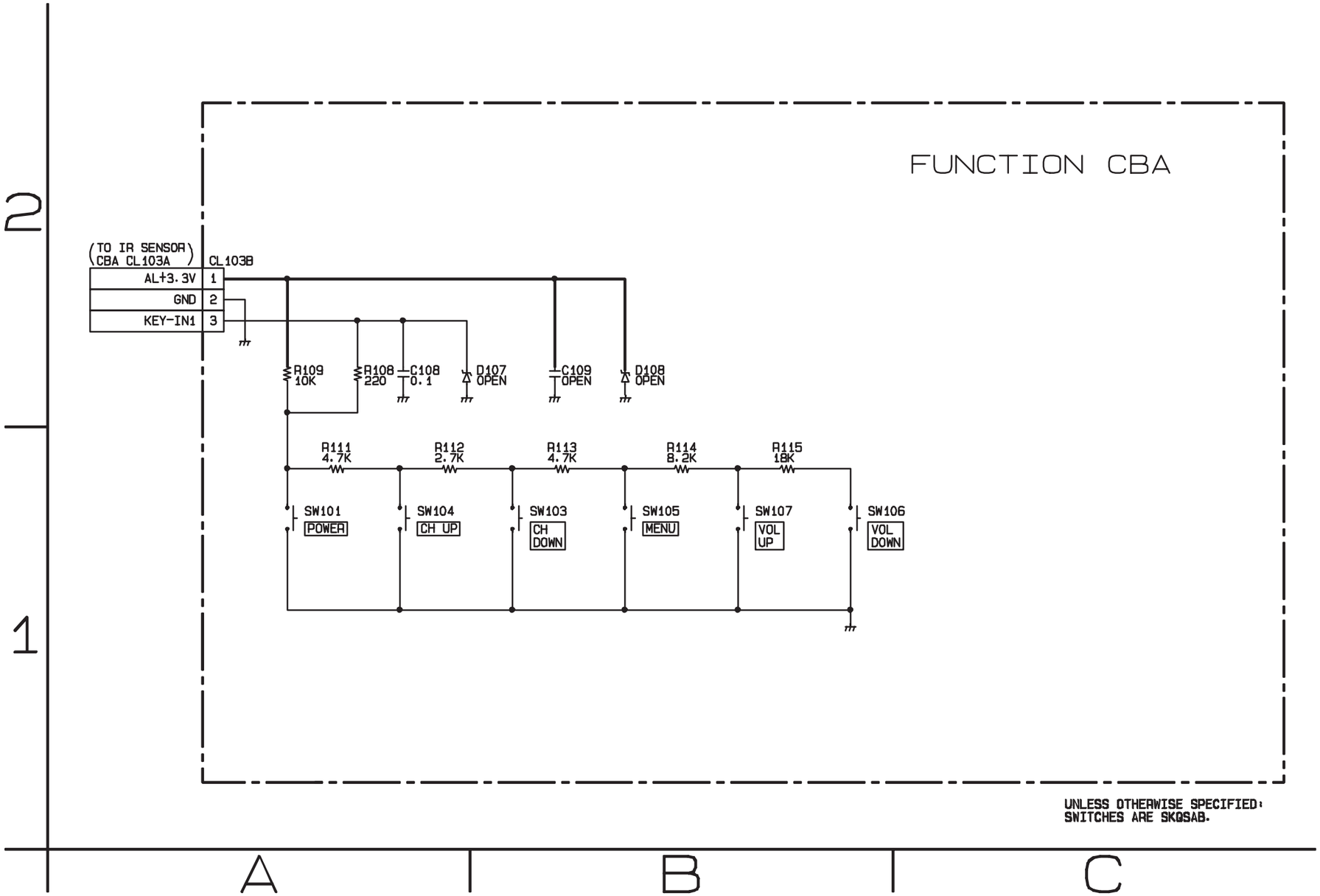
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



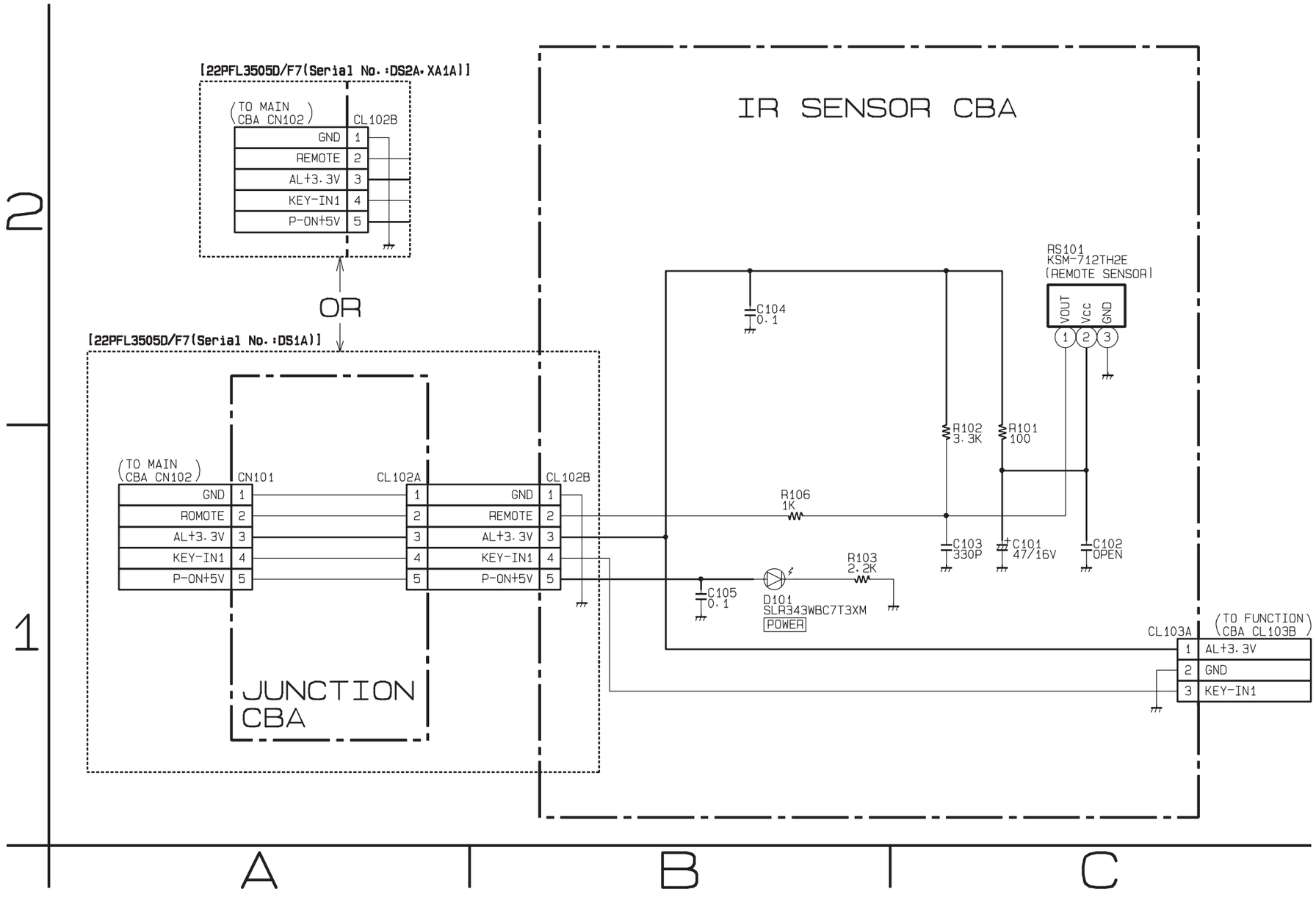
Jack Schematic Diagram



Function Schematic Diagram

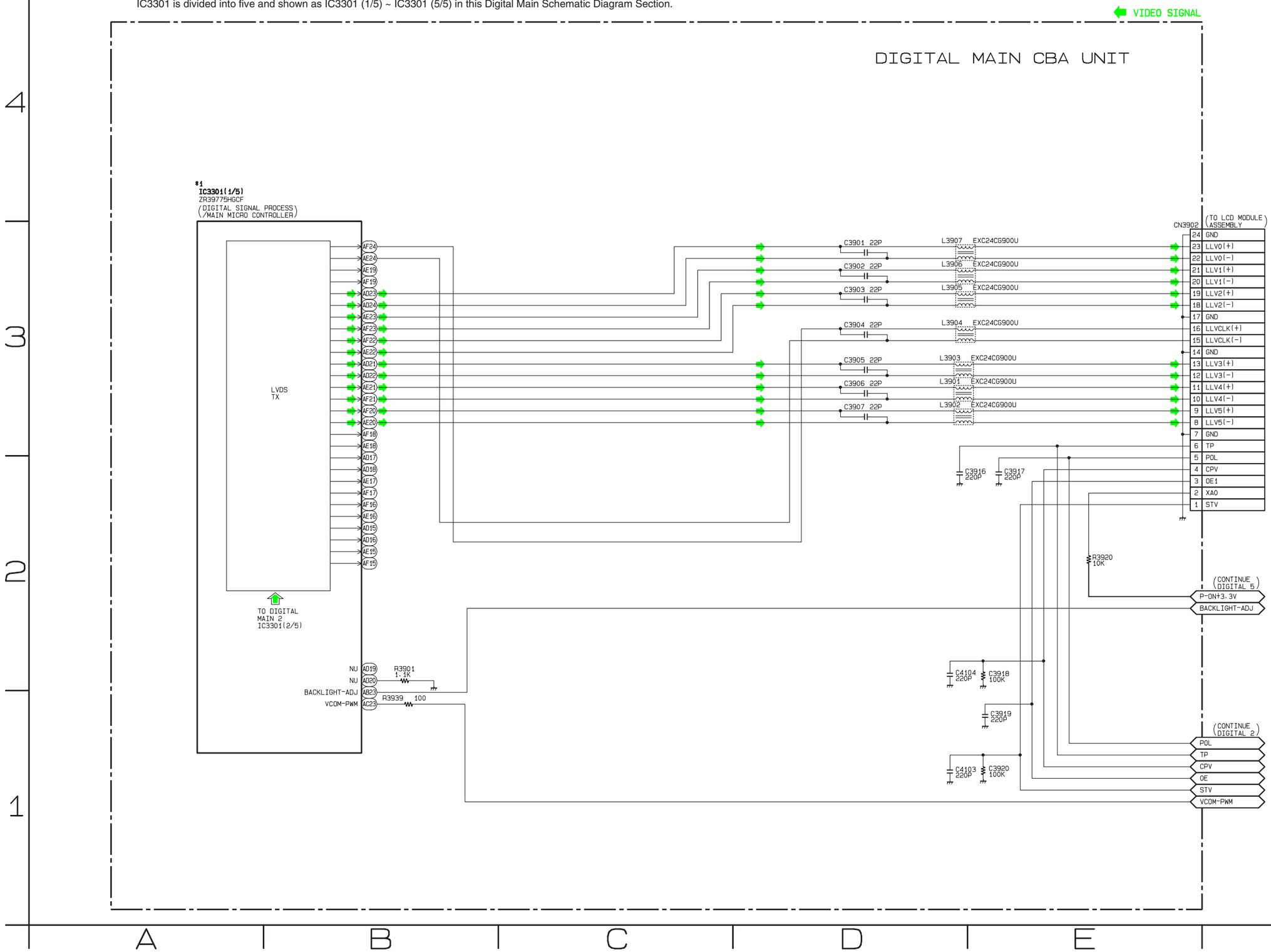


IR Sensor & Junction Schematic Diagram



Digital Main 1 Schematic Diagram

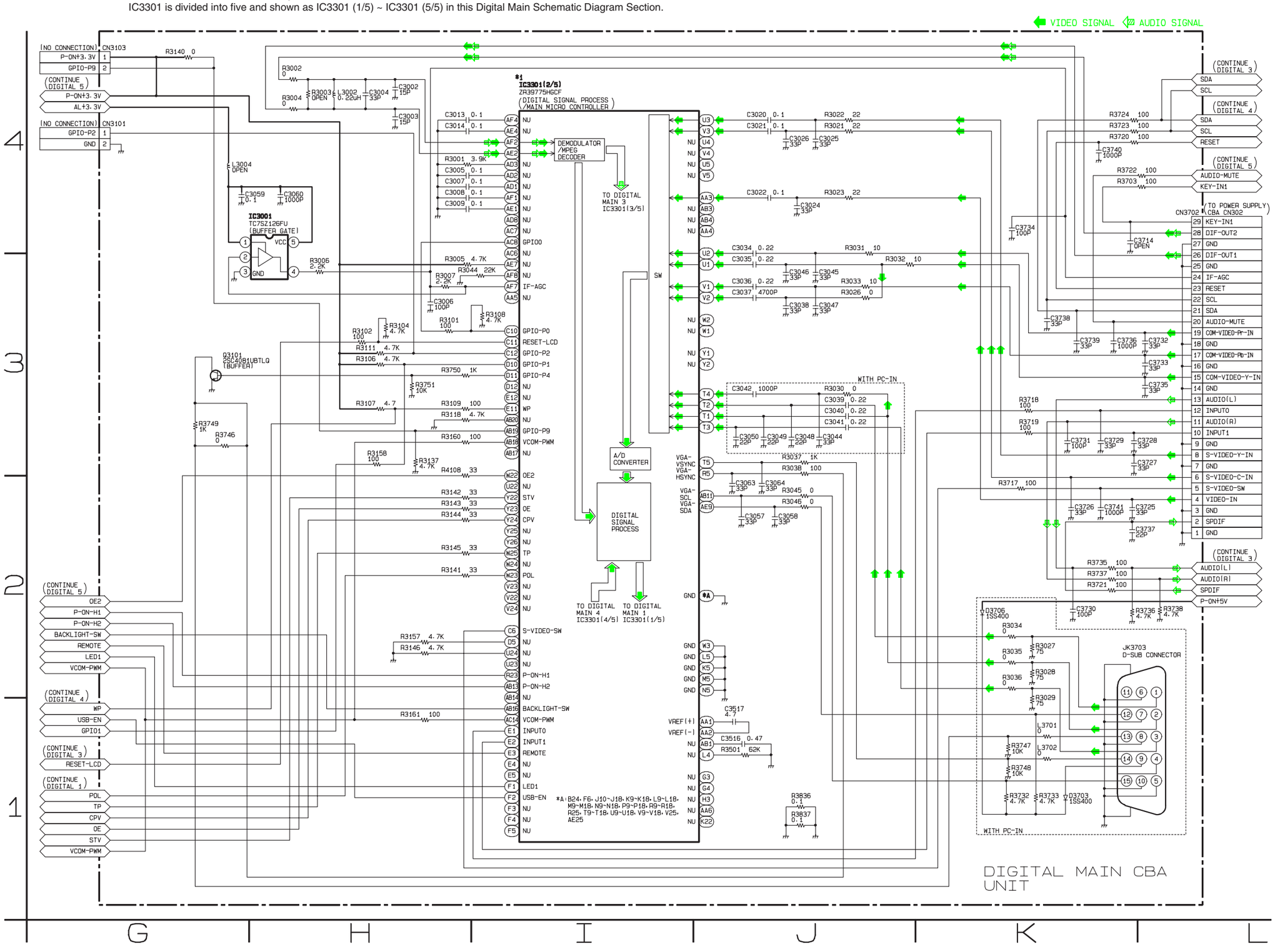
*1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3301.
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



PL10.1SCD1

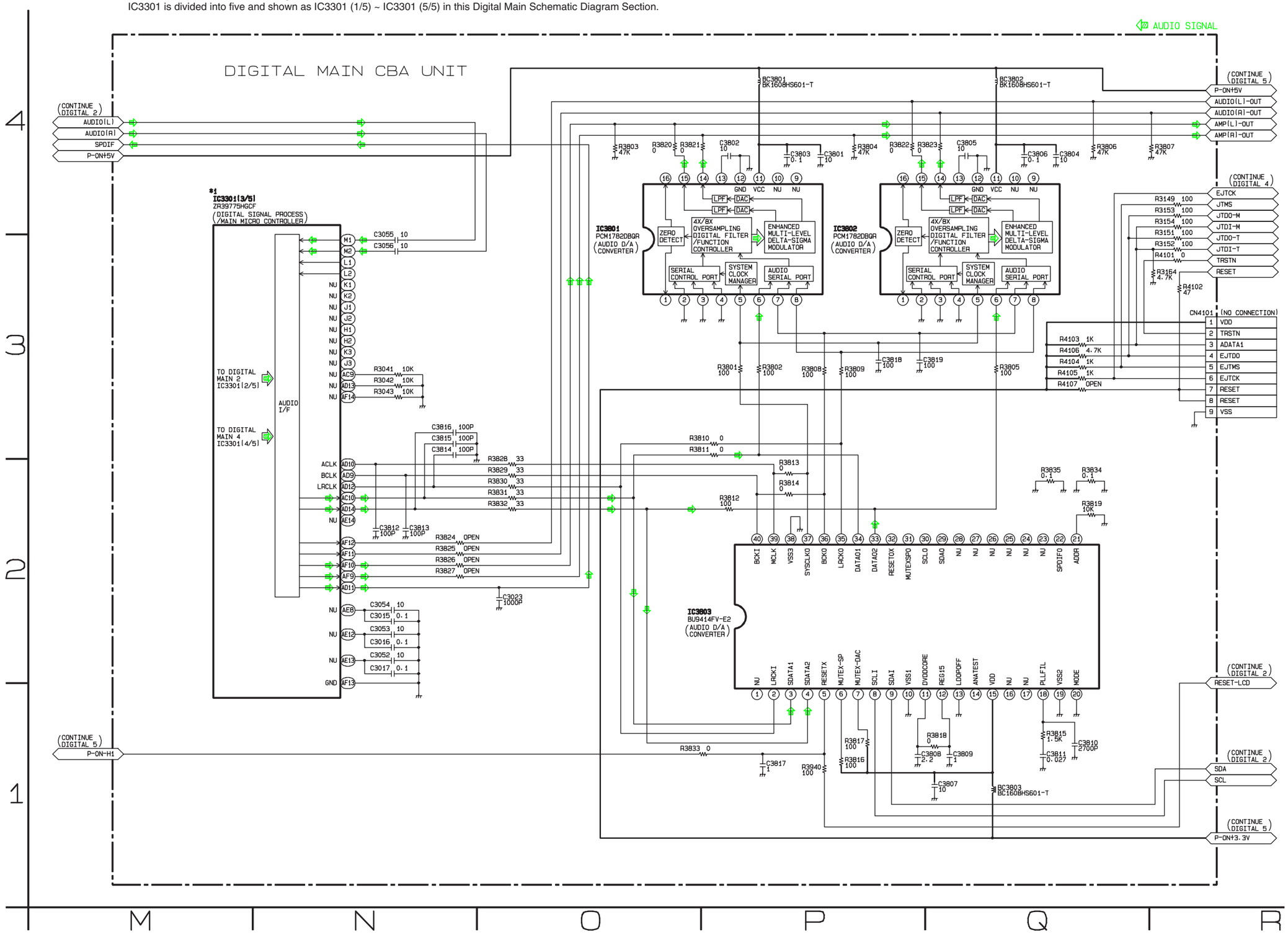
Digital Main 2 Schematic Diagram

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3301.
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



Digital Main 3 Schematic Diagram

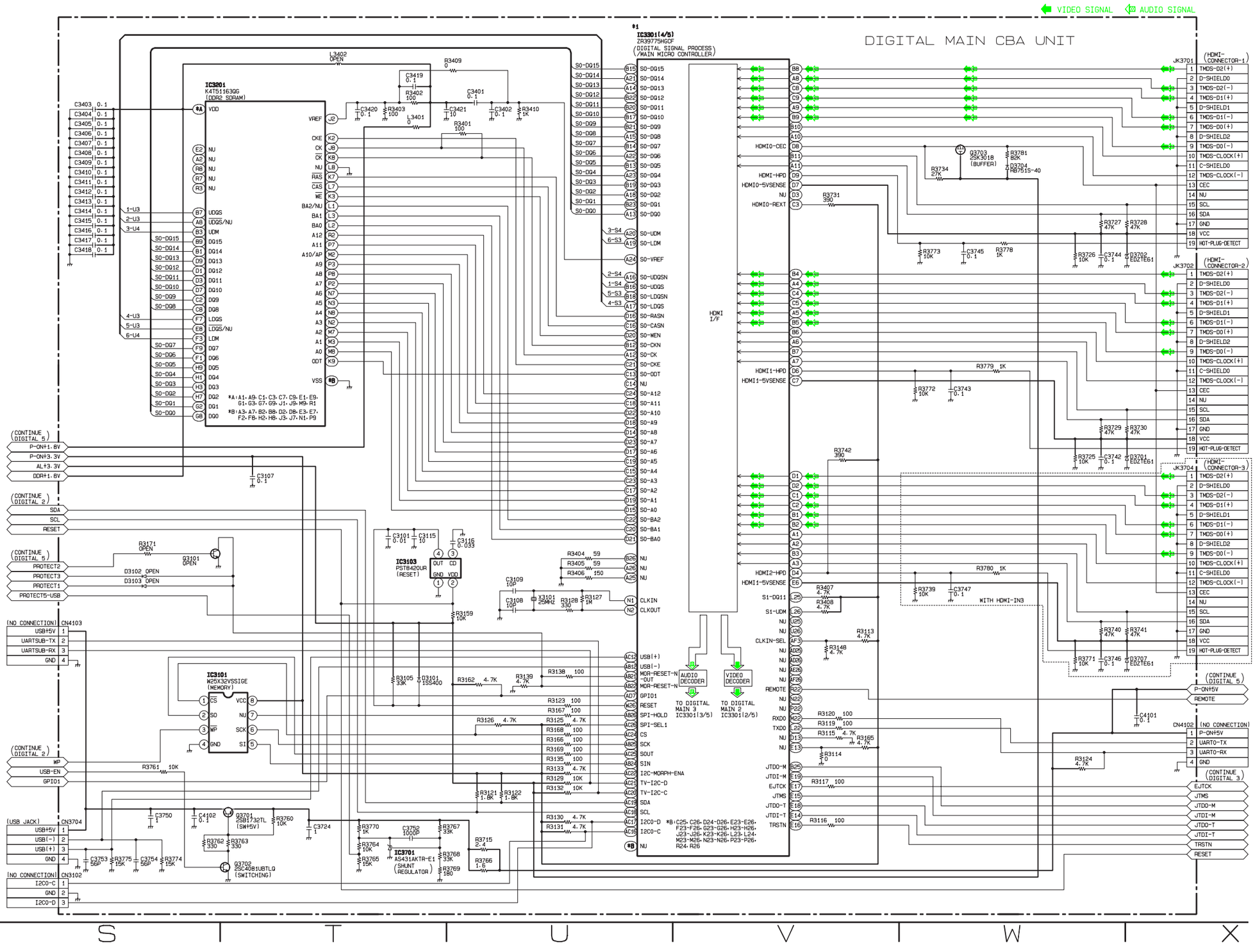
*1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3301.
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



PL10.1SCD3

Digital Main 4 Schematic Diagram

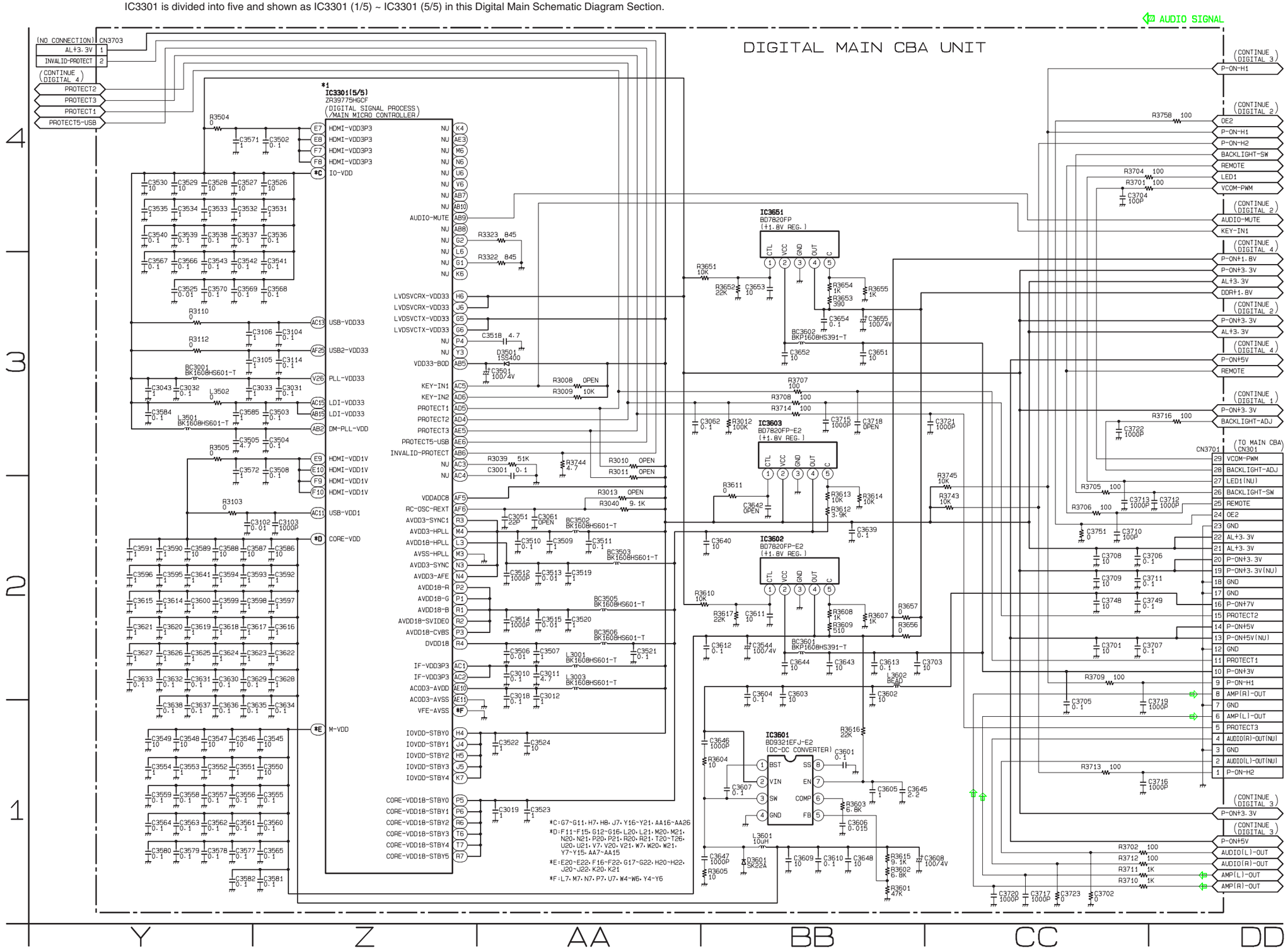
∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3301.
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



PL10.1SCD4

Digital Main 5 Schematic Diagram

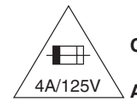
∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3301.
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



Main CBA Top View

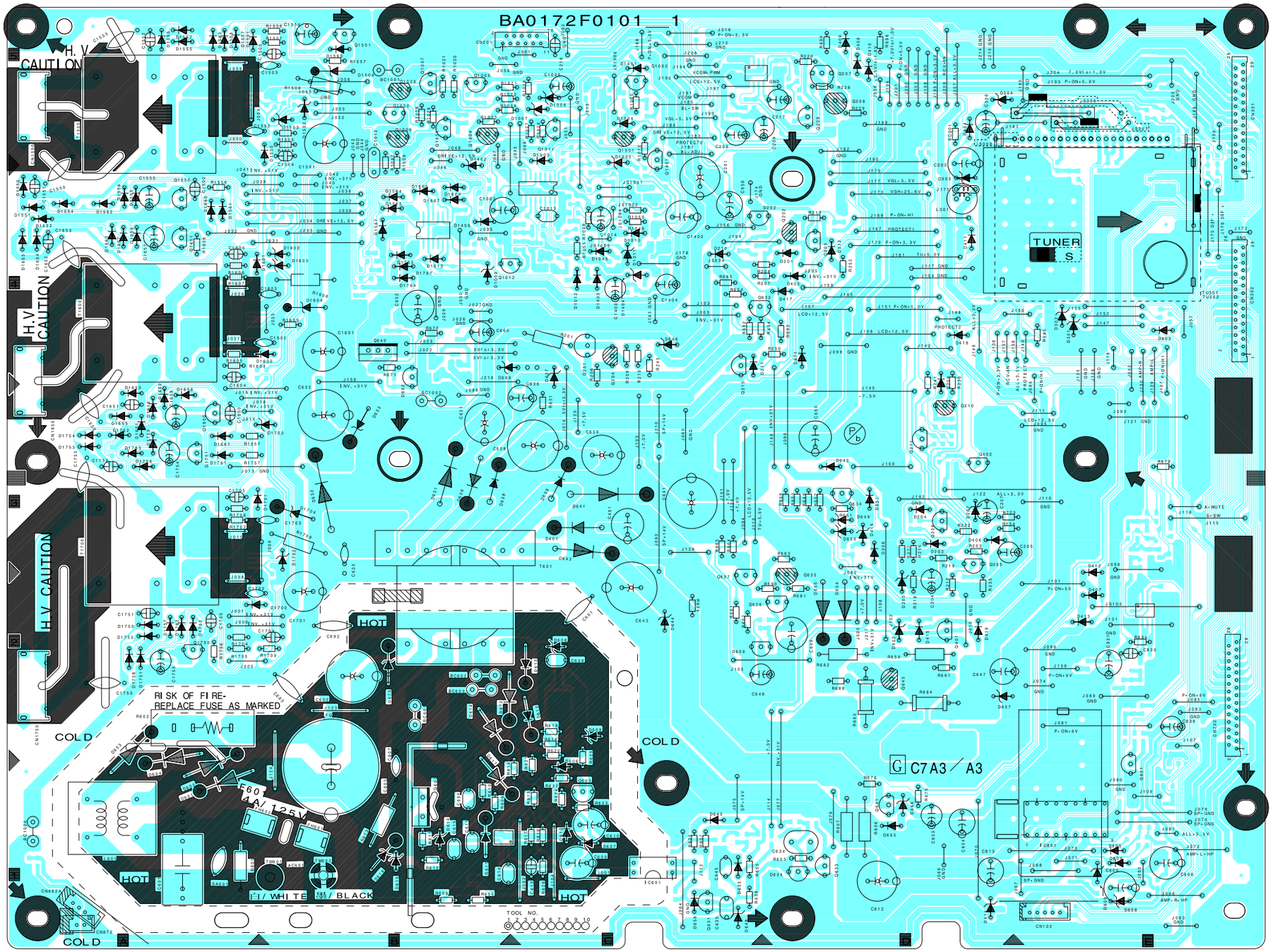
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

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.



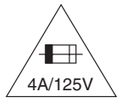
CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

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



Main CBA Bottom View

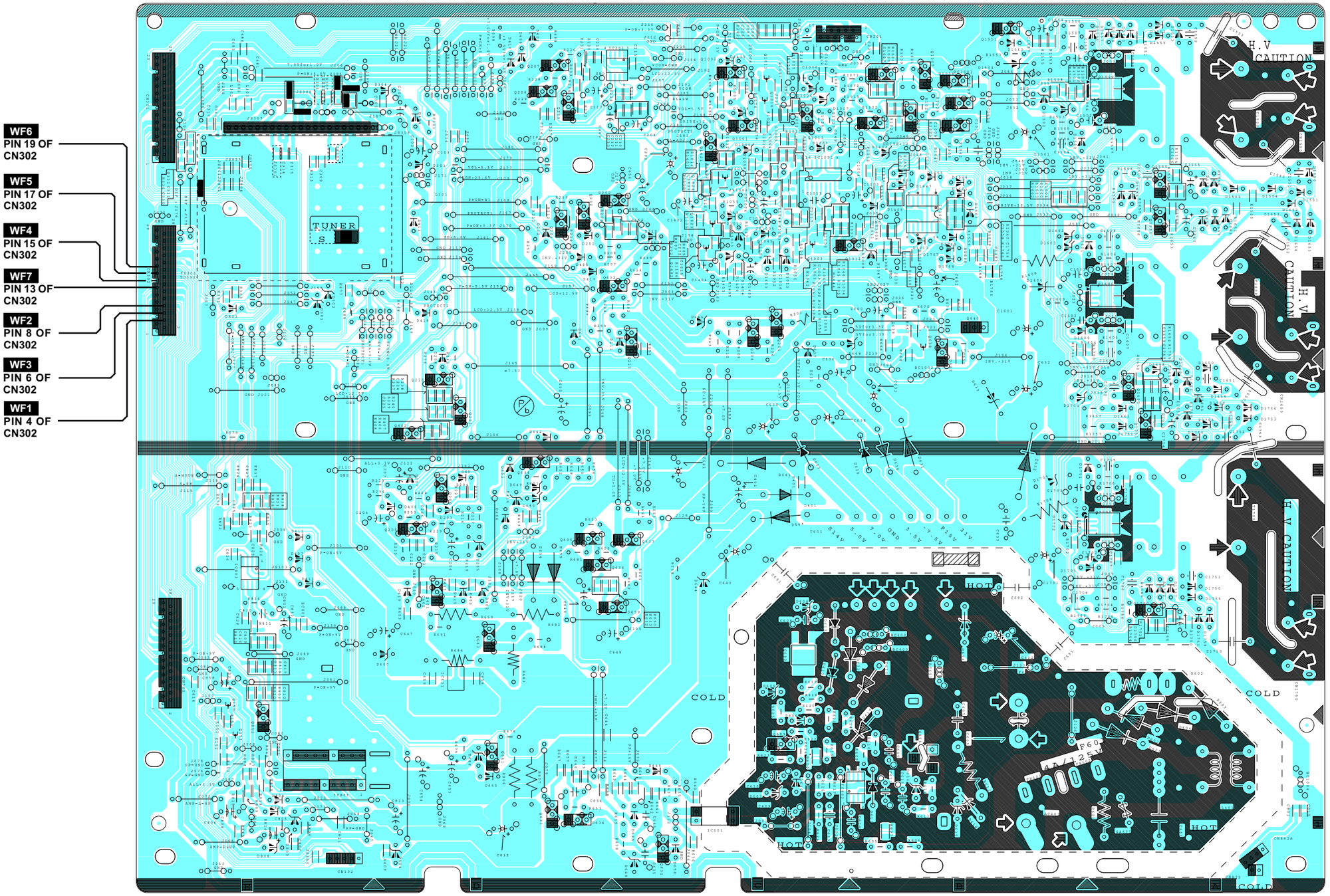
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in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



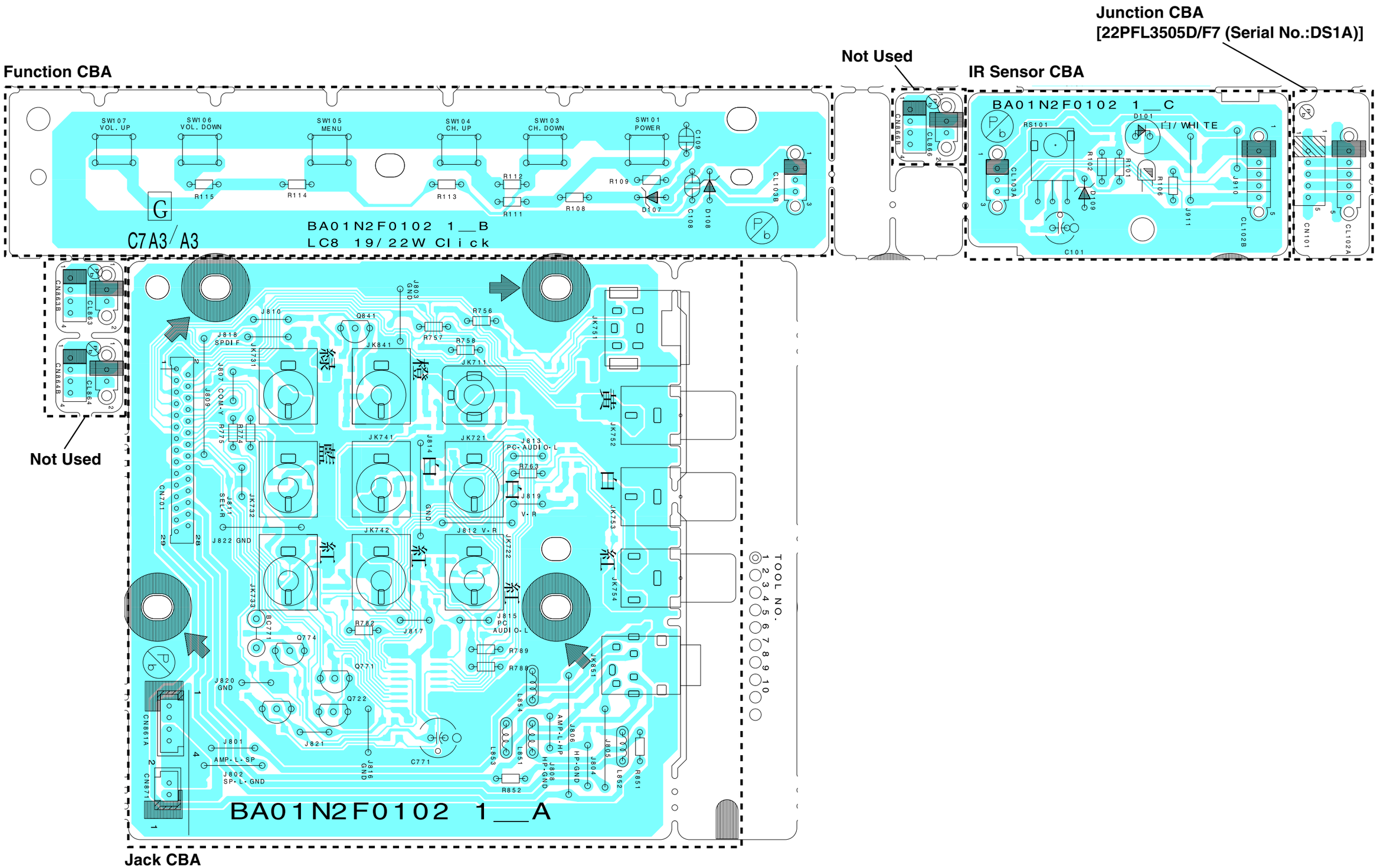
CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

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

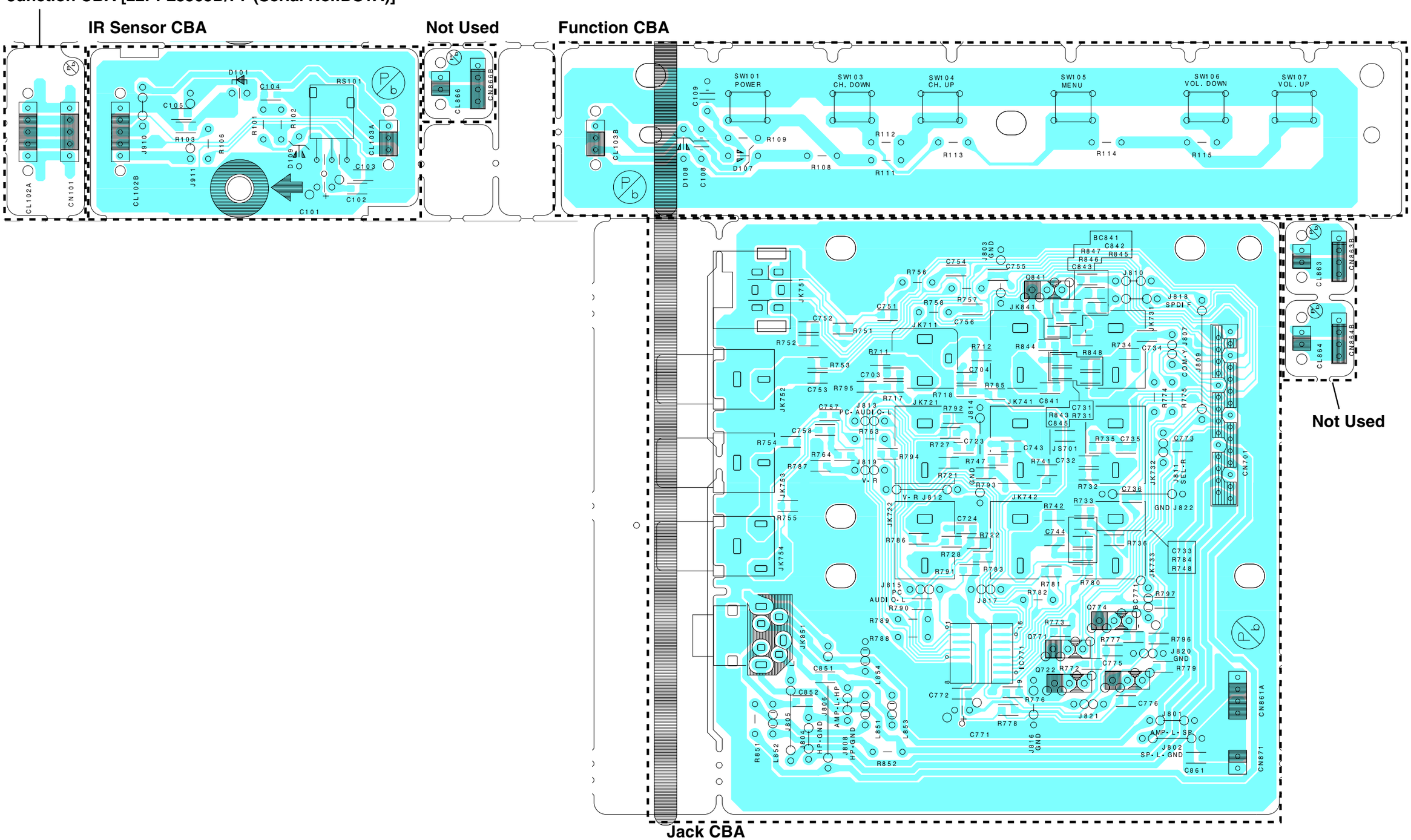
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.



Jack CBA, Function CBA, IR Sensor CBA & Junction CBA Top View



Jack CBA, Function CBA, IR Sensor CBA & Junction CBA Bottom View

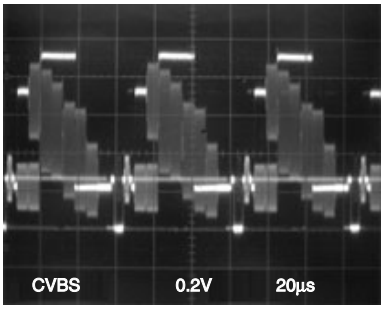


WAVEFORMS

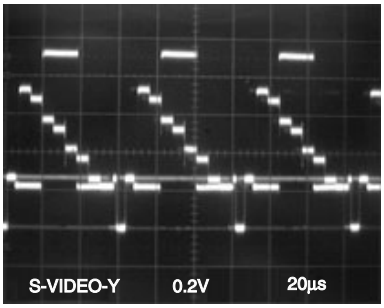
WF1 ~ WF7 = Waveforms to be observed at Waveform check points. (Shown in Schematic Diagram.)

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

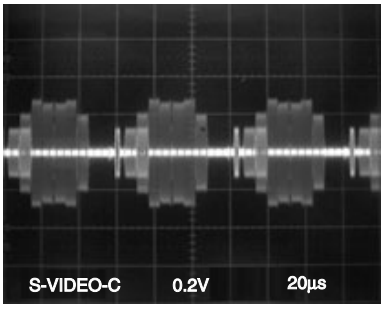
WF1 Pin 4 of CN302



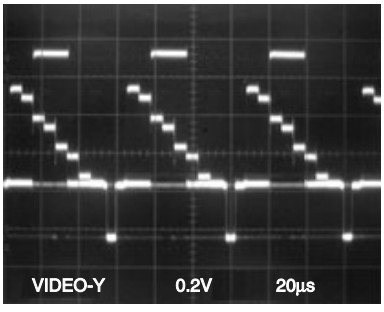
WF2 Pin 8 of CN302



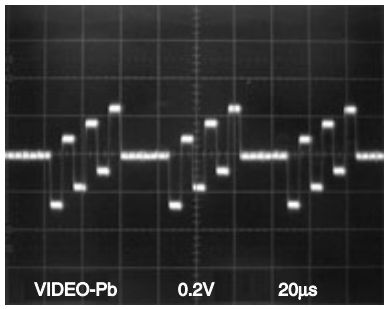
WF3 Pin 6 of CN302



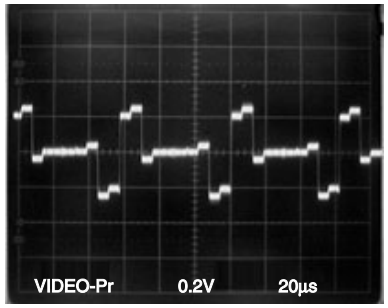
WF4 Pin 15 of CN302



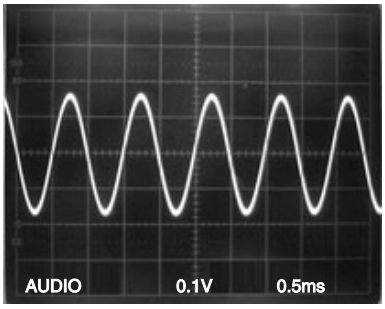
WF5 Pin 17 of CN302



WF6 Pin 19 of CN302

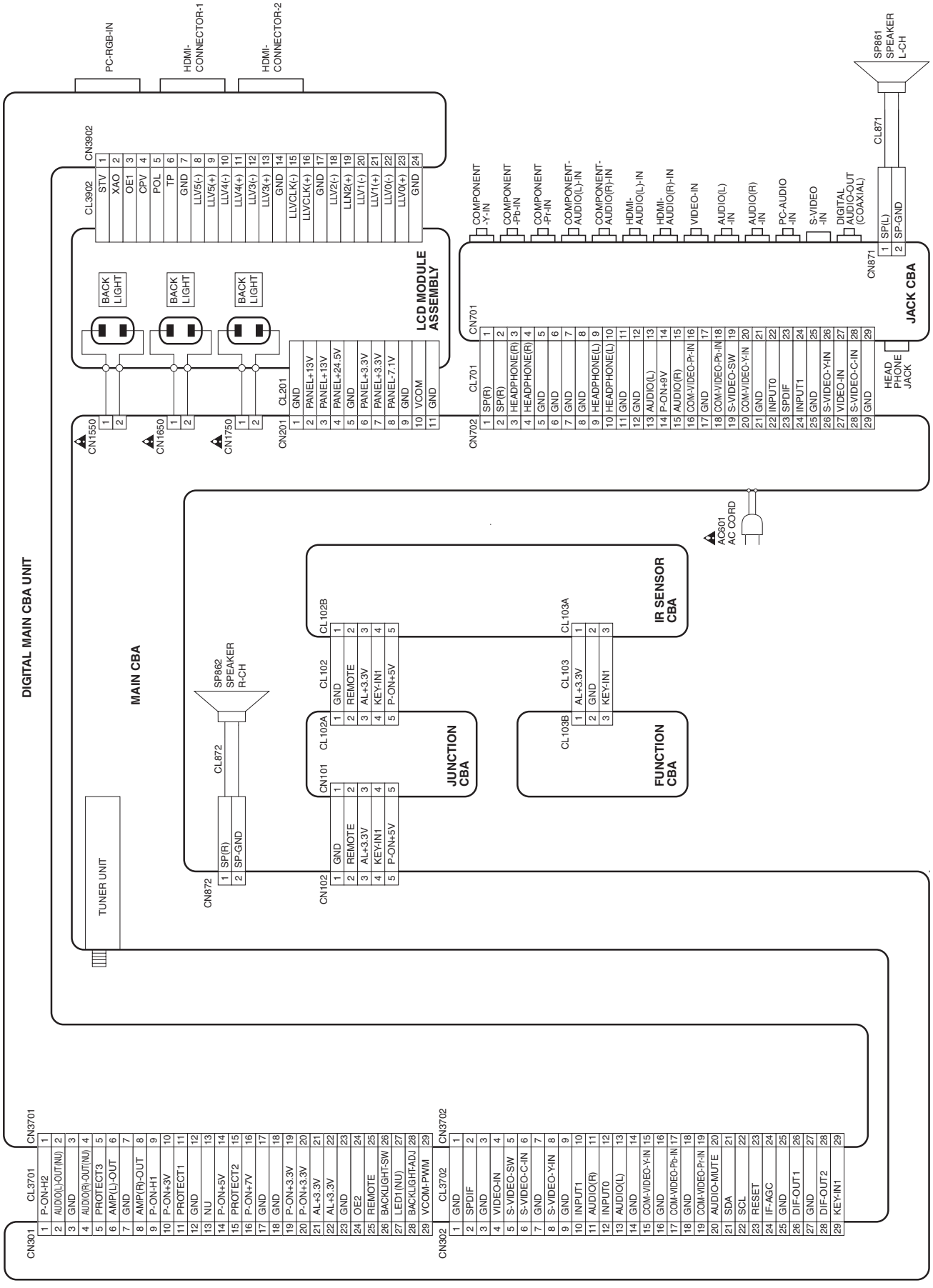


WF7 Pin 13 of CN302

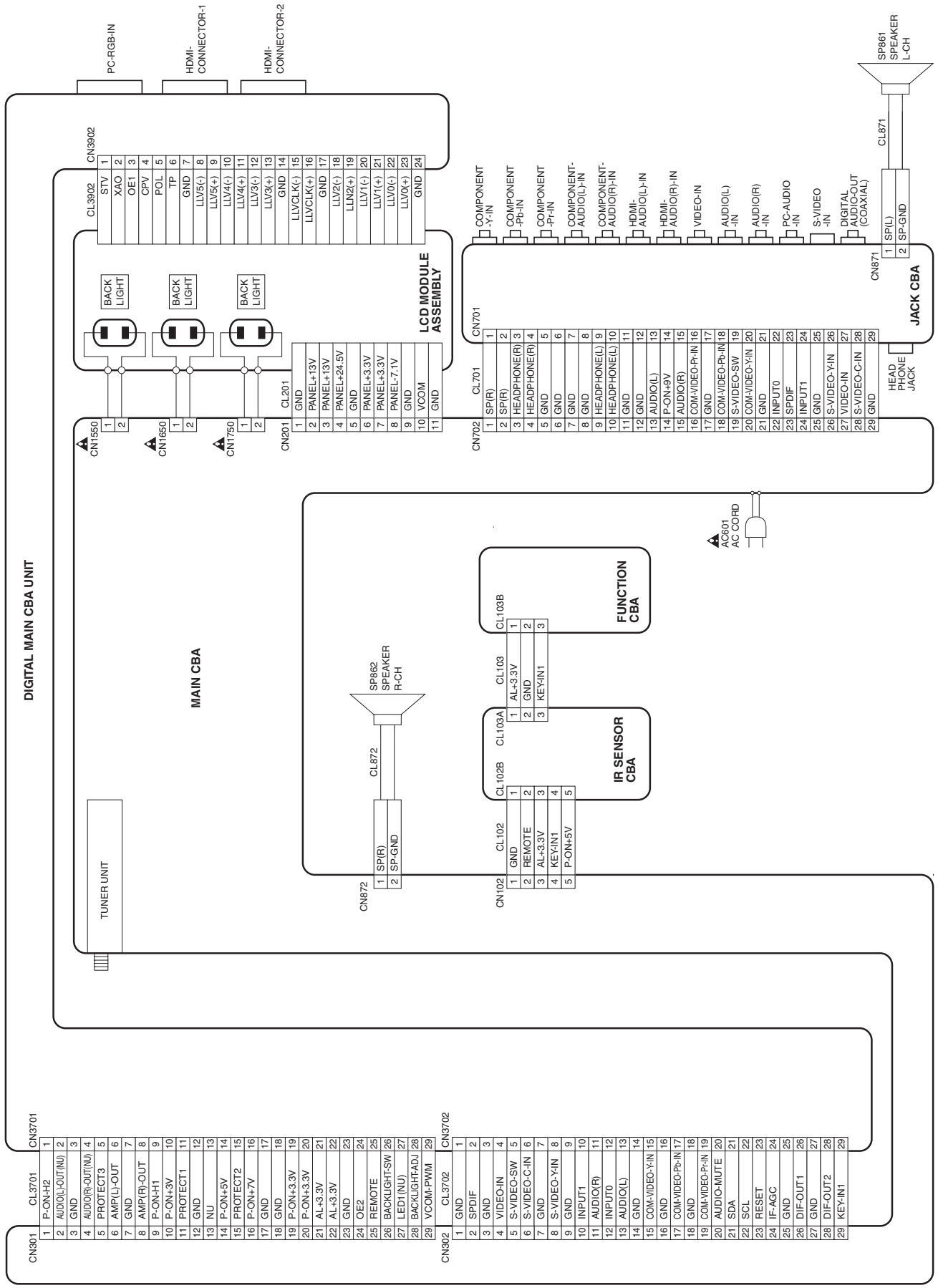


WIRING DIAGRAM

[22PFL3505D/F7 (Serial No.:DS1A)]

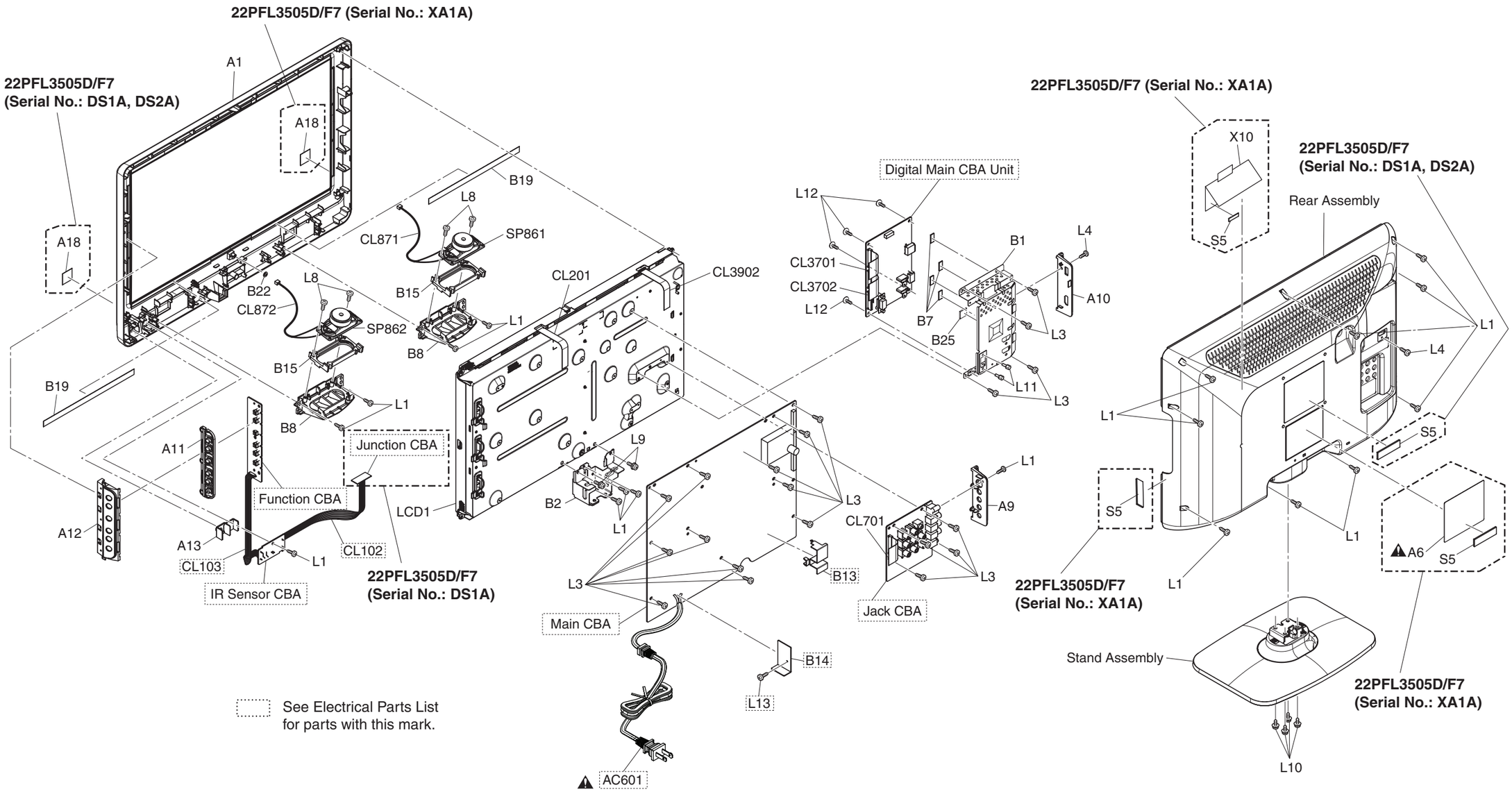


[22PFL3505D/F7 (Serial No.:DS2A, XA1A)]

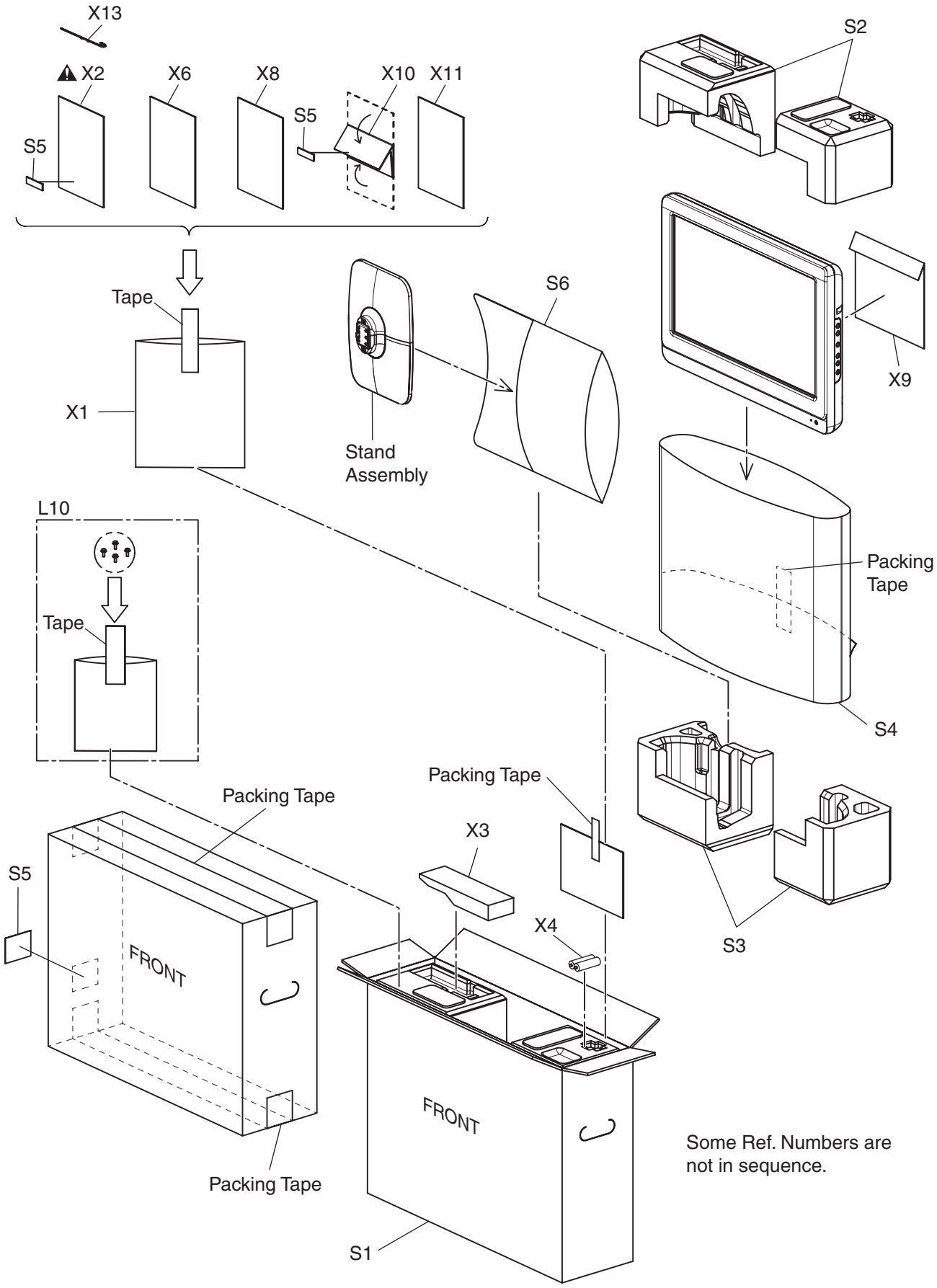


EXPLODED VIEWS

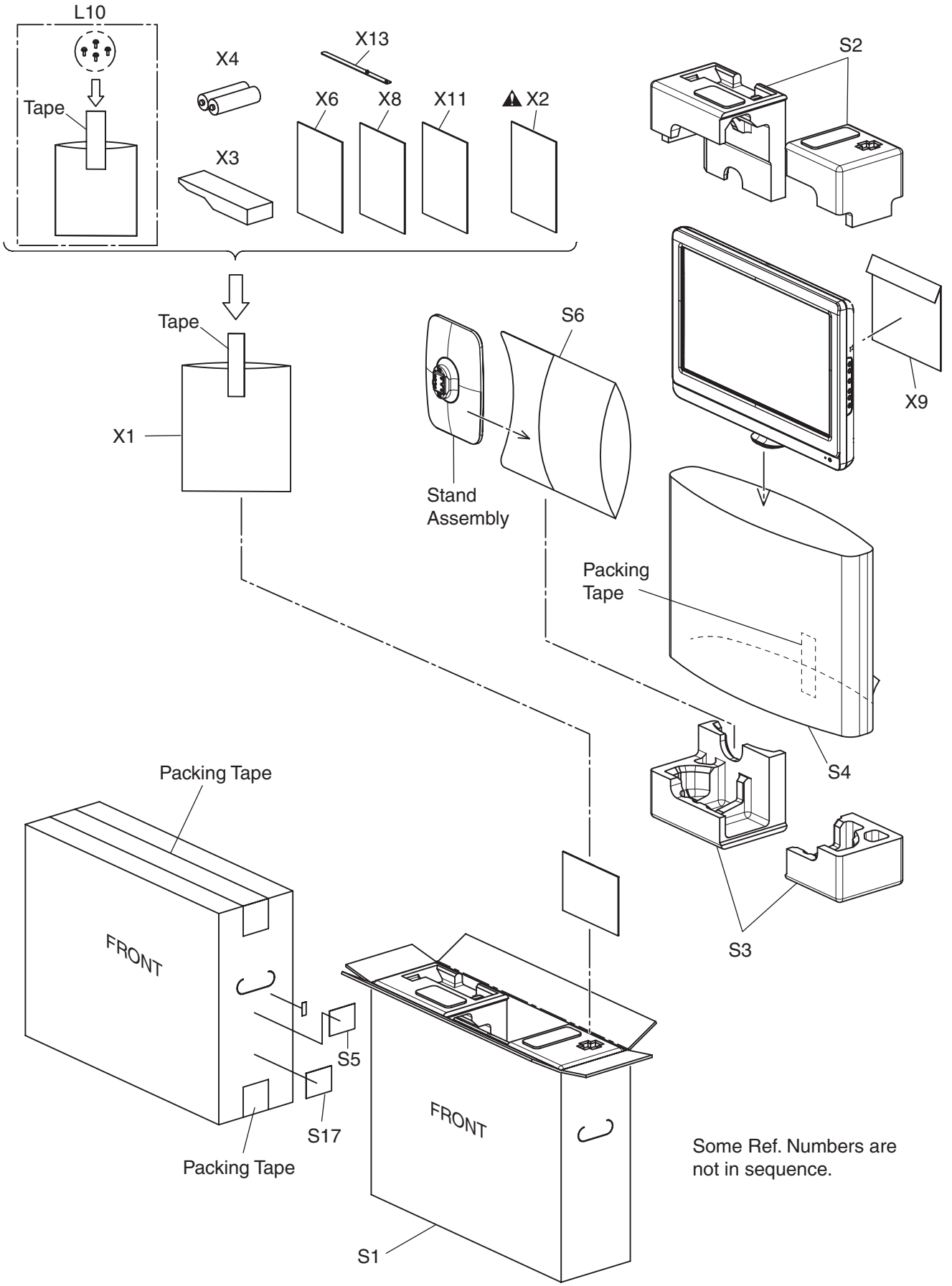
Cabinet



Packing [22PFL3505D/F7 (Serial No.: DS1A, DS2A)]



Packing [22PFL3505D/F7 (Serial No.: XA1A]



PARTS LIST [22PFL3505D/F7 (Serial No. : DS1A)]

Mechanical Parts

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.

Ref. No.	Description	Part No.
	STAND ASSEMBLY A9172UH	1ESA19910
	REAR ASSEMBLY A0172UH	1ESA23007
A1	FRONT CABINET A9172UH	1EM023691
A9	JACK HOLDER(A) A01N2UH	1EM223903
A10	JACK HOLDER(D) A01N2UH	1EM223904
A11	FUNCTION KNOB A91H2UH	1EM222865
A12	KNOB FRAME A01F2UH	1EM327217
A13	SENSOR LED LENS A91H2UH	1EM325697
A18	ENERGY STAR LABEL A91F2UH	---------
B1	SHIELD BOX A01F2UH	1EM224323
B2	STAND HOLDER A9172UH	1EM223044A
B7	GASKET A8AF0UH	1EM425861
B8	SPEAKER HOLDER A91N2UH	1EM222983
B15	SPEAKER CUSHION A91N2UH	1EM325798
B19	CLOTH(10X190XT0.3) L0200UA	1EM420019
B22	SPACER L0001UA	0EM407895
B25	THERMOSTAR TMS-L-2(12*12HC)	XK10000X4003
CL201	WIRE ASSEMBLY 11PIN FFC 11PIN 90MM	WX1A9170-107
CL701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL871	2PIN WIRE ASSEMBLY 2PIN / 80MM	WX1A9172-003
CL872	2PIN WIRE ASSEMBLY 2PIN / 80MM	WX1A9172-003
CL3701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3702	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3902	WIRE ASSEMBLY 24PIN FFC 24PIN 80MM	WX1A9170-101
L1	SCREW P-TIGHT 3X10 BIND HEAD+	GBHP3100
L3	SCREW S-TIGHT M3X6 BIND HEAD+	GBJS3060
L4	SCREW S-TIGHT M3X8 BIND HEAD+	GBHS3080
L8	ASSEMBLED SCREW M3X10	1EM420633A
L9	DOUBLE SEMS SCREW M4X10 + BLK	FPH34100
L11	HEX SCREW #4-40 7MM	1EM430139
L12	ASSEMBLED SCREW (D9 M3X6) A71F0UH	1EM424392B
LCD1	LCD MODULE 6BIT NORMAL GRADE	UJ22MXA
SP861	SPEAKER S0307F03	DS08070XQ001
SP862	SPEAKER S0307F03	DS08070XQ001
PACKING		
S1	CARTON A0172UH	1EM430619
S2	STYROFOAM TOP A9172UH	1EM024029
S3	STYROFOAM BOTTOM A9172UH	1EM024030
S4	SET BAG A81N0UH	1EM322872A
S5	SERIAL NO. LABEL A01P0UH	---------
S6	STAND BAG A81N0UH	1EM425888
ACCESSORIES		
L10	STAND SCREW KIT A9172UH	1ESA19917
X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420A
X2⚠	OWNERS MANUAL A01N2UH	1EMN25619
X3	REMOTE CONTROL TRANSMITTER YKF259-001	URMT34JHG001
X4	BATTERY R03-B500/01S	XB0M451CZB01
X6	QUICK START GUIDE A01N2UH	1EMN25699
X8	CHILD SAFETY SHEET A91H2UH	1EMN24526
X9	CONNECTION GUIDE A91N2UH	1EM325917
X10	REGISTRATION CARD(PHILIPS) A01F2UH	1EMN25799
X11	WALL MOUNT INSTRUCTION A01F2UH	1EMN25659
X13	CABLE MANAGEMENT TIE(BLACK) A01F2UH	1EM431197

Electrical Parts

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%

DIGITAL MAIN CBA UNIT

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A0172MMA-005

MAIN CBA

Ref. No.	Description	Part No.
	MAIN CBA Consists of the following:	A0172MPWA001
	CAPACITORS	
C201	ELECTROLYTIC CAP. 470μF/25V M	CE1EMASDL471
C202	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C204	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C207	ELECTROLYTIC CAP. 22μF/50V M	CE1JMASDL220
C208	ELECTROLYTIC CAP. 47μF/25V M	CE1EMASDL470
C209	ELECTROLYTIC CAP. 47μF/25V M	CE1EMASDL470
C214	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C215	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C216	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C217	ELECTROLYTIC CAP. 47μF/25V M	CE1EMASDL470
C302	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C303	ELECTROLYTIC CAP. 220μF/10V M	CE1AMASDL221
C305	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C306	ELECTROLYTIC CAP. 1μF/50V M	CE1JMASDL1R0
C309	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C310	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
C311	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
C314	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C315	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C330	CHIP CERAMIC CAP.(1608) CH D 10pF/50V	CHD1JD3CH100
C331	CHIP CERAMIC CAP.(1608) CH D 10pF/50V	CHD1JD3CH100
C401	ELECTROLYTIC CAP. 1μF/50V M	CE1JMASDL1R0
C601⚠	CAP METALIZED FILM 0.47μF/300V K 3.5MM	CT2F474DC004
C602	ELECTROLYTIC CAP 47μF/200V M	CE2DMZNDL470
C603	CAP ELECTROLYTIC 390μF/200V	CEB391DYG006
C605	POLYESTER FILM CAP. (PB FREE) 0.0015μF/ 100V J	CA2A152DT018
C607⚠	CERAMIC CAP. 560pF/2KV	CA3D561PAN04
C608	POLYESTER FILM CAP. (PB FREE) 0.001μF/ 100V J	CA2A102DT018
C609	ELECTROLYTIC CAP. 47μF/50V M	CE1JMASDL470
C610	ELECTROLYTIC CAP. 100μF/50V M	CE1JMASDL101
C611	CAP CERAMIC (AX) 0.1μF/50V/B/K	CA1J104TU061
C613	CAP CERAMIC (AX) 220pF/50V/B/K	CA1J221TU061
C614	CAP CERAMIC (AX) 1000pF/50V/B/K	CA1J102TU061
C615	CAP CERAMIC (AX) 3300pF/50V/B/K	CA1J332TU061
C631	ELECTROLYTIC CAP. 470μF/25V M	CE1EMASDL471
C632	ELECTROLYTIC CAP. 1000μF/35V M	CE1GMZADL102
C633	CERAMIC CAP. B K 1500pF/1KV	CCD3AKN0B152
C634	POLYESTER FILM CAP. (PB FREE) 0.022μF/ 100V J	CA2A223DT018
C636⚠	ELECTROLYTIC CAP. 100μF/25V M	CE1EMASDL101
C638	CAP ALUMINUM ELECTOLYTIC 2200μF/6.3V M	CE0KMZNDL222
C639	CAP ALUMINUM ELECTOLYTIC 2200μF/6.3V M	CE0KMZNDL222
C641	ELECTROLYTIC CAP 3300μF/10V	CE1AMZNDL332
C643	ELECTROLYTIC CAP. 470μF/25V M	CE1EMZNDL471
C645	POLYESTER FILM CAP. (PB FREE) 0.0022μF/ 100V J	CA2A222DT018
C647	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C649	ELECTROLYTIC CAP. 220μF/10V M	CE1AMASDL221
C650	ELECTROLYTIC CAP. 220μF/10V M	CE1AMASDL221
C652	ELECTROLYTIC CAP. 1000μF/6.3V M	CE0KMASDL102
C653	ELECTROLYTIC CAP. 22μF/50V M	CE1JMASDL220
C654	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C656	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C658	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C659	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C660	ELECTROLYTIC CAP. 3.3μF/50V M	CE1JMASDL3R3
C692⚠	CAP CERAMIC 4700pF/250V/M/KX	CA2E472MR101
C805	ELECTROLYTIC CAP. 330μF/25V M	CE1EMASDL331
C806	ELECTROLYTIC CAP. 330μF/25V M	CE1EMASDL331
C807	CHIP CERAMIC CAP.(1608) B K 0.022μF/25V	CHD1EK30B223
C808	CHIP CERAMIC CAP.(1608) B K 0.022μF/25V	CHD1EK30B223
C809	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C810	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C811	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C812	ELECTROLYTIC CAP. 470μF/25V M	CE1EMASDL471
C813	ELECTROLYTIC CAP. 100μF/25V M	CE1EMASDL101
C816	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C817	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C825	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C826	CHIP CERAMIC CAP.(1608) CH J 390pF/50V	CHD1JJ3CH391
C827	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C828	CHIP CERAMIC CAP.(1608) CH J 390pF/50V	CHD1JJ3CH391
C829	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C830	CAP CERAMIC (AX) 1000pF/50V/B/K	CA1J102TU061
C831	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C832	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1003	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C1004	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1005	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1006	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1007	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1008	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1009	CHIP CERAMIC CAP. B K 470pF/50V	CHD1JK30B471
C1010	CHIP CERAMIC CAP. B K 470pF/50V	CHD1JK30B471
C1012	METALIZED POLYESTER FILM CAP. 0.47μF/ 50V J	CT1J474DT040
C1013	POLYESTER FILM CAP. (PB FREE) 0.0039μF/ 100V J	CA2A392DT018
C1014	ELECTROLYTIC CAP. 47μF/25V M	CE1EMASDL470

Ref. No.	Description	Part No.
C1015	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1016	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1017	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1018	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1019	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1020	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1021	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1401	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1403	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1404	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1500	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
C1501	ELECTROLYTIC CAP. 470μF/35V M	CE1GMZNDL471
C1502	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1503	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1550	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1551	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1552	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1553	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1554	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1555	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1556	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1557	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1558	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1600	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
C1601	ELECTROLYTIC CAP. 470μF/35V M	CE1GMZNDL471
C1602	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1603	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1650	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1651	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1652	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1653	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1657	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1658	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1659	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1660	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1661	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1700	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
C1701	ELECTROLYTIC CAP. 470μF/35V M	CE1GMZNDL471
C1702	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1703	CERAMIC CAP. B K 2200pF/500V	CCD2JKS0B222
C1750	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1751	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1752	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1753	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1754	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1755	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1756	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1757	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1758	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
CONNECTORS		
CN102	242 SERIES CONNECTOR 224202105W1	J322C05TG001
CN201	FFC CONNECTOR IMSA-9615S-11A-PP-A	JC96J11ER007
CN301	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN302	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN702	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN872	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
CN1550⚠	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
CN1650⚠	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
CN1750⚠	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
DIODES		
D201	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D202	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036

Ref. No.	Description	Part No.
D203	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D204	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D205	DIODE ZENER 27BSB-T26	NDTB027BST26
D206	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D207	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D210	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D211	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D212	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D401	DIODE FR104-B	NDLZ000FR104
D402	DIODE ZENER 8V2BSB-T26	NDTB8R2BST26
D404	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D405	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D406	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D407	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D408	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D409	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D410	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D411	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D412	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D413	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D414	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D416	DIODE ZENER 10BSB-T26	NDTB010BST26
D417	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D418	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D419	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D601⚠	DIODE 1N5397BD	NDL1001N5397
D602⚠	DIODE 1N5397BD	NDL1001N5397
D603⚠	DIODE 1N5397BD	NDL1001N5397
D604⚠	DIODE 1N5397BD	NDL1001N5397
D607	DIODE ZENER 11BSB-T26	NDTB011BST26
D608	DIODE ZENER 27BSB-T26	NDTB027BST26
D609	DIODE ZENER 27BSB-T26	NDTB027BST26
D610	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D612	DIODE FR104-B	NDLZ000FR104
D613	DIODE FR104-B	NDLZ000FR104
D614	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D615⚠	DIODE ZENER 39BSB-T26	NDTB039BST26
D616	DIODE ZENER 27BSB-T26	NDTB027BST26
D617	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D631	DIODE FAST RECOVERY FR153-B/P	NDWZ0FR153BP
D632	DIODE SCHOTTKY 30PHA20-FC	QD9Z030PHA20
D633⚠	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D634	IC SHUNT REGULATOR KIA431-AT/PF5	NSZBB0TJY036
D635	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D636	DIODE FR104-B	NDLZ000FR104
D637⚠	DIODE ZENER 36BSB-T26	NDTB036BST26
D638	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D639	DIODE FAST RECOVERY FR151BD	NDWZ0FR151BD
D641	DIODE SCHOTTKY SB360BH	NDWZ000SB360
D642	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D643	FAST RECOVERY DIODE FR252	NDWZ000FR252
D646	DIODE ZENER 11BSA-T26	NDTA011BST26
D648	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D649⚠	DIODE ZENER 3V3BSB-T26	NDTB3R3BST26
D650⚠	DIODE ZENER 5V6BSA-T26	NDTA5R6BST26
D651	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D654	DIODE FR154BD	NDL1000FR154
D655	DIODE FR154BD	NDL1000FR154
D657	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D658	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D659	SHUNT REGULATOR KIA431B-AT/P	NSZBA0TJY038
D662	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D665	WIRE CP STP-S-0.50	XZ40F0REN001

Ref. No.	Description	Part No.
D666	DIODE ZENER 10BSB-T26	NDTB010BST26
D668⚠	DIODE ZENER 1ZB20BB	NDWZ0001ZB20
D671	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D672	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D804	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D805	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D808	DIODE ZENER 20BSB-T26	NDTB020BST26
D809	DIODE ZENER 20BSB-T26	NDTB020BST26
D1003	WIRE CP STP-S-0.50	XZ40F0REN001
D1004	WIRE CP STP-S-0.50	XZ40F0REN001
D1005	DIODE ZENER 15BSB-T26	NDTB015BST26
D1007	DIODE ZENER 6V8BSB-T26	NDTB6R8BST26
D1009	DIODE ZENER 12BSB-T26	NDTB012BST26
D1010	WIRE CP STP-S-0.50	XZ40F0REN001
D1012	WIRE CP STP-S-0.50	XZ40F0REN001
D1013	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1045	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1401	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1402	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
D1403	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1404	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
D1406	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1504⚠	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D1550	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1551	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1552	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1553	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1554	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1555	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1556	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1557	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1558	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1559	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1560	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1561	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1562	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1563	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1564	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1565	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1567	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1604⚠	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D1650	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1651	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1652	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1653	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1654	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1655	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1656	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1657	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1658	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1659	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1660	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1661	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1662	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1663	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1664	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1665	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1667	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1704⚠	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D1750	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1751	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1752	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1753	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1754	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1755	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1756	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1757	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1758	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1759	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1760	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1761	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1762	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1763	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1764	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1765	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1767	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
	ICS	
IC201	IC TL3472CDR	NSZBA0TTY115
IC601⚠	PHOTO COUPLER LTV817MCF	NPECLTV817MF
IC602	IC SWITING FA5571N-D1-TE1/SOP-8	QSCA0T0FD003
IC631	IC REGULATOR MM3123DPRE	QSCA0T0MM108
IC801	AUDIO AMP IC TDA1517P/N3 112	NSCA0SNXP003
IC803	IC OP AMP NJM4558M(TE1)-#ZZZB	QSZBA0TJR089
IC1001	IC PULSE-WIDTH-MODULATION CONT TL494CDR	NSCA0T0TY006
IC1002	IC BA10324AF-E2	QSZBA0TRM032
	COILS	
L301	CHOKE COIL 22μH-K	LLBD00PKV021
L302	CHIP INDUCTOR LK1608R22K-T	LLACKB3TUR22
L303	CHIP INDUCTOR LK1608R22K-T	LLACKB3TUR22
L601⚠	LINE FILTER JLB20102	LLEG0Z0XB006
	TRANSISTORS	
Q201	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q202	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q203	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q204	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q205	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q206	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q207	TRANSISTOR 2SC2655-Y(TE6 F M)	QQSY2SC2655F
Q208	TRANSISTOR KTA1281-Y-AT/P	NQVYKTA1281P
Q209	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q215	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q401	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q402	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q601⚠	MOS FET TK7A50D	QEWZTK7A50DQ
Q602	FET POWER MOS SMD KHB1D0N60D-RTF/ PMC	NF1ZKHB1D0N6
Q603	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q631	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q632	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q633	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q634	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q635	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q636	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q637	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q638	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q639	PNP TRANSISTOR SMD 2SA1576UBTLQ	QQ1Q2SA1576U
Q640	NPN TRANSISTOR POWER 2SC4881F HFE MAX320	QQWZ2SC4881F
Q641	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q643	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q801	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1001	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q1002	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1003	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q1004	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F

Ref. No.	Description	Part No.
Q1005	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1006	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q1007	TRANSISTOR 2SC2120-O(TE2 F T)	QQS02SC2120F
Q1008	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q1009	TRANSISTOR 2SA950-Y(TE2 F T)	QQSY02SA950F
Q1010	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1011	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1013	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q1014	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q1023	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q1024	PNP TRANSISTOR SMD 2SA1576UBTLQ	QQ1Q2SA1576U
Q1401	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1402	NPN TRANSISTOR SMD 2SC4081UBTLQ	QQ1Q2SC4081U
Q1500⚠	FET MOS SMD TPC8214-H	QF2ZTPC8214H
Q1550	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1551	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1600⚠	FET MOS SMD TPC8214-H	QF2ZTPC8214H
Q1650	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1651	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1700⚠	FET MOS SMD TPC8214-H	QF2ZTPC8214H
Q1750	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1751	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
RESISTORS		
R201	RES. CARBON FILM J 1/2W J 12 Ω	RCX2120T1003
R202	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R203	CHIP RES. 1/10W F 2.7k Ω	RRXAFR5H2701
R204	CHIP RES. 1/10W F 2.7k Ω	RRXAFR5H2701
R205	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R206	RES CARBON FILM T 1/4W J 8.2 Ω	RCX48R2T1001
R207	RES CARBON FILM T 1/4W J 5.6k Ω	RCX4562T1001
R208	RES CARBON FILM T 1/4W J 5.6k Ω	RCX4562T1001
R209	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R210	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R211	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R212	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R213	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R214	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R215	RES CARBON FILM T 1/4W J 220 Ω	RCX4221T1001
R217	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R218	RES CARBON FILM T 1/4W J 6.8k Ω	RCX4682T1001
R219	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R220	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R221	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R222	RES CARBON FILM T 1/4W J 220 Ω	RCX4221T1001
R223	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R224	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R225	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R226	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R227	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R228	WIRE CP STP-S-0.50	XZ40F0REN001
R229	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R230	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R231	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R232	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R233	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R234	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R236	WIRE CP STP-S-0.50	XZ40F0REN001
R243	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R250	RES CARBON FILM T 1/4W J 100 Ω	RCX4101T1001
R251	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R252	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R253	RES CARBON FILM T 1/4W J 56k Ω	RCX4563T1001
R254	RES CARBON FILM T 1/4W J 6.8k Ω	RCX4682T1001
R302	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R303	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R304	CHIP RES. 1/10W J 82 Ω	RRXAJR5Z0820
R305	CHIP RES. 1/10W J 82 Ω	RRXAJR5Z0820
R313	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R330	CHIP RES. 1/10W J 47 Ω	RRXAJR5Z0470
R331	CHIP RES. 1/10W J 47 Ω	RRXAJR5Z0470
R401⚠	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R402	CHIP RES. 1/10W F 30k Ω	RRXAFR5H3002
R403	CHIP RES. 1/10W F 43.0 k Ω	RRXAFR5H4302
R406	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R407	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R408	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R409	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R411	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R412	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R413	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R601⚠	GLASS GLAZE RES. 1/2W J 2.7M Ω	RXX2JZLZ0275
R602⚠	CEMENT RES. 3W K 1.2 Ω	RW031R2PG007
R604	RES CHIP 3216 1/4W J 2.7M Ω	RRX4275HH034
R605	WIRE CP STP-S-0.50	XZ40F0REN001
R606	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R607	RES CHIP 3216 1/4W J 2.7M Ω	RRX4275HH034
R609	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R610	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R611	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R612	RES CARBON FILM T 1/4W J 100 Ω	RCX4101T1001
R613⚠	METAL OXIDE FILM RES. 2W J 0.27 Ω	RN02R27ZU001
R614	RES CARBON FILM T 1/4W J 33 Ω	RCX4330T1001
R615	RES CARBON FILM T 1/4W J 27 Ω	RCX4270T1001
R616	RES CARBON FILM T 1/4W J 33 Ω	RCX4330T1001
R617	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R618	WIRE CP STP-S-0.50	XZ40F0REN001
R619	WIRE CP STP-S-0.50	XZ40F0REN001
R622	RES CARBON FILM T 1/4W J 1.2k Ω	RCX4122T1001
R623	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R624	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R626	RES CARBON FILM T 1/4W J 5.6k Ω	RCX4562T1001
R631	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R632	RES CHIP.(1608) 1/10W D 1.1k Ω	RRXADR5H1101
R633	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R636	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R637	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R638	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R639	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R640	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R641	CHIP RES. 1/10W F 330 Ω	RRXAFR5H3300
R642	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R643	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R644	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R645	CHIP RES. 1/10W F 11k Ω	RRXAFR5H1102
R646	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902
R647	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R648	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R649	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R650	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R651⚠	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R652	WIRE CP STP-S-0.50	XZ40F0REN001
R653	WIRE CP STP-S-0.50	XZ40F0REN001
R654	RES CARBON FILM T 1/4W J 470 Ω	RCX4471T1001
R655	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R656	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001

Ref. No.	Description	Part No.
R657	CHIP RES. 1/10W F 27k Ω	RRXAFR5H2702
R658	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R659	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R660	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R661	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R662	RES CARBON FILM T 1/4W J 39 Ω	RCX4390T1001
R663	RES CARBON FILM T 1/4W J 1.8 Ω	RCX41R8T1001
R664	RES CARBON FILM T 1/4W J 3.9 Ω	RCX43R9T1001
R665	RES CARBON FILM T 1/4W J 3.9 Ω	RCX43R9T1001
R666	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R667	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R668	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R669	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R670	RES CARBON FILM T 1/4W J 270 Ω	RCX4271T1001
R671	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R673	CHIP RES. 1/10W F 3.6k Ω	RRXAFR5H3601
R674	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R675	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
R676	RES CARBON FILM T 1/4W J 22 Ω	RCX4220T1001
R677	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R678	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R679	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R681	RES CARBON FILM T 1/4W J 2.2 Ω	RCX42R2T1001
R682	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R683	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R684	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R685	RES CARBON FILM T 1/4W J 47 Ω	RCX4470T1001
R688	RES CARBON FILM T 1/4W J 1.0 Ω	RCX41R0T1001
R690	RES CARBON FILM T 1/4W J 1.5 Ω	RCX41R5T1001
R691	WIRE CP STP-S-0.50	XZ40F0REN001
R694	RES CARBON FILM T 1/4W J 8.2 Ω	RCX48R2T1001
R699	RES CARBON FILM T 1/4W J 56 Ω	RCX4560T1001
R803	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R804	CHIP RES. 1/10W J 8.2 Ω	RRXAJR5Z08R2
R805	CHIP RES. 1/10W J 8.2 Ω	RRXAJR5Z08R2
R806	WIRE CP STP-S-0.50	XZ40F0REN001
R807	WIRE CP STP-S-0.50	XZ40F0REN001
R808	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R809	CHIP RES. 1/10W F 300 Ω	RRXAFR5H3000
R810	CHIP RES. 1/10W J 5.6k Ω	RRXAJR5Z0562
R811	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R813	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R814	CHIP RES. 1/10W J 5.6k Ω	RRXAJR5Z0562
R815	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R816	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R817	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R818	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R819	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R820	CHIP RES. 1/10W J 5.6k Ω	RRXAJR5Z0562
R821	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R823	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R826	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R830	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R834	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R836	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R837	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R838	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R842	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1003	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1005	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R1006	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1007	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1008	CHIP RES. 1/10W F 5.6k Ω	RRXAFR5H5601

Ref. No.	Description	Part No.
R1009	CHIP RES.(1608) 1/10W F 75k Ω	RRXAFR5H0753
R1012	WIRE CP STP-S-0.50	XZ40F0REN001
R1014	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R1015	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R1016	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R1017	CHIP RES. 1/10W J 220k Ω	RRXAJR5Z0224
R1020	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1021	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1023	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1024	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1025	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1026	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R1027	RES CARBON FILM T 1/4W J 1.5k Ω	RCX4152T1001
R1028	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1029	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R1030	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1031	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R1036	CHIP RES. 1/10W J 5.1k Ω	RRXAJR5Z0512
R1037	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1043	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1044	CHIP RES. 1/10W F 2.7k Ω	RRXAFR5H2701
R1045	CHIP RES. 1/10W F 1.2k Ω	RRXAFR5H1201
R1048	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1049	RES CARBON FILM T 1/4W J 1.2k Ω	RCX4122T1001
R1050	WIRE CP STP-S-0.50	XZ40F0REN001
R1051	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1053	WIRE CP STP-S-0.50	XZ40F0REN001
R1054	CHIP RES. 1/10W F 120 k Ω	RRXAFR5H1203
R1055	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R1056	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1058	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1059	CHIP RES. 1/10W J 120k Ω	RRXAJR5Z0124
R1060	CHIP RES. 1/10W F 7.50 k Ω	RRXAFR5H7501
R1061	CHIP RES. 1/10W F 4.7k Ω	RRXAFR5H4701
R1062	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1063	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1064	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1065	CHIP RES. 1/10W F 27k Ω	RRXAFR5H2702
R1066	CHIP RES. 1/10W J 5.1k Ω	RRXAJR5Z0512
R1067	CHIP RES. 1/10W J 6.8k Ω	RRXAJR5Z0682
R1068	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1069	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1070	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1071	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R1072	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R1074	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1075	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1076	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1105	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R1106	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1107	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1109	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R1110	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1401	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R1402	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1403	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1404	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1405	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1406	CHIP RES. 1/10W J 120k Ω	RRXAJR5Z0124
R1407	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1500	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1501	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1502	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123

Ref. No.	Description	Part No.
R1503	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1508⚠	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R1509	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1550	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1551	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1552	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1553	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1554	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1555	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1556	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1557	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1558	CHIP RES. 1/10W J 24k Ω	RRXAJR5Z0243
R1559	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1560	CHIP RES. 1/10W J 220k Ω	RRXAJR5Z0224
R1600	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1601	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1602	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1603	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1608⚠	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R1609	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1650	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1651	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1652	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1653	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1654	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1655	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1656	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1657	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1658	CHIP RES. 1/10W J 24k Ω	RRXAJR5Z0243
R1659	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1660	CHIP RES. 1/10W J 220k Ω	RRXAJR5Z0224
R1700	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1701	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1702	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1703	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1708⚠	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R1709	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1750	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1751	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1752	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1753	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1754	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1755	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1756	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1757	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1758	CHIP RES. 1/10W J 24k Ω	RRXAJR5Z0243
R1759	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1760	CHIP RES. 1/10W J 220k Ω	RRXAJR5Z0224
MISCELLANEOUS		
AC601⚠	AC CORD W/O A GND WIRE UL/CSA 1770 NO BLACK	WAC0172LW022
B13	HEAT SINK PMU A8A70UH	1EM324377
B14	POW HEAT SINK A7120UH	1EM423993
BC301	WIRE CP STP-S-0.50	XZ40F0REN001
BC601	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC603	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC801	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
BC1001	WIRE CP STP-S-0.50	XZ40F0REN001
BC1004	WIRE CP STP-S-0.50	XZ40F0REN001
F601⚠	FUSE STC4A125V U/CT	PAGE20CW3402
FH601	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
FH602	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
JS103	WIRE CP STP-S-0.50	XZ40F0REN001
JS150	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS304	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS305	WIRE CP STP-S-0.50	XZ40F0REN001
JS306	WIRE CP STP-S-0.50	XZ40F0REN001
JS310	WIRE CP STP-S-0.50	XZ40F0REN001
JS801	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS802	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS803	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS804	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS1002	WIRE CP STP-S-0.50	XZ40F0REN001
JS1005	WIRE CP STP-S-0.50	XZ40F0REN001
JS1006	WIRE CP STP-S-0.50	XZ40F0REN001
L13	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
SA601⚠	SURGE ABSORBER 470V+-10PER	NVQZ10D471KB
T601⚠	TRANS POWER BCK-28-9911	LTT2PC0XB055
TM601	EYELET TYPE D-1	0VM406868
TM602	EYELET TYPE D-1	0VM406868
T1500⚠	TRANS INVERTER HVT-179	LTZ3PZ0XB012
T1600⚠	TRANS INVERTER HVT-179	LTZ3PZ0XB012
T1700⚠	TRANS INVERTER HVT-179	LTZ3PZ0XB012
TU302	TUNER UNIT ATSC/NTSC/QAM TDAU4-D05A	UTNATS0AL002

JACK ASSEMBLY

Ref. No.	Description	Part No.
	JACK ASSEMBLY Consists of the following:	A0172MJC-001
	JACK CBA(MJC-A) ---------- FUNCTION CBA(MJC-B) IR SENSOR CBA(MJC-C) JUNCTION CBA(MJC-D)	A0172MJC-001-JK ---------- A0172MJC-001-FNIRJN

JACK CBA

Ref. No.	Description	Part No.
	JACK CBA (MJC-A) Consists of the following:	---------
CAPACITORS		
C703	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C704	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C723	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C724	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C731	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C732	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C733	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C743	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C744	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C751	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C752	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C753	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C757	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C758	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C771	ELECTROLYTIC CAP. 100μF/16V M H7	CE1CMAVSL101
C772	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C773	CHIP CERAMIC CAP. (1608) F Z 1μF/16V	CHD1CZ30F105
C775	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C776	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C841	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C842	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C843	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C845	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
CONNECTORS		

Ref. No.	Description	Part No.
CN701	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN871	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
	IC	
IC771	IC SWITCHING TC4052BF(ELNF)	QSZBA0TTS162
	COILS	
L851	WIRE CP STP-S-0.50	XZ40F0REN001
L852	WIRE CP STP-S-0.50	XZ40F0REN001
L853	WIRE CP STP-S-0.50	XZ40F0REN001
	TRANSISTORS	
Q722	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q771	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q773	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q774	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q841	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
	RESISTORS	
R711	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R712	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R717	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R718	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R721	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R722	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R727	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R728	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R731	CHIP RES.(1608) 1/10W F 75 Ω	RRXAFR5H75R0
R732	CHIP RES.(1608) 1/10W F 75 Ω	RRXAFR5H75R0
R733	CHIP RES.(1608) 1/10W F 75 Ω	RRXAFR5H75R0
R734	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R735	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R736	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R741	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R742	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R747	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R748	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R751	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R752	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R753	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R754	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R755	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R756	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R757	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R758	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R763	RES CARBON FILM T 1/4W J 56k Ω	RCX4563T1001
R764	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R772	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R773	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R774	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R775	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R780	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R781	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R782	RES CARBON FILM T 1/4W J 82k Ω	RCX4823T1001
R783	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R784	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R785	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R786	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R787	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R788	RES CARBON FILM T 1/4W J 82k Ω	RCX4823T1001
R789	RES CARBON FILM T 1/4W J 82k Ω	RCX4823T1001
R790	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R791	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R792	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R793	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R794	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R795	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R796	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R797	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R843	CHIP RES. 1/10W J 110 Ω	RRXAJR5Z0111
R844	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R845	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R846	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R847	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R848	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R851	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R852	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
	MISCELLANEOUS	
BC771	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC841	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
JK711	JACK HPEP SML PCB S PJ-358H	JXSJ020YUQ01
JK721	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK722	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK731	JACK RCA PCB S GREEN 01/RCA-101H(GN)	JXRJ010YUQ03
JK732	JACK RCA PCB S BLUE 01/RCA-101H(BL)	JXRJ010YUQ04
JK733	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK741	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK742	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK751	JACK SW DIN PCB L DIN-435C(777D)	JYEL040YUQ03
JK752	JACK RCA PCB L RCA-101S(1)-03	JXRL010YUQ12
JK753	JACK RCA PCB L RCA-101S(1)-04	JXRL010YUQ13
JK754	JACK SW RCA PCB L RCA-102F(RD)	JYRL010YUQ05
JK841	JACK RCA PCB S ORANGE 01/RCA-101H(OR)	JXRJ010YUQ06
JK851	JACK SW HPEP SML PCB L PJ-350	JYSL010YUQ03
JS701	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000

FUNCTION CBA

Ref. No.	Description	Part No.
	FUNCTION CBA (MJC-B) Consists of the following:	---------
	CAPACITOR	
C108	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
	RESISTORS	
R108	RES CARBON FILM T 1/4W J 220 Ω	RCX4221T1001
R109	RES CARBON FILM T 1/4W G 10k Ω	RCX4103T1002
R111	RES CARBON FILM T 1/4W G 4.7k Ω	RCX4472T1002
R112	RES CARBON FILM T 1/4W G 2.7k Ω	RCX4272T1002
R113	RES CARBON FILM T 1/4W G 4.7k Ω	RCX4472T1002
R114	RES CARBON FILM T 1/4W G 8.2k Ω	RCX4822T1002
R115	RES CARBON FILM T 1/4W G 18k Ω	RCX4183T1002
	SWITCHES	
SW101	TACT SWITCH SKQSAB	SST0101AL038
SW103	TACT SWITCH SKQSAB	SST0101AL038
SW104	TACT SWITCH SKQSAB	SST0101AL038
SW105	TACT SWITCH SKQSAB	SST0101AL038
SW106	TACT SWITCH SKQSAB	SST0101AL038
SW107	TACT SWITCH SKQSAB	SST0101AL038

IR SENSOR CBA

Ref. No.	Description	Part No.
	IR SENSOR CBA (MJC-C) Consists of the following:	---------
	CAPACITORS	
C101	ELECTROLYTIC CAP. 47μF/16V M H7	CE1CMAVSL470
C103	CHIP CERAMIC CAP. B K 330pF/50V	CHD1JK30B331
C104	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C105	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104

Ref. No.	Description	Part No.
	DIODE	
D101	LED (WHITE) SLR343WBC7T3XM	QPWM343WBC7T
	RESISTORS	
R101	RES CARBON FILM T 1/4W J 100 Ω	RCX4101T1001
R102	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R103	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R106	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
	MISCELLANEOUS	
CL102	WIRE ASSEMBLY 5PIN 5PIN/340MM	WX1A0172-001
CL103	WIRE ASSEMBLY 3PIN 3PIN/110MM	WX1A0172-004
RS101	SENSOR REMOTE RECEIVER KSM-712TH2E	USESJRSKK044

JUNCTION CBA

Ref. No.	Description	Part No.
	JUNCTION CBA (MJC-D) Consists of the following:	----------
	CONNECTOR	
CN101	242 SERIES CONNECTOR TUC-P05X-B1 WHT ST	JCTUB05TG002

PARTS LIST [22PFL3505D/F7 (Serial No.: DS2A)]

Mechanical Parts

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.

Different parts from the original model 22PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
B25	THERMAL SHEET TMS-14-20 12X12	XK10000X4011
S1	CARTON A0172UH	1EM431819
X10	REGISTRATION CARD(PHILIPS) A01F2UH	1EMN25799B

Electrical Parts

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.

Different parts from the original model 22PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A0172MMA-003
	MAIN CBA	A0172MPWA002
CN102	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
	JACK ASSEMBLY Consists of the following	A0172MJC-002
	JACK CBA ---------- FUNCTION CBA(MJC-B) IR SENSOR CBA(MJC-C)	A0172MJC-002-JK ---------- A0172MJC-002-FNIR
	IR SENSOR CBA	----------
CL102	WIRE ASSEMBLY 5PIN 5PIN/340MM	WX1A0172-011
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN101	Not used	

		20110506	
		22PFL3505D/F7(A017JMA) (Serial No.: XA1A)	
Different parts from the original model 22PFL3505D/F7(Serial No.: DS1A)			
Ref. No.		Description	Parts No.
MECHANICAL PARTS			
		REAR ASSEMBLY A017JMZ	1ESA29823
A6!		RATING LABEL A017JMA	----------
B25		THERMAL SHEET TMS-14-20 12X12	XK10000X4011
S1		CARTON A017JMA	1EM436398
S4		SET BAG A81N0UH	1EM323958A
S5		SERIAL NO. LABEL A01PBUH	----------
S17		CARTON LABEL A017JMA	----------
X2!		OWNERS MANUAL A01NLMA	1EMN28641
X6		QUICK START GUIDE A01NKUH	1EMN28500
X10		REGISTRATION CARD(PHILIPS) A11P4UH	1EMN27321
ELECTRICAL PARTS			
		MAIN CBA	A0172MPWA002
CN102		CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
		JACK ASSEMBLY	A0172MJC-002
		Consists of the following	
		JACK CBA(MJC-A)	A0172MJC-002-JK
		FUNCTION CBA(MJC-B)	A0172MJC-002-FNIR
		IR SENSOR CBA(MJC-C)	
		IR SENSOR CBA	----------
CL102		WIRE ASSEMBLY 5PIN 5PIN/340MM	WX1A0172-011
		JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN101		Not used	

REVISION HISTORY

Chassis PL10.1

- 2009-12-25 22PFL3505D/F7 (Serial No. : DS1A) added
- 2010-11-05 22PFL3505D/F7 (Serial No. : DS2A) added
- TBD 22PFL3505D/F7 (Serial No. : XA1A) added

COMPARISON LIST OF MODEL NAME

Chassis PL10.1

22PFL3505D/F7	(DS1A)	A0172UH
	(DS2A)	A0172UH
	(XA1A)	A017JMA