

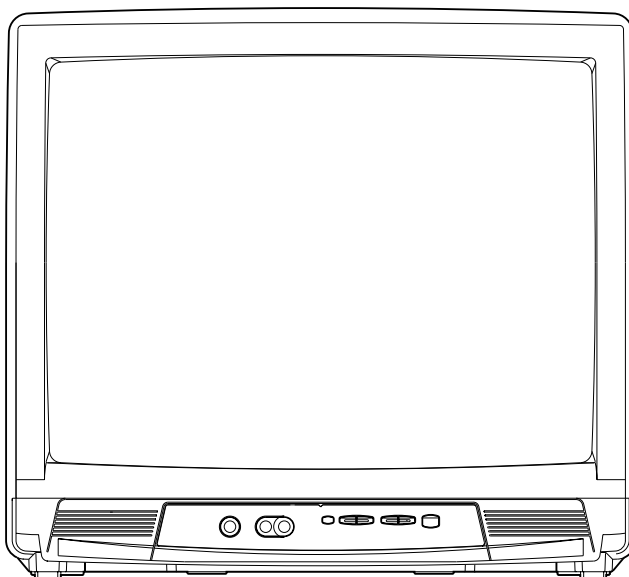


SERVICE MANUAL

This service manual supplement (EWT19B4) contains only the difference from the original model.

For all other data, see the original service manual for ST419D.

19" COLOR TELEVISION EWT19B4



IMPORTANT SAFETY NOTICE

Proper service and repair is important to the safe, reliable operation of all Funai Equipment. The service procedures recommended by Funai 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.

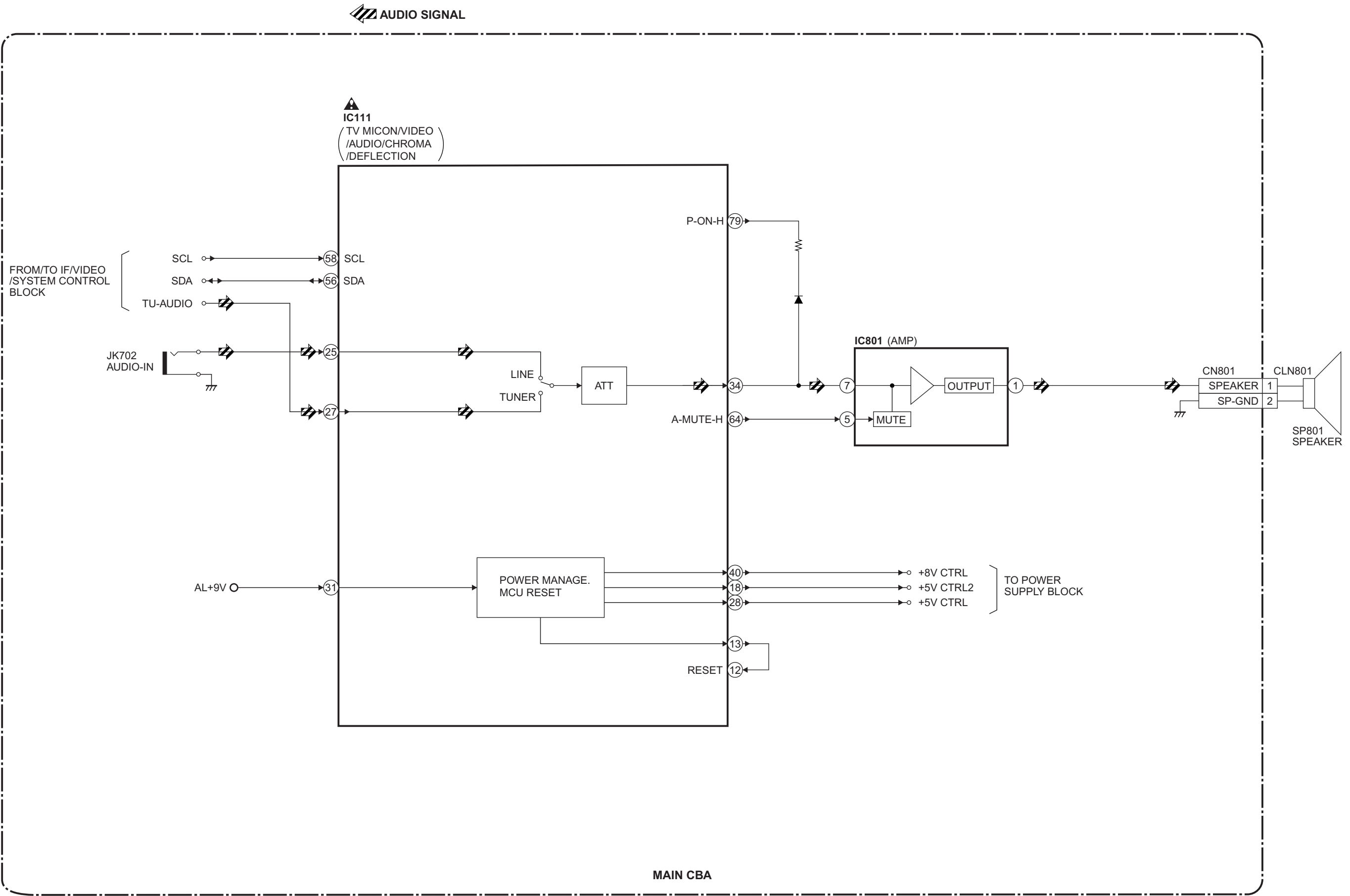
It is important to note that this service manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It also is important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Funai could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Funai has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Funai 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.

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BLOCK DIAGRAMS

Audio/Power Control Block Diagram



SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

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

Note:

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

Note of Capacitors:

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

Temperature Characteristics of Capacitors are noted with the following:

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

Tolerance of Capacitors are noted with the following:

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

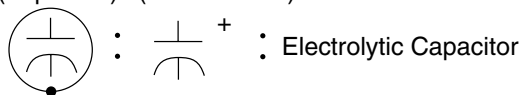
Note of Resistors:

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

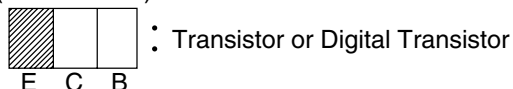
Capacitors and transistors are represented by the following symbols.

CBA Symbols

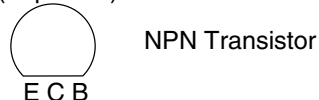
(Top View) (Bottom View)



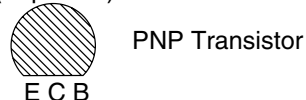
(Bottom View)



(Top View)



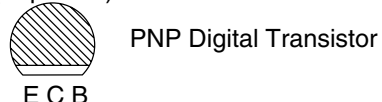
(Top View)



(Top View)

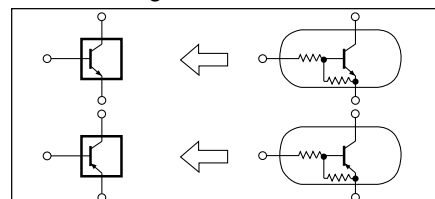


(Top View)



Schematic Diagram Symbols

Digital Transistor



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

1. **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.

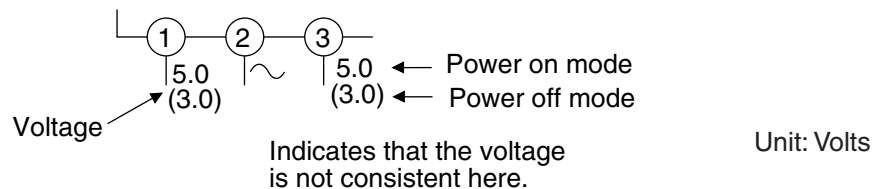
4. Wire Connectors

- (1) Prefix symbol "CN" means "connector" (can disconnect and reconnect).
- (2) Prefix symbol "CL" means "wire-solder holes of the PCB" (wire is soldered directly).

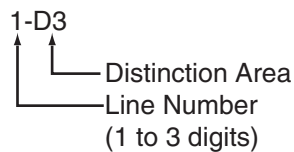
5. **Note:** Mark "●" is a leadless (chip) component.

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

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

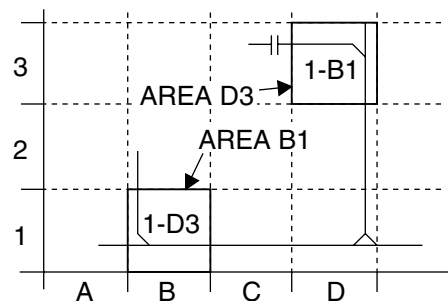


7. How to read converged lines



Examples:

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



8. Test Point Information

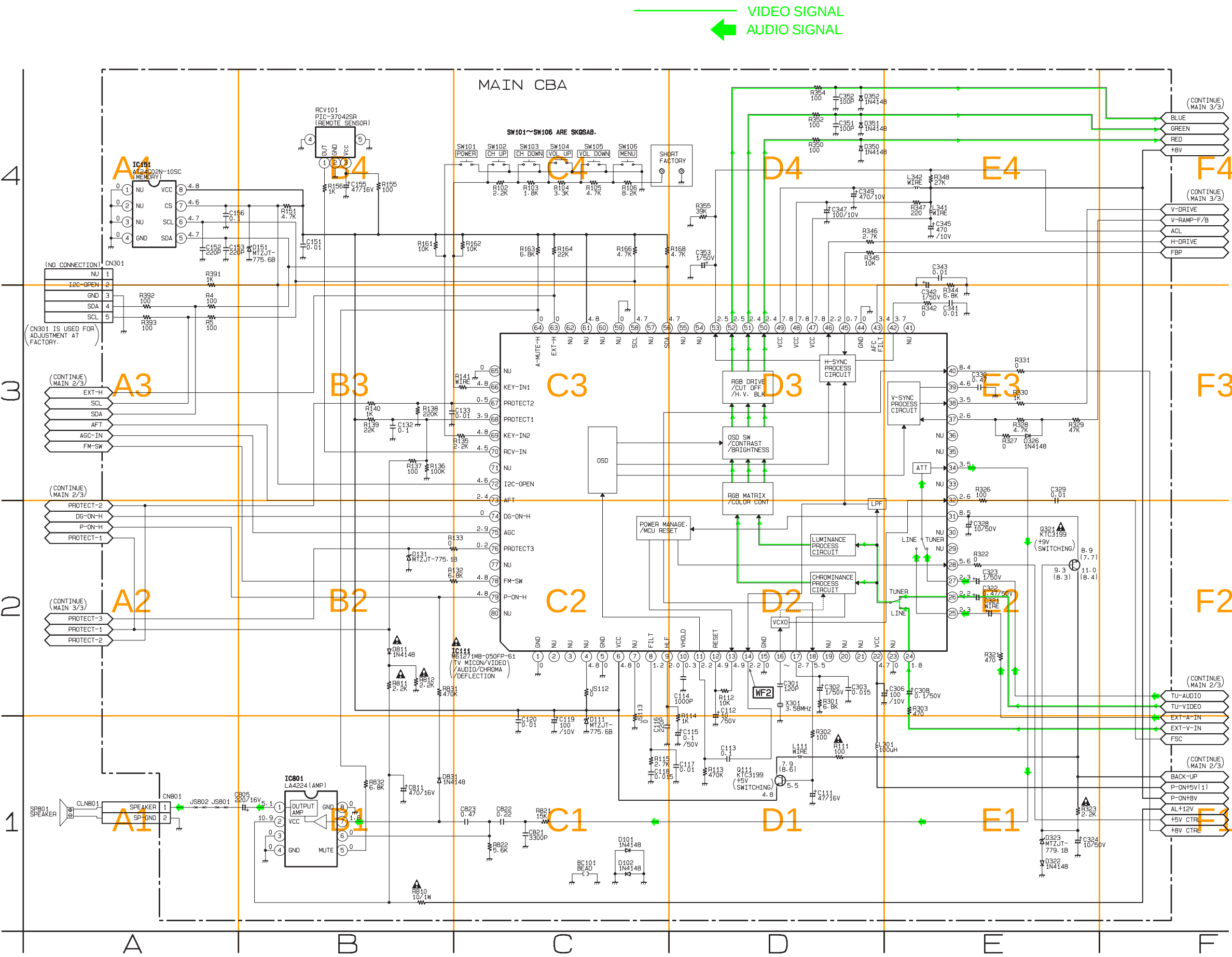
⊙ : Indicates a test point with a jumper wire across a hole in the PCB.

□→ : 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 1/3 Schematic Diagram



MAIN 1/3

Ref No.	Position
ICS	
IC111	C-2
IC151	A-4
IC801	B-1
TRANSISTORS	
Q111	D-1
Q321	E-2
CONNECTORS	
CN301	A-4
CN801	A-1

DIFFERENT PARTS FROM ORIGINAL MODEL (ST419D)

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%

Ref. No.	Description	Part No.
Mechanical Parts		
A1	FRONT CABINET L6119UV	OEM101223
A2	CONTROL PLATE L6119UV	OEM301705
A4 	RATING LABEL L6408UJ	-----
PB4	CHASSIS NO.LABEL L6408UJ	-----
S1	CARTON L6408UJ	OEM408581
S6	SERIAL NO. LABEL L6408UJ	-----
S7	LABEL, EAS(H3761UD) MAKER NO.ZLLFNSLE1	-----
X1 	OWNER'S MANUAL(E)/(S) L6408UJ:ENGLISH/SPANISH	OEMN02270
X2	REMOTE CONTROL 130/ERC001/ N0158UD or	N0158UD
	REMOTE CONTROL 100/ ECNL1301/NE152UD	NE152UD
X4	RETURN STOP SHEET T4259UK	OEM406203A
Electrical Parts		
	MMA-422 CBA	OESA05765
C642	Not Used	
C643 	CERAMIC CAP. 0.0047µF F CS or	CCG2HMN0F472
	SAFETY CAP. 4700pF/250V or	CCG2EMA0F472
	SAFETY CAP. E M 4700pF/250V KH	CCG2EMP0E472
JK801	Not Used	
JS801	PCB JUMPER D0.6-P5.0	JW5.0T
R801	Not Used	

EW19B4

L6408UJ