

## SCHEMATIC DIAGRAM

(1/5)

OBSERVATION OF VOLTAGES AND MANUFACTURER'S

Voltages measured VTA from each channel to chassis ground, line voltage 220 volts, color bar digital. Voltages reading may vary 20%.

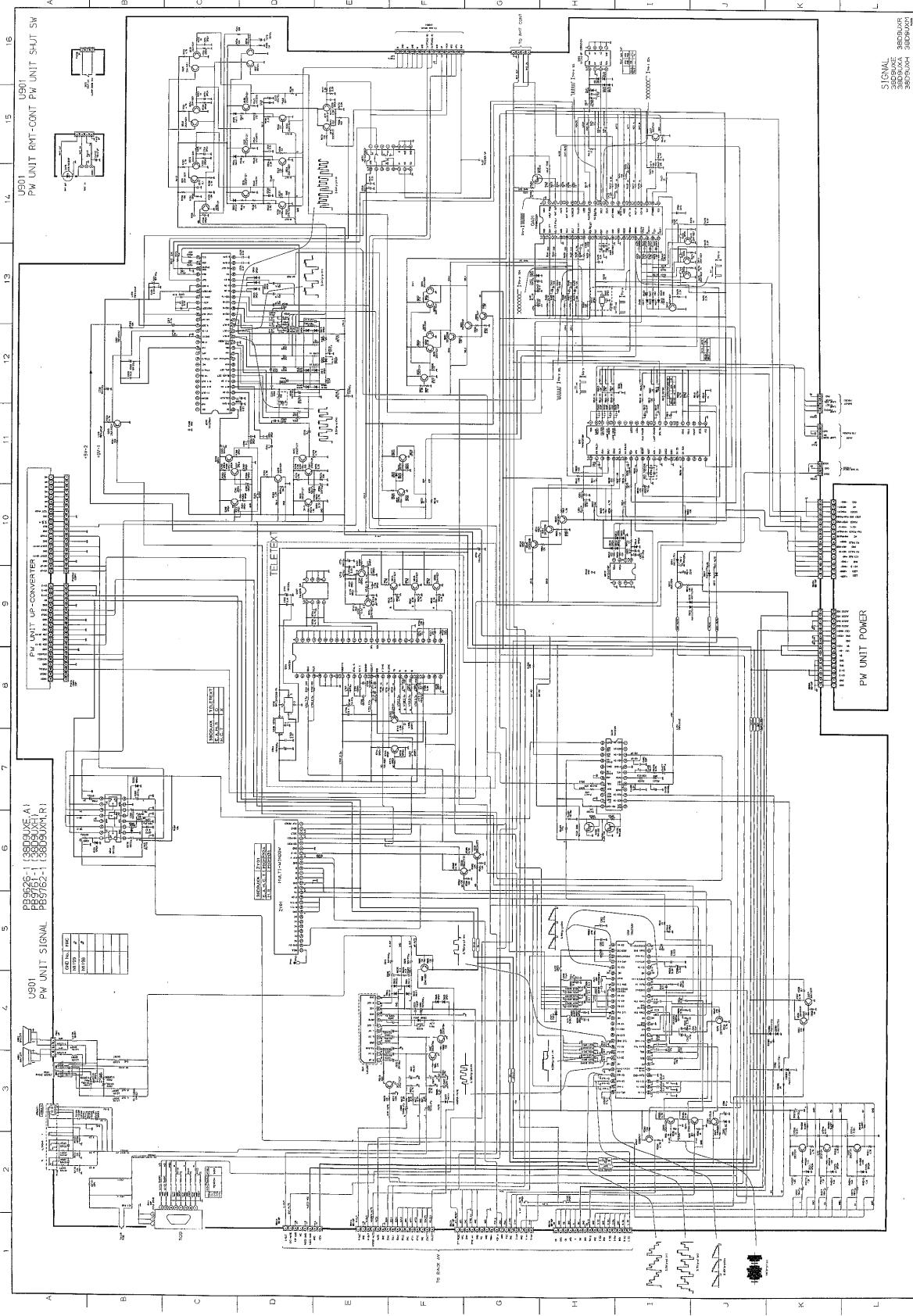
- All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- Maintain the contrast and brightness controls in mid position.
- Make sure that CONTRAST and COLOUR controls are in maximum position. See other controls for best picture.

**CAUTION:** THE INFORMATION CONTAINED IN THIS SCHEMATIC DIAGRAM AND THE PARTS LIST DESIGNATE COM-  
ONENTS WHICH HAVE SPECIAL CHARACTERISTICS OR IMPLANTATION TO EASILY AND SHOULD BE REPLACED ONLY WITH THOSE IDENTICAL  
TO THE ORIGINAL EQUIPMENT. ANY MODIFICATION TO THESE COMPONENTS IS TO BE ARRANGED  
WITH PHILIPS. BEFORE APPLYING ANY OF THESE CHANGES, CONSULT THE PRODUCT SHEET OR NOTICE ON PAGE  
1. ON REQUEST, THE SCHEMATIC DIAGRAM WILL BE MADE AVAILABLE THROUGH THE PHILIPS SERVICE CENTER.

4020005

## EXPRESSION VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. D.C. resistance value of a practical transformer is shown in this schematic diagram. This is a reference for repairing from the circuit.
2. The circuit is subject to change without notice.
3. : Solder lines.



SIGNAL  
SUBSOURCE  
SUBSOURCE  
SUBSOURCE  
SUBSOURCE  
SUBSOURCE  
SUBSOURCE

## **SCHEMATIC DIAGRAM**

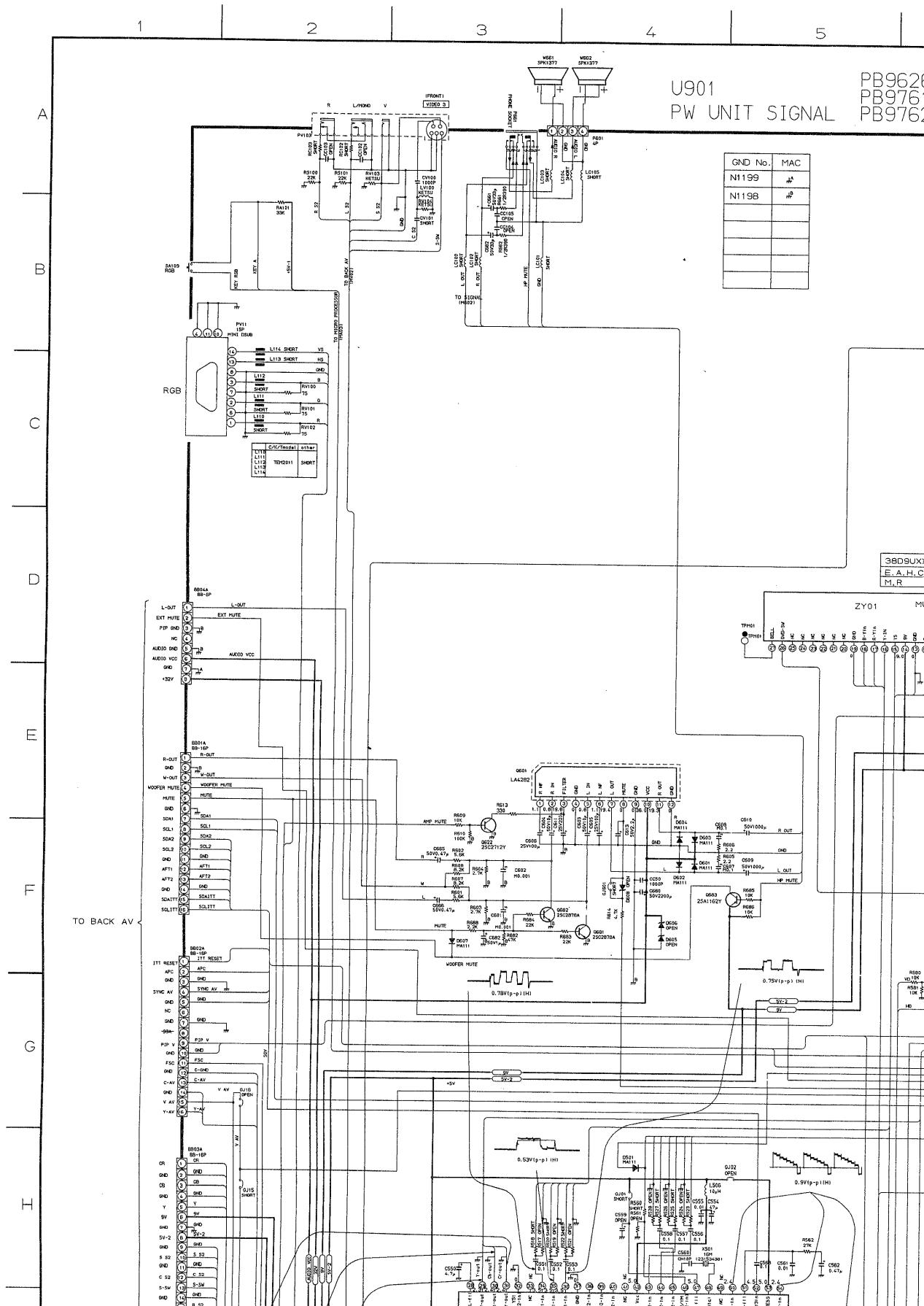
**MODEL : 38D9UXE / 38D9UXA (1/5)**  
**38D9UXH / 38D9UXR**  
**38D9UXM**

**CAUTION:** The international hazard symbols “” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

## OBSERVATION OF VOLTAGES AND WAVEFORM

1. Voltages read with VTVM from point shown to volts, colour bar signal. Voltages reading may be.
  2. All waveforms are taken using a wide band oscilloscope.
  3. Waveforms are taken using a standard colour bar.
  4. Make sure that CONTRAST and COLOUR controls are set correctly. The BRIGHTNESS control is almost in maximum position.

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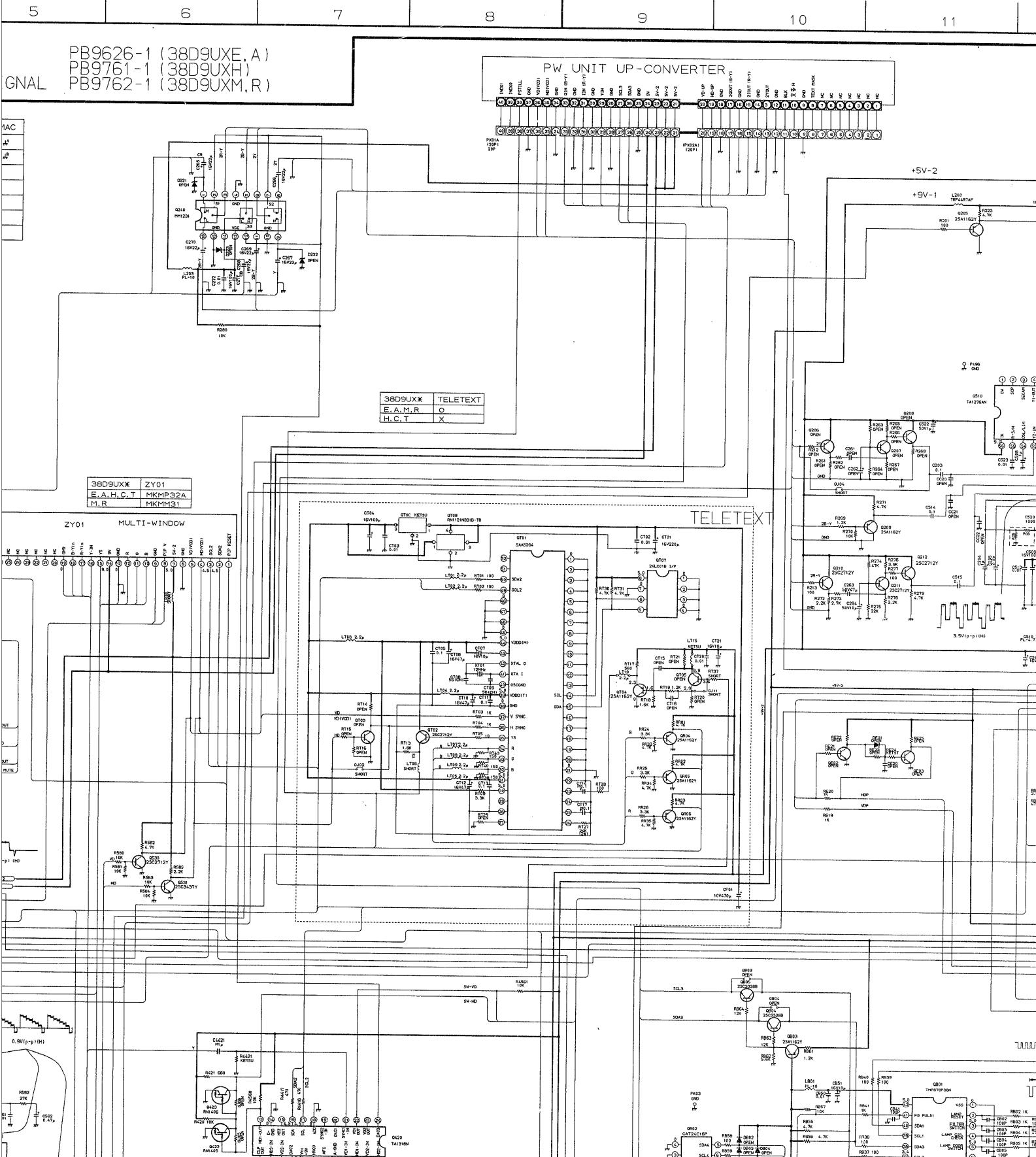


## GES AND WAVEFORMS

1 from point shown to chassis ground, line voltage 220  
 Voltages reading may vary  $\pm 20\%$ .  
 Using a wide band oscilloscope and a low capacity probe.  
 Using a standard colour bar signal.  
 AST and COLOUR controls are in mid position and  
 almost in maximum position. Set other controls for best

## NOTES:

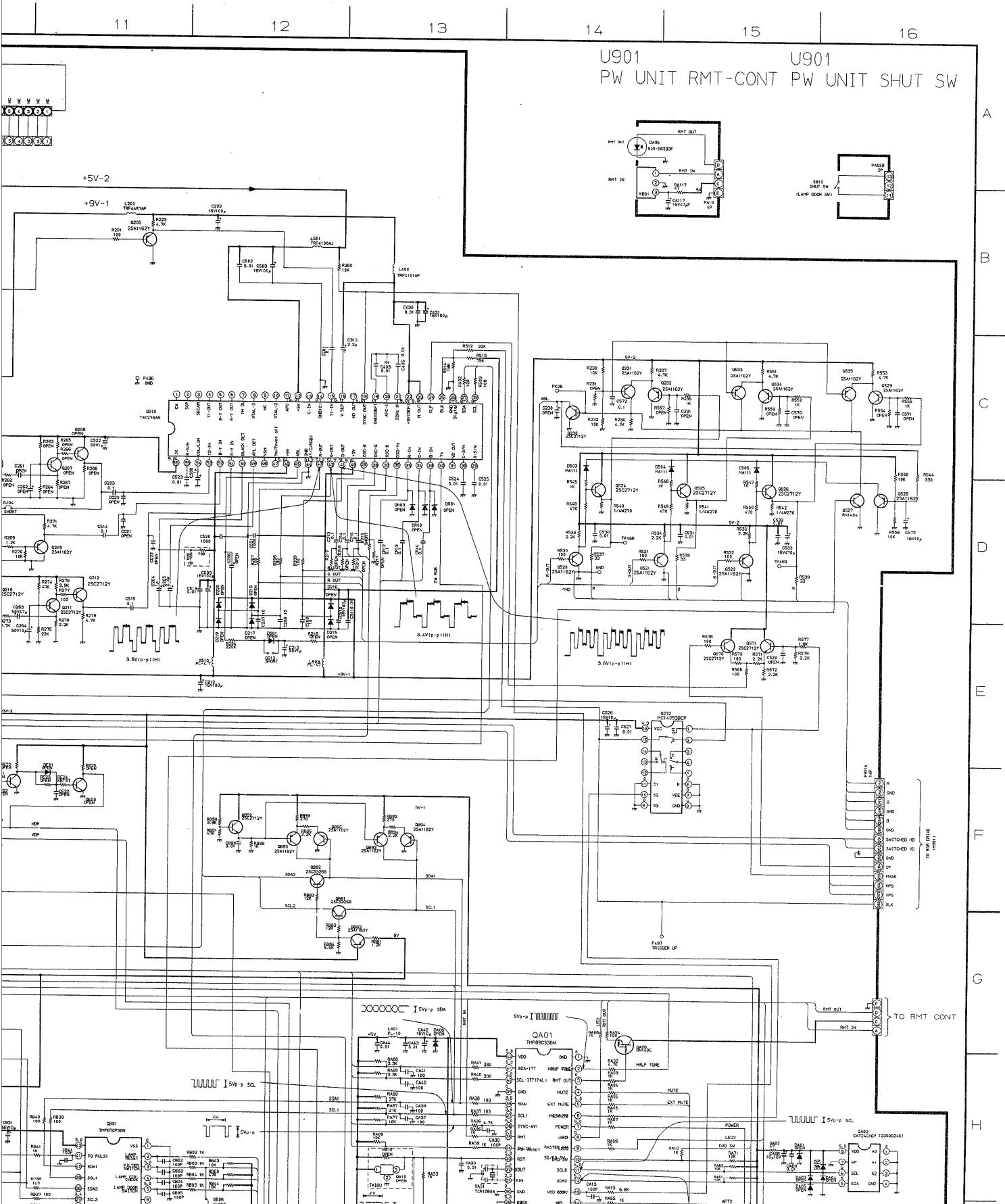
1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ● : Solder links.

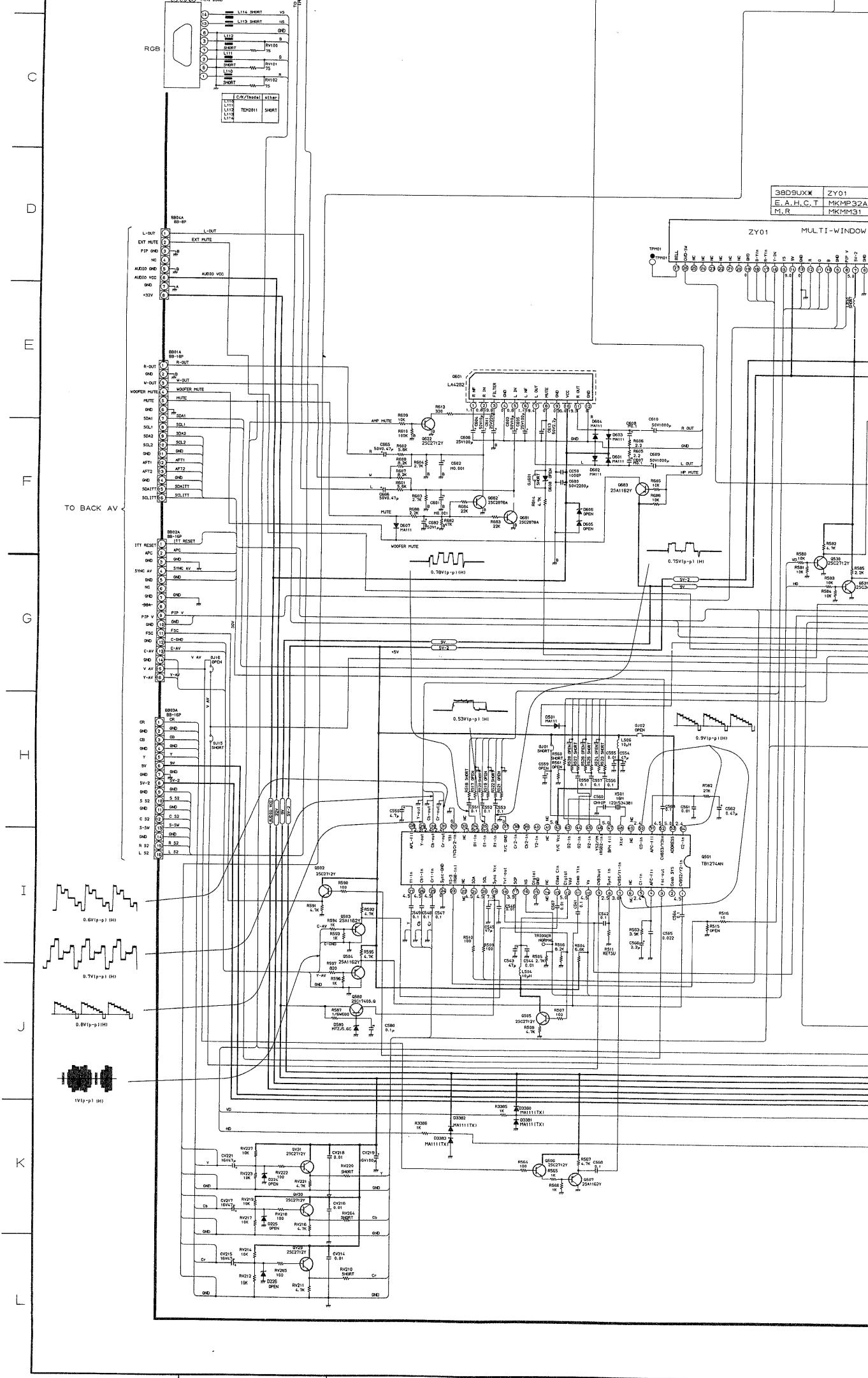


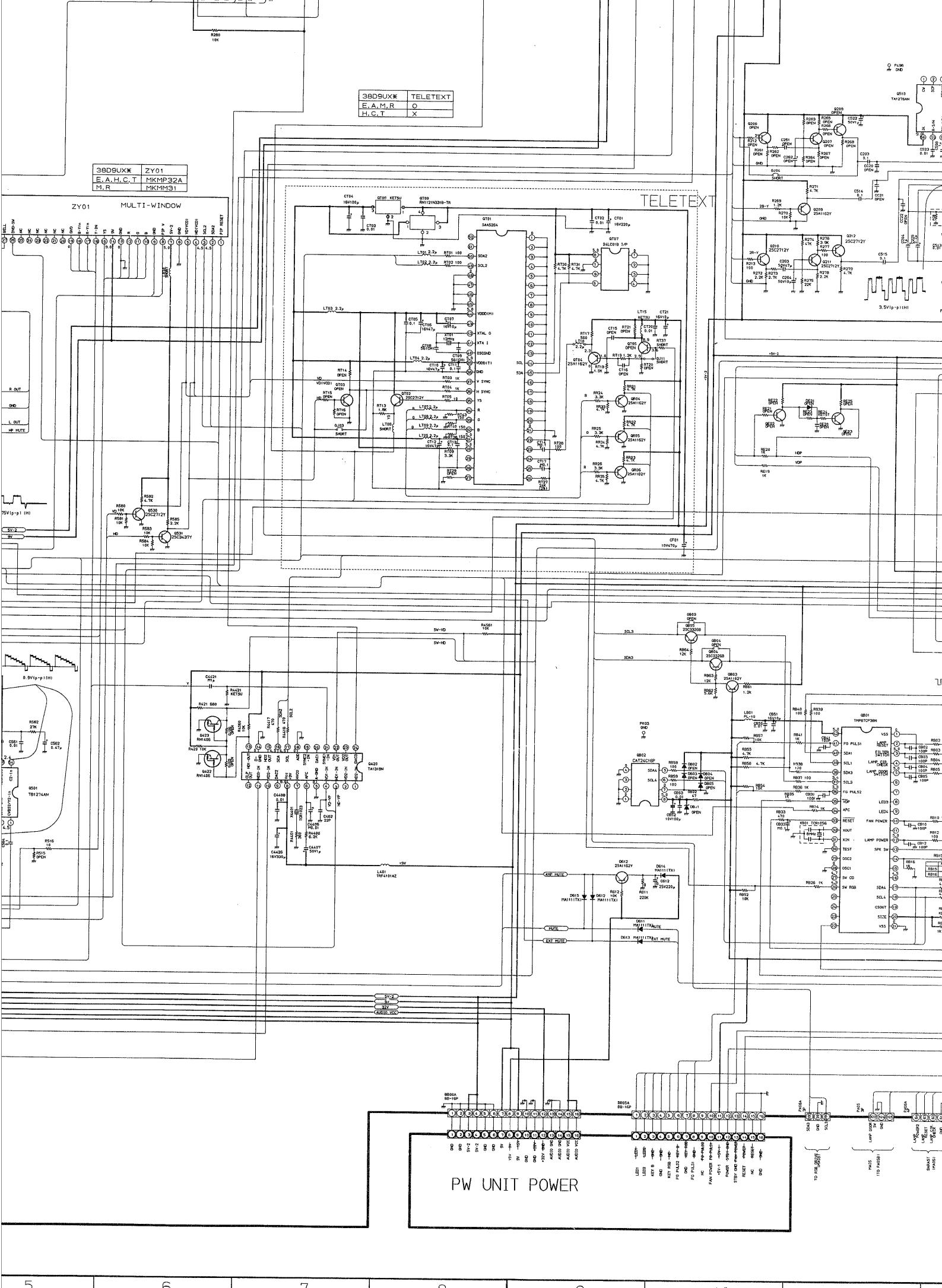
## **EXPRESSION**

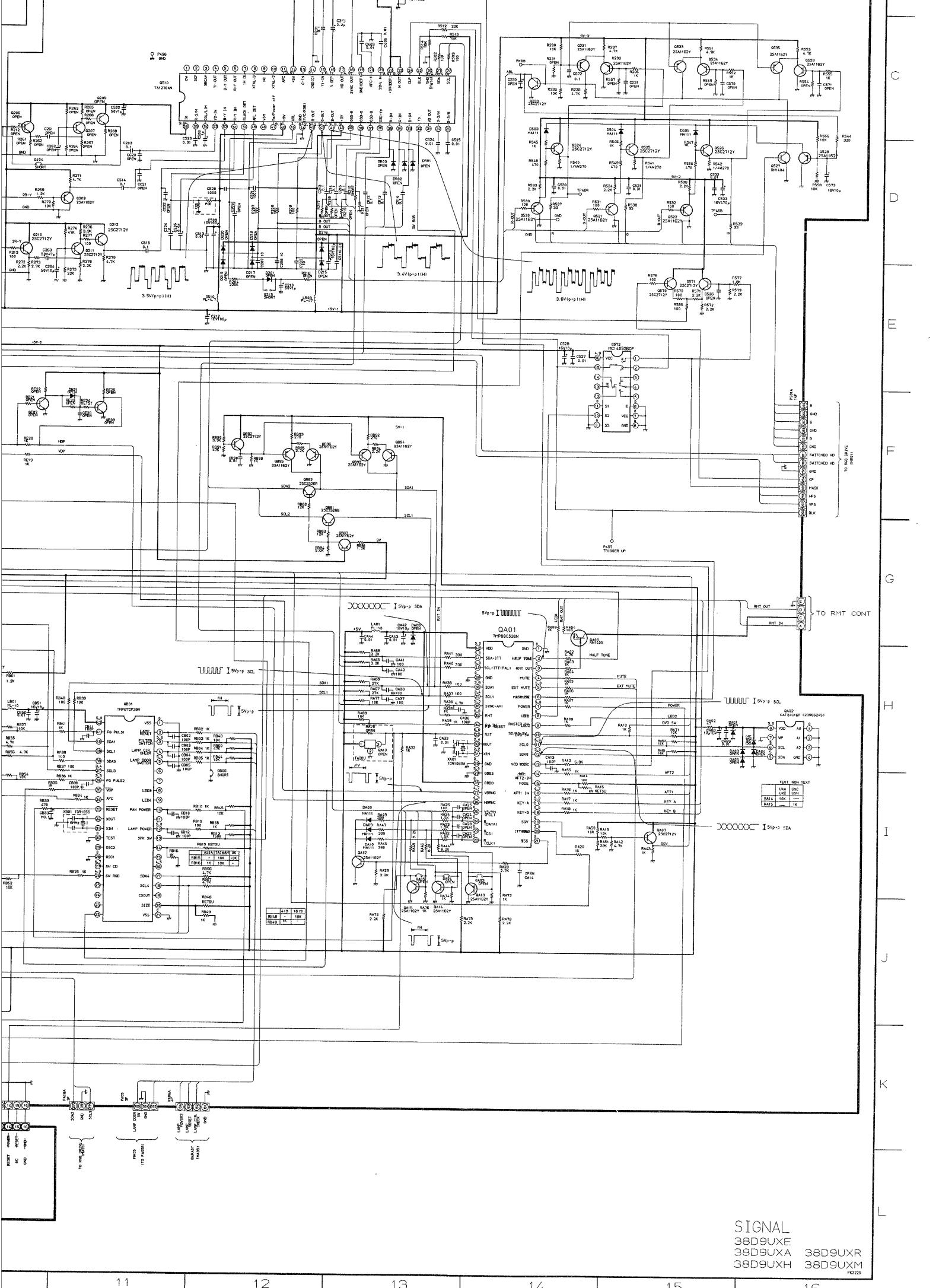
## **VALUE OF RESISTOR, CAPACITOR and INDUCTOR**

1. Resistance is shown in ohm,  $k=1,000$ ,  $M=1,000,000$
  2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu F$  and the values more than 1 in  $pF$ .
  3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in  $\mu H$ , and the values less than 1 in  $H$ .











# SCHEMATIC DIAGRAM

MODEL : 38D9UXE / 38D9UXA

(2/5)

38D9UXH / 38D9UXR

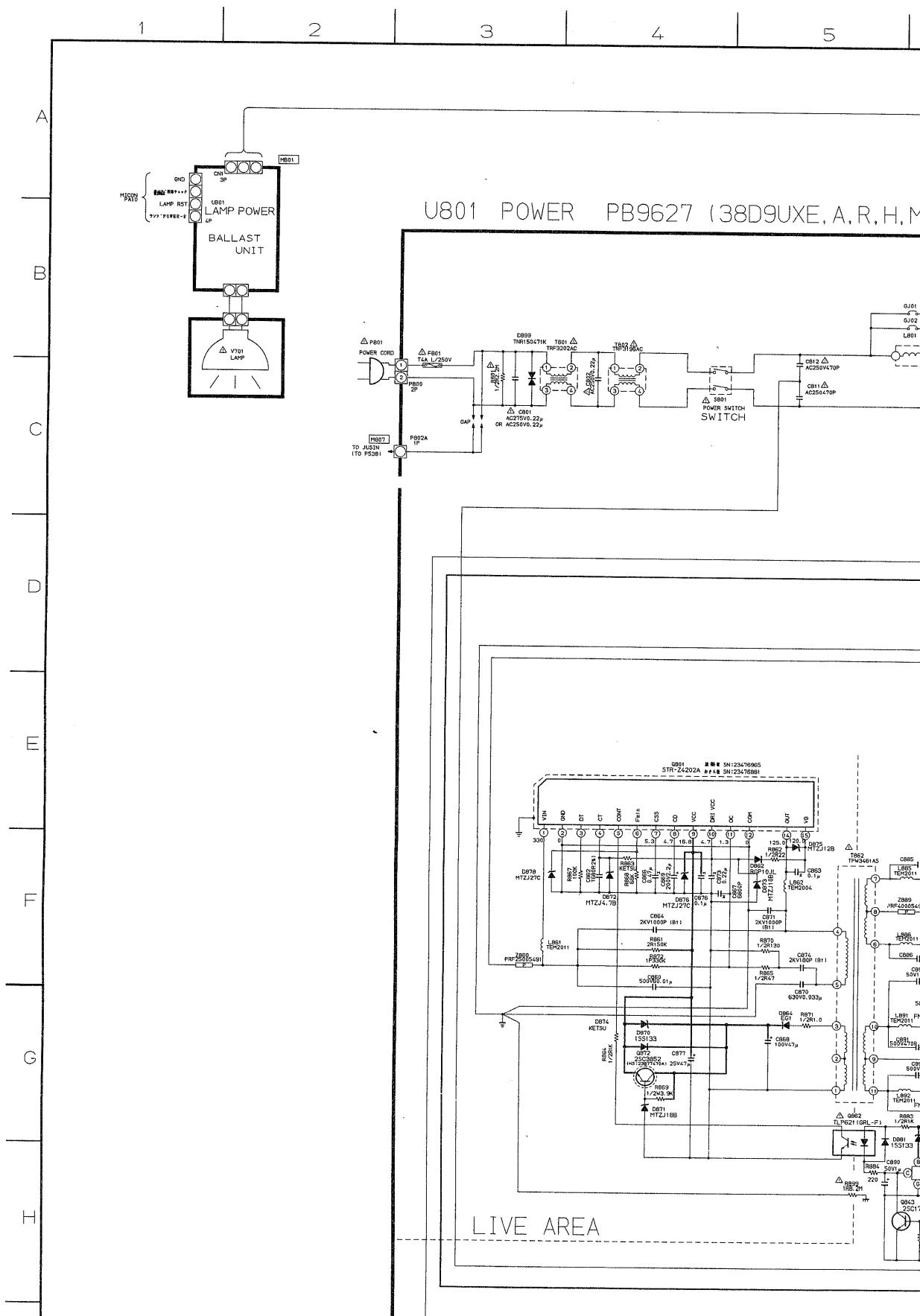
38D9UXM

**CAUTION:** The international hazard symbols "Δ" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

## OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to ground in volts, colour bar signal. Voltages reading may vary.
2. All waveforms are taken using a wide band oscilloscope.
3. Waveforms are taken using a standard colour television.
4. Make sure that CONTRAST and COLOUR controls are set correctly. Make sure that BRIGHTNESS control is almost in maximum position.

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**S AND WAVEFORMS**

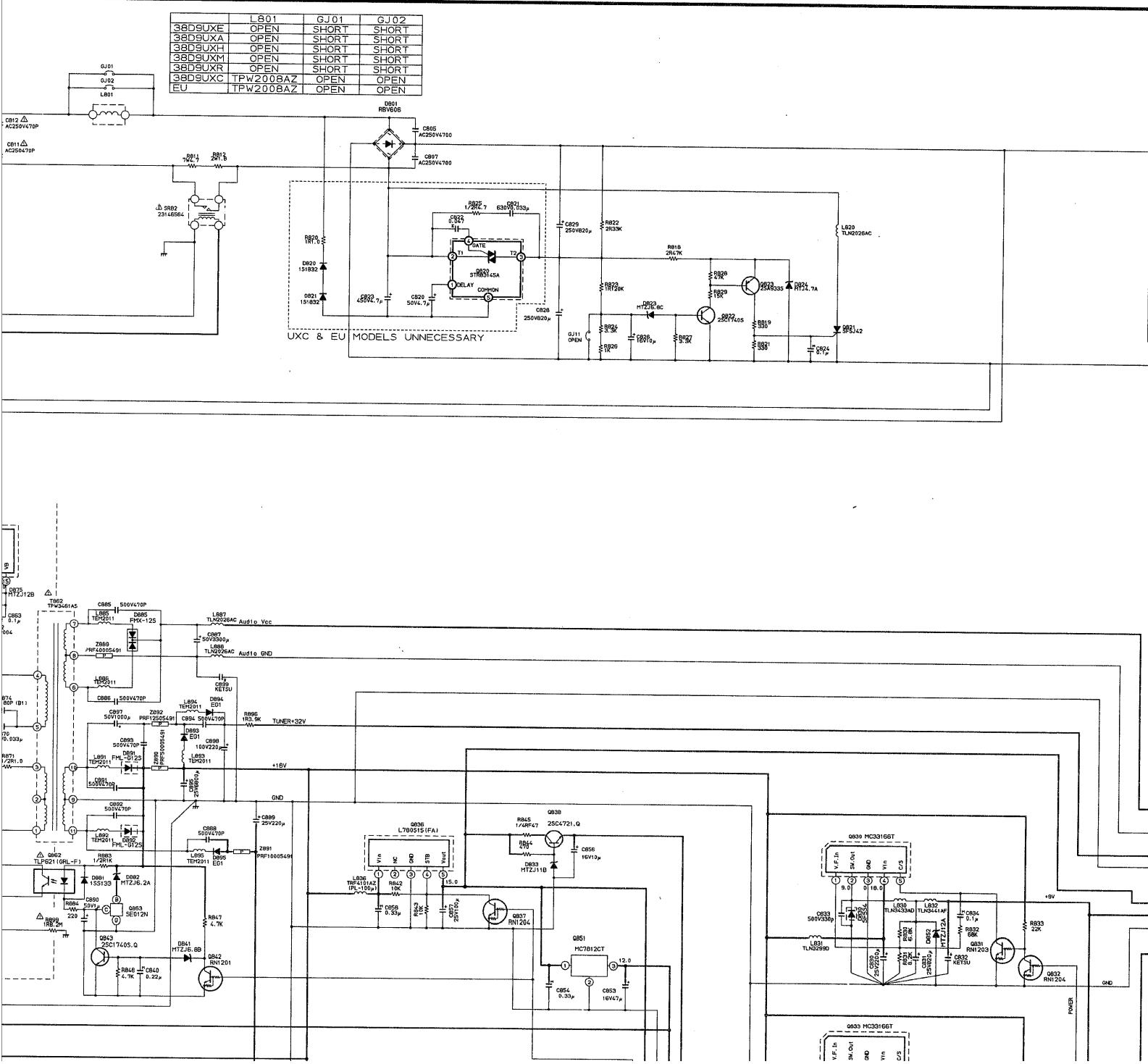
From point shown to chassis ground, line voltage 220V  
stages reading may vary  $\pm 20\%$ .  
Using a wide band oscilloscope and a low capacity probe.  
a standard colour bar signal.  
T and COLOUR controls are in mid position and  
set in maximum position. Set other controls for best

**NOTES:**

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. : Solder links.

5 | 6 | 7 | 8 | 9 | 10 | 11

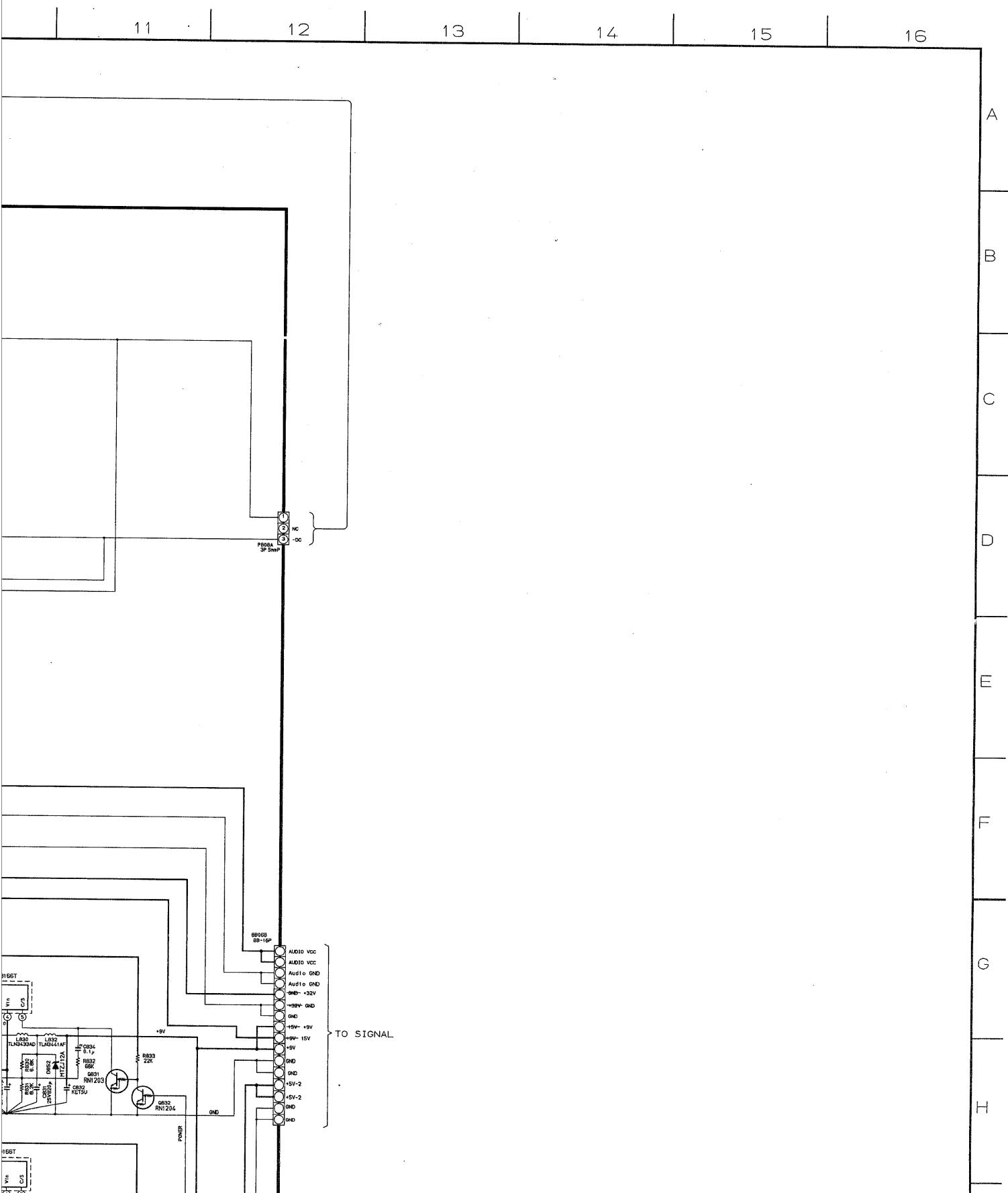
(E, A, R, H, M)

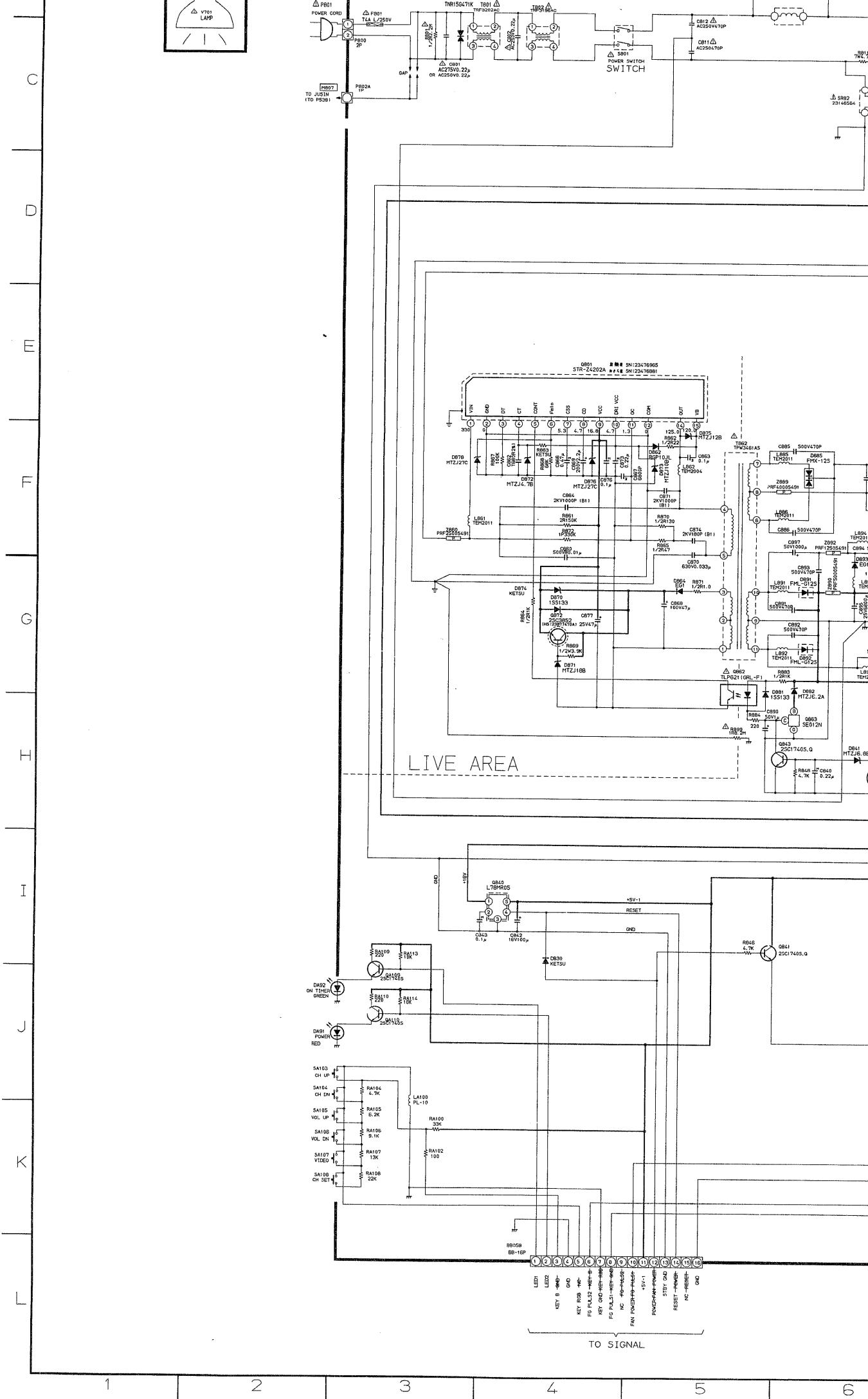


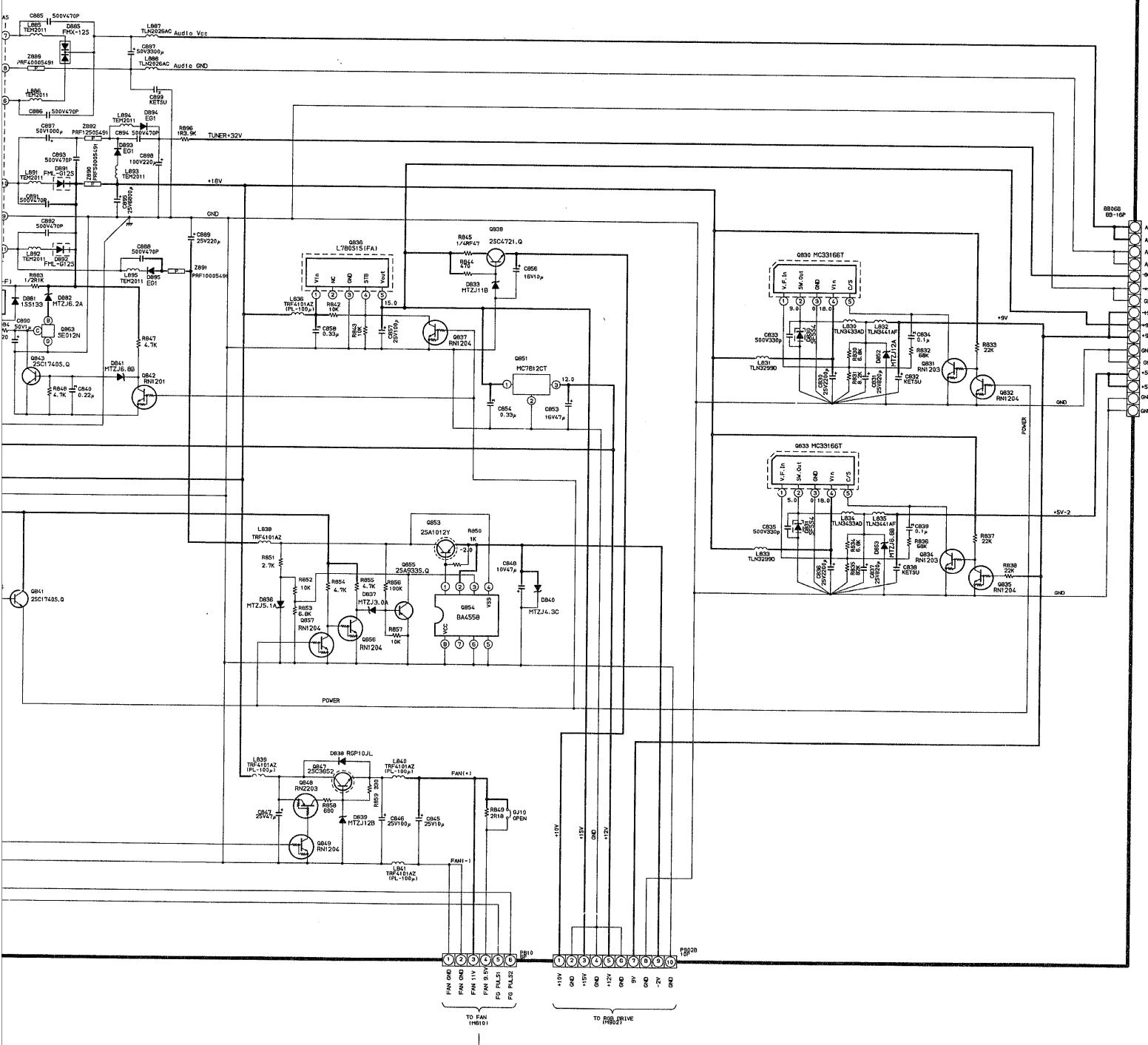
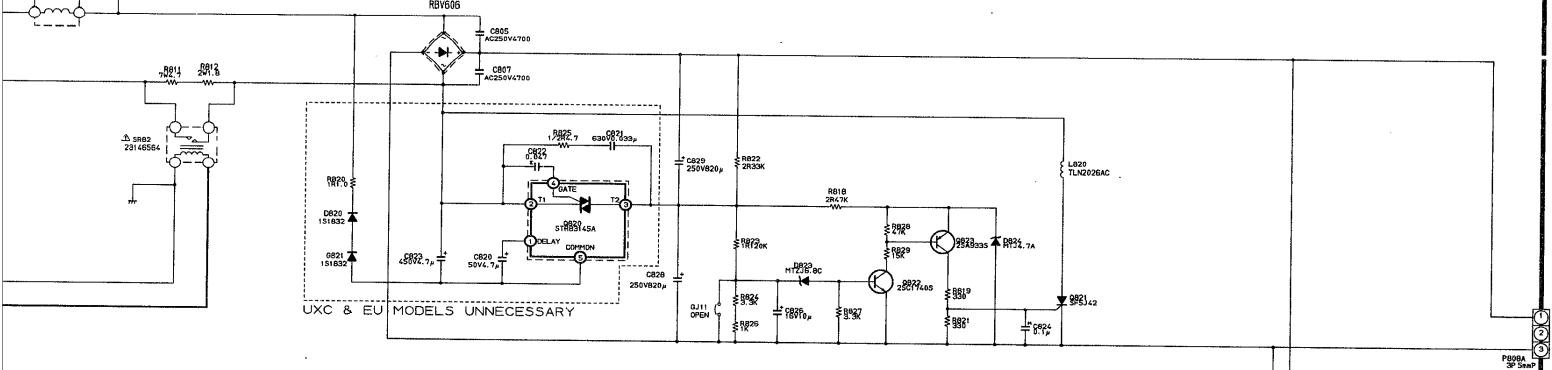
## **EXPRESSION**

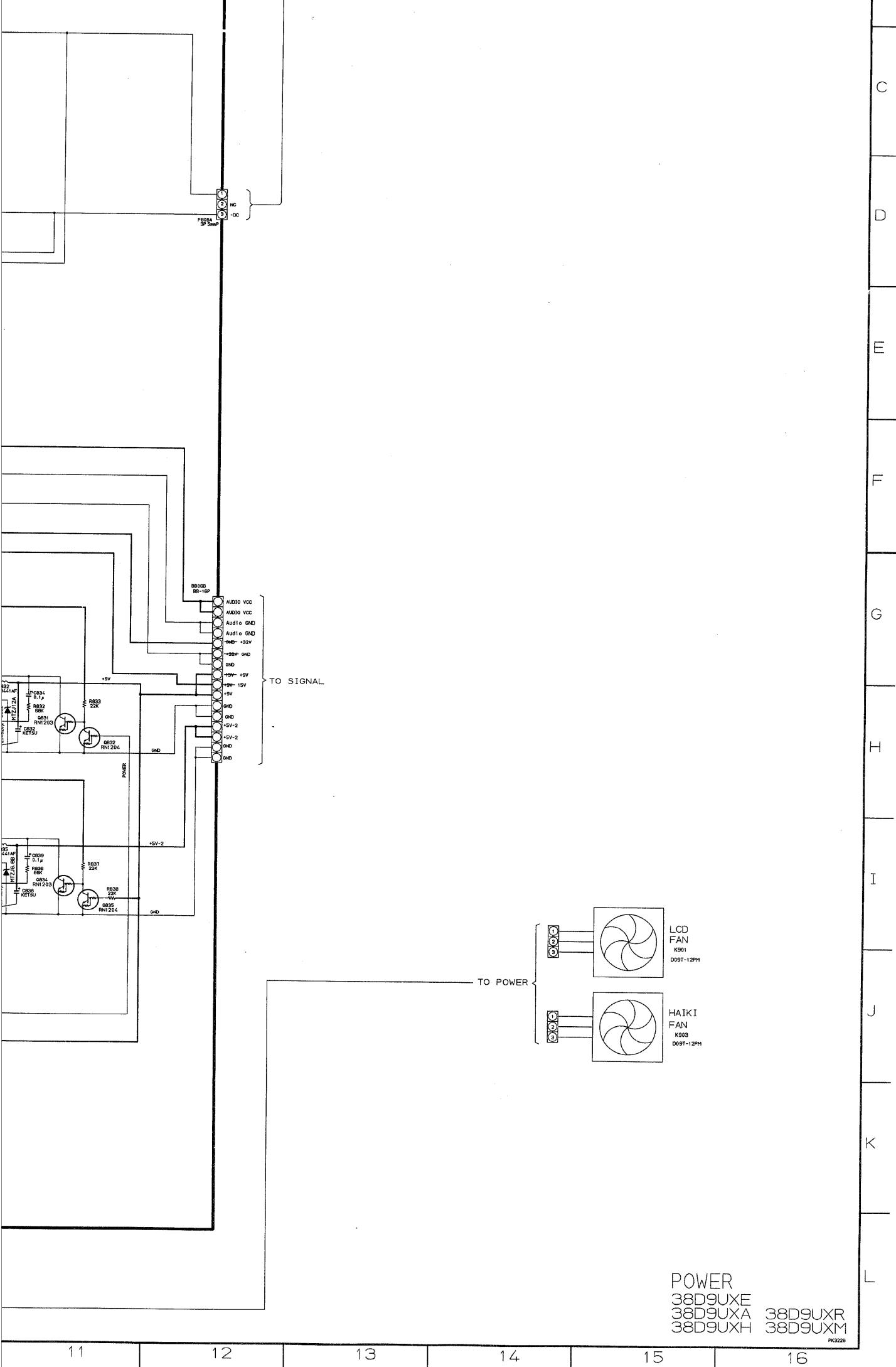
## **VALUE OF RESISTOR, CAPACITOR and INDUCTOR**

1. Resistance is shown in ohm,  $k=1,000$ ,  $M=1,000,000$
  2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu F$  and the values more than 1 in  $pF$ .
  3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in  $\mu H$ , and the values less than 1 in  $H$ .











# SCHEMATIC DIAGRAM

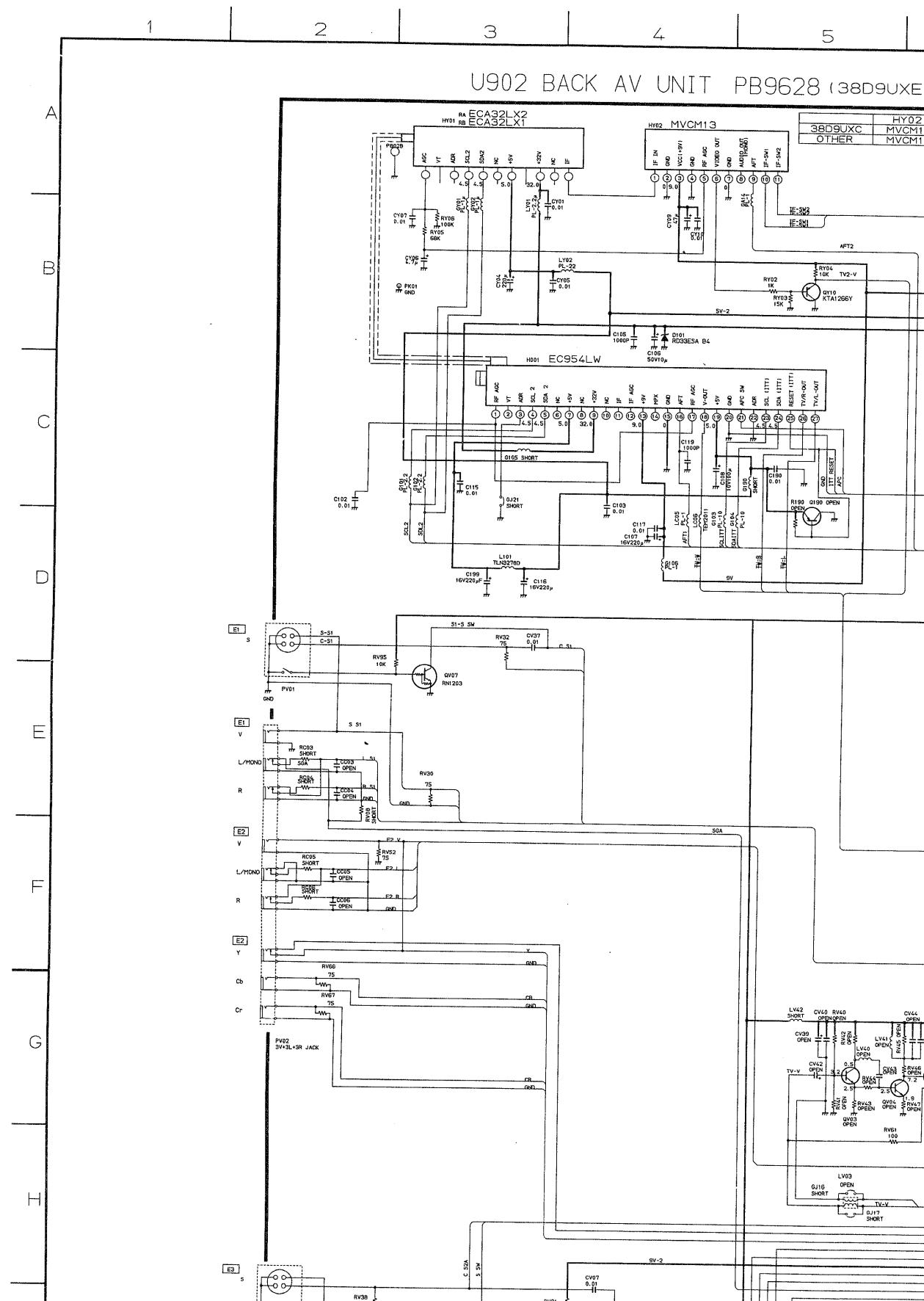
MODEL : 38D9UXE / 38D9UXA (3/5)  
 38D9UXH / 38D9UXR  
 38D9UXM

**CAUTION:** The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

## OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to c.volt, colour bar signal. Voltages reading may vary.
2. All waveforms are taken using a wide band oscilloscope.
3. Waveforms are taken using a standard colour bar.
4. Make sure that CONTRAST and COLOUR control BRIGHTNESS control is almost in maximum position.

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## S AND WAVEFORMS

point shown to chassis ground, line voltage 220  
tages reading may vary  $\pm 20\%$ .  
g a wide band oscilloscope and a low capacity probe.  
a standard colour bar signal.  
T and COLOUR controls are in mid position and  
ost in maximum position. Set other controls for best

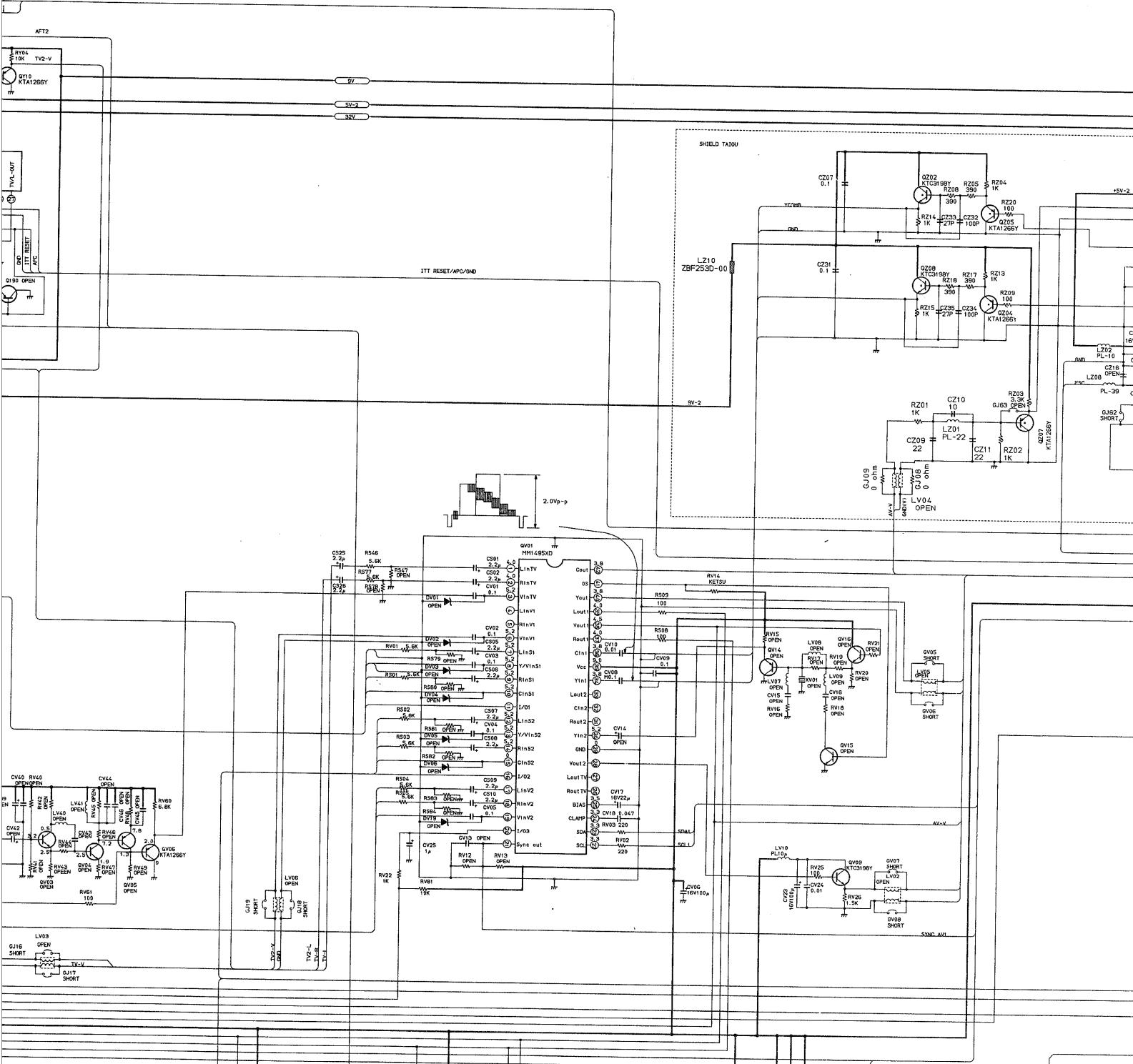
## NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. : Solder links.

5 6 7 8 9 10 11

8 (38D9UXE, A, R, H, M)

	HY02
38D9UXC	MVCM13A
OTHER	MVCM13



## **EXPRESSION**

## **VALUE OF RESISTOR, CAPACITOR and INDUCTOR**

1. Resistance is shown in ohm,  $k=1,000$ ,  $M=1,000,000$
  2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu F$  and the values more than 1 in  $pF$ .
  3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in  $\mu H$ , and the values less than 1 in  $H$ .

11

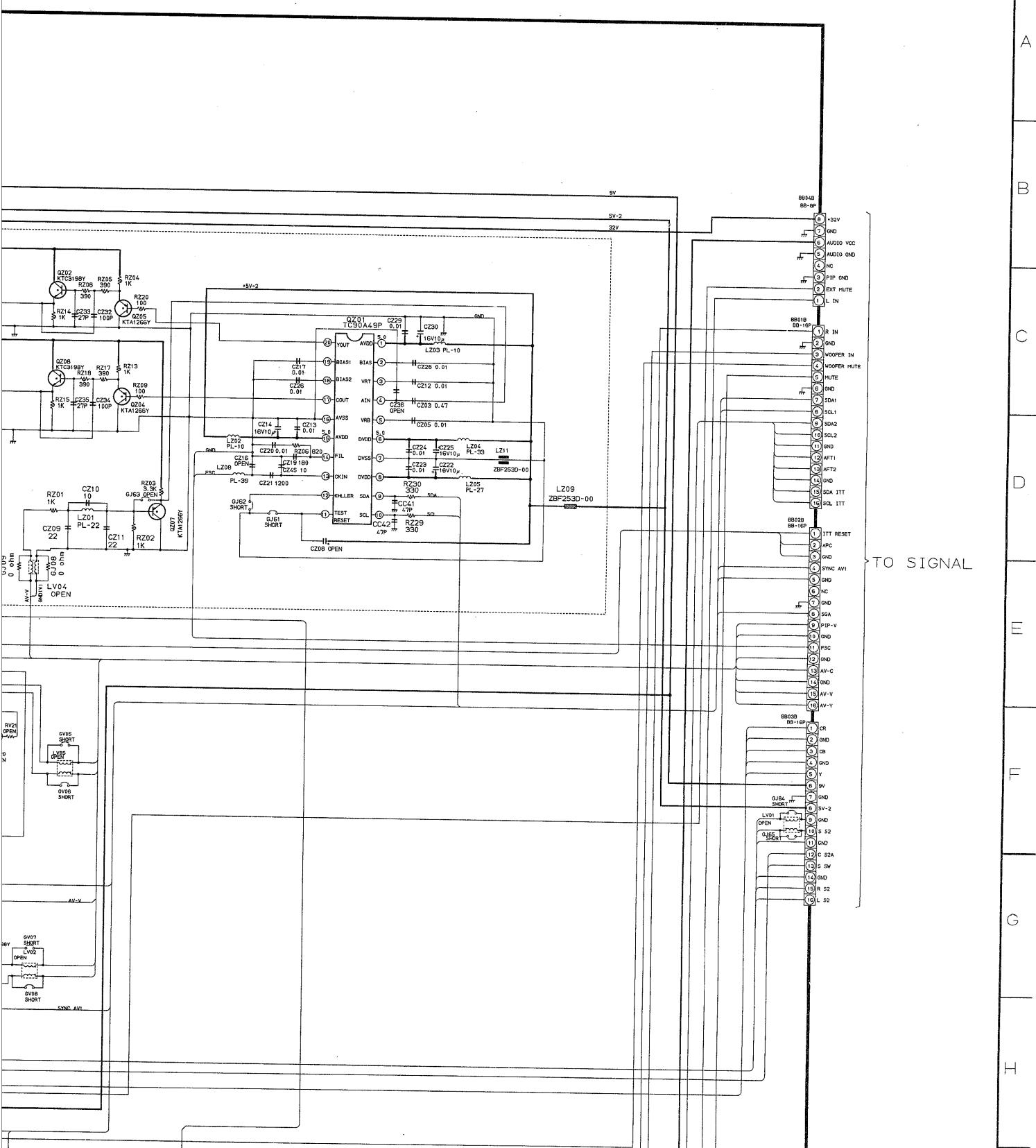
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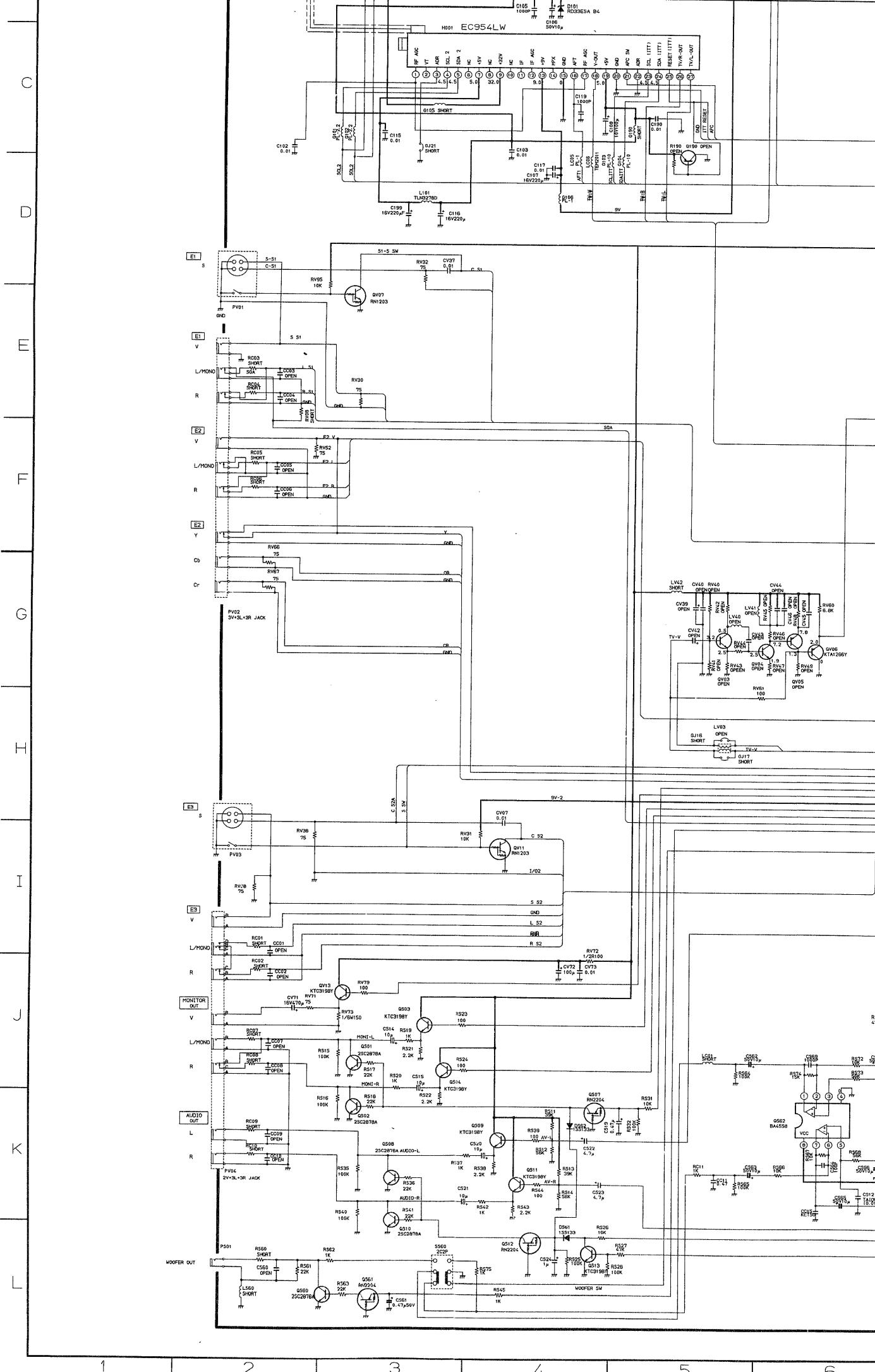
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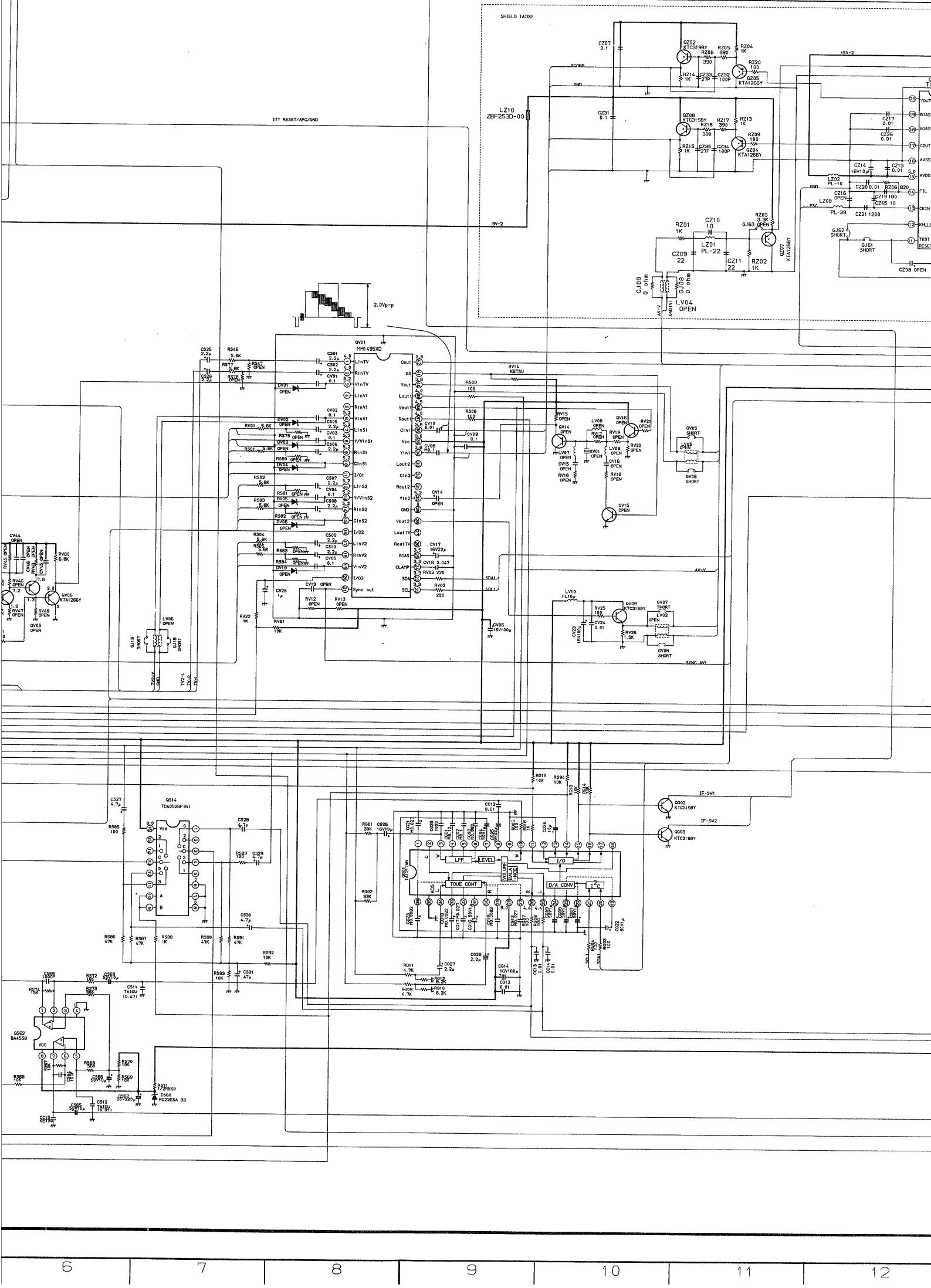
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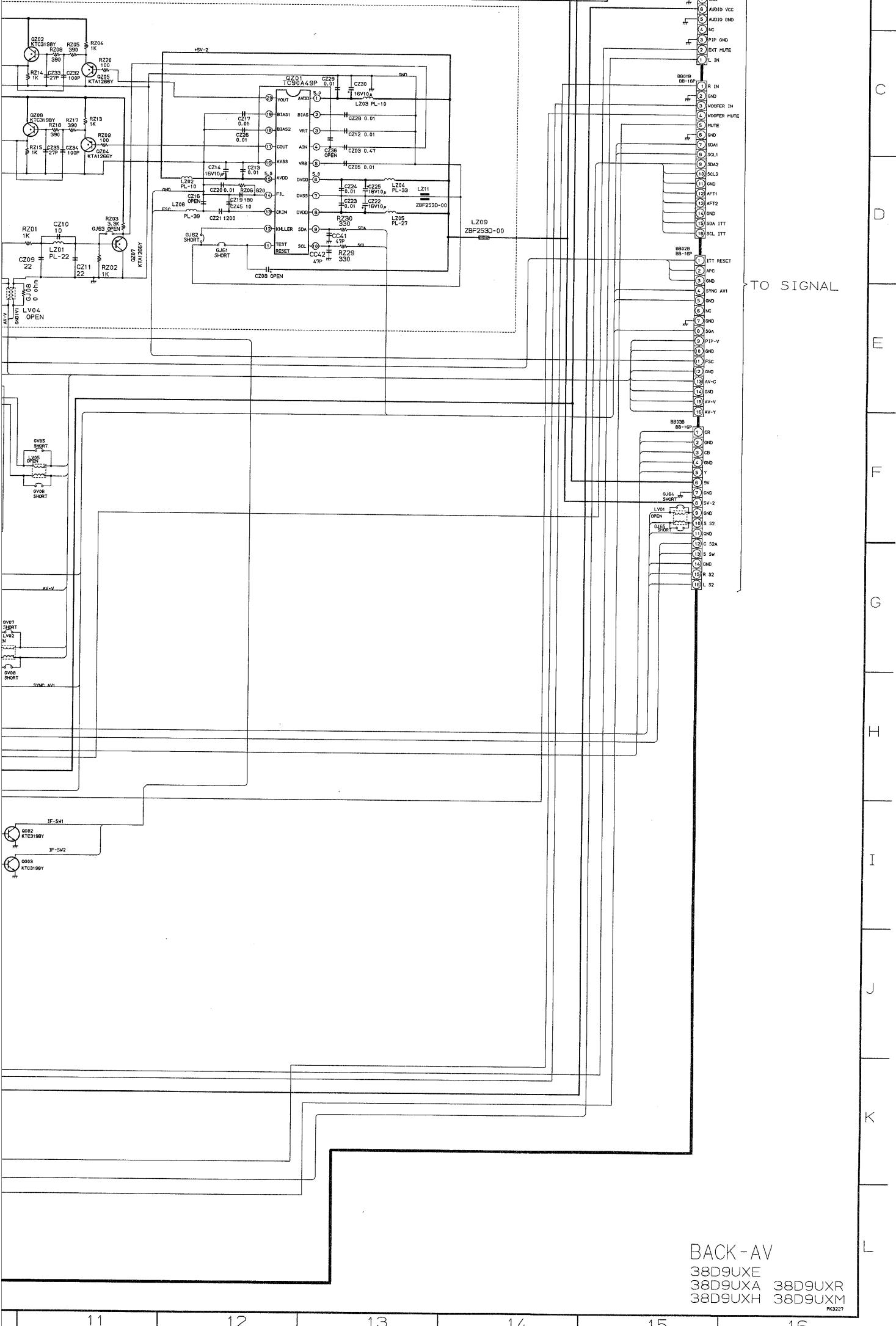
15

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### SCHEMATIC DIAGRAM

MODEL : 38D9UXE / 38D9UXA (4/5)

38D9UXH / 38D9UXKR

38D9UXM

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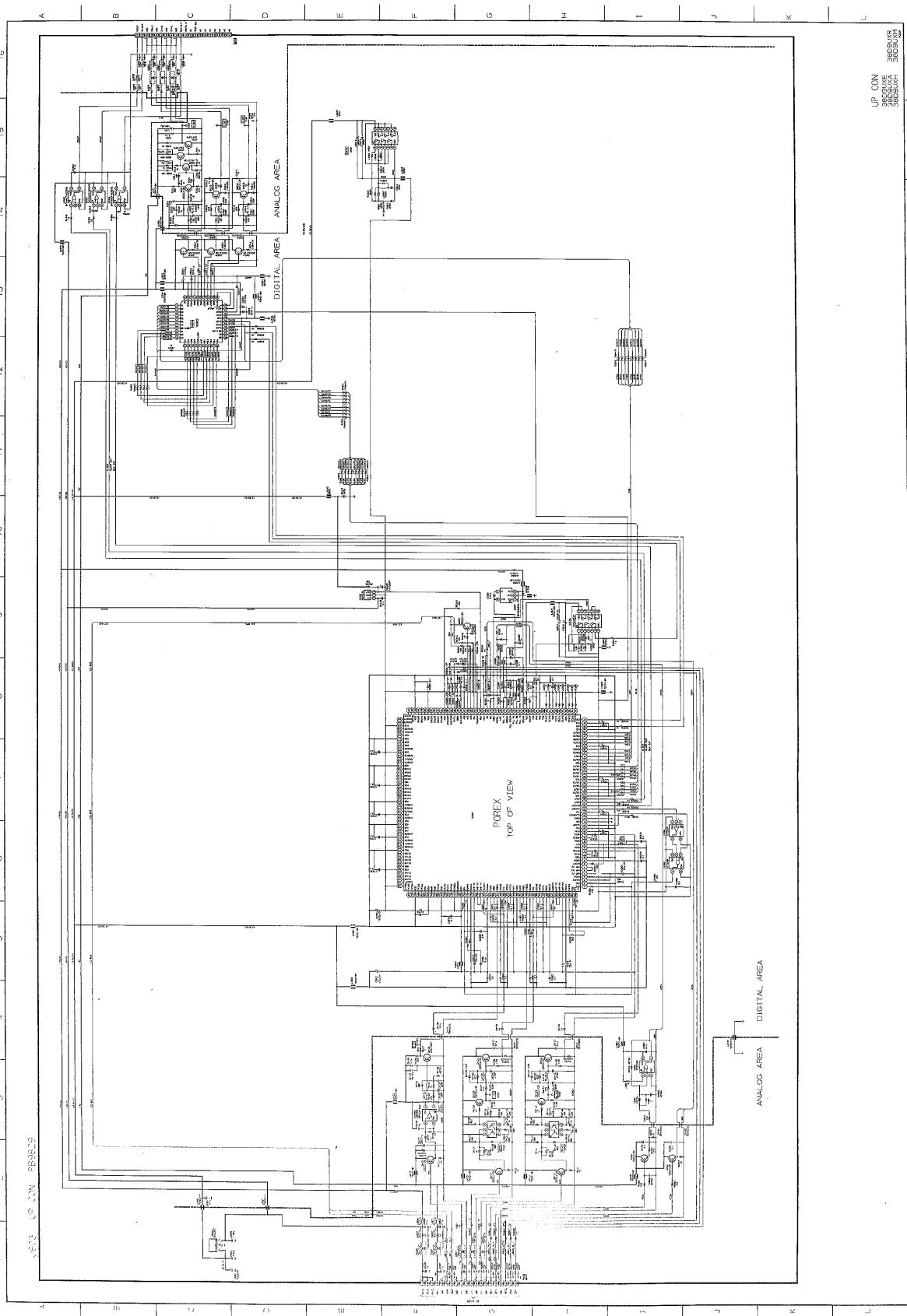
**CAUTION:** The international hazard symbols in the schematic diagram and this parts list designate components which have special characteristics and/or handling requirements. These symbols do not apply to other parts in this parts list. Therefore, before replacing any of these components, read carefully the technical information & safety notices on page 3 to insure the safety of the receiver through proper servicing.

### NOTES

1. Voltages read with K7W from point shown to chassis ground, line voltage 220  
2. All resistors are 1% unless otherwise noted. Capacitors are 10% unless otherwise noted.  
3. Components in parentheses are optional.  
4. All diodes are 1N4007 except where otherwise specified.

**EXPRESSION**  
**VALUE OF RESISTOR, CAPACITOR and INDUCTOR**

1. Resistance is given in ohms,  $k\Omega = 1000$ ,  $M = 1000000$
2. Units given in schematic are in microfarads, all capacitors values less than 1  $\mu F$  are expressed in pF.
3. Unless otherwise stated in schematic, all inductor values more than 1  $H$  are expressed in mH, and the values less than 1  $H$ .



## **SCHEMATIC DIAGRAM**

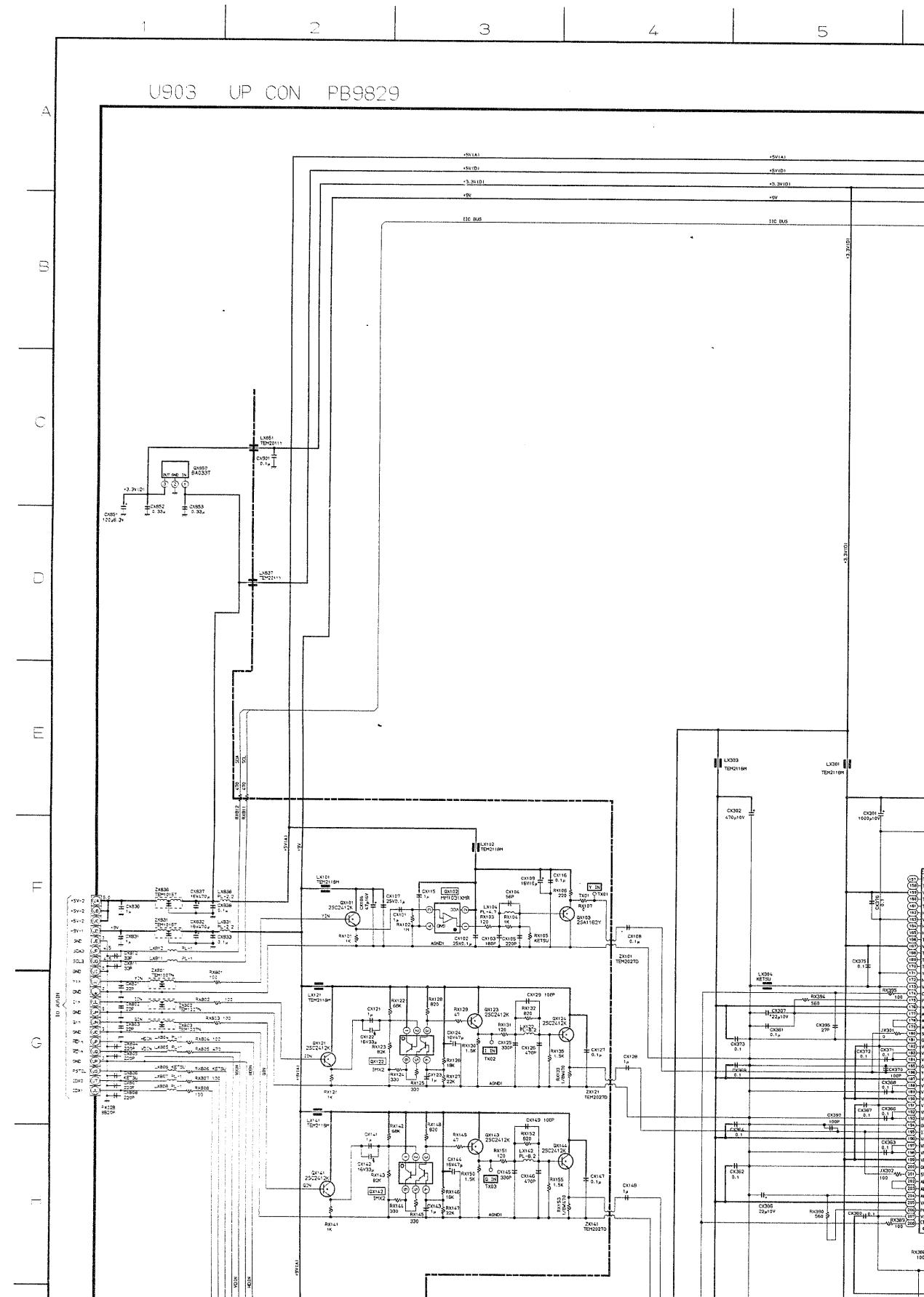
**MODEL : 38D9UXE / 38D9UXA (4/5)  
38D9UXH / 38D9UXR  
38D9UXM**

**CAUTION:** The international hazard symbols “” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

## OBSERVATION OF VOLTAGES AND WAVEFORM

1. Voltages read with VTVM from point shown to  
volts, colour bar signal. Voltages reading may  
be taken using a wide band oscil-
  2. All waveforms are taken using a standard colour b
  3. Waveforms are taken using a standard colour b
  4. Make sure that CONTRAST and COLOUR co  
BRIGHTNESS control is almost in maximum po  
picture.

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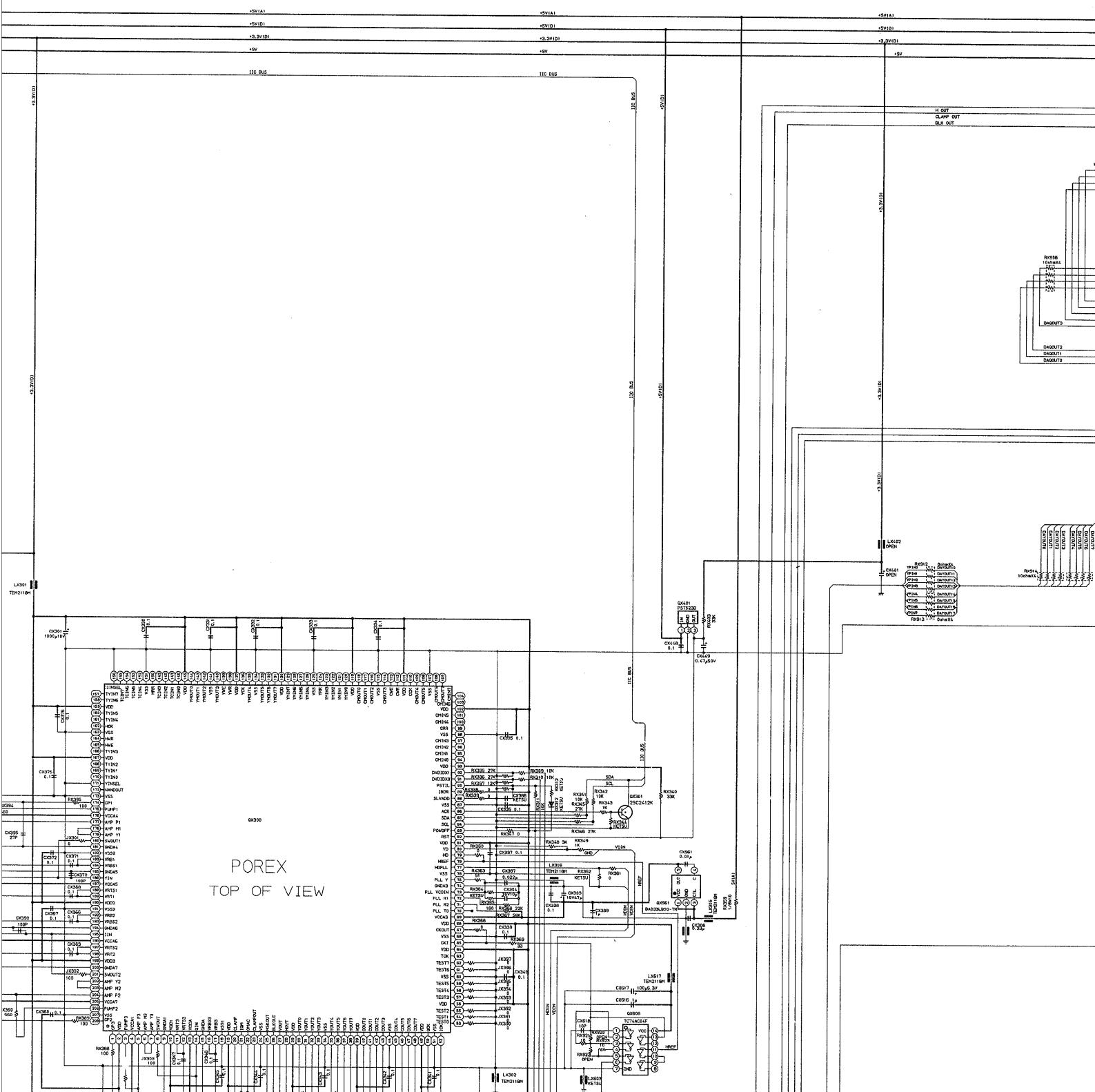
### **AND WAVEFORMS**

In point shown to chassis ground, line voltage 220  
volts reading may vary  $\pm 20\%$ .  
a wide band oscilloscope and a low capacity probe.  
standard colour bar signal.  
and COLOUR controls are in mid position and  
set in maximum position. Set other controls for best

**NOTES:**

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
  2. The circuits are subject to change without notice.
  3.  : Solder links.

## VALUE



## **EXPRESSION**

## **VALUE OF RESISTOR, CAPACITOR and INDUCTOR**

1. Resistance is shown in ohm,  $k=1,000$ ,  $M=1,000,000$
  2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu F$  and the values more than 1 in  $pF$ .
  3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in  $\mu H$ , and the values less than 1 in  $H$ .

1 1

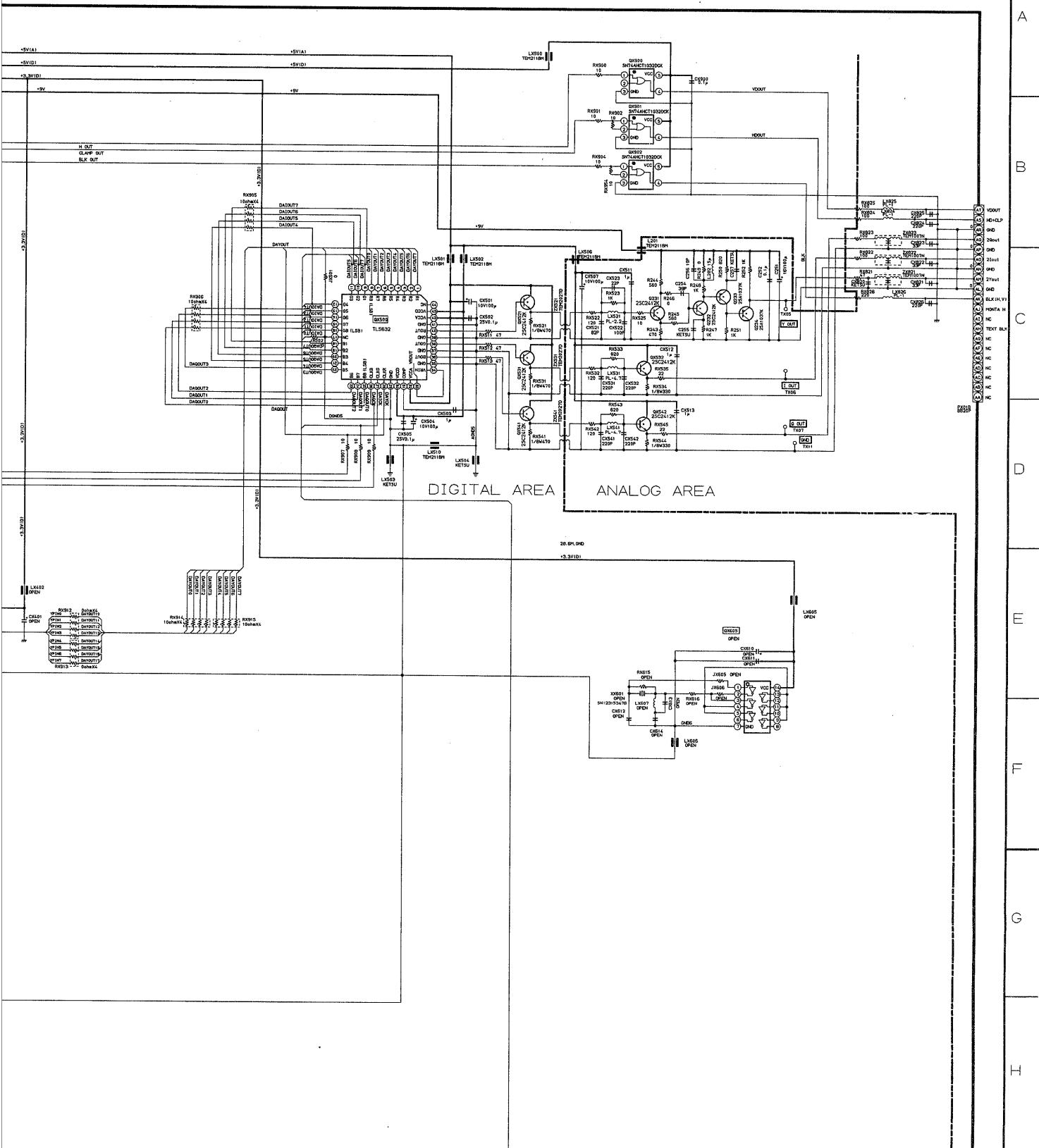
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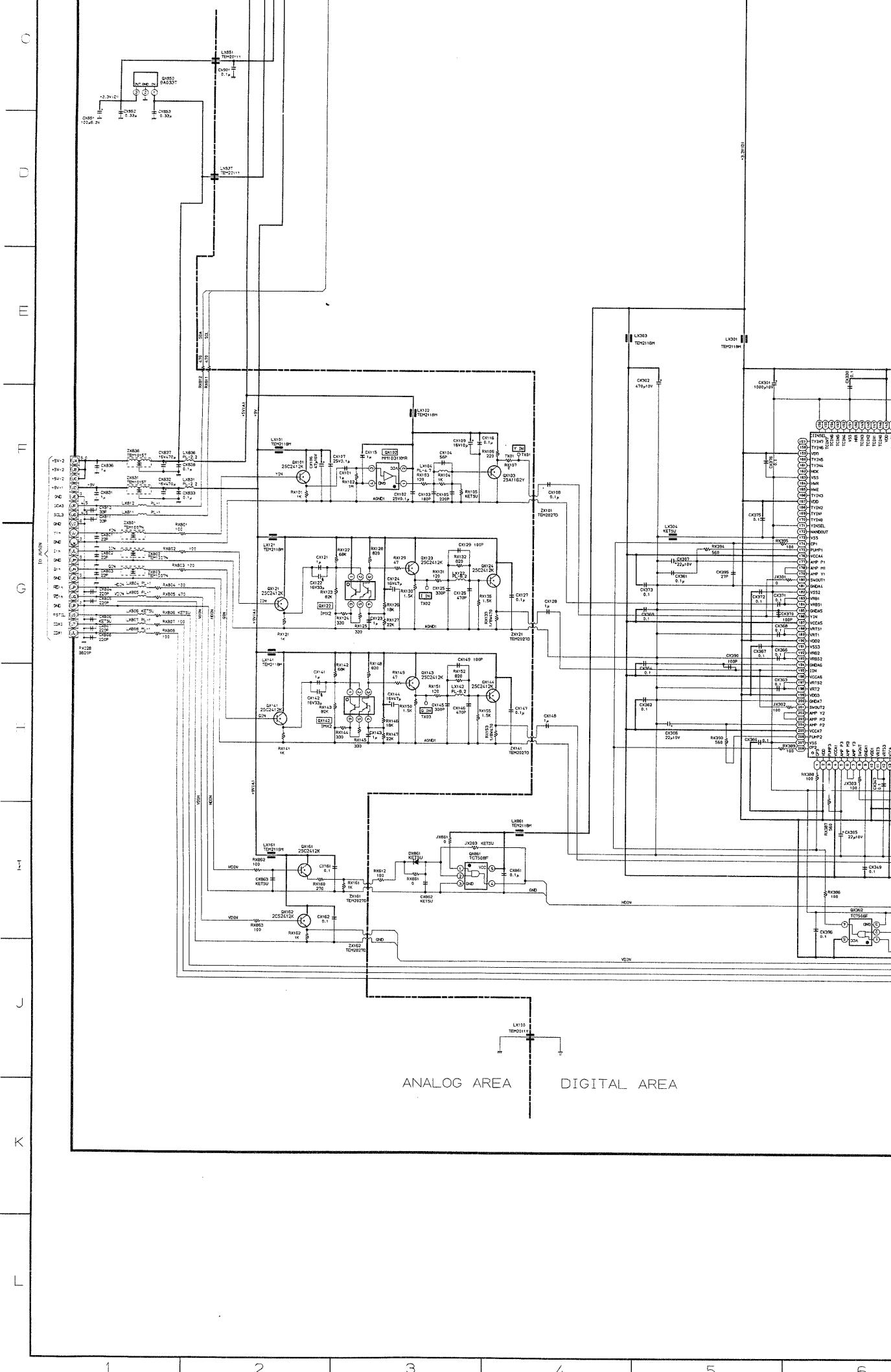
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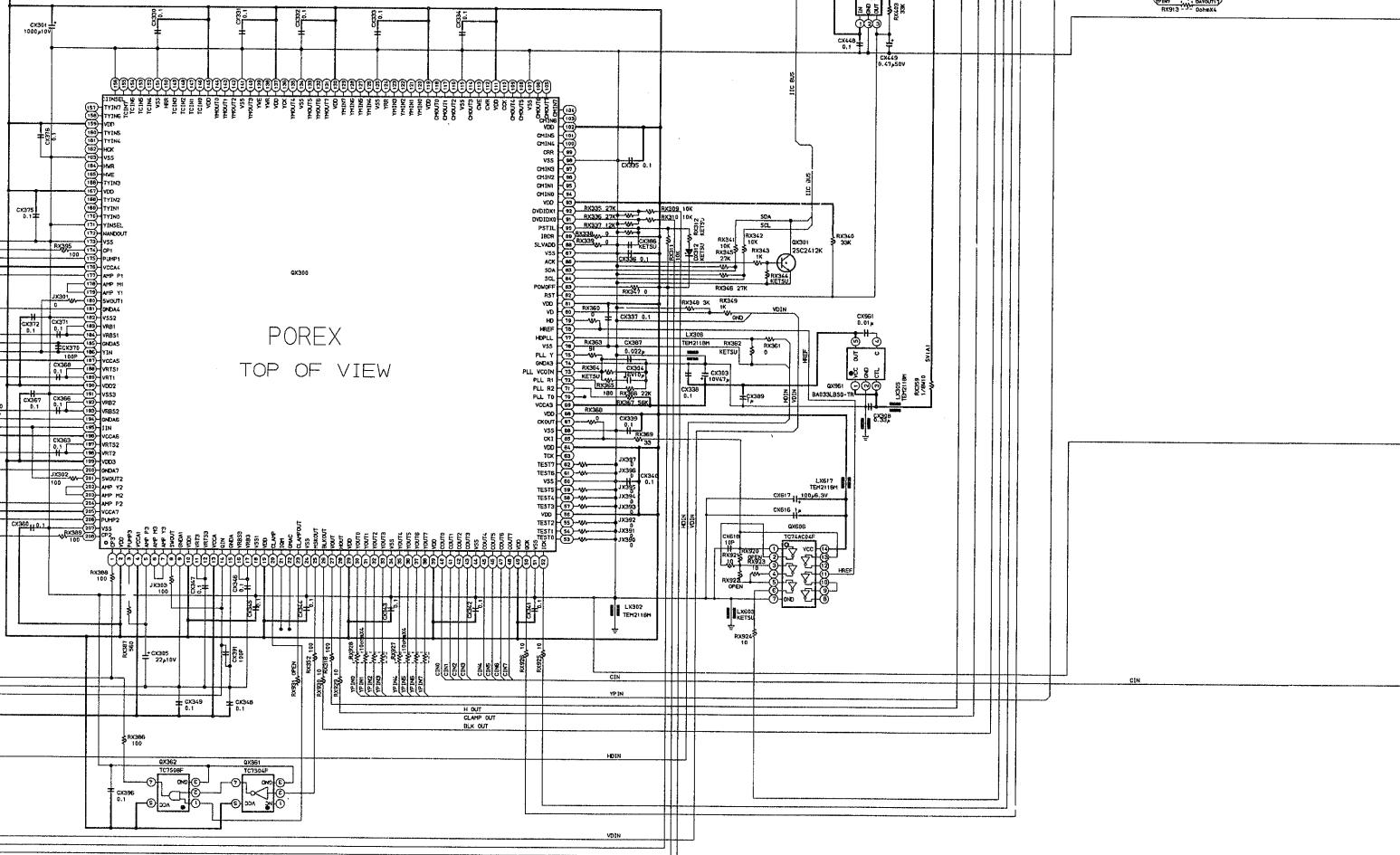
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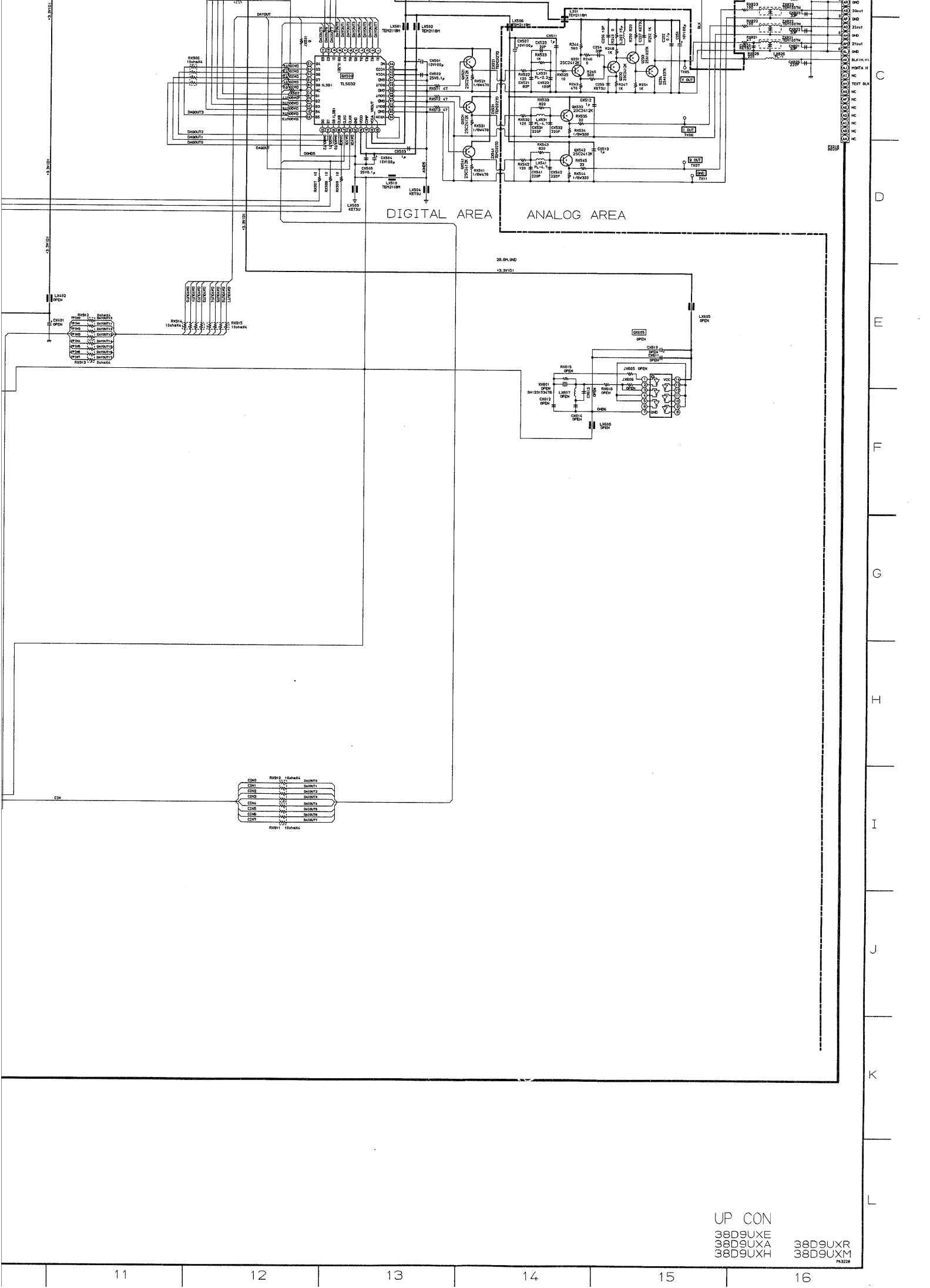
15

16









## SCHEMATIC DIAGRAM

MODEL : 38D9UXE / 38D9UXA (5/5)

38D9UXH / 38D9UXW

NOTES:

1. DC resistance value of a principal transformer is shown in this schematic diagram.

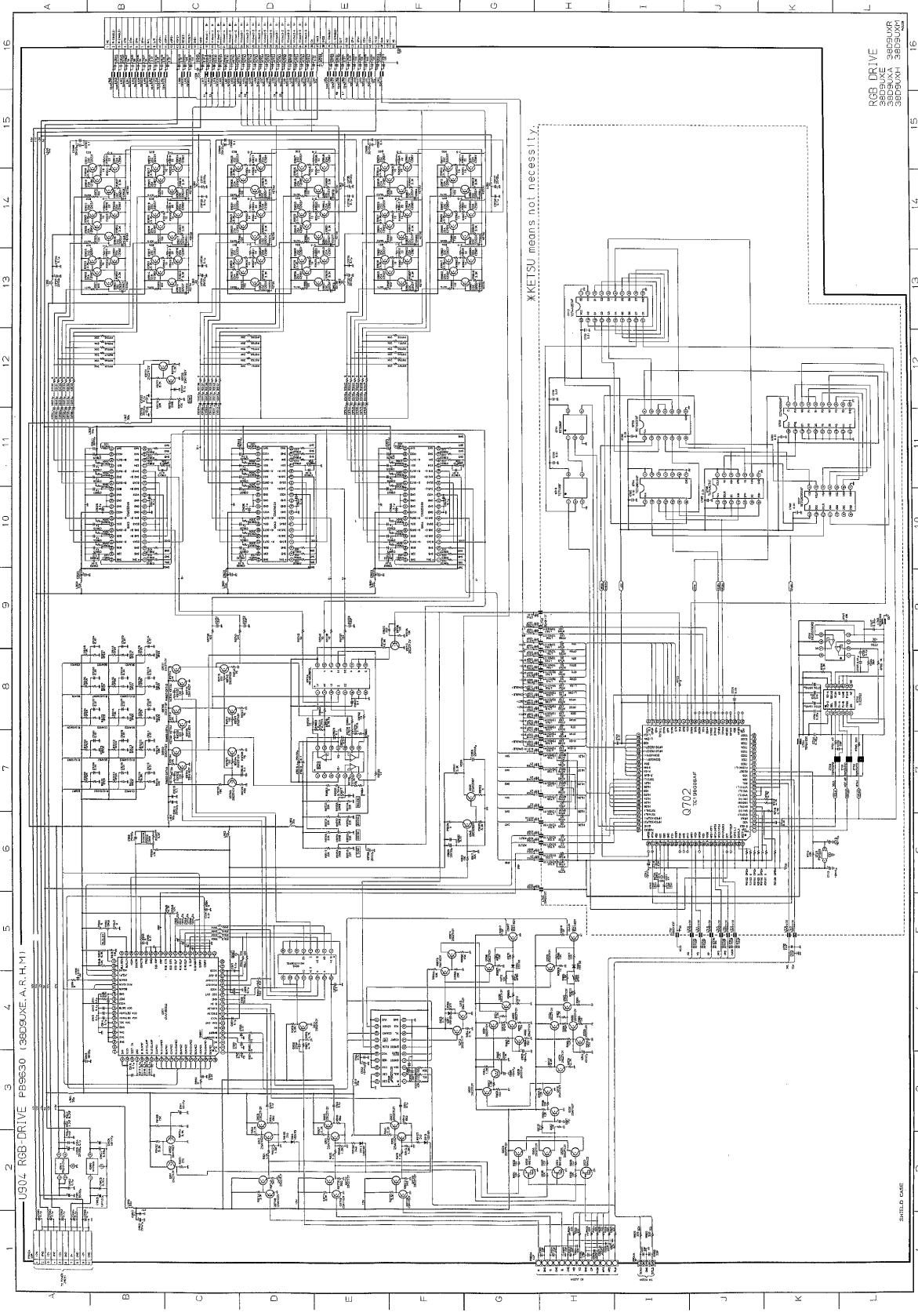
2. Units other than ohm are indicated in schematic all resistor values less than 1 are expressed in milliohms.

3. Unless otherwise stated in schematic all capacitor values less than 1 are expressed in picofarads.

4. Unless otherwise stated in schematic all inductor values more than 1 are expressed in microhenrys.

5. Inductance values less than 1 mH, and the values less than 1 nH.

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# SCHEMATIC DIAGRAM

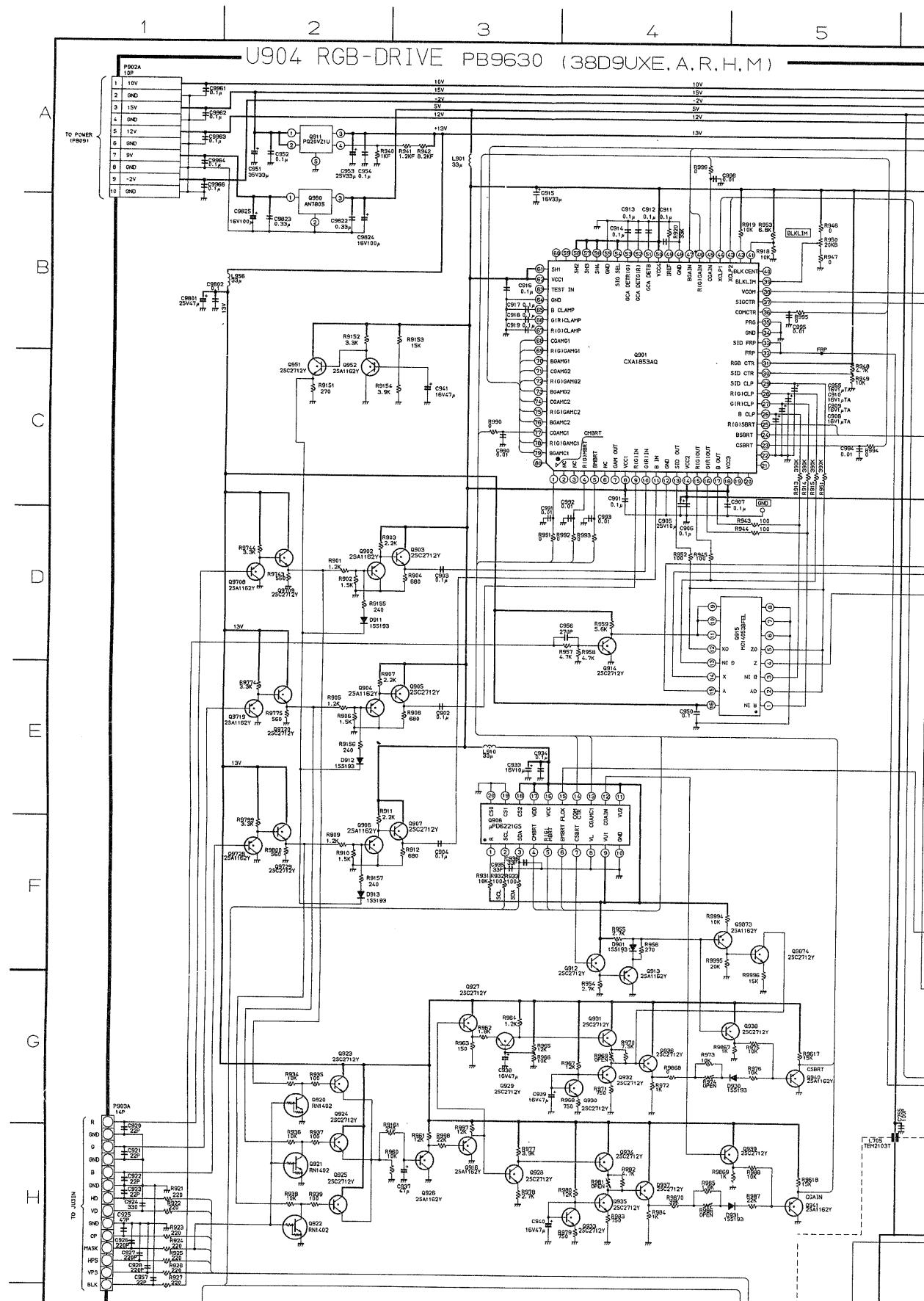
## MODEL : 38D9UXE / 38D9UXA (5/5) 38D9UXH / 38D9UXR 38D9UXM

**CAUTION:** The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

### OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to ground in volts, colour bar signal. Voltages reading may vary.
2. All waveforms are taken using a wide band oscilloscope.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls and BRIGHTNESS control is almost in maximum position when taking picture.

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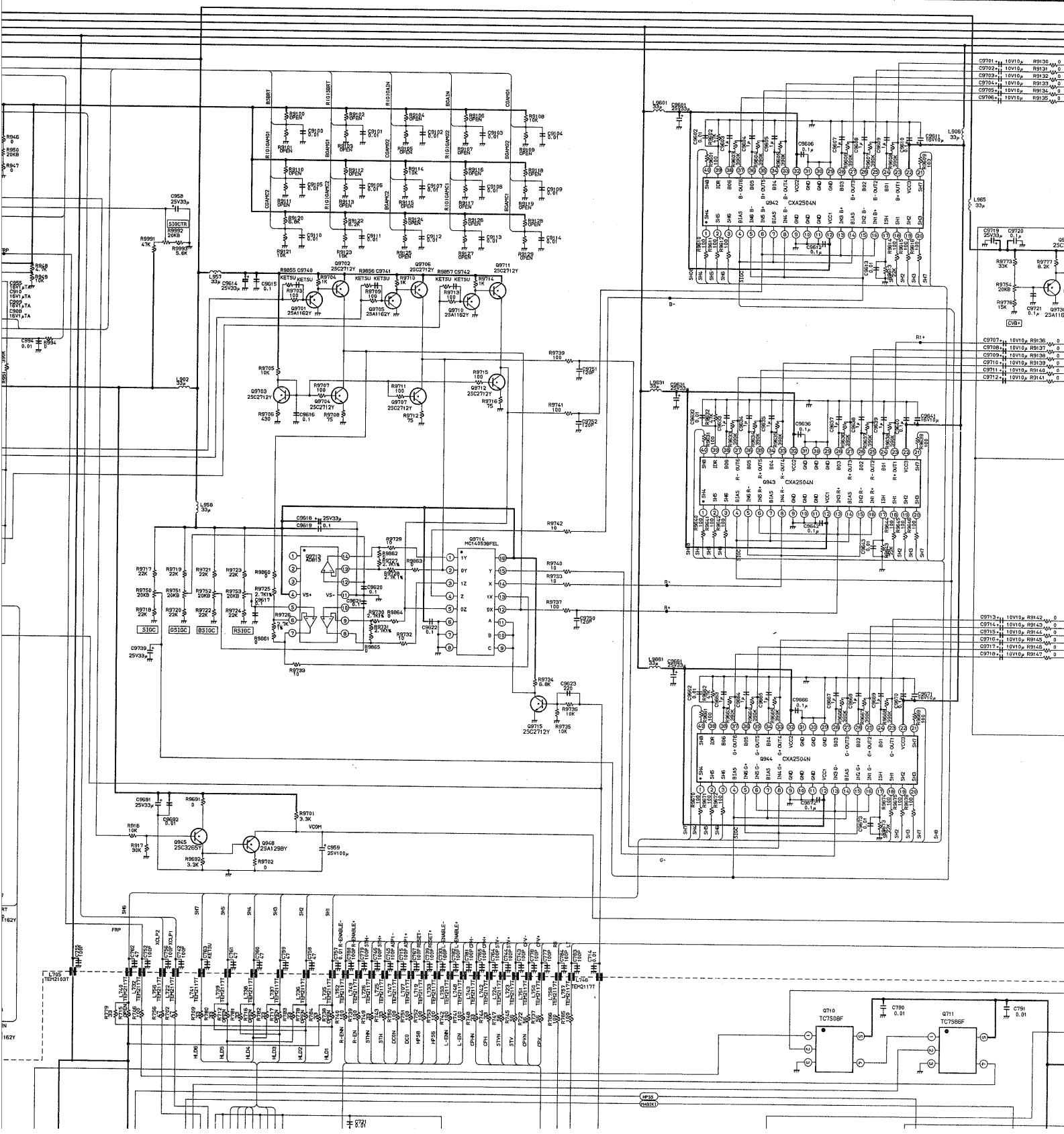


## **ND WAVEFORMS**

point shown to chassis ground, line voltage 220  
es reading may vary  $\pm 20\%$ .  
wide band oscilloscope and a low capacity probe.  
standard colour bar signal.  
nd COLOUR controls are in mid position and  
in maximum position. Set other controls for best

**NOTES:**

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
  2. The circuits are subject to change without notice.
  3.  : Solder links.



# EXPRESSION

## VALUE OF RESISTOR, CAPACITOR and INDUCTOR

- Resistance is shown in ohm, k=1,000, M=1,000,000
- Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu\text{F}$  and the values more than 1 in  $\text{pF}$ .
- Unless otherwise noted in schematic, all inductor values more than 1 are expressed in  $\mu\text{H}$ , and the values less than 1 in H.

schematic dia-

11

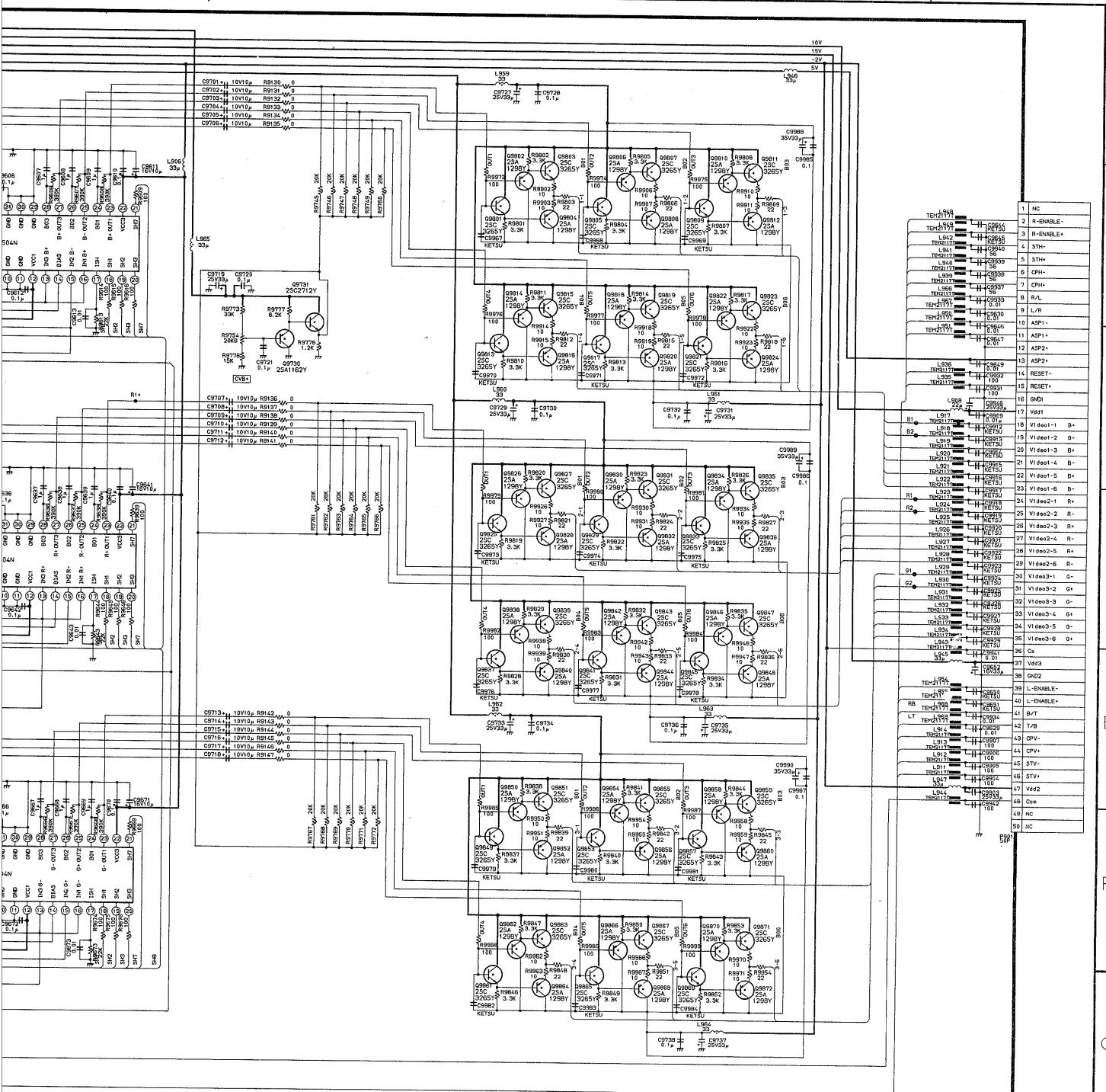
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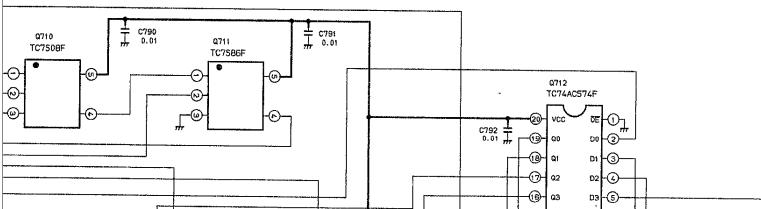
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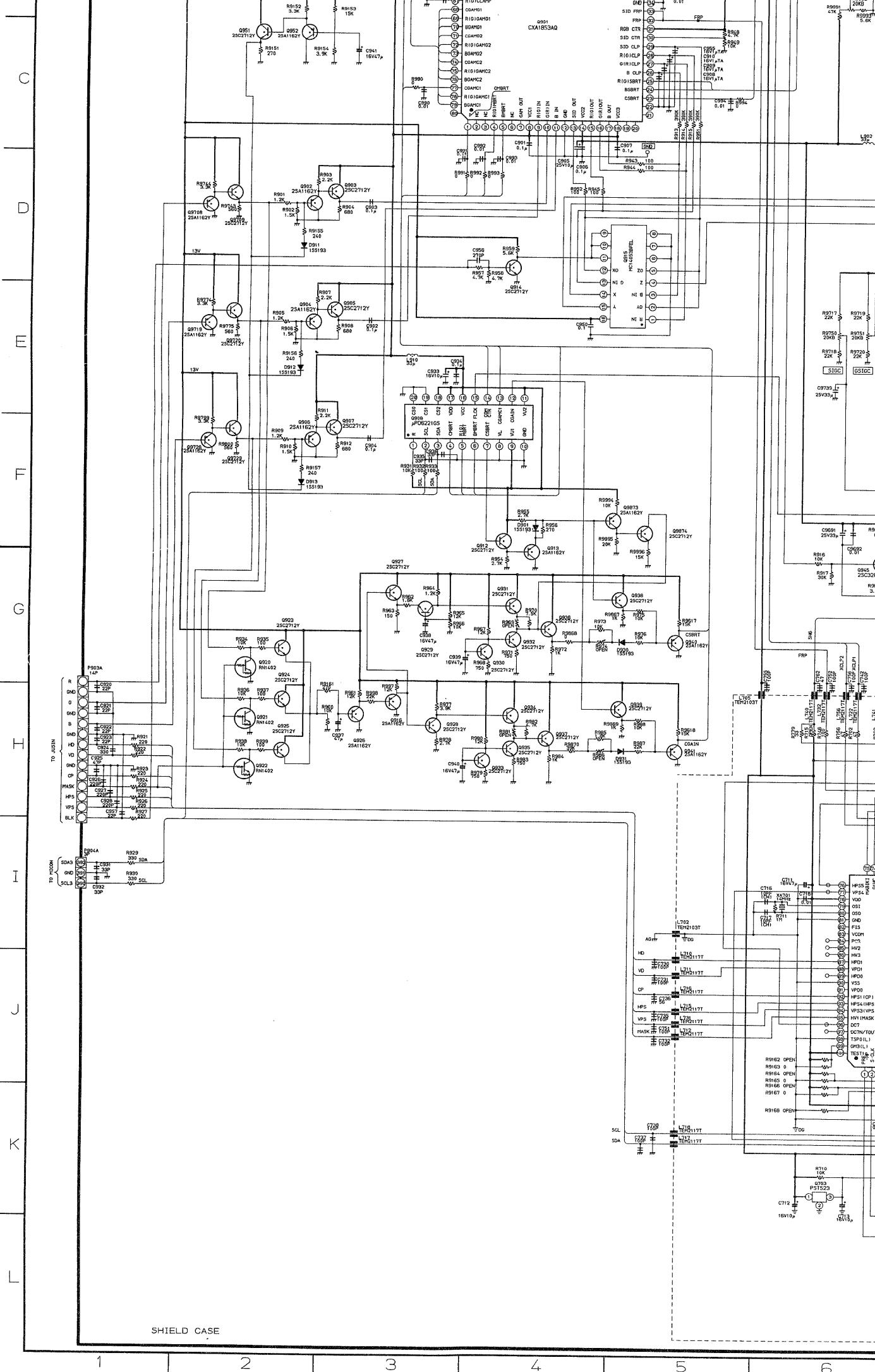
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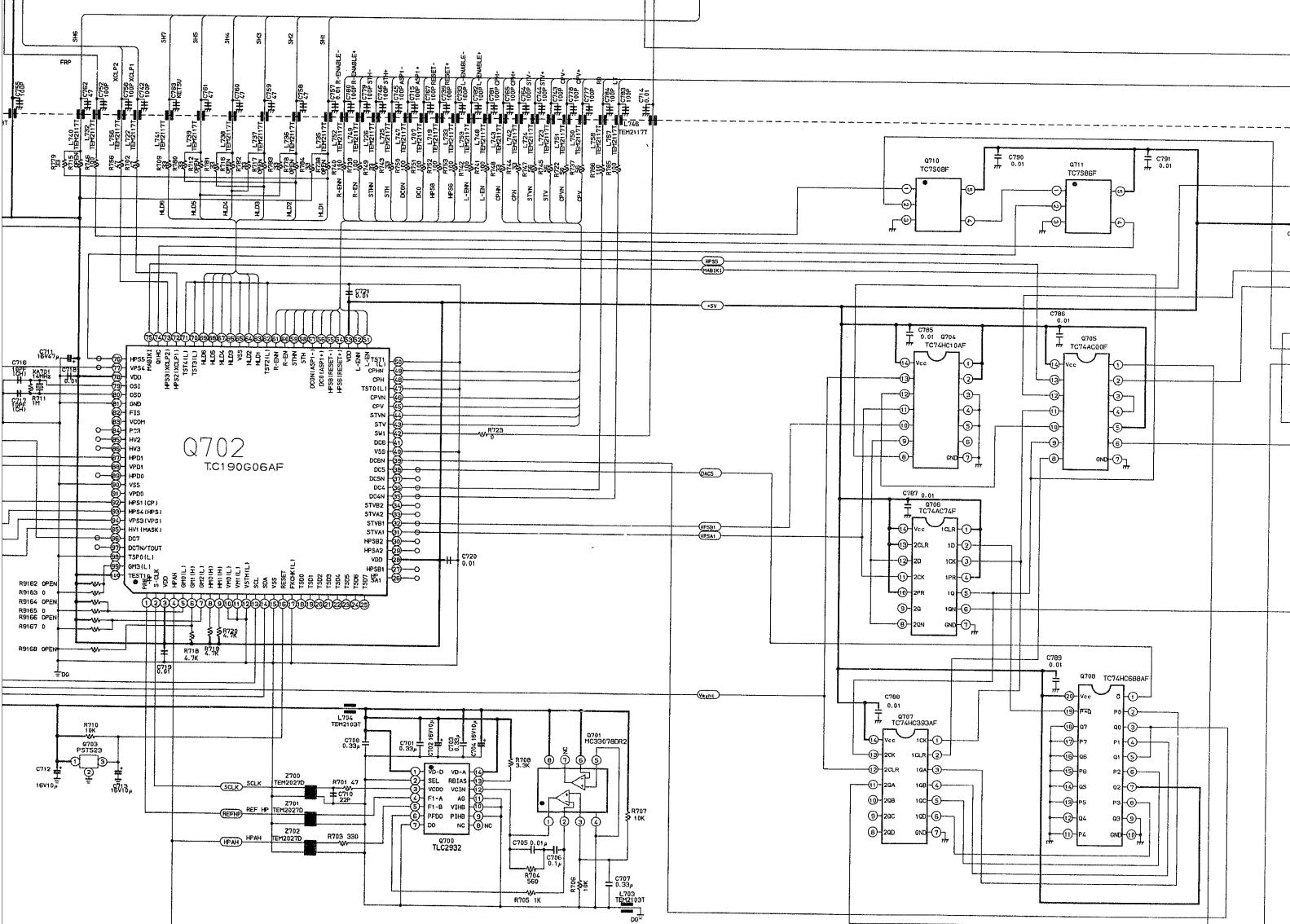
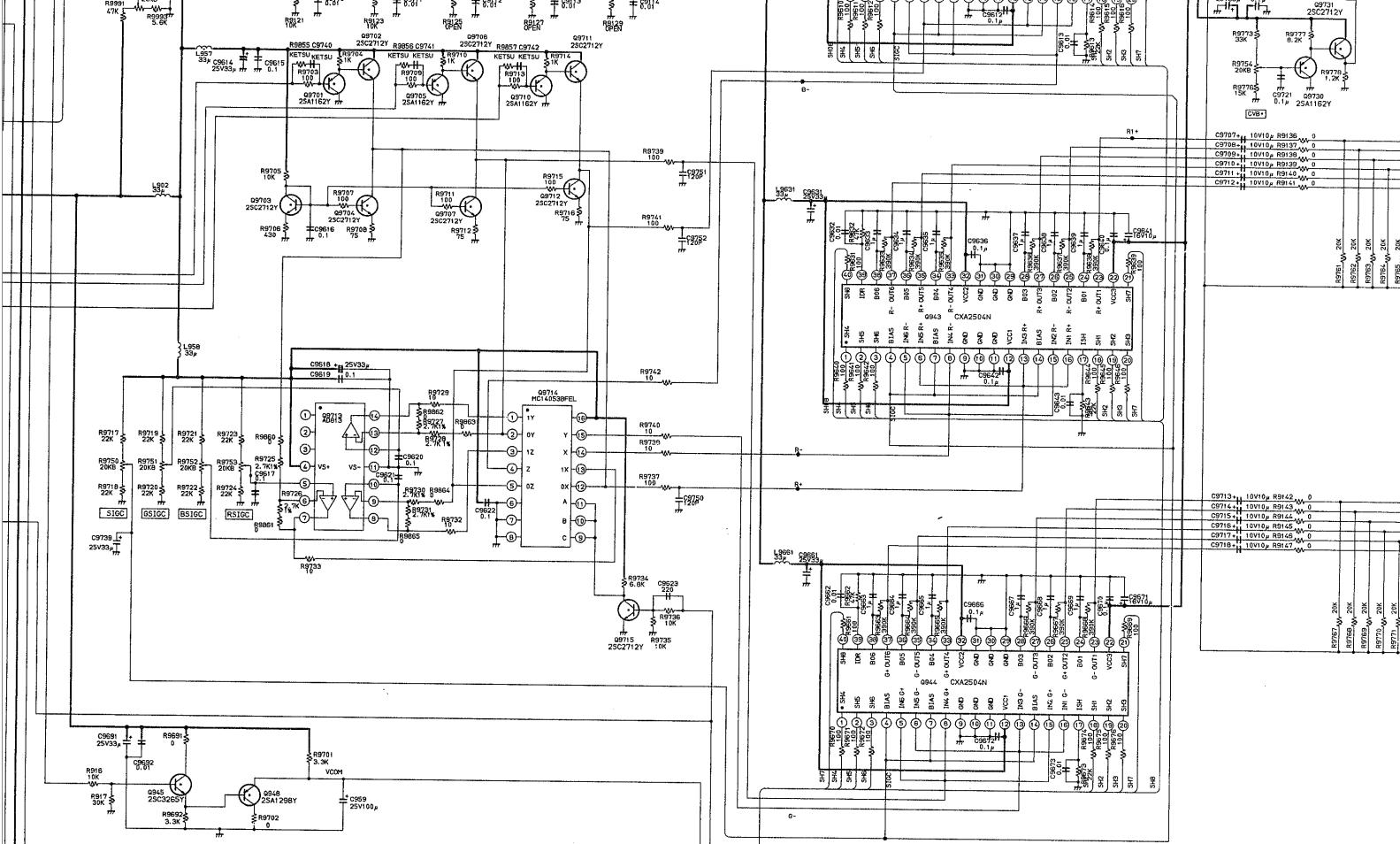
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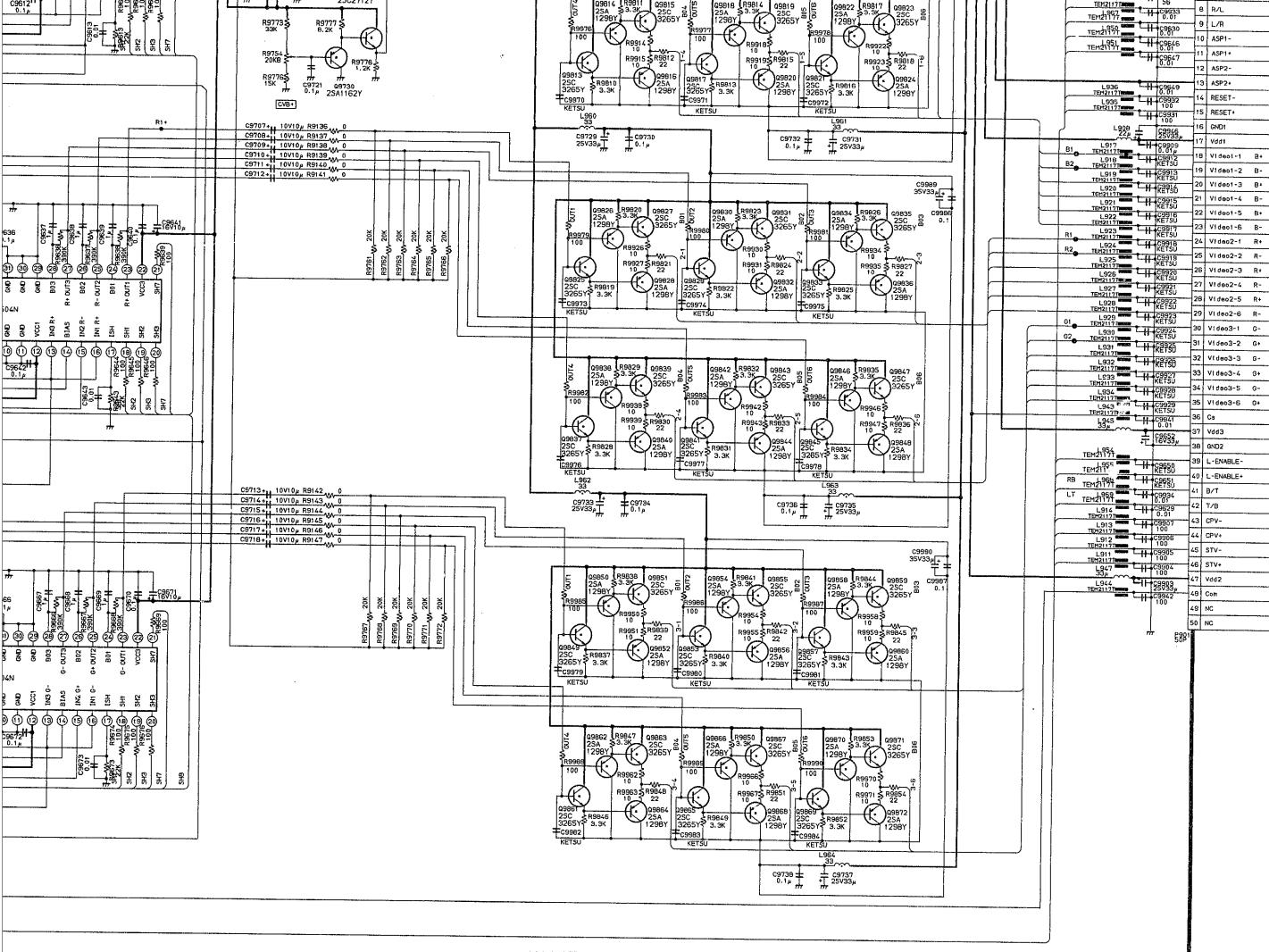


\*KETSU means not necessary.

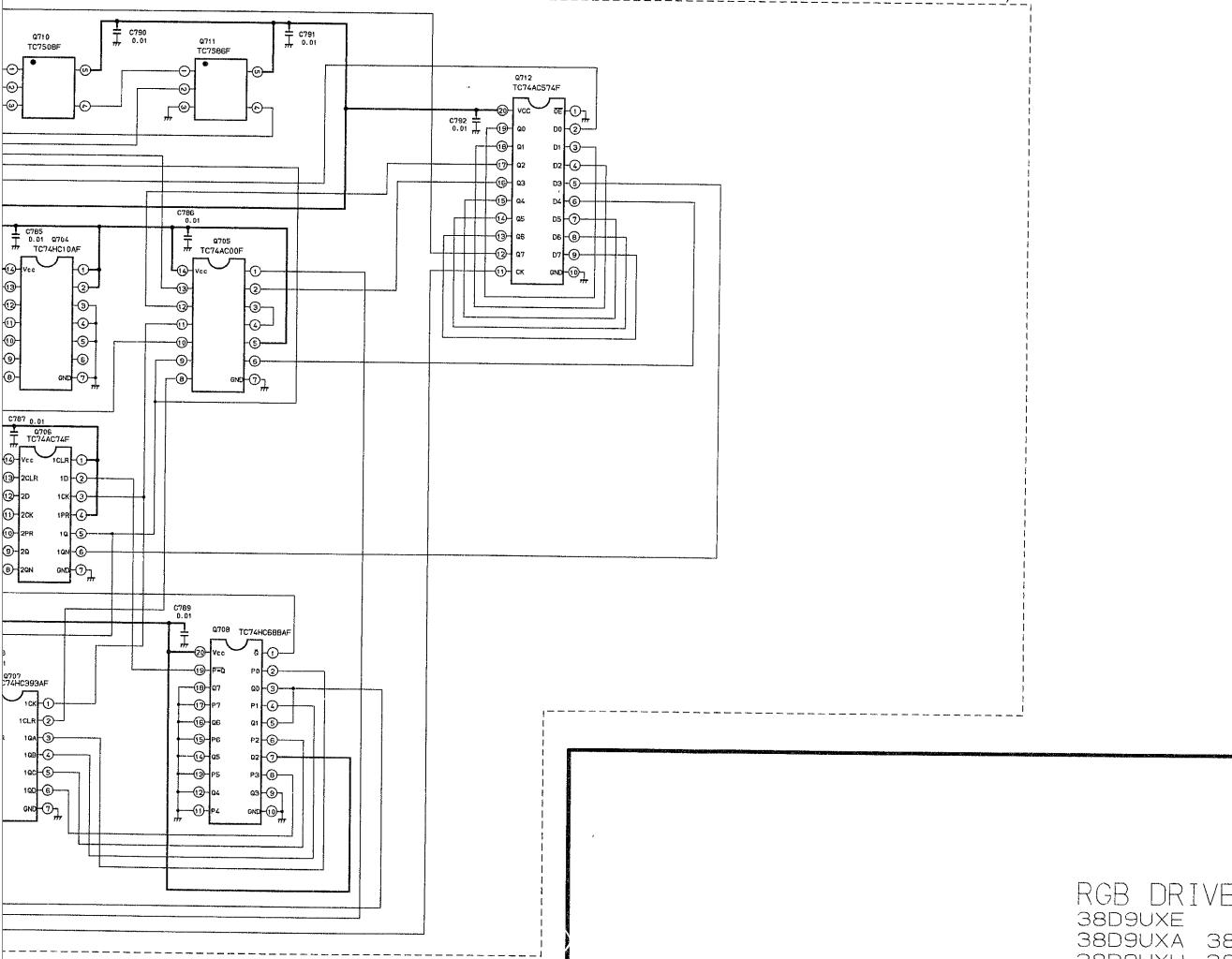








\*KETSU means not necessity



RGB DRIVE  
38D9UXE  
38D9UXA 38D9UXR  
38D9UXH 38D9UXM