C-N14210/S STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

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

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

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

(1)Input signal : Color bar signal

(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped

(3)Internal resistance of tester :DC 20kΩ/V

(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified

(5)Voltage values :All DC voltage values

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

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value
No unit :[Ω]
K :[KΩ]
M :[MΩ]

●Rated allowable power
No indication :1/10 [W]
Others :As specified

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

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

(2)Capacitors

●Capacitance value
1 or higher :[pF]
less than 1 :[μF]

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

*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

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

(3)Coils
No unit :[μH]
Others :As specified

(4)Power Supply
═══ :B1 ■■■■ :B2(12V)
■□■□ :9V □□□□ :5V

*Respective voltage values are indicated

(5)Test point
◉ :Test point ○ :Only test point display

(6)Connecting method
▭ :Connector ○ :Wrapping or soldering
→≻— →⊁— :Receptacle

(7)Ground symbol
⊥ :LIVE side ground
⫫ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

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

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

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

◇**NOTE**

Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

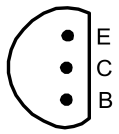
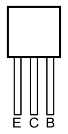
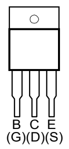
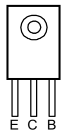
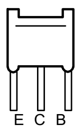
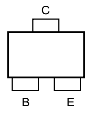
When ordering parts, please use the numbers that appear in the Parts List.

Aug. 2001 No.51831

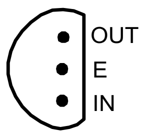
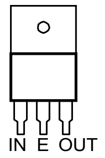
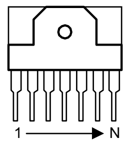
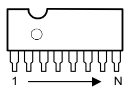
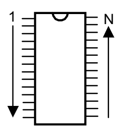
CONTENTS

SEMICONDUCTOR SHAPES

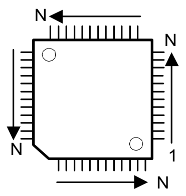
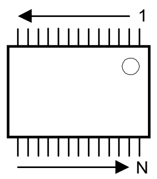
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

CHANNEL CHART

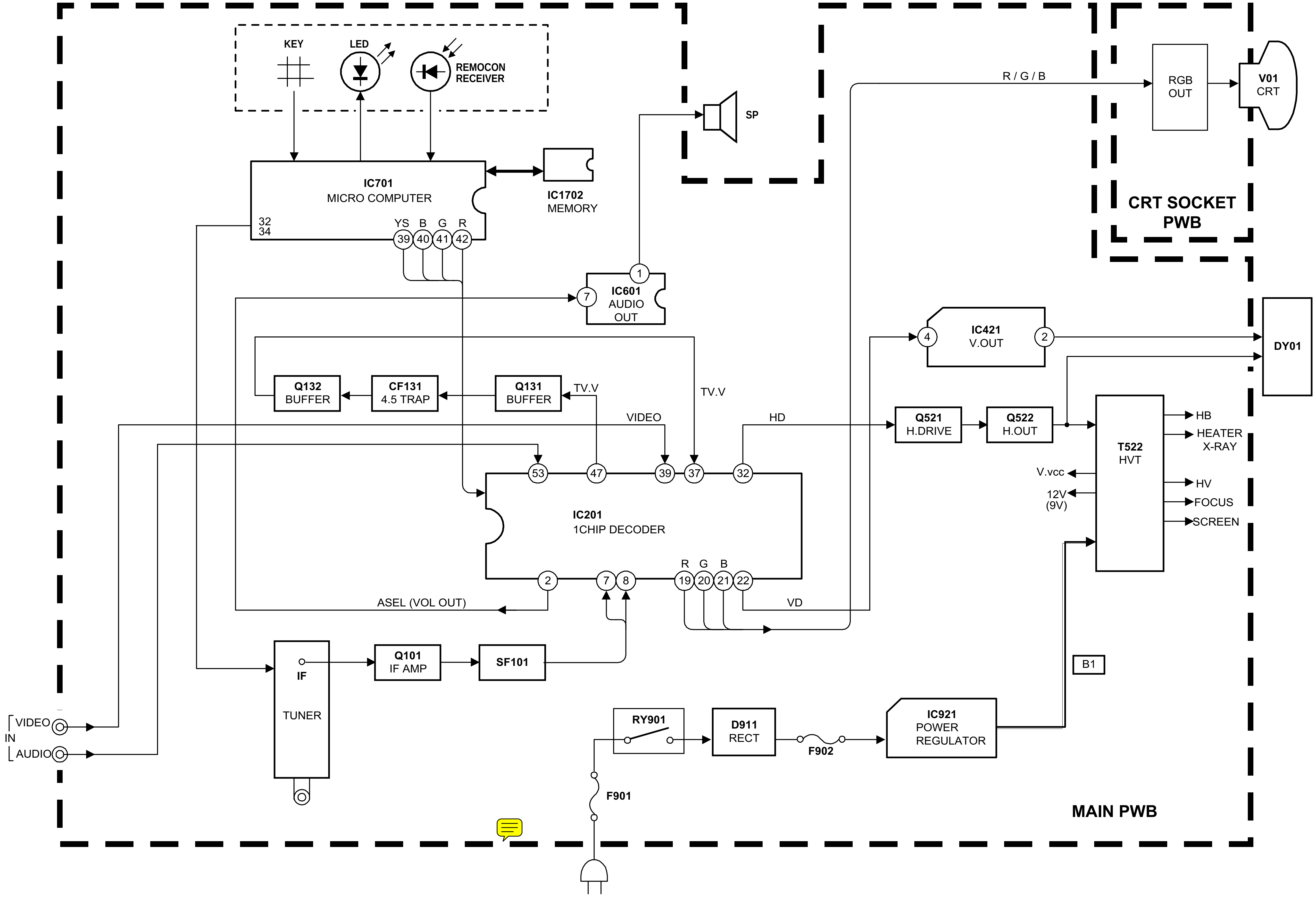
MODE		BAND	CHANNEL	TUNER BAND
TV	CATV		DISP.	
○	○	VL	02 03 04 05 06	I
		VH	07 08 09 10 11 12 13	II
×	○	MID	14 15	I
			16 17 18 19 20 21 22	II
		SUPER	23 24 25 26 27 28 29 30 31 32 33 34 35 36	
		HYPER	37 38 39 40 41 42 43 44 45 46 47	
			48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	IV
		ULTRA	65 66 67 68 69 70	

MODE		BAND	CHANNEL	TUNER BAND
TV	CATV		DISP.	
×	○	ULTRA	71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125	IV
		SUB MID	01 96 97 98 99	I
○	×	UHF	14 ≀ 69	IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

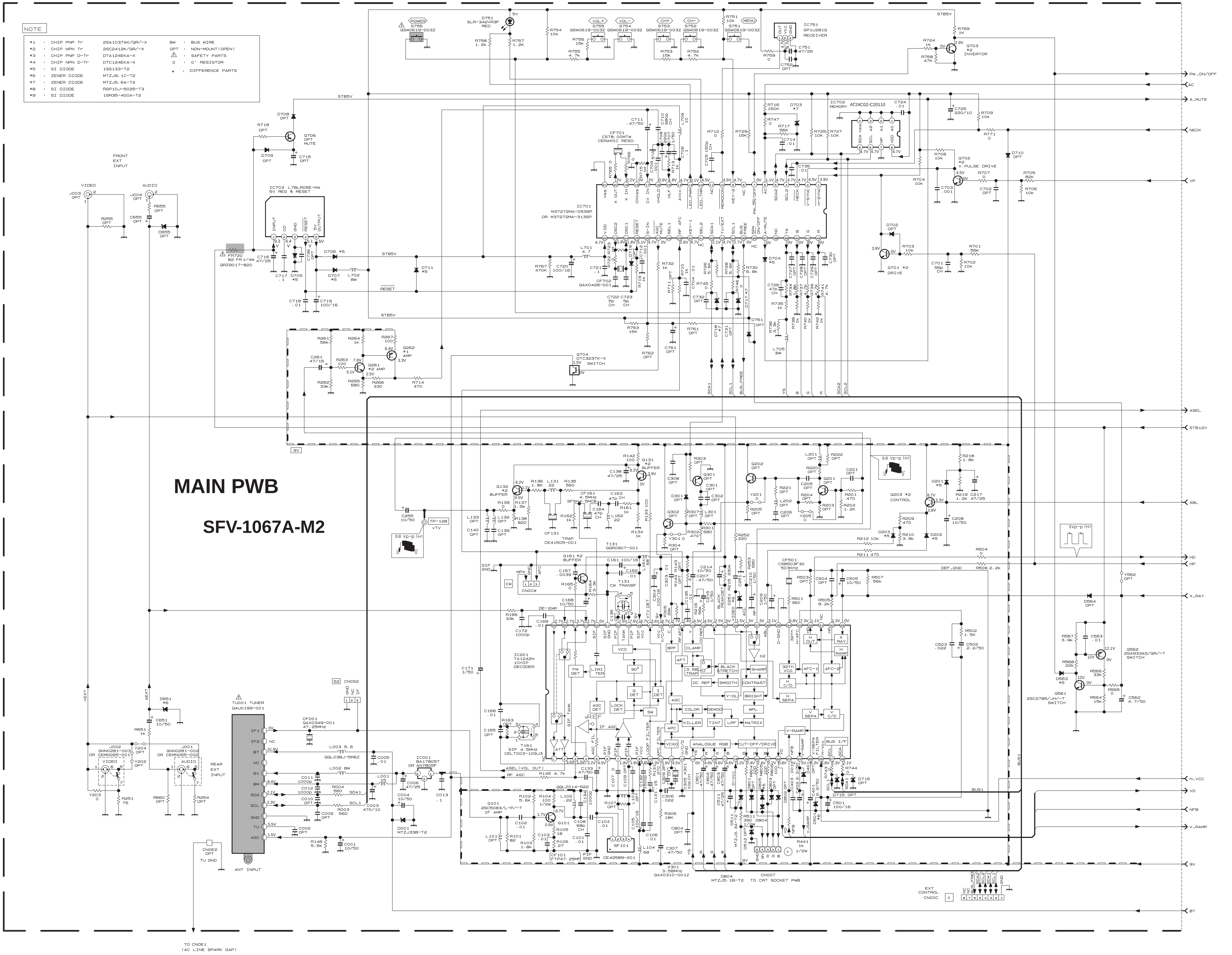
NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

BLOCK DIAGRAM



CIRCUIT DIAGRAMS

MAIN PWB,
CRT SOCKET PWB
CIRCUIT DIAGRAMS

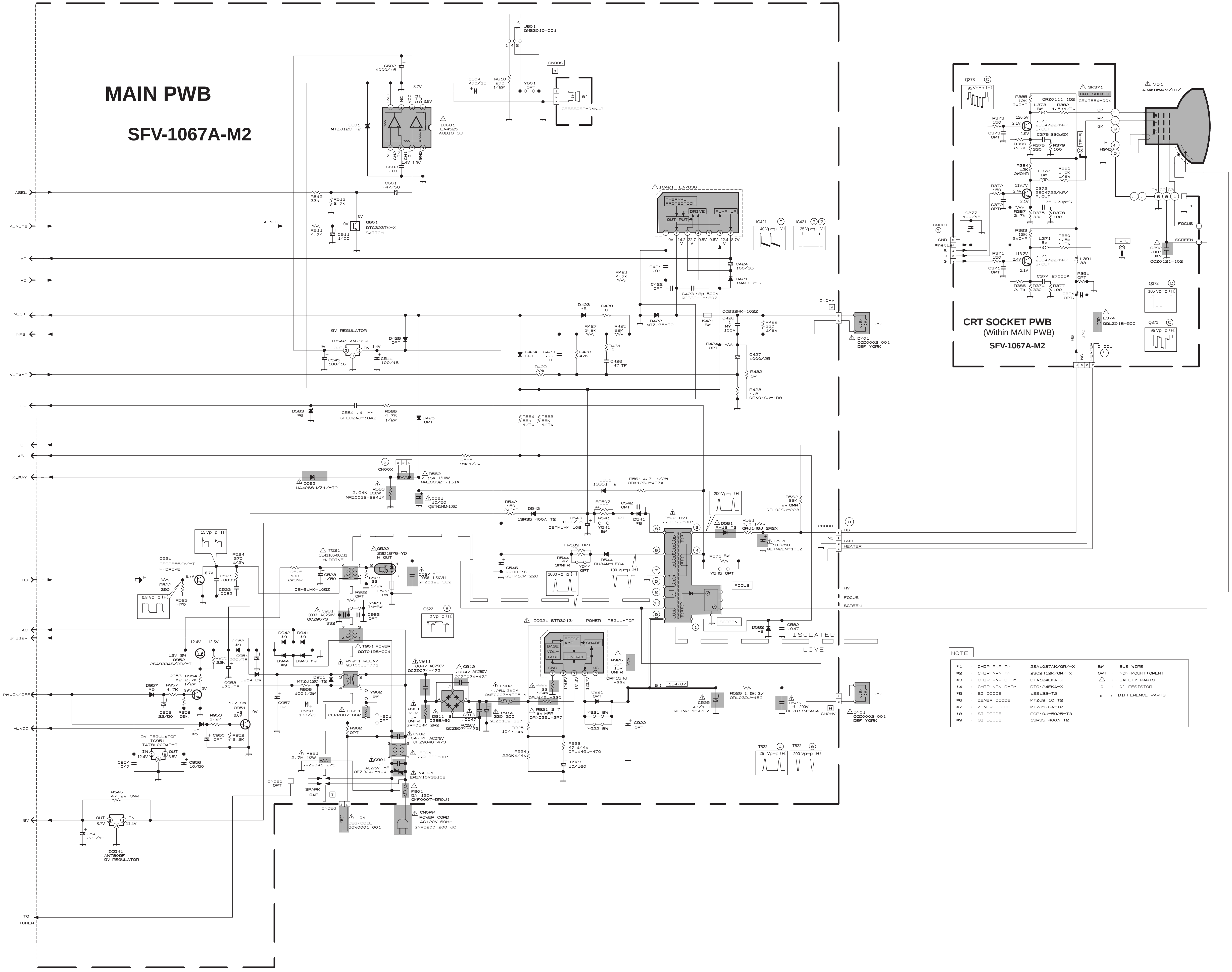


NOTE

*1	:	CHIP PNP Tr	2SA1037AK/QR/-X	BW	:	BUS WIRE
*2	:	CHIP NPN Tr	2SC2412K/QR/-X	OPT	:	NON-MOUNT(OPEN)
*3	:	CHIP PNP D-Tr	DTA124EKA-X	⚠	:	SAFETY PARTS
*4	:	CHIP NPN D-Tr	DTC124EKA-X	0	:	0˘ RESISTOR
*5	:	SI DIODE	1SS133-T2	*	:	DIFFERENCE PARTS
*6	:	ZENER DIODE	MTZJ9.1C-T2			
*7	:	ZENER DIODE	MTZJ5.6A-T2			
*8	:	SI DIODE	RGP10J-5025-T3			
*9	:	SI DIODE	1SR35-400A-T2			

MAIN PWB

SFV-1067A-M2



NOTE					
*1	:	CHIP PNP Tr	2SA1037AK/QR/-X	BW :	BUS WIRE
*2	:	CHIP NPN Tr	2SC2412K/QR/-X	OPT :	NON-MOUNT(OPEN)
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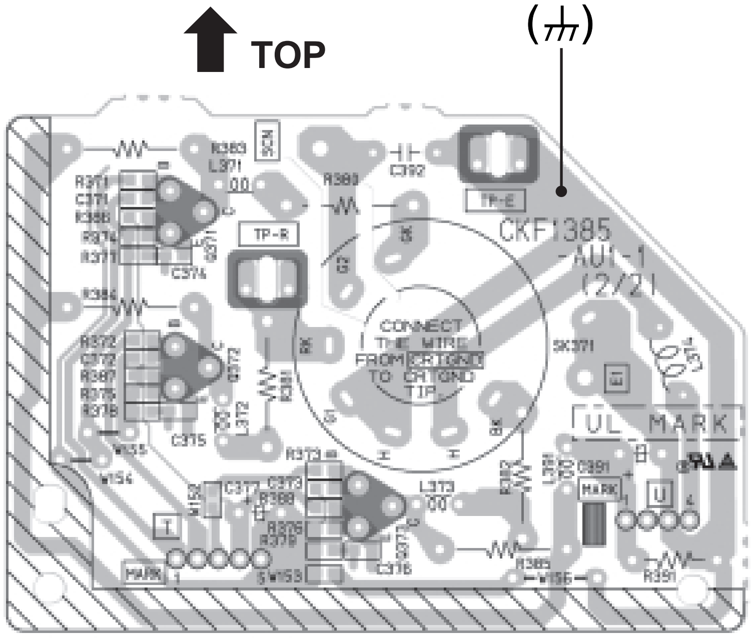
PATTERN DIAGRAMS

MAIN PWB, CRT SOCKET PWB PATTERN



CRT SOCKET PWB ASS'Y(2/2)

MAIN PWB ASS'Y(1/2)