

**SONY**

**TRINITRON® COLOR TV BASIC SCHEMATIC DIAGRAM**

**KV-2092ME2B/RM-656**

*Chassis No.: SCC-B21G*

**NOTE**

THIS SCHEMATIC DIAGRAM IS FOR USE BY YOUR SERVICE  
TECHNICIAN.

KEEP THIS DIAGRAM HANDY FOR FUTURE REFERENCE.

**Sony Corporation**

4-490-327-01

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




Printed in Japan


#### Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  
50WV or less are not indicated except for electrolytics.  
p :  $\mu\text{F}$
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch: 5mm, Rating electrical power: 1/4W

k $\Omega$  : 1000 $\Omega$ , M $\Omega$  : 1000k $\Omega$

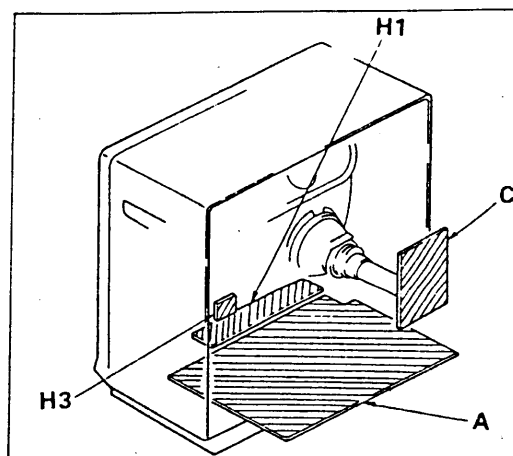
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
- $\Delta$  : internal component.
-  : panel designation.
-  : adjustment for repair.
-  : B + bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M $\Omega$  digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar-signal input.  
no mark : with PAL color-bar signal received.  
( ) : with SECAM color-bar signal received.

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

#### Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE WIREWOUND
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

#### CIRCUIT BOARDS LOCATION



# A BOARD

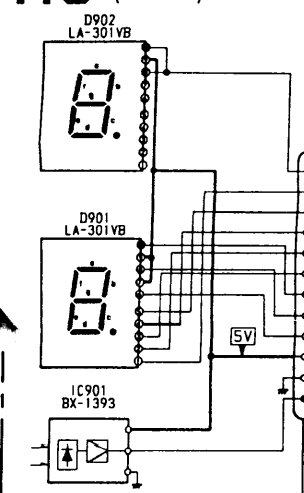
IC 001	CONTROLLER	D 339	V PULSE
002	MEMORY	341	CLIP
003	33V REG	401	TDL
151	BAND SW	430	D SYNC
201	9V REG	501	12V SUPPLY
251	AUDIO OUT	502	V SYNC
300	Y CHROMA	503	V HOLD
400	SECAM CHROMA PROCESS	551	V DRIVE
470	PAL/SECAM SW	601	LINE RECT
501	H.V OSC	604	CHARGE UP
551	V OUT	605	115V DAMPER
601	PWM REG	606	DC STOP
871	PIN AMP	607	115V CLAMP
		608	14V RECT
Q 001	RESET	610	OVP
002	VC AMP	801	H DAMPER
003	SV REG	802	PIN DAMPER
008	ST-BY	851	200V RECT
010	LED DRIVE	852	MV RECT
011	BLK-1	853	15V RECT
012	BLK-2	854	24V RECT
151	VC FILTER	855	12V REG
201	BUFFER	856	H CENTER
330	ABL	857	H CENTER
400	SECAM DRIVE		
401	R-Y DRIVE		
402	B-Y DRIVE		
470	DL DRIVE		
501	SYNC AMP		
504	V SIZE CORRECT		
801	H. DRIVE		
802	H. OUT		
804	H. PULSE		
851	12V REG		
871	PIN OUT		
D 001	RESET		
006	SV REG REF		
011	KEY SCAN D1		
012	KEY SCAN D2		
013	KEY SCAN D3		
014	KEY SCAN D4		
017	7SEG DISP		
018	12 PROG		
020	BLK		
021	BLK-1		
022	BLK-2		
026	BACK UP-1		
027	BACK UP-2		
028	VOL CONT		
030	COL CONT		
151	AGC		
201	MUTE		
305	ACC		
307	C OUT		

BAND	VHF LOW	VHF HIGH	UHF
TERMINAL			
+B	+12V	+0.5V or less	
I	+0.5V or less	+12V	+0.5V or less
U	+0.5V or less		+12V
VC	2.9~14V	3.3~20V	1.5~26.5V
AGC	8.5 (GAIN MAX) -0.5V		

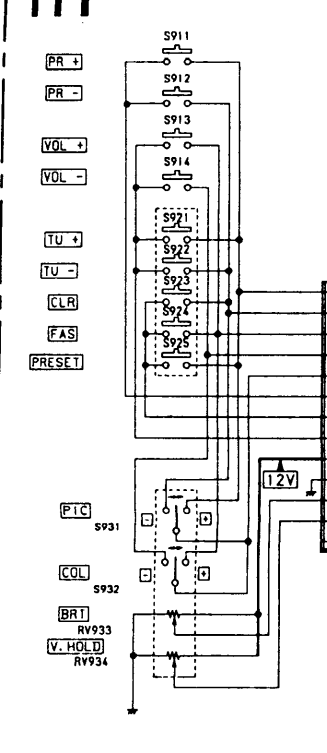
### H3BOARD

IC901	IR DETECTOR
D901	PROG DISP 1
D902	PROG DISP 10

### H3 (INDICATOR PROG DSP)



### H1 (CUSTOMER CONTROL)



### DGC

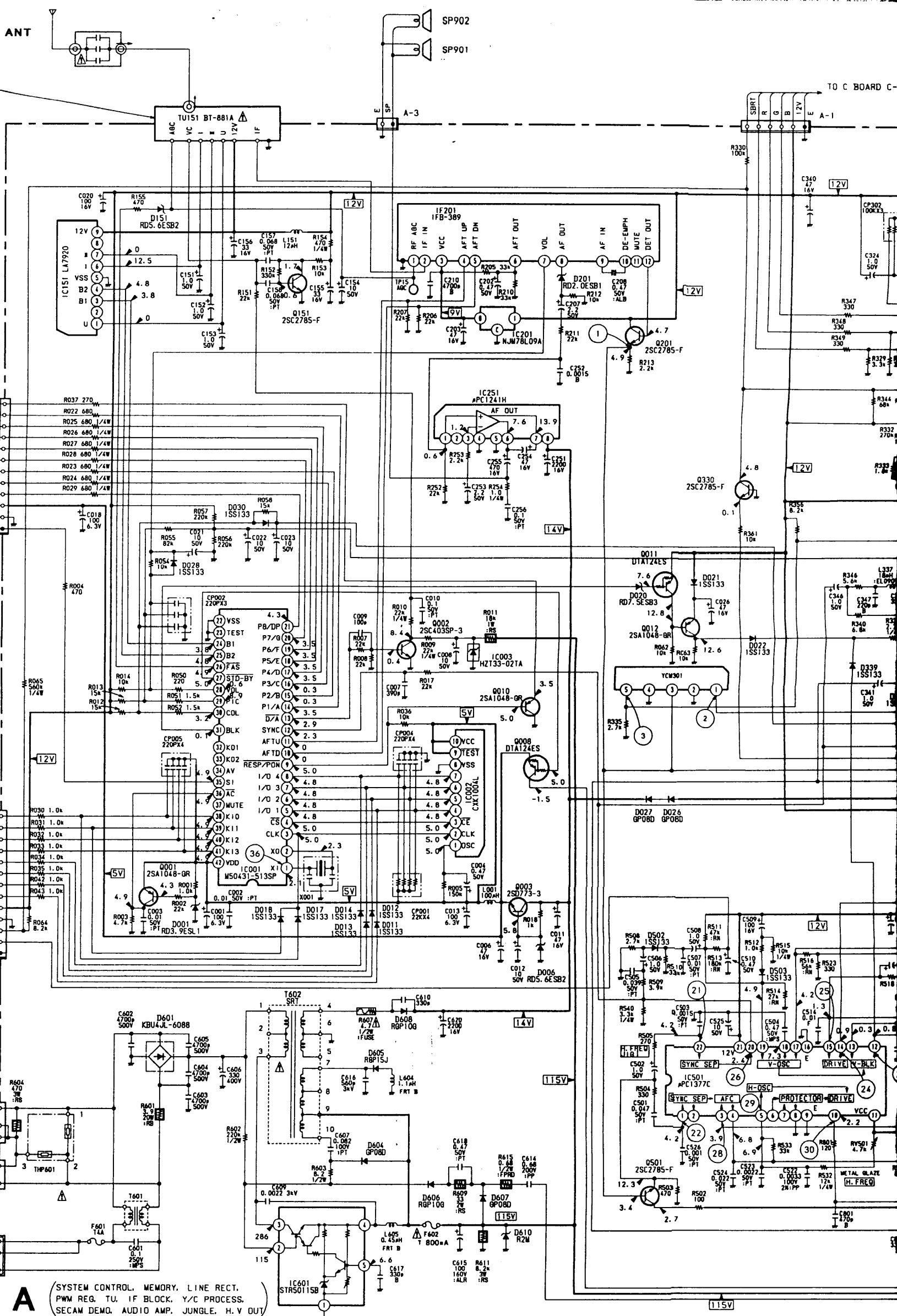
DGC

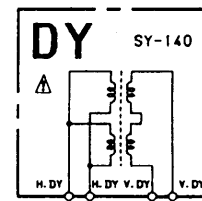
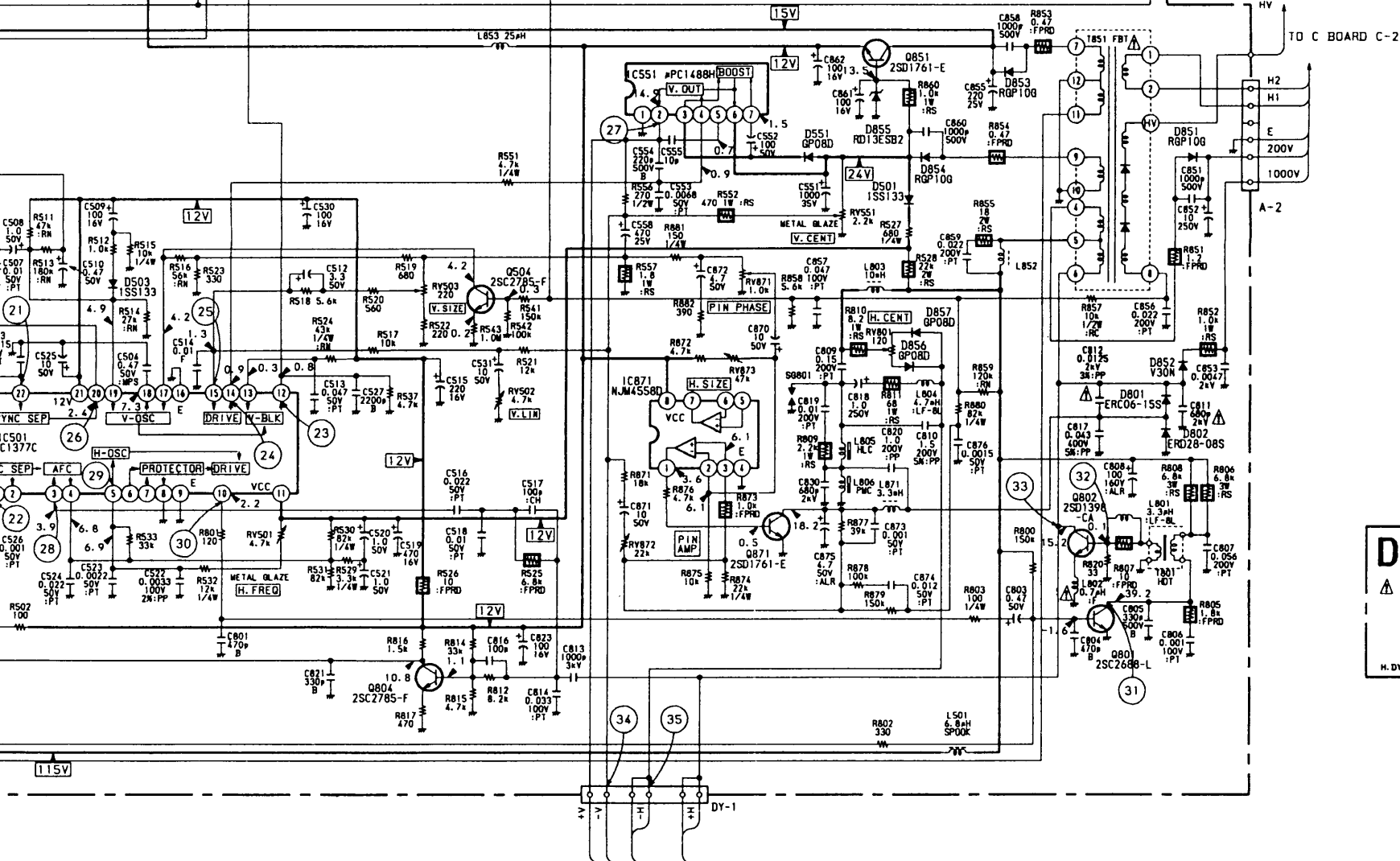
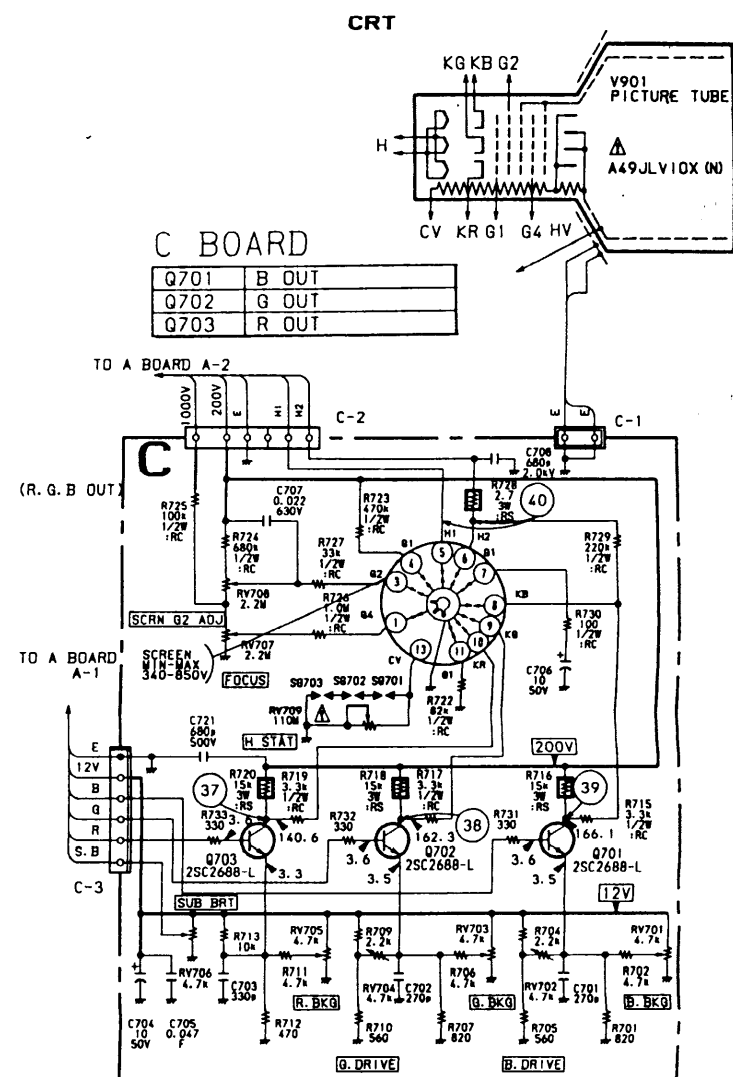
### POWER

AC IN  
110~240V  
50/60HZ

### A

(SYSTEM CONTROL, MEMORY, LINE RECT, PWM REG, TU, IF BLOCK, Y/C PROCESS, SECAM DEMO, AUDIO AMP, JUNGLE, H.V OUT)



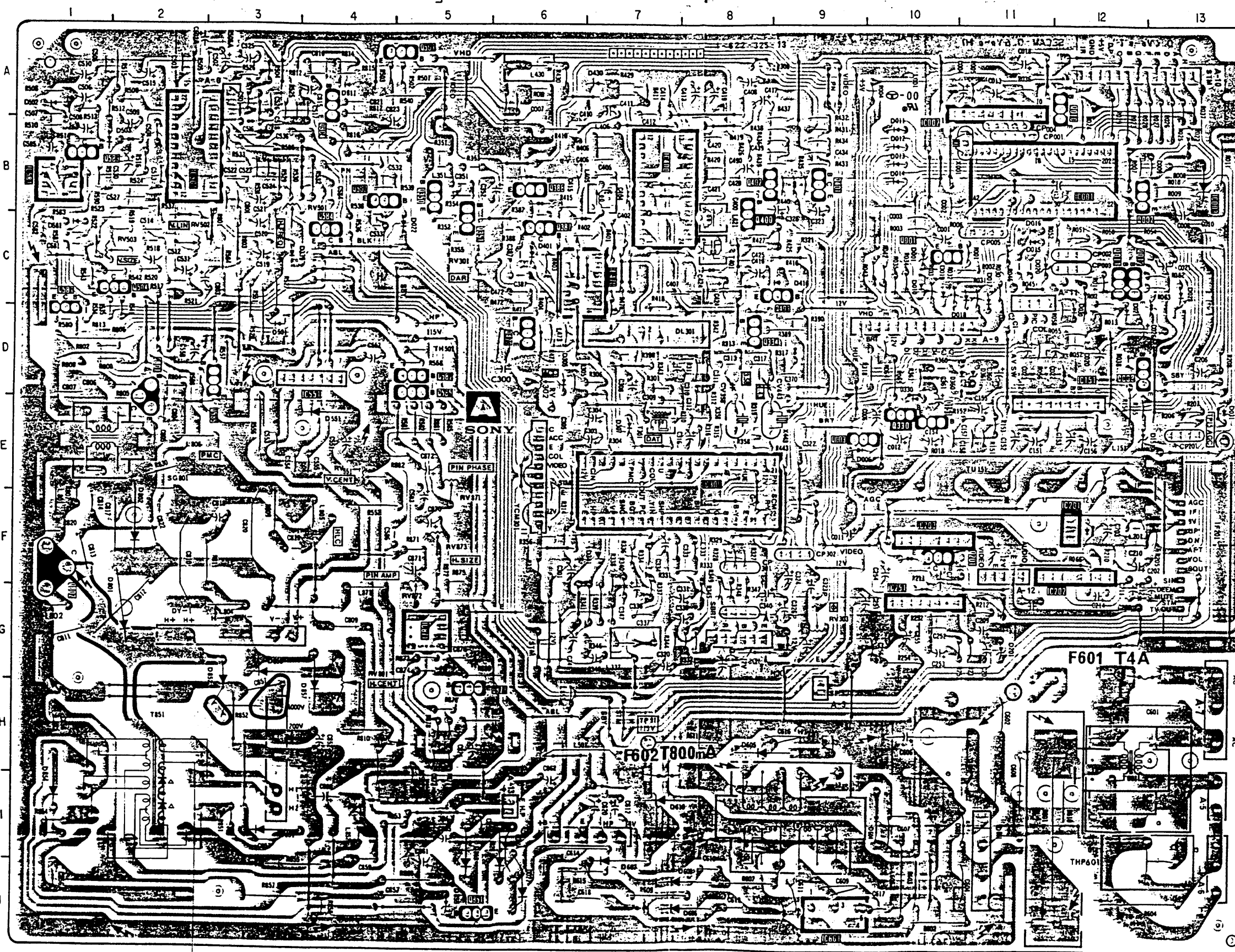


# MOUNTING DIAGRAMS

Note: All mounting diagrams are viewed from conductor side.

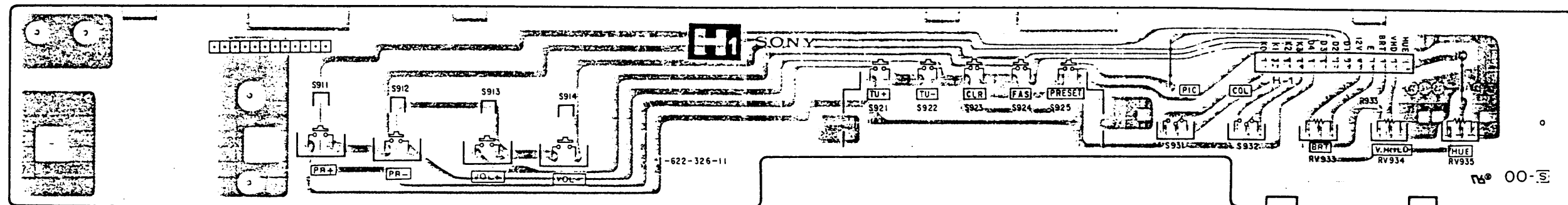
A

SYSTEM CONTROL, MEMORY, LIEN RECT, PWM REG  
TU, IF BLOCK, Y/C PROCESS, SECAM DEMO,  
AUDIO AMP, JUNGLE, H.V. OUT



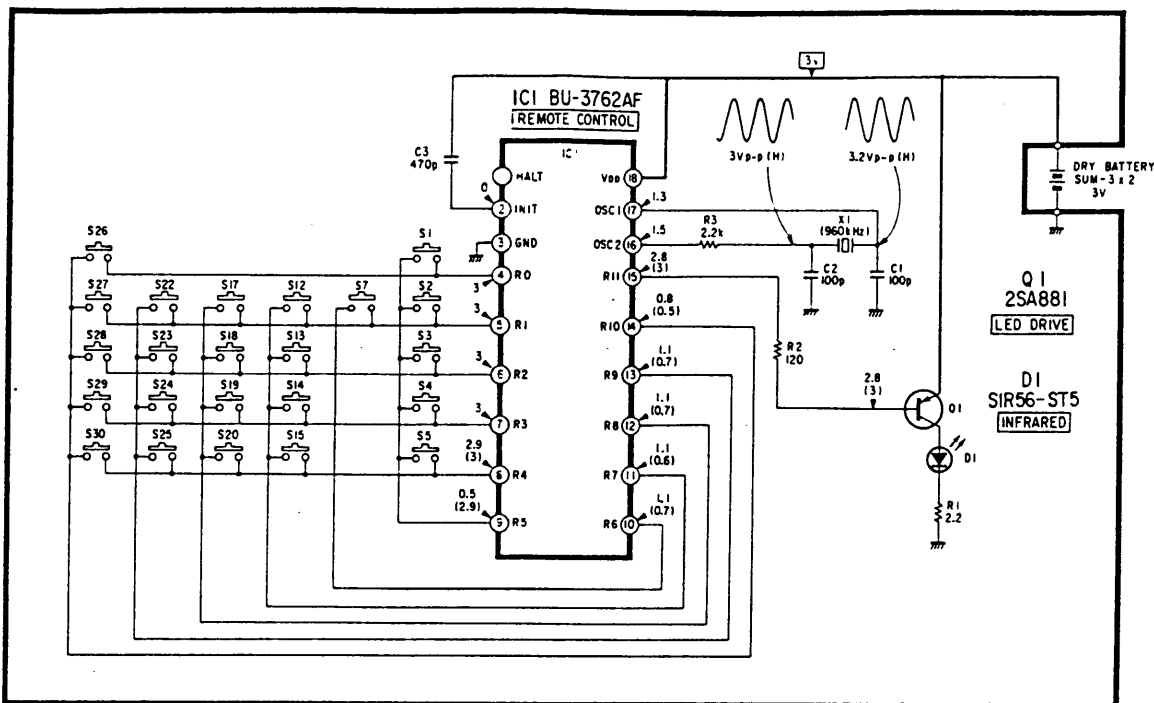
IC			
IC001	B-12	D018	C-11
IC002	A-11	D020	C-11
IC003	B-13	D021	D-12
IC151	D-12	D022	C-5
IC201	F-12	D026	J-6
IC251	G-10	D027	J-6
IC300	E-8	D028	C-13
IC400	B-7	D030	D-12
IC470	C-7	D151	E-12
IC501	B-2	D201	G-11
IC551	D-4	D305	D-6
IC601	J-9	D307	E-7
IC871	G-5	D339	C-3
		D401	C-6
TRANSISTOR			
Q001	C-10	D430	A-7
Q002	B-12	D501	D-3
Q003	E-9	D502	A-1
Q008	D-12	D503	B-1
Q010	A-12	D551	E-4
Q011	C-12	D601	I-11
Q012	C-12	D604	I-10
Q151	E-10	D605	H-8
Q201	F-10	D606	J-8
Q330	E-10	D607	I-7
Q400	C-8	D608	J-8
Q401	B-9	D610	I-7
Q402	B-8	D801	G-2
Q470	D-6	D802	F-2
Q501	A-5	D851	I-3
Q504	D-2	D852	H-3
Q801	D-2	D853	J-5
Q802	F-1	D854	I-1
Q804	A-4	D855	J-5
Q851	J-5	D856	G-3
Q871	H-5	D857	H-4
VARIABLE RESISTOR			
		RV301	C-5
		RV302	D-6
		RV303	G-9
		RV501	B-3
		RV502	C-2
DIODE			
D001	C-10		
D006	E-9		
D011	B-10	RV503	C-1
D012	B-10	RV551	E-4
D013	B-10	RV801	H-4
		RV871	E-5
D014	B-10	RV872	F-5
D017	C-11	RV873	F-5










# H1 [CUSTOMER CONTROL]



# REMOTE COMMANDER RM-656

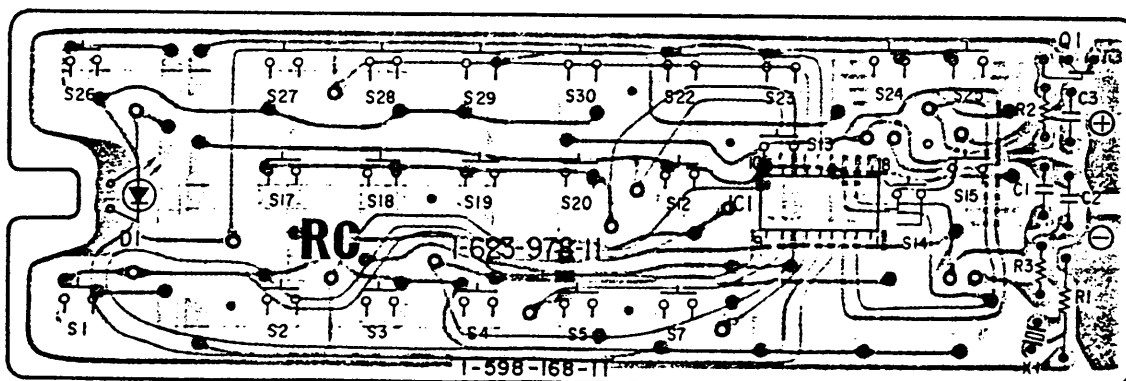
### SCHEMATIC DIAGRAM



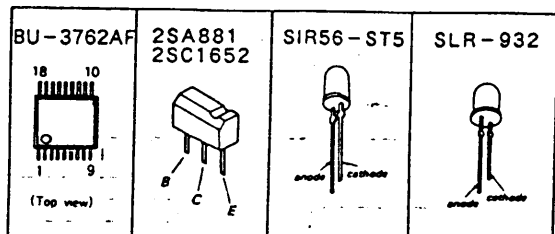
	R5	R6	R7	R8	R9	R10
R0	S1 MUTE 					S26 
R1	S2 1	S7 	S12  +	S17 2	S22  +	S27 3
R2	S3 4		S13  -	S18 5	S23  -	S28 6
R3	S4 7		S14  +	S19 8	S24 PROGR +	S29 9
R4	S5 10		S15  -	S20 11	S25 PROGR -	S30 12

- All voltages are in V (volt).
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M $\Omega$ /V digital voltmeter. No marking: S1 is depressed.
- Voltage variations may be noted due to normal production tolerances.
- Voltages and waveform are for when 1 button is pressed
- Voltages in ( ) are taken with button not pressed.
- — B — bus.

## PRINTED WIRING BOARD



## SEMICONDUCTOR



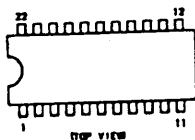


# SEMICONDUCTORS

M50431-513SP  
CXA1001AP



PC1377C



2SD773

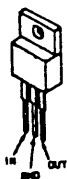


2SA1048TP-GR  
2SA1115TP-E  
2SA1115TP-F  
2SA933S-R  
2SA933S-S  
DTA124ES-TP  
2SC2458TP-GR  
2SC2603E-TP  
2SC2603F-TP  
2SC1740SRT  
2SC1740SST  
2SC2785TP-J  
2SC2785TP-H  
2SC2785TP-F  
2SC2785TP-K  
2SC2785TP-E  
2SC2603TP-E  
2SC2603TP-F

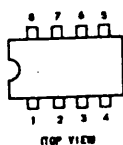
V30N



BA178N05



PC4558C  
NJM4558D  
HA17558



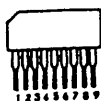
2SD1398



LA-301VB



LA7920



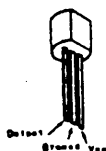
STR50115B



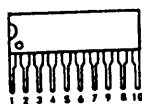
2SD1761-D  
2SD1761-E  
2SD1761-F



NJM78L09A



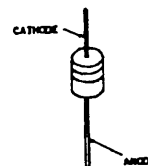
CXK1004L



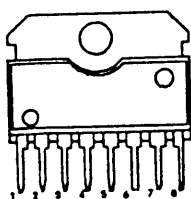
KBU4JL-6088



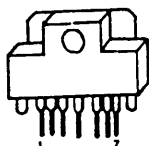
RD13ES-T2B2  
RD5.6ES-T2B2  
1SS119TG  
1SS148-TP6  
1SS133T-72



PC1241H



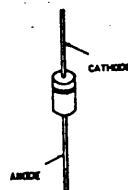
PC1488H



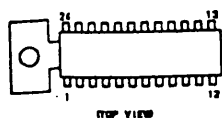
2SA1175TP-J  
2SA1175-H  
2SA1175-F  
2SA1175-E  
2SA1175-K  
2SC2785TP-H  
2SC2785TP-F  
2SC2785TP-E  
2SC2785TP-K



R2M  
ERC06-15S  
H2T33-02TA  
RD2.0ES-T2B1  
RD3.9ES-T2L1  
RD7.5ES-T2B3  
HZS13NB2T2



CX-175



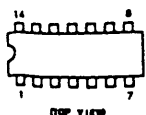
BX-1393



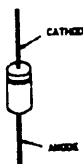
2SC2688-L  
2SC2688-K  
2SC2688-M






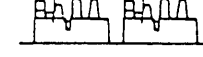







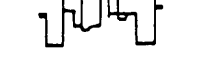




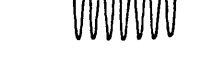


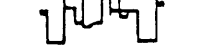
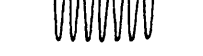



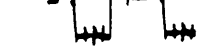


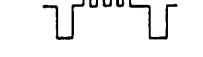



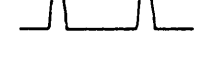
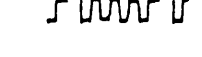


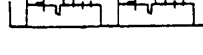

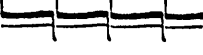


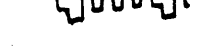
HD14066BP  
MC14066BCP



ES1F  
ERD28-08S  
QP08DPKG23  
10E2-TA2B  
RGP15JPKQ23  
RGP10GPKQ23

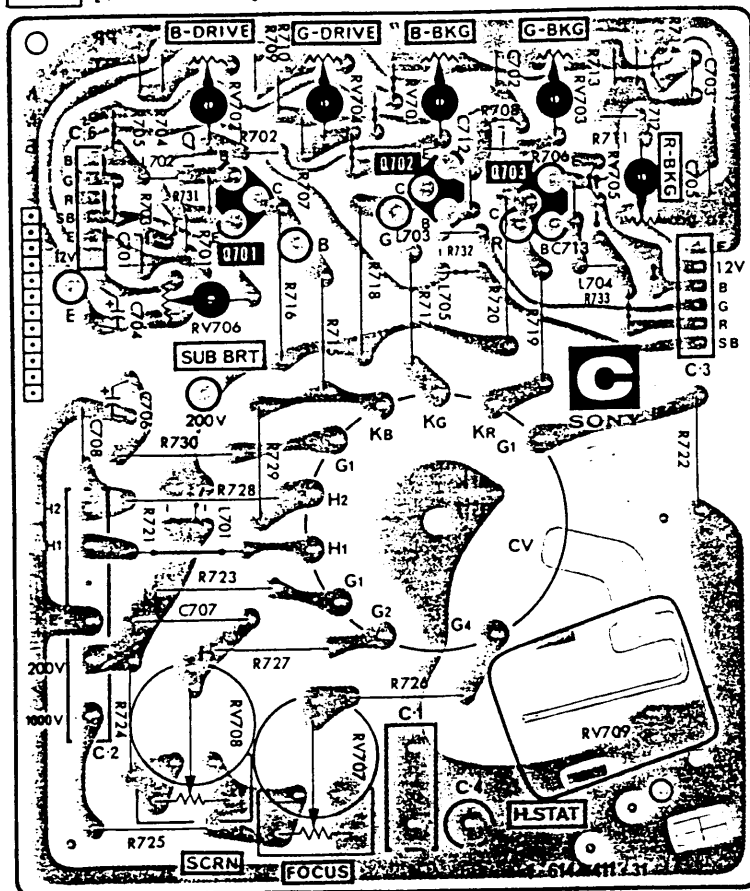


WAVE FORM

<div>①</div> <div></div> <div>2.0 Vp-p (H)</div>	<div>⑤</div> <div></div> <div>PAL 0.3 Vp-p (H)</div>	<div>⑩</div> <div></div> <div>SECAM 2.2 Vp-p (H)</div>	<div>⑮</div> <div></div> <div>6.0 Vp-p (H)</div>	<div>⑳</div> <div></div> <div>2.0 Vp-p (H)</div>	<div>㉕</div> <div></div> <div>1.5 Vp-p (V)</div>	<div>⑳</div> <div></div> <div>5.6 Vp-p (H)</div>	<div>㉓</div> <div></div> <div>180 Vp-p (H)</div>	<div>④①</div> <div></div> <div>24 Vp-p (H)</div>
<div>②</div> <div></div> <div>PAL 0.5 Vp-p (H)</div>	<div>⑥</div> <div></div> <div>PAL 0.4 Vp-p (H)</div>	<div>⑪</div> <div></div> <div>SECAM 0.6 Vp-p (H)</div>	<div>⑮</div> <div></div> <div>PAL 0.12 Vp-p (H)</div>	<div>㉑</div> <div></div> <div>1.8 Vp-p (H)</div>	<div>㉒</div> <div></div> <div>9.0 Vp-p (V)</div>	<div>③①</div> <div></div> <div>95 Vp-p (H)</div>	<div>③⑥</div> <div></div> <div>3.8 Vp-p (7MHz)</div>	
<div>②</div> <div></div> <div>SECAM 0.5 Vp-p (H)</div>	<div>⑦</div> <div></div> <div>SECAM 0.75 Vp-p (H)</div>	<div>⑫</div> <div></div> <div>SECAM 0.6 Vp-p (H)</div>	<div>⑮</div> <div></div> <div>1.8 Vp-p (4.43MHz)</div>	<div>㉒</div> <div></div> <div>1.8 Vp-p (H)</div>	<div>㉒</div> <div></div> <div>50 Vp-p (H)</div>	<div>③②</div> <div></div> <div>20 Vp-p (H)</div>	<div>③⑦</div> <div></div> <div>100 Vp-p (H)</div>	
<div>③</div> <div></div> <div>1.2 Vp-p (H)</div>	<div>⑧</div> <div></div> <div>SECAM 0.32 Vp-p (H)</div>	<div>⑬</div> <div></div> <div>5.8 Vp-p (H)</div>	<div>⑮</div> <div></div> <div>4.2 Vp-p (H)</div>	<div>㉑</div> <div></div> <div>11 Vp-p (V)</div>	<div>㉒</div> <div></div> <div>2.4 Vp-p (H)</div>	<div>③③</div> <div></div> <div>1000 Vp-p (H)</div>	<div>③⑧</div> <div></div> <div>95 Vp-p (H)</div>	
<div>④</div> <div></div> <div>PAL 0.3 Vp-p (H)</div>	<div>⑨</div> <div></div> <div>SECAM 2.2 Vp-p (H)</div>	<div>⑭</div> <div></div> <div>6.0 Vp-p (H)</div>	<div>⑮</div> <div></div> <div>6.6 Vp-p (V)</div>	<div>㉑</div> <div></div> <div>1.8 Vp-p (V)</div>	<div>㉒</div> <div></div> <div>4.8 Vp-p (H)</div>	<div>③④</div> <div></div> <div>9.0 Vp-p (H)</div>	<div>③⑨</div> <div></div> <div>95 Vp-p (H)</div>	

**C**

[R·G·B OUT]



**H3**

[INDICATOR  
PROG DISP]

