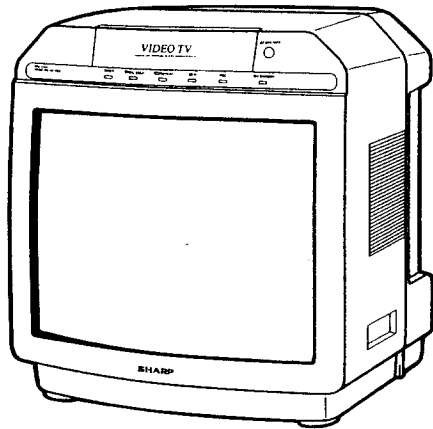


**SHARP**

**SERVICE MANUAL**  
**维修说明书**

S82D1VT1480D/



**CEG TECHNICAL**  
**THIS COPY MUST NOT BE REMOVED FROM CEG OFFICE**  
**VIDEO TV**  
**Chassis No. VT-1**

**MODELS**  
**型号**

**VT-1480D**  
**VT-2198(D)**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used

为了使用者的安全(有些国家用安全规定加以要求), 修理本装置时必须完全保持其原有配件状态, 更换只得使用规定者。

**CONTENTS**

**目 录**

	Page		页数
● SPECIFICATIONS .....	2	● 规格.....	39
● IMPORTANT SERVICE NOTES .....	3	● 维修注意要点.....	40
● DISASSEMBLY AND REASSEMBLY		● 分解和组装	
□ TV SECTION .....	4	□ 电视机部分.....	41
□ VCR SECTION .....	5	□ 盒式磁带录象机部分.....	42
□ FUNCTION OF MAJOR MECHANICAL PARTS (Refer to 14VT10D or 14VT10B1 Service Manual)		□ 主要机械部件的配置及其功能 (参照型号14VT10D或型号14VT10B1的维修说明书)	
□ ADJUSTMENT, REPLACEMENT AND ASSEMBLY OF MECHANICAL UNITS (Refer to 14VT10D or 14VT10B1 Service Manual)		□ 机械部件的调整、更换及装配 (参照型号14VT10D或型号14VT10B1的维修说明书)	
● ADJUSTMENT OF THE ELECTRICAL CIRCUITRY		● 电路的调整	
□ TV SECTION .....	6	□ 电视机部分电路的调整.....	43
□ VCR SECTION .....	14	□ 盒式磁带录象机部分电路的调整.....	51
● TROUBLE SHOOTING GUIDE .....	20	● 故障检查.....	57
● OVERALL WIRING DIAGRAM .....	77	● 全电路图.....	77
● OVERALL BLOCK DIAGRAM .....	81	● 全电路方框图.....	95
● BLOCK DIAGRAMS (VCR SECTION) .....	83	● 电路方框图(录象机部分).....	97
● BLOCK DIAGRAM (TV SECTION) .....	93	● 电路方框图(电视机部分).....	107
● SCHEMATIC DIAGRAMS .....	109	● 电路原理图的说明.....	109
● PRINTED WIRING BOARD ASSEMBLIES ...	132	● 印刷电路板总成.....	132
● REPLACEMENT PARTS LIST .....	139	● 更换零件表.....	139
● PACKING OF THE SET .....	177	● 出厂包装时各控制调节的设定位置.....	178

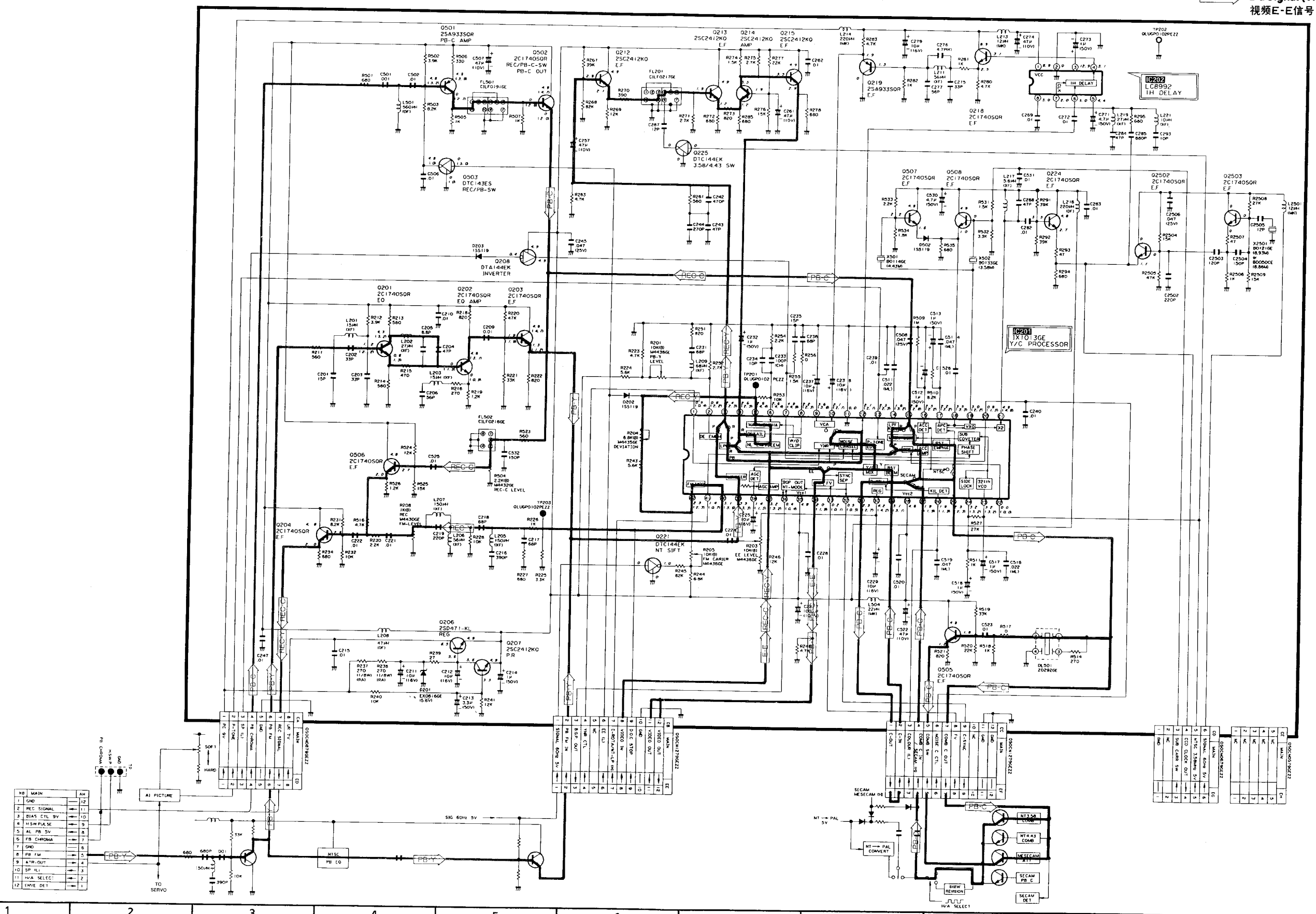
VT-1480D  
VT-2198 (D)      VT-1480D  
VT-2198 (D)

# Y/C CIRCUIT (VCR Section)

## 亮度/色度(Y/C)信号电路(录象机部分)

PB-C Playback Chrominance Signal  
再现色度信号  
PB-Y Playback Luminance Signal  
再现亮度信号

REC-C Recording Chrominance Signal  
记录色度信号  
REC-Y Recording Luminance Signal  
记录亮度信号  
E-E E-E Signal (Video)  
视频E-E信号



10	MAIN	AM
1	GND	12
2	REC SIGNAL	11
3	BIAS CTL SV	10
4	HSW PLASE	9
5	AL PB SV	8
6	PB CHROMA	7
7	GND	6
8	FM FM	5
9	ATH OUT	4
10	SP LI	3
11	H/A SELEC	2
12	EMVE DET	1

VT-1480D  
VT-2198 (D)

VT-1480D  
VT-2198 (D)

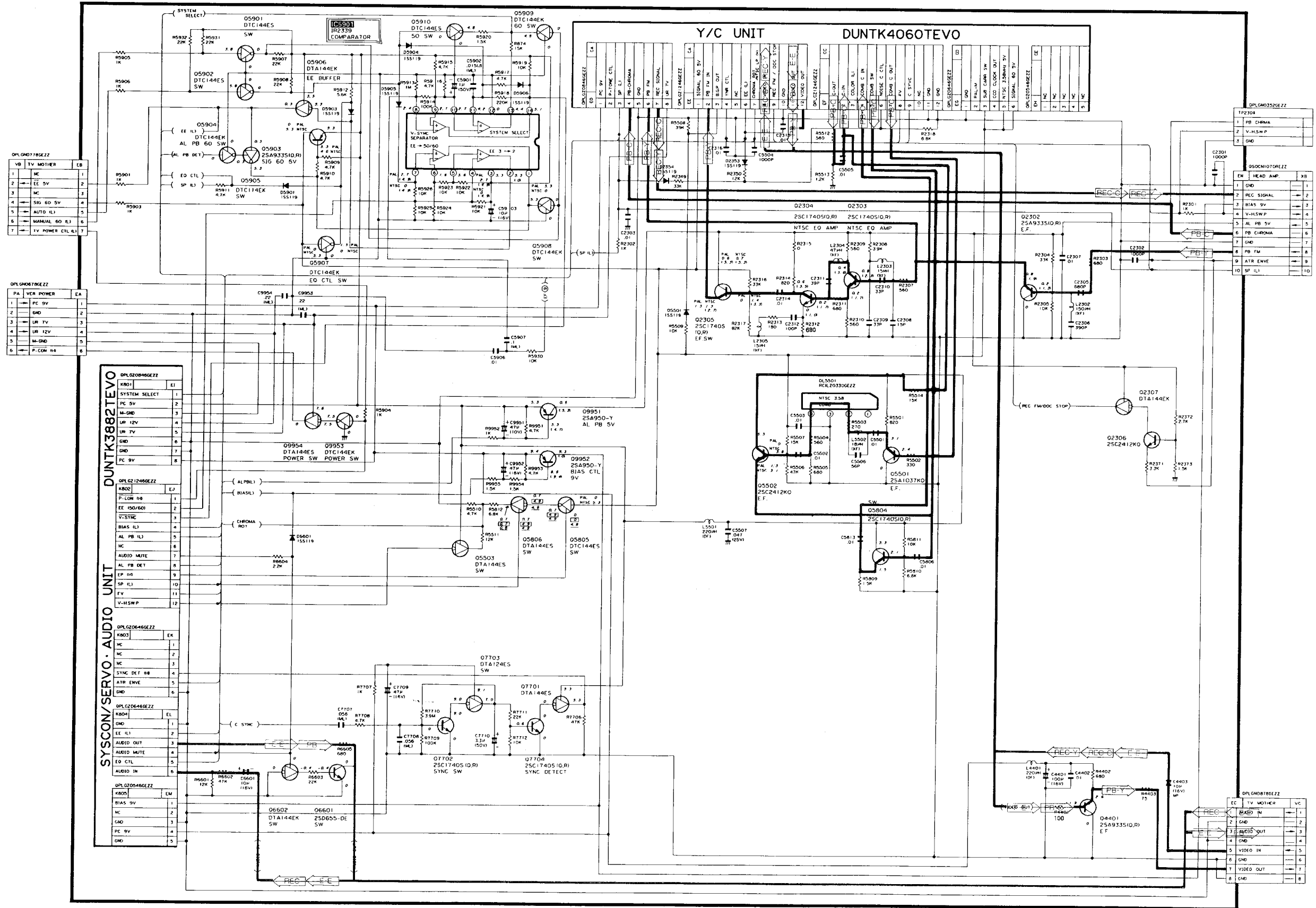
# MAIN CIRCUIT (VCR Section)

主电路(录像机部分)

PB-C Playback Chrominance Signal  
再现色度信号  
PB-Y Playback Luminance Signal  
再现亮度信号

REC-C Recording Chrominance Signal  
记录色度信号  
REC-Y Recording Luminance Signal  
记录亮度信号

REC Audio Recording Signal  
音频记录信号  
PB Audio Playback Signal  
音频再生信号  
E-E E-E Signal  
音频E-E信号



VB	TV MOTHER	EB
1	NC	1
2	EE 5V	2
3	NC	3
4	SG 60 5V	4
5	AUTO IL	5
6	MANUAL 60 IL	6
7	TV POWER CTL IL	7

PA	VCR POWER	EA
1	PC 9V	1
2	GND	2
3	LR TV	3
4	LR 12V	4
5	M-GND	5
6	P-COM H4	6

K801	EJ
1	SYSTEM SELECT
2	PC 5V
3	M-GND
4	LR 12V
5	LR TV
6	GND
7	PC 9V

K802	EJ
1	P-COM H4
2	EE 100/60
3	V-SYNC
4	BIAS IL
5	AL PB IL
6	NC
7	AUDIO MUTE
8	AL PB DET
9	SP HL
10	SP IL
11	TV
12	V-HSWP

K803	EK
1	NC
2	NC
3	NC
4	SYNC DET H4
5	ATR ENVE
6	GND

K804	EL
1	EE IL
2	AUDIO MUTE
3	AUDIO OUT
4	EO CTL
5	AUDIO IN
6	GND

K805	EM
1	BIAS 9V
2	NC
3	GND
4	PC 9V
5	GND

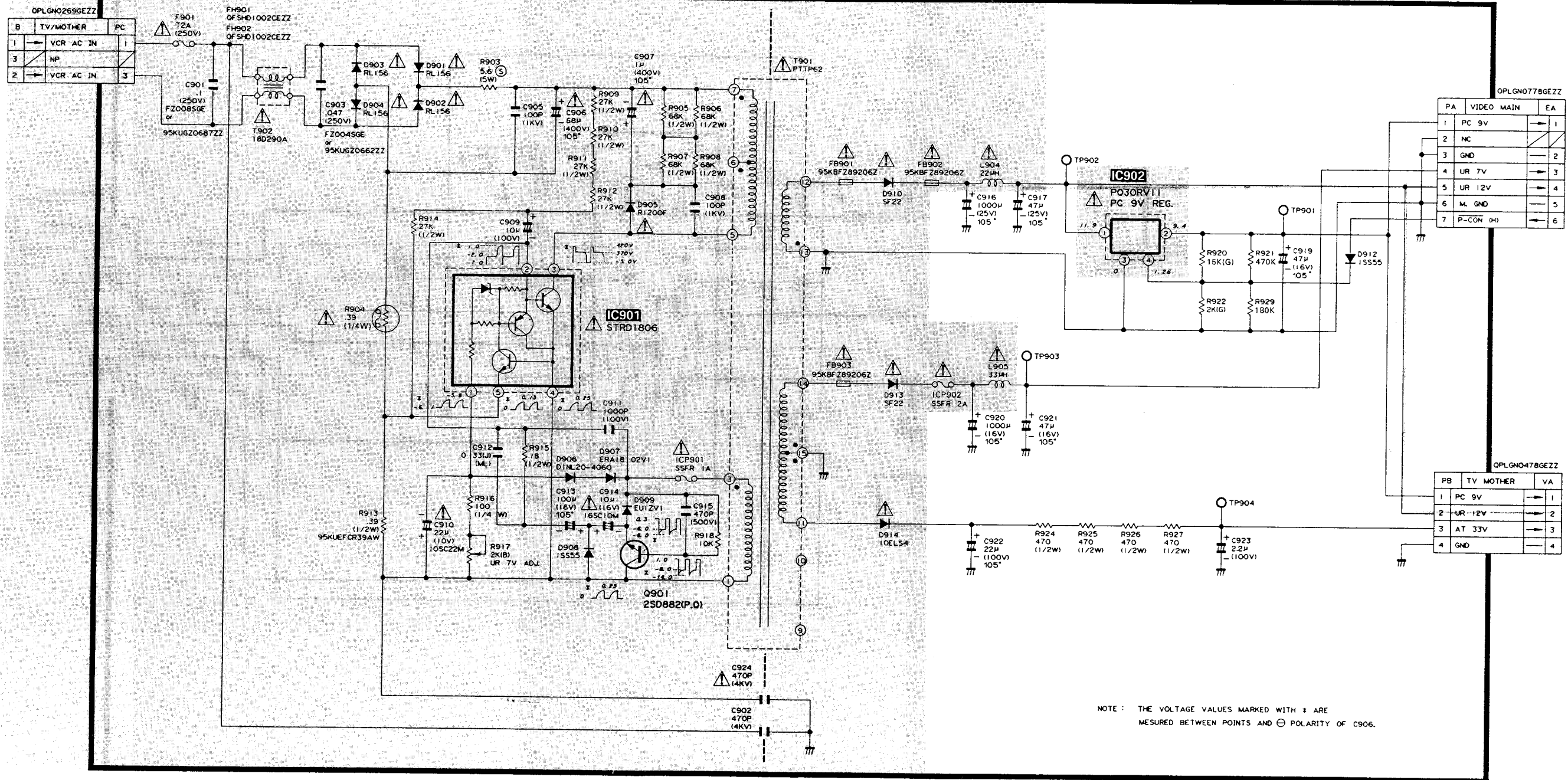
EC	TV MOTHER	VC
1	BIAS IN	1
2	GND	2
3	AUDIO OUT	3
4	GND	4
5	VIDEO IN	5
6	GND	6
7	VIDEO OUT	7
8	GND	8

\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ..... Without Parentheses

★电压测定值  
再现：括号中的数值  
记录：括号外的数值

# VCR-POWER CIRCUIT (VCR Section)

录象机电源电路(录象机部分)



H  
G  
F  
E  
D  
C  
B  
A

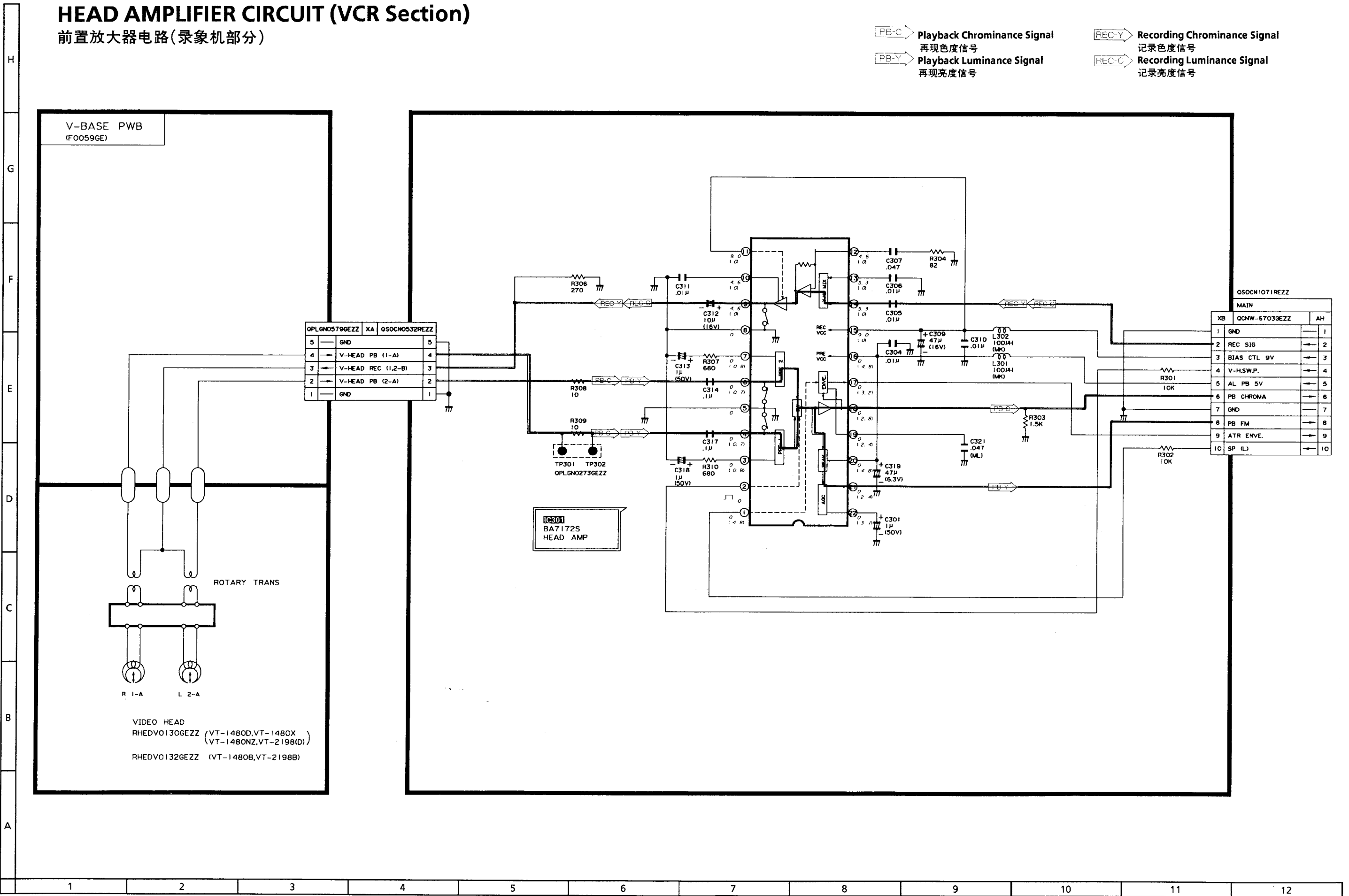
1 2 3 4 5 6 7 8 9 10 11 12

# HEAD AMPLIFIER CIRCUIT (VCR Section)

前置放大器电路(录像机部分)

PB-C Playback Chrominance Signal  
再现色度信号  
PB-Y Playback Luminance Signal  
再现亮度信号

REC-Y Recording Chrominance Signal  
记录色度信号  
REC-C Recording Luminance Signal  
记录亮度信号

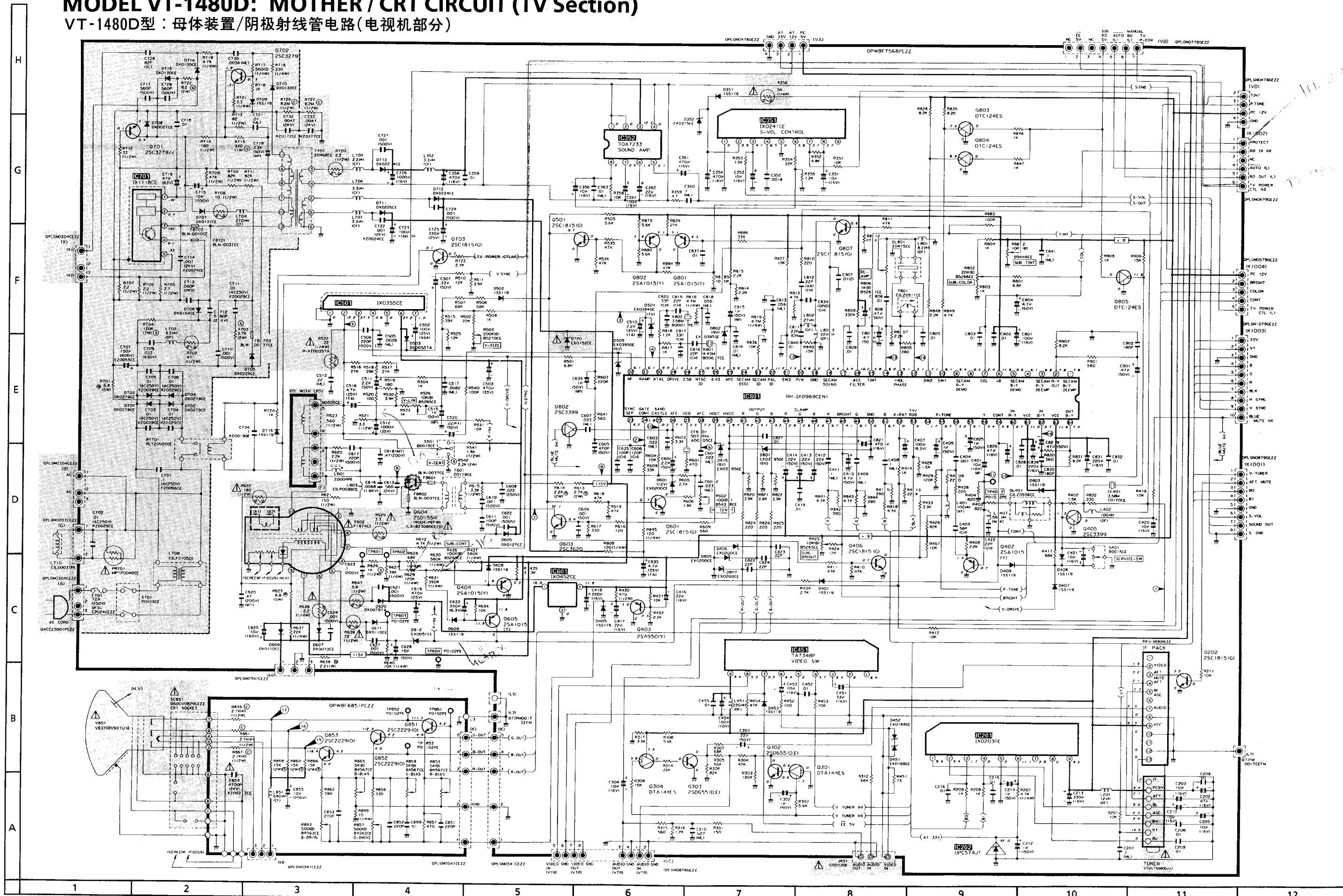


\* VOLTAGE MEASUREMENT MODE  
PB ..... Parentheses ( )  
REC ..... Without Parentheses

★电压测定值  
再现：括号中的数值  
记录：括号外的数值

# MODEL VT-1480D: MOTHER / CRT CIRCUIT (TV Section)

VT-1480D型：母体装置/阴极射线管电路(电视机部分)

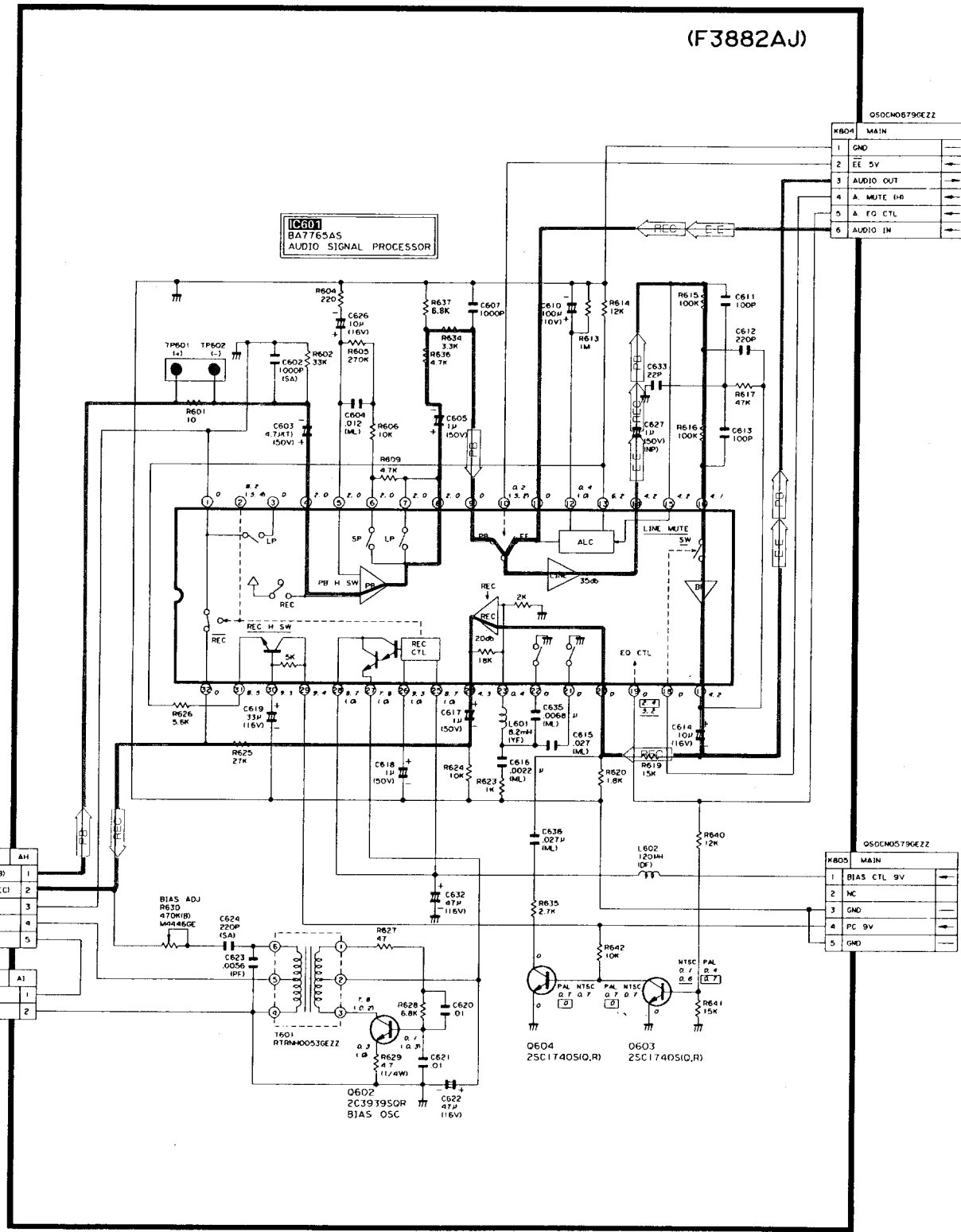




# AUDIO CIRCUIT (VCR Section)

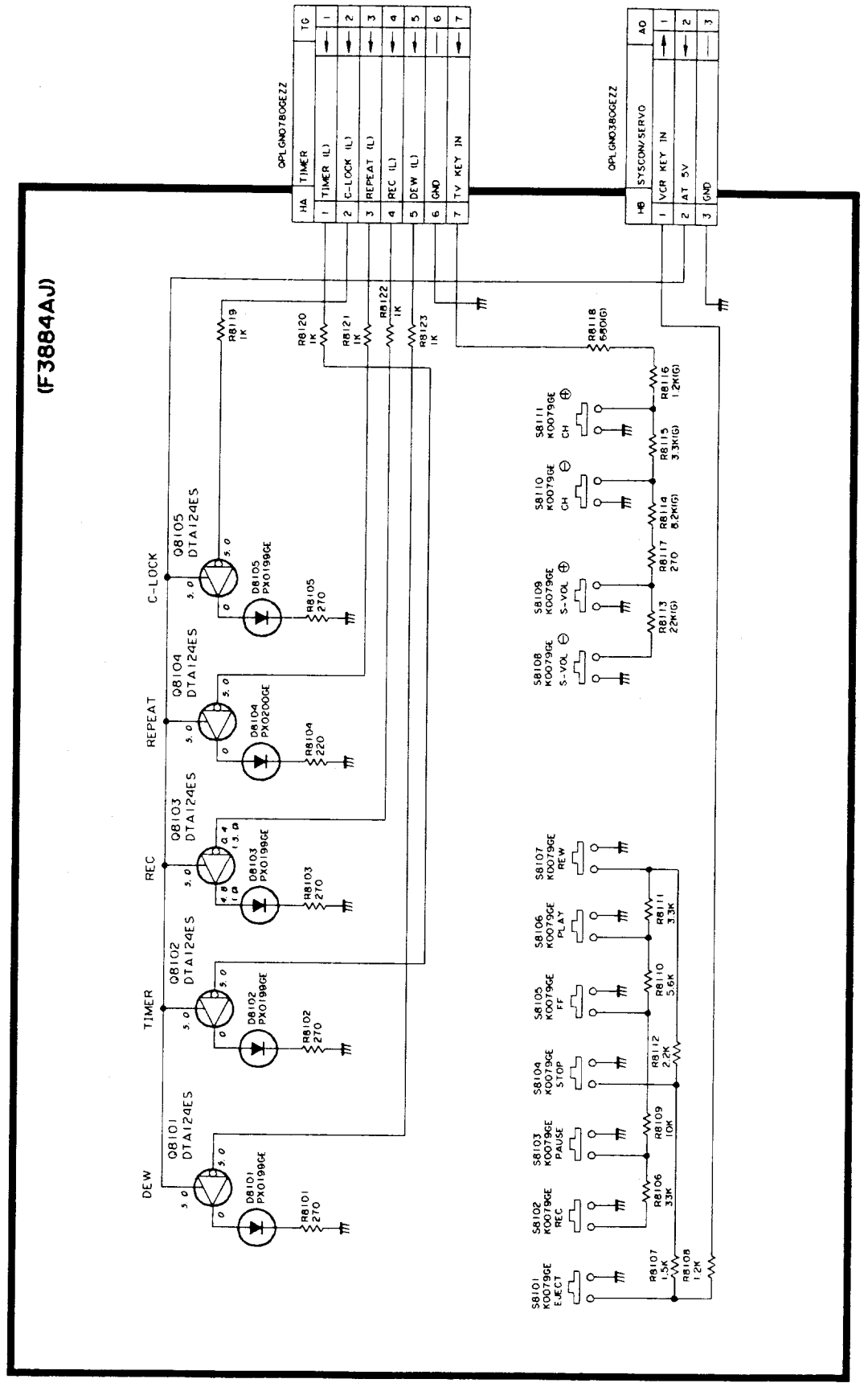
音频电路(录像机部分)

- PB** → Audio Playback Signal  
音频再生信号
- REC** → Audio Recording Signal  
音频记录信号
- E-E** → E-E Signal (Audio)  
音频E-E信号



# OPERATION CIRCUIT (VCR Section)

操作控制板电路(录像机部分)





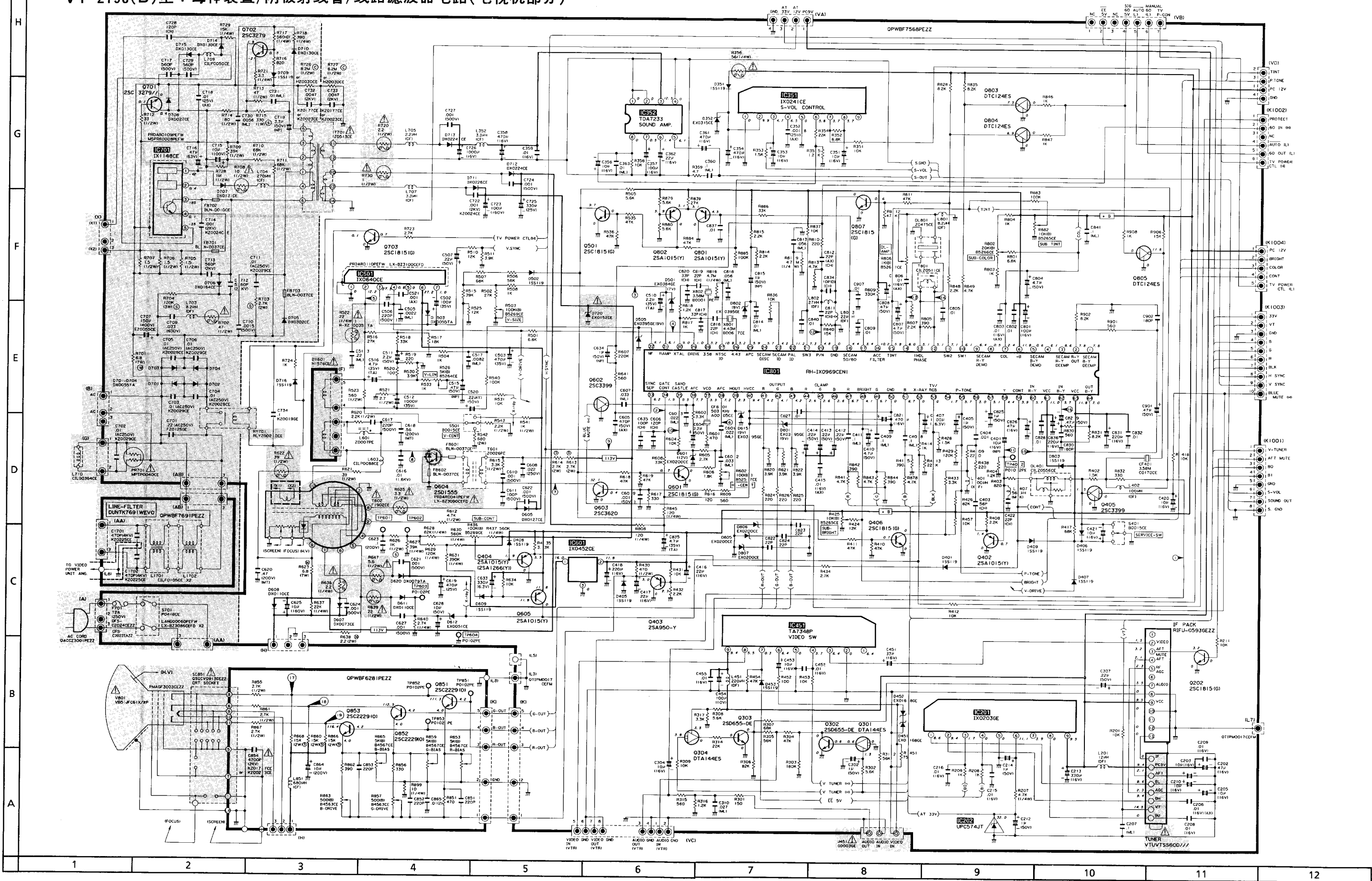


VT-1480D  
VT-2198 (D)

VT-1480D  
VT-2198 (D)

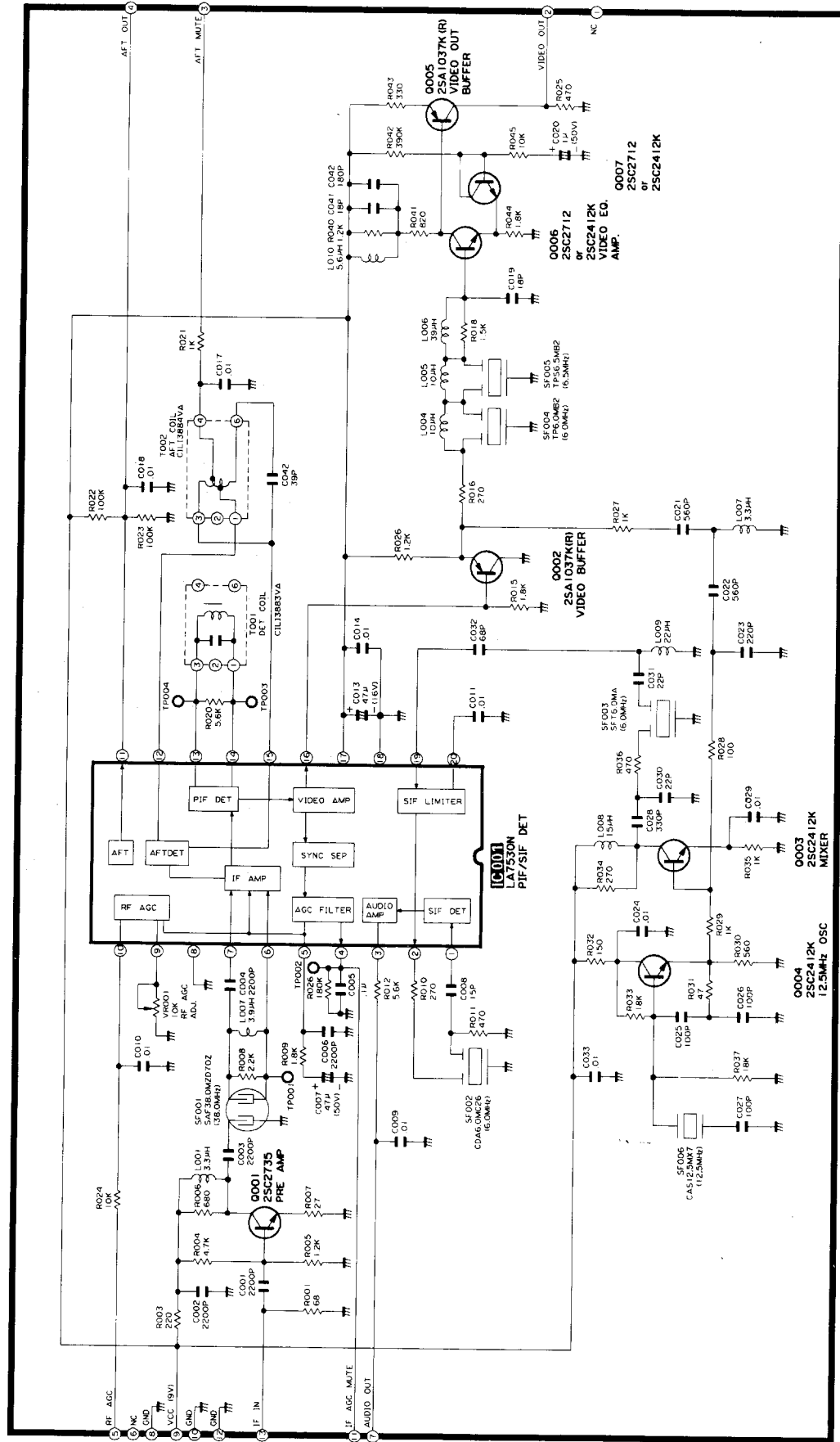
# MODEL VT-2198(D): MOTHER / CRT / LINE FILTER CIRCUIT (TV Section)

VT-2198(D)型：母体装置/阴极射线管/线路滤波器电路(电视机部分)



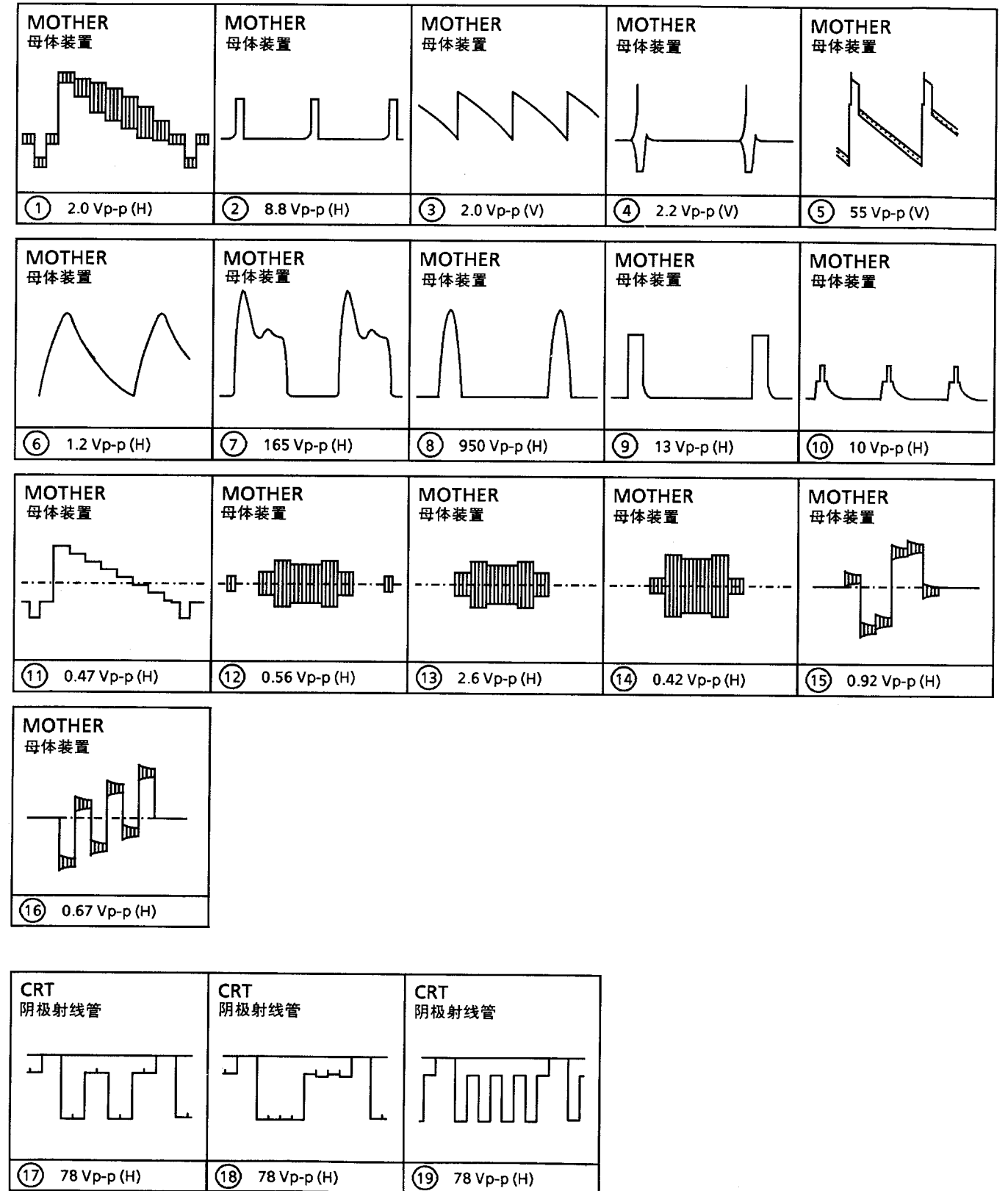
IF PACK CIRCUIT (TV Section) 中频包电路(电视机部分)

RiFU-0593GEZZ



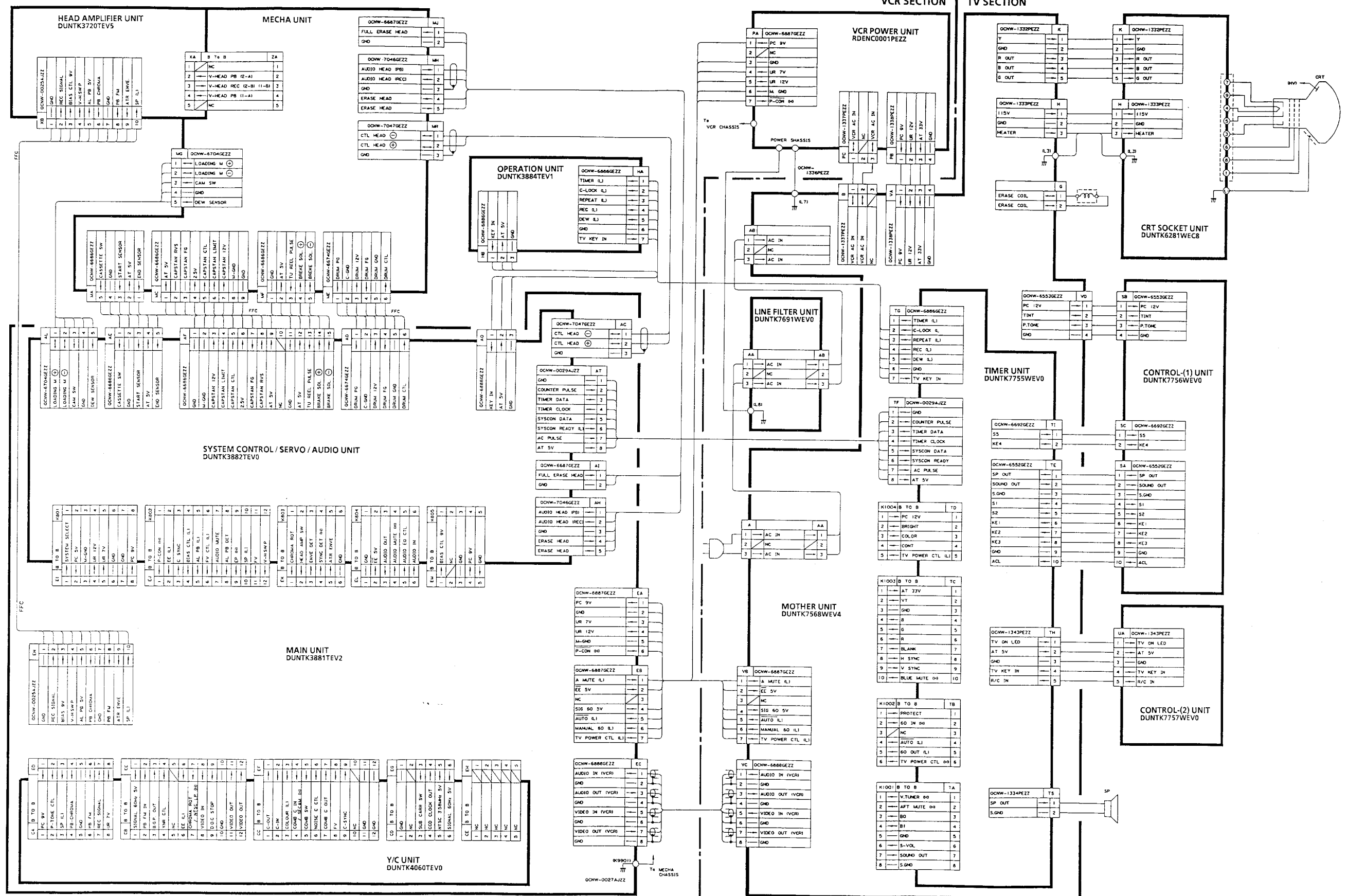
WAVE FORMS (TV Section)

波形图(电视机部分)



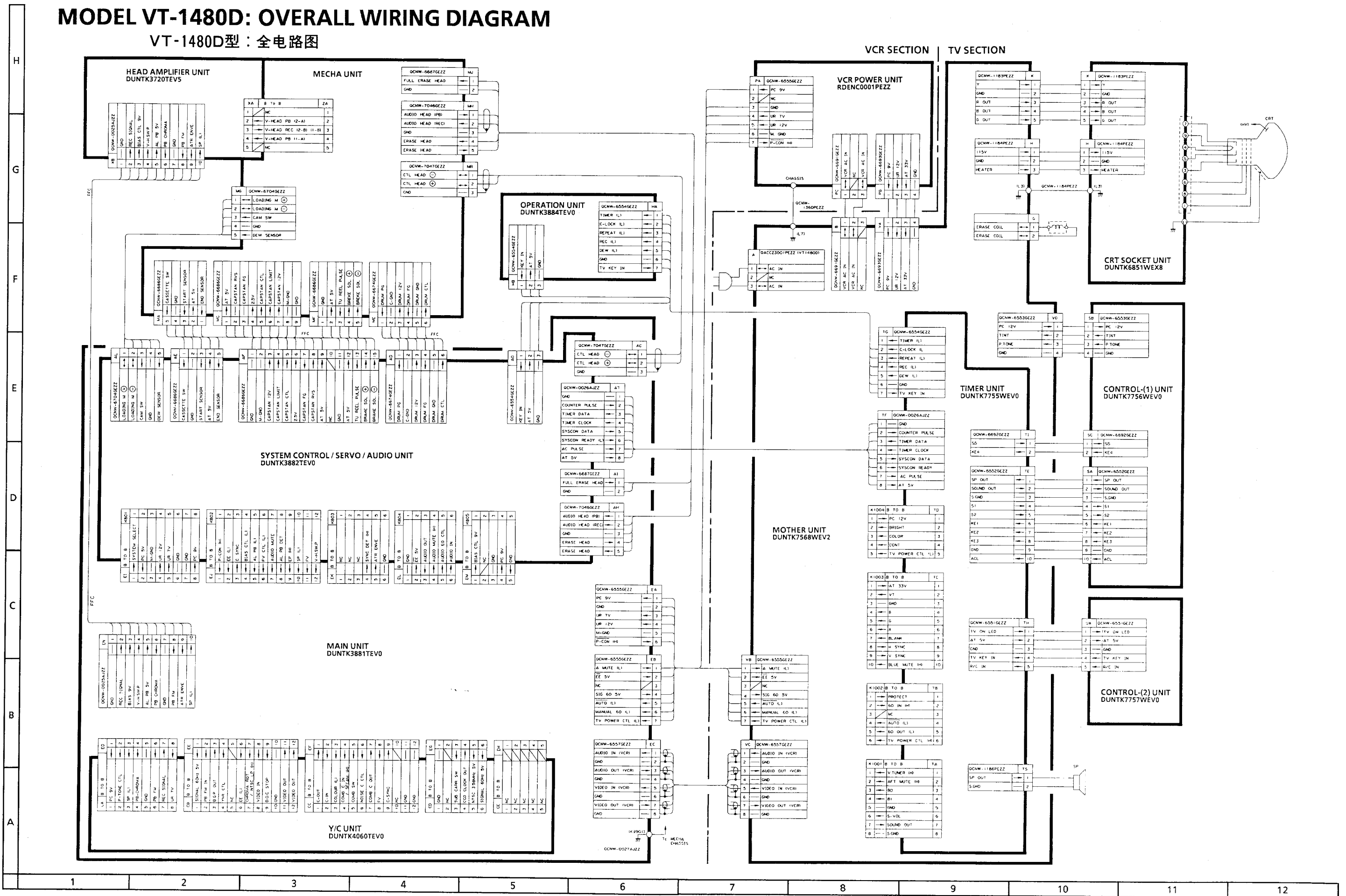
# MODEL VT-2198(D): OVERALL WIRING DIAGRAM

VT-2198(D)型：全电路图

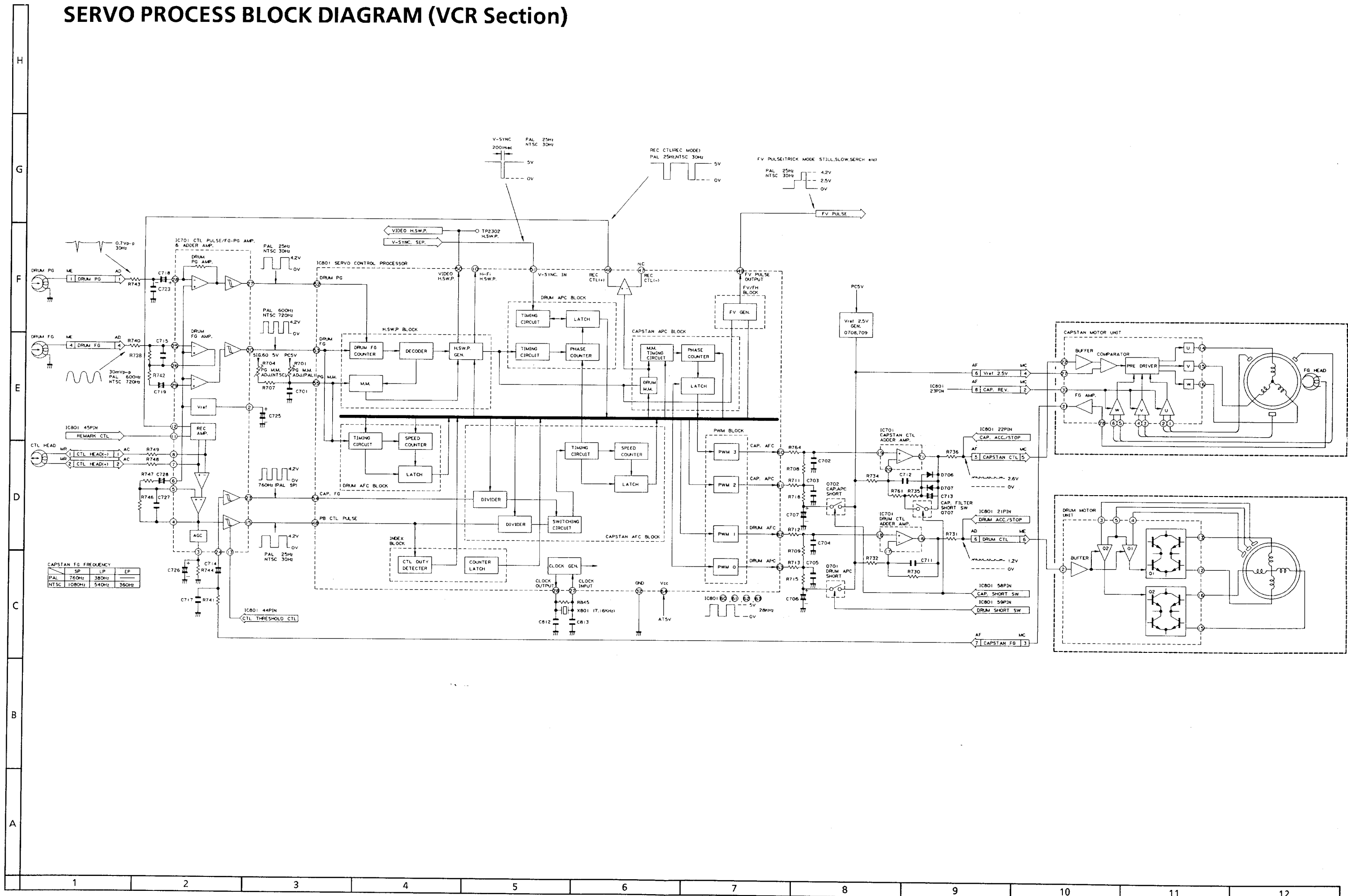


# MODEL VT-1480D: OVERALL WIRING DIAGRAM

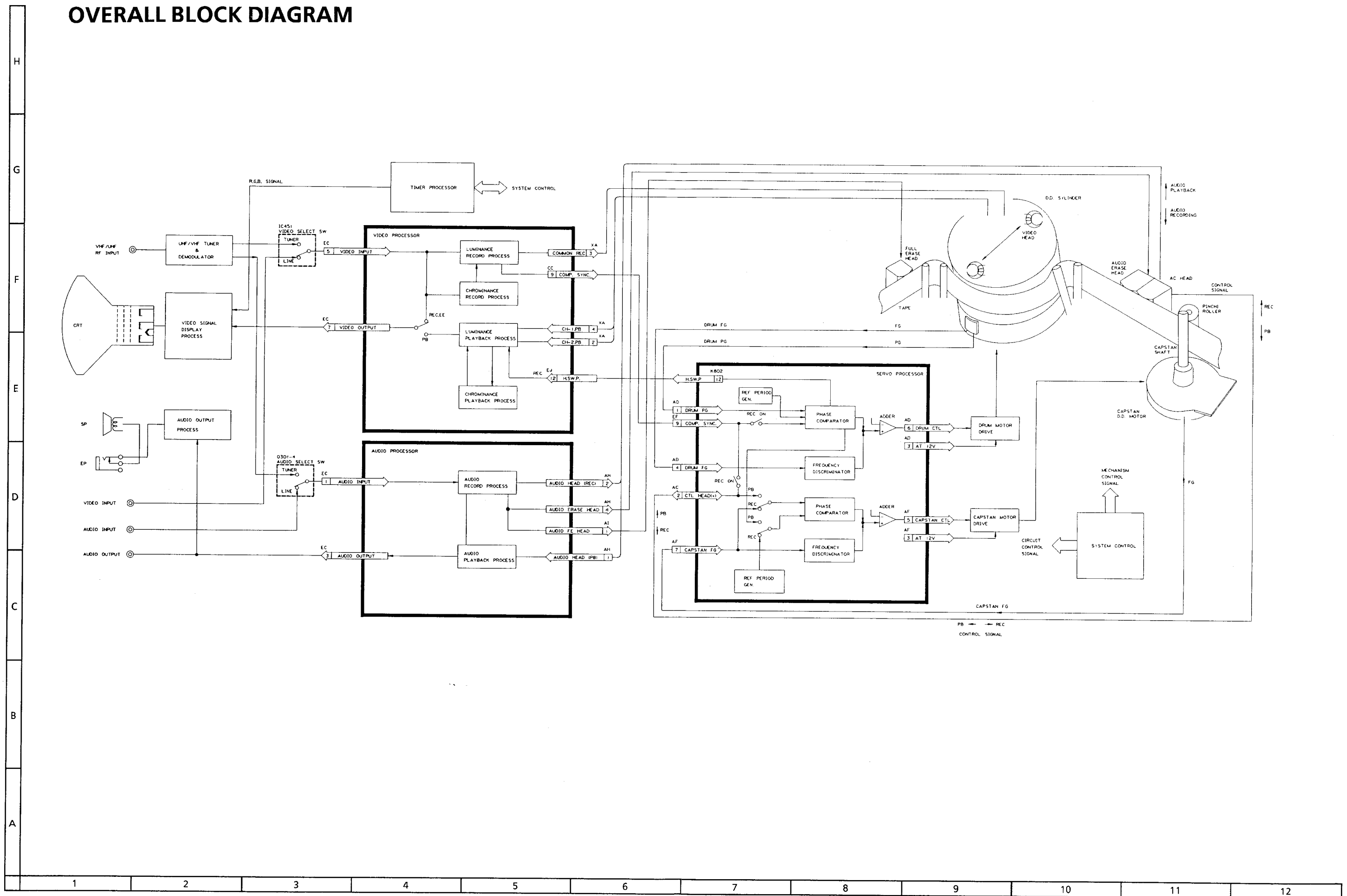
VT-1480D型：全电路图



# SERVO PROCESS BLOCK DIAGRAM (VCR Section)



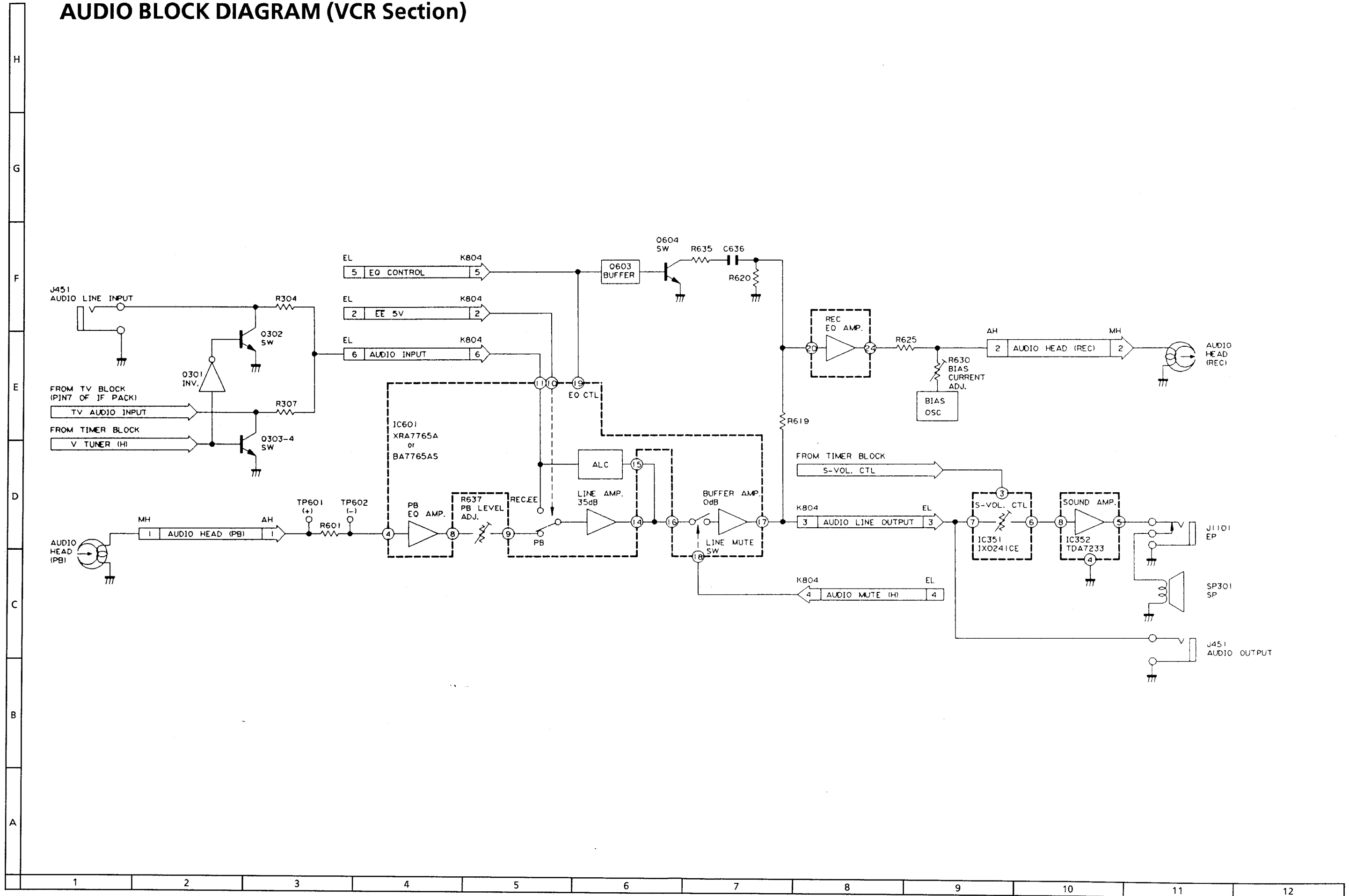
# OVERALL BLOCK DIAGRAM



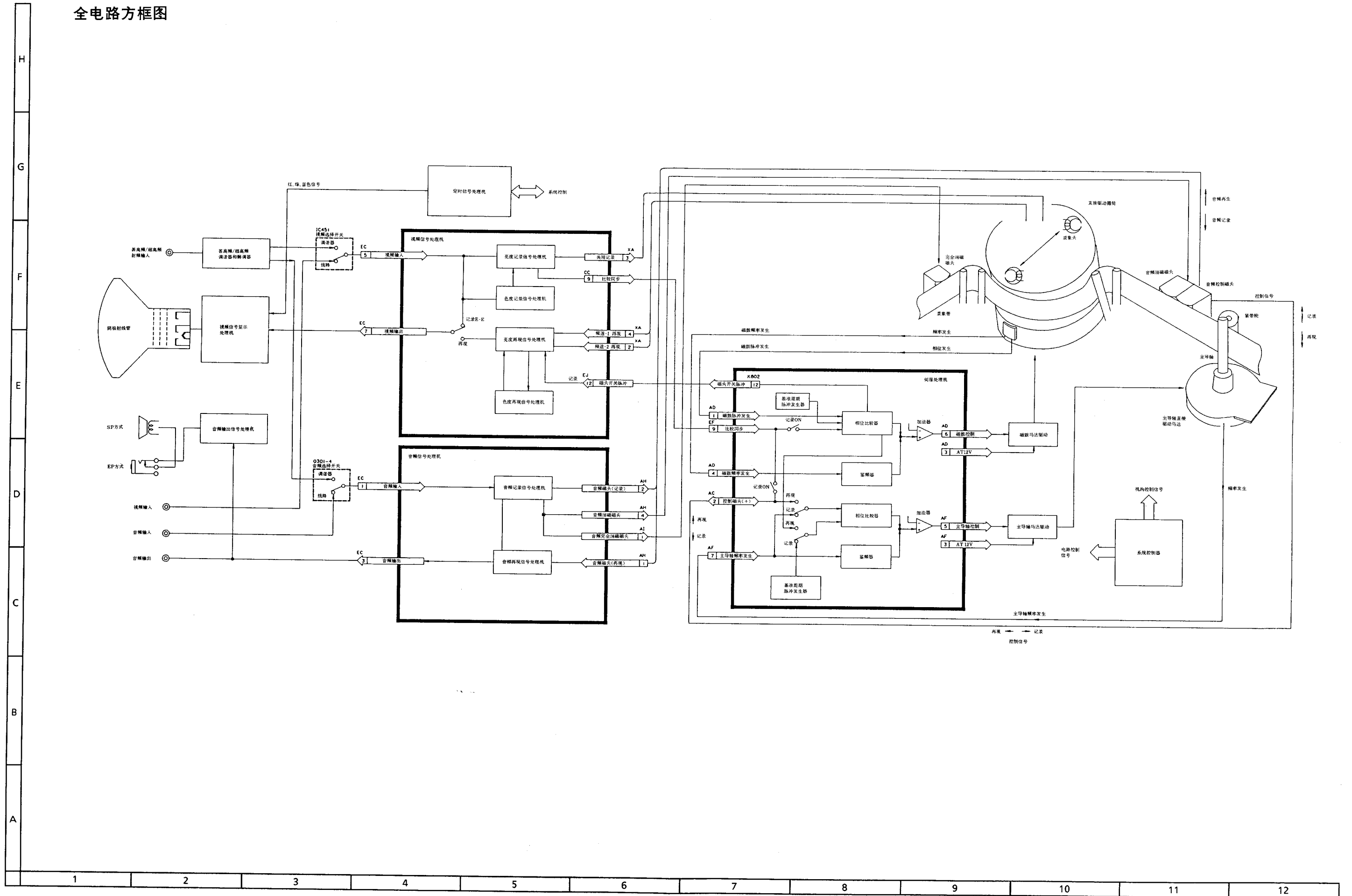




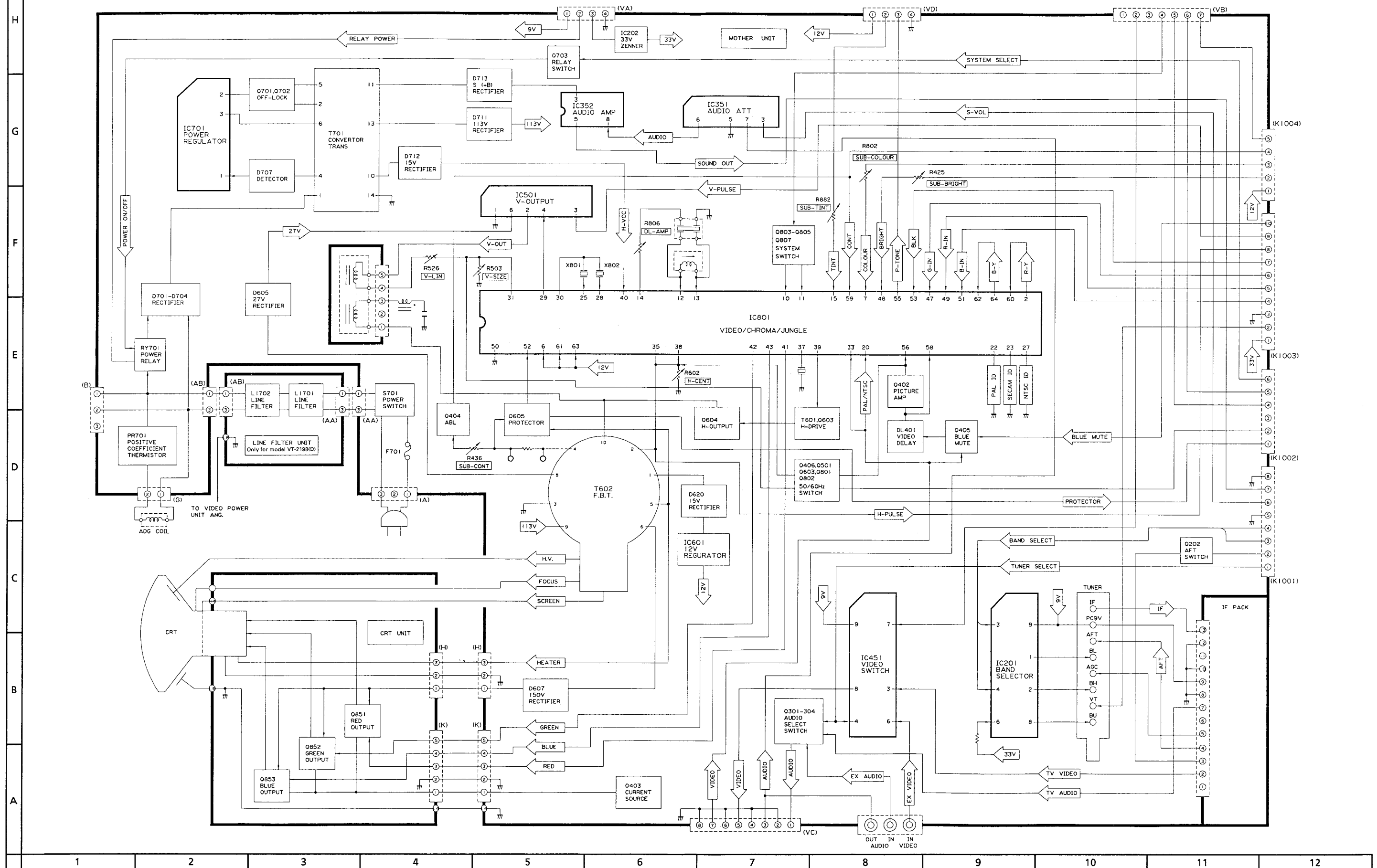
# AUDIO BLOCK DIAGRAM (VCR Section)



全电路方框图

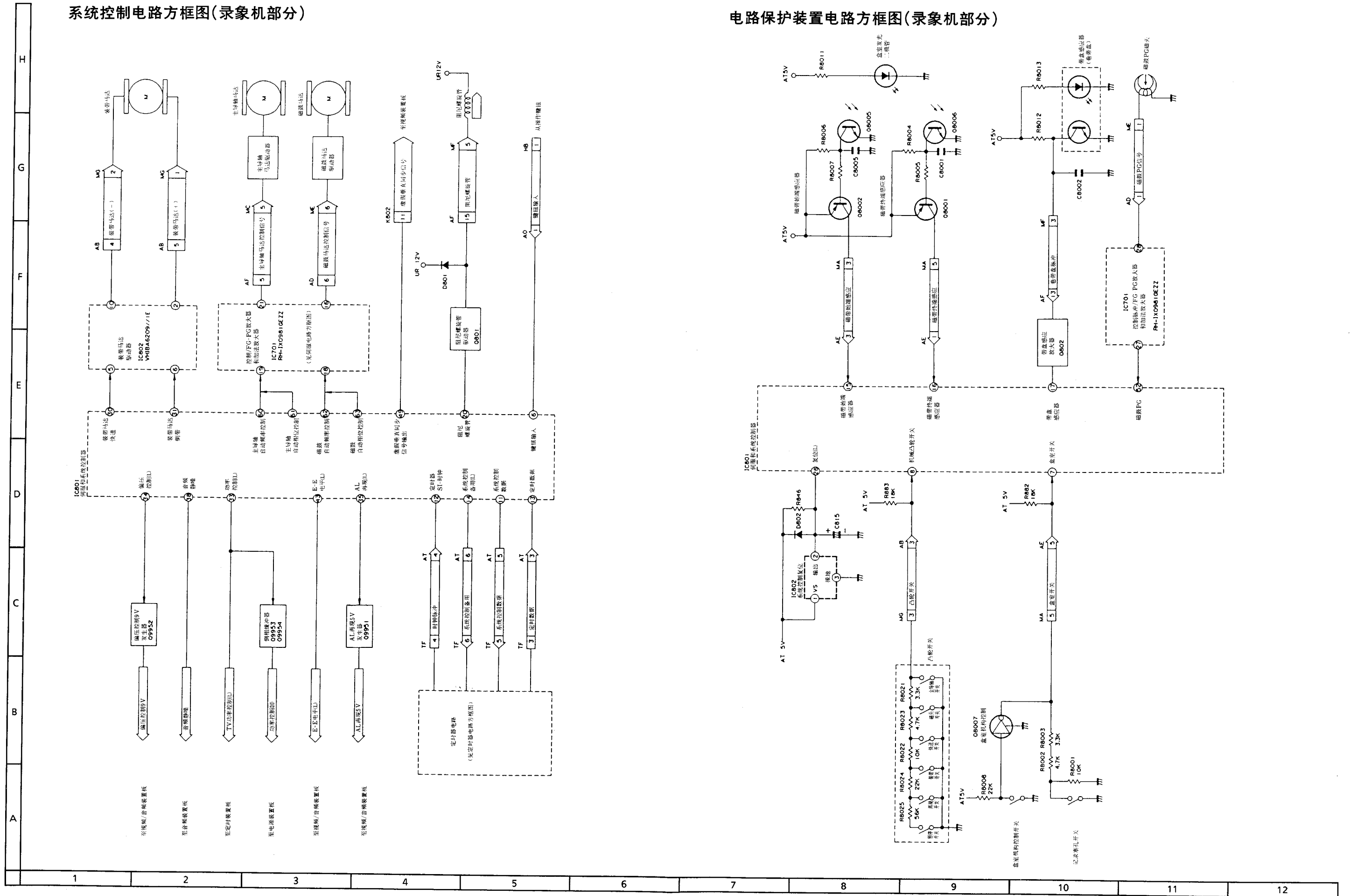


# BLOCK DIAGRAM (TV Section)

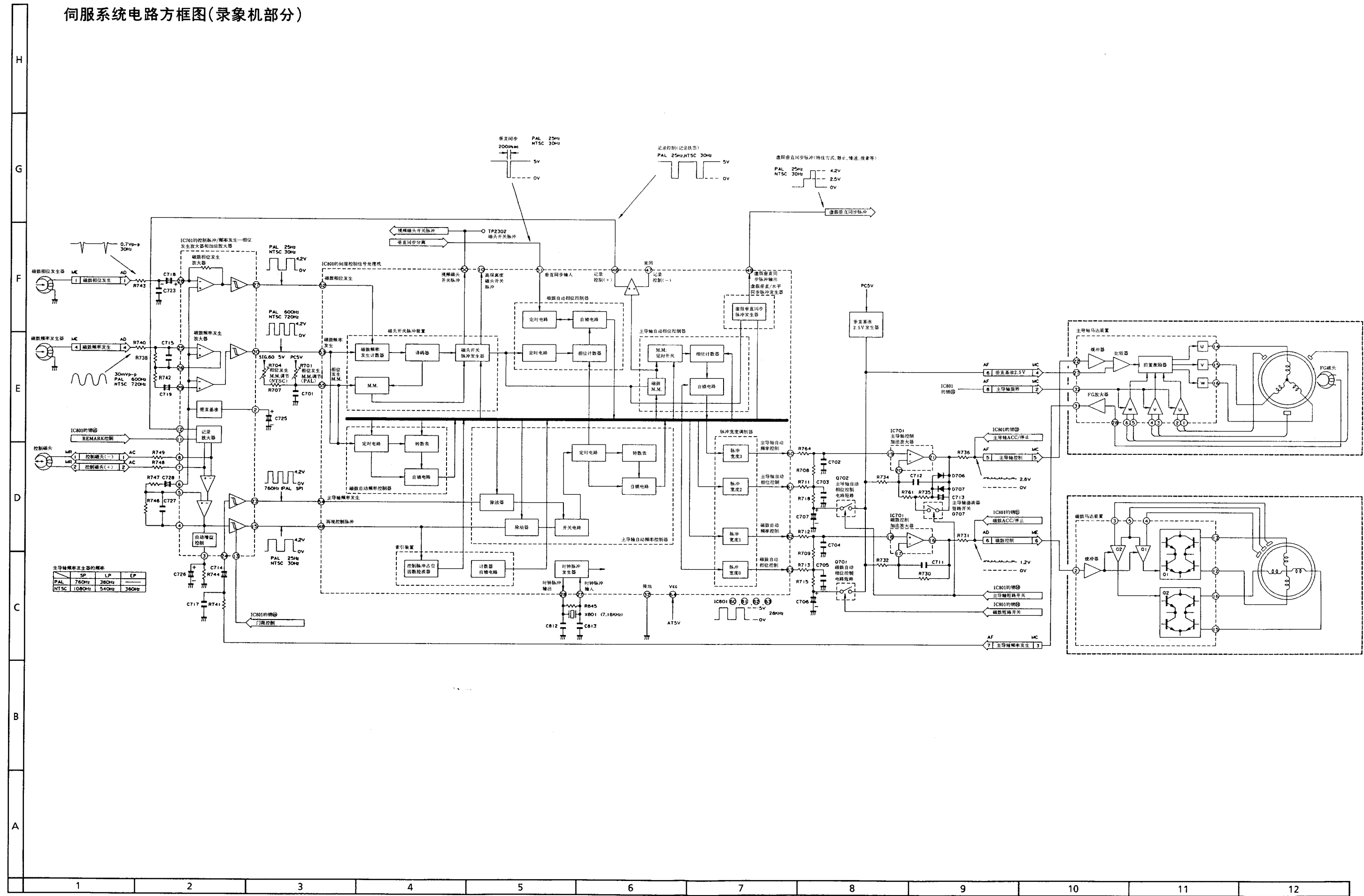


系统控制电路方框图(录象机部分)

电路保护装置电路方框图(录象机部分)



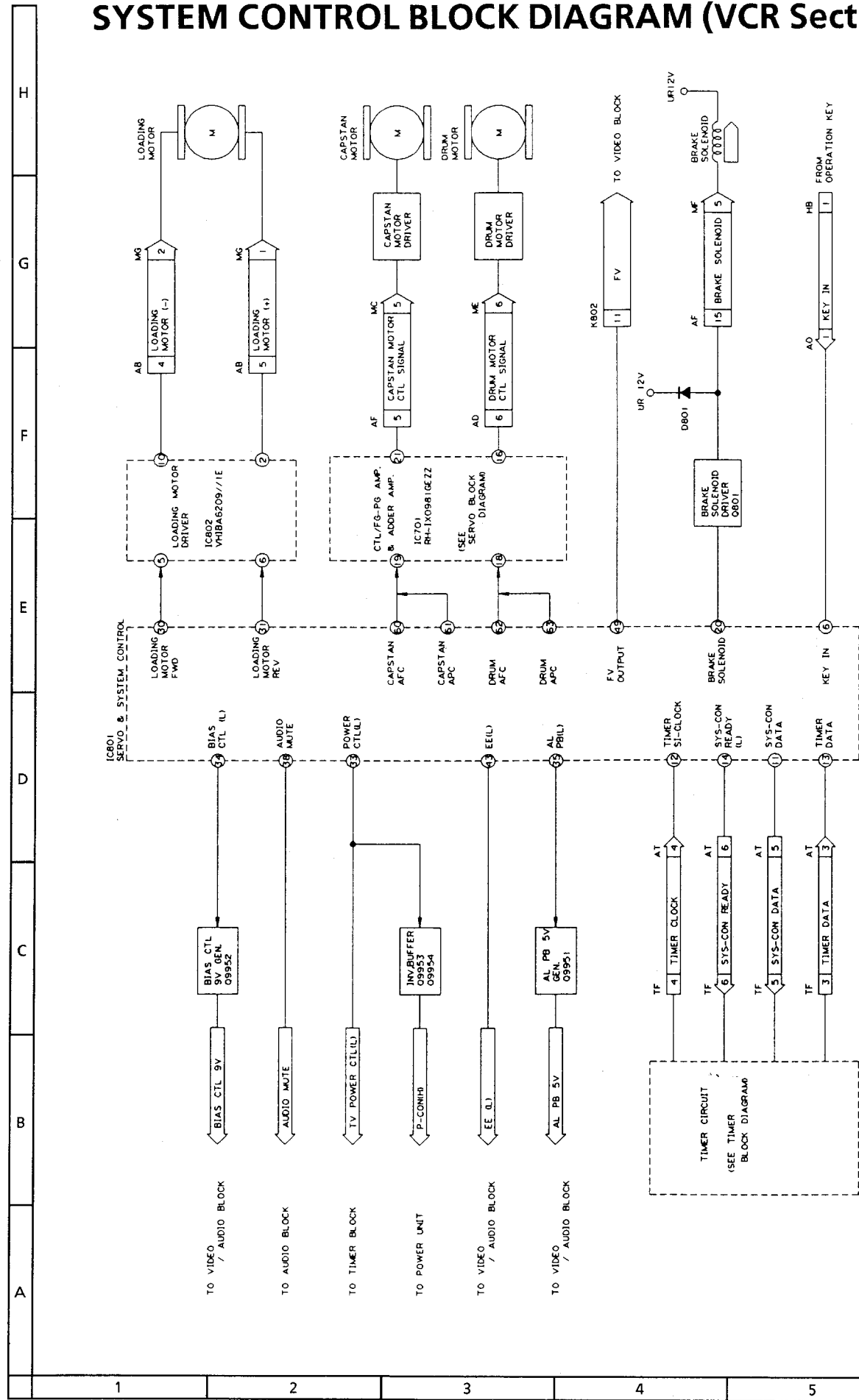
伺服系统电路方框图(录像机部分)



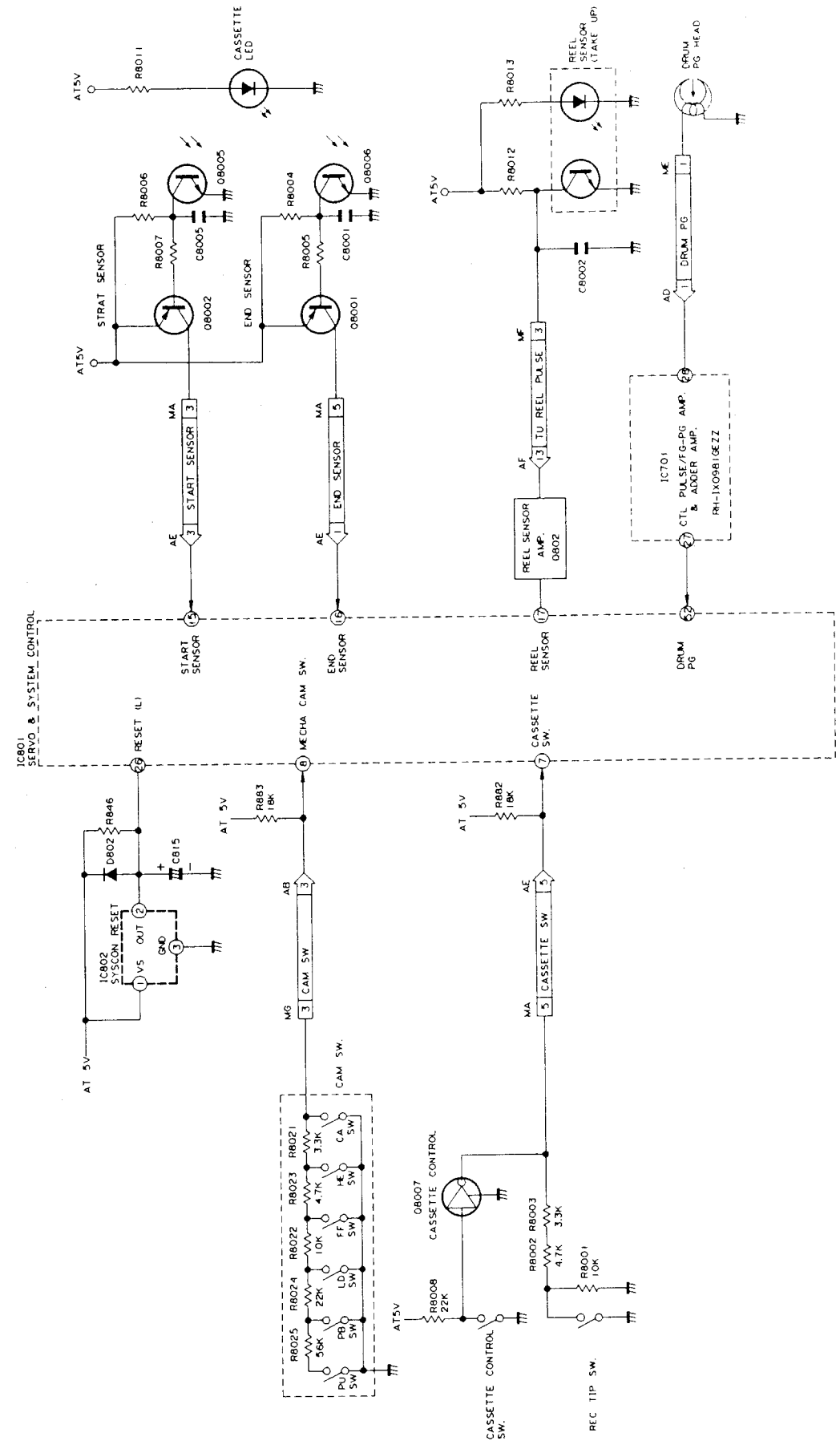




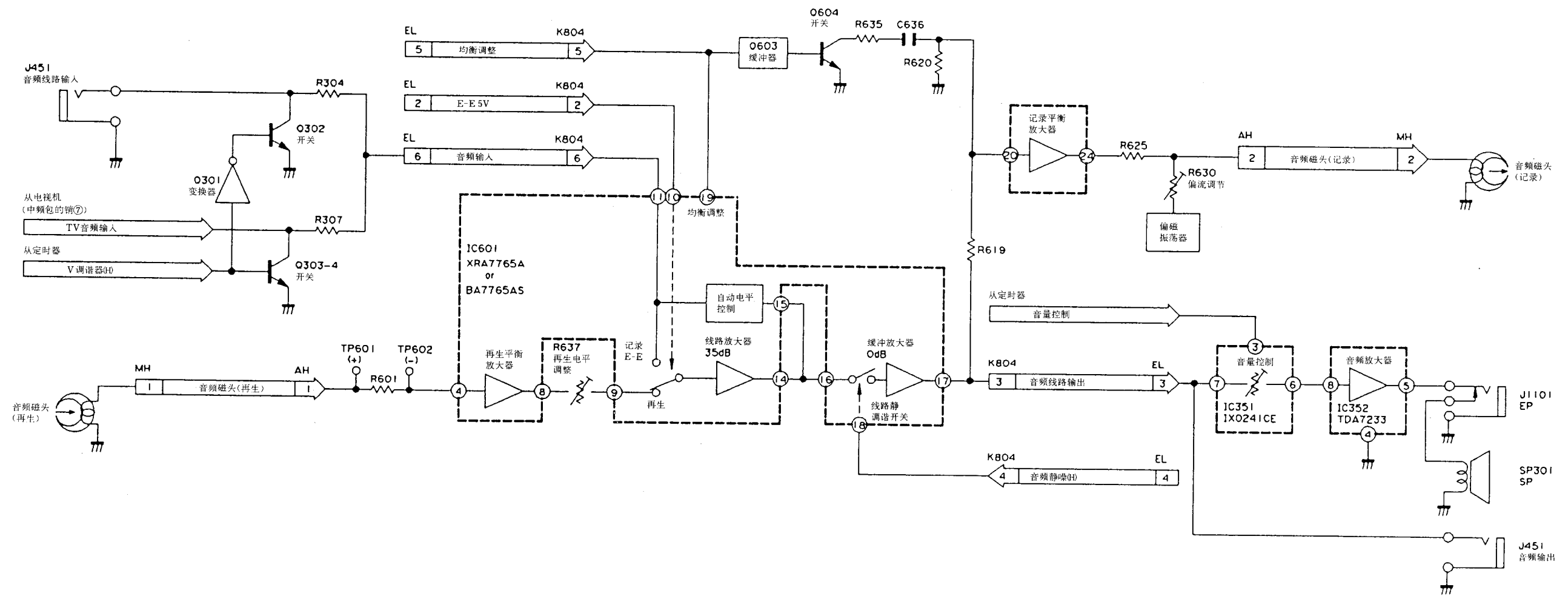
### SYSTEM CONTROL BLOCK DIAGRAM (VCR Section)



### SAFETY DEVICE BLOCK DIAGRAM (VCR Section)



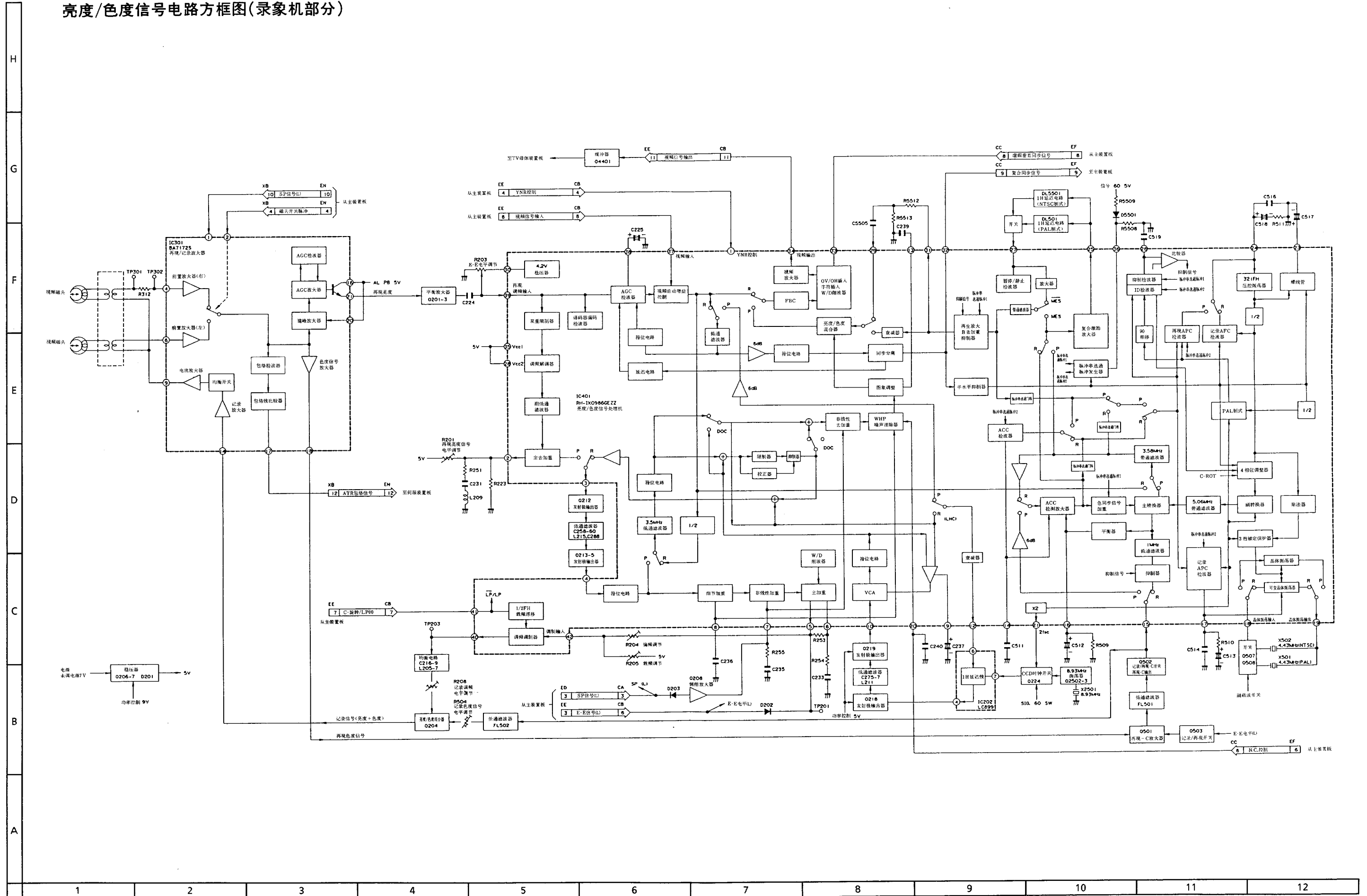
音频信号电路方框图(录象机部分)



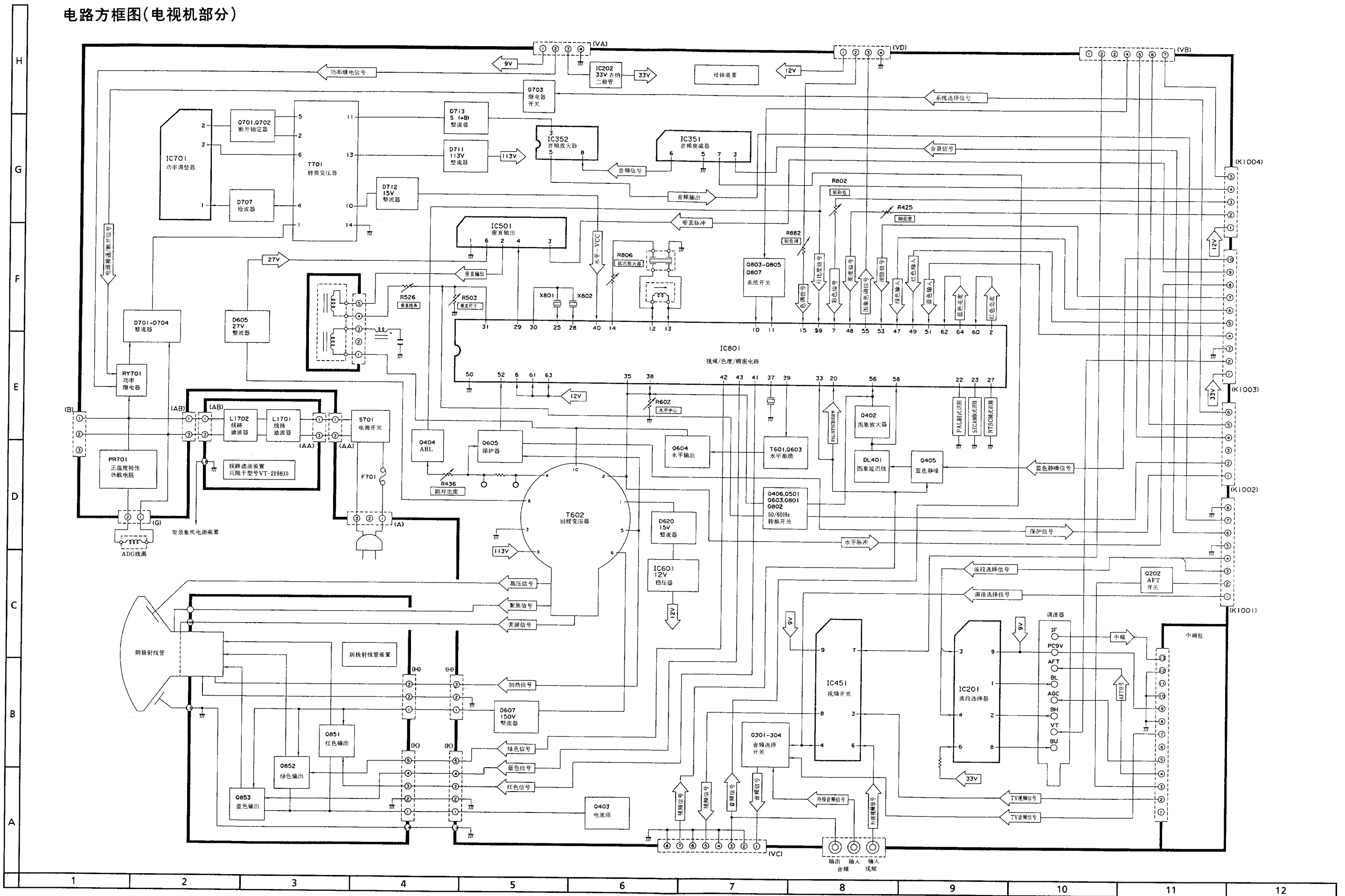
H  
G  
F  
E  
D  
C  
B  
A

1 2 3 4 5 6 7 8 9 10 11 12

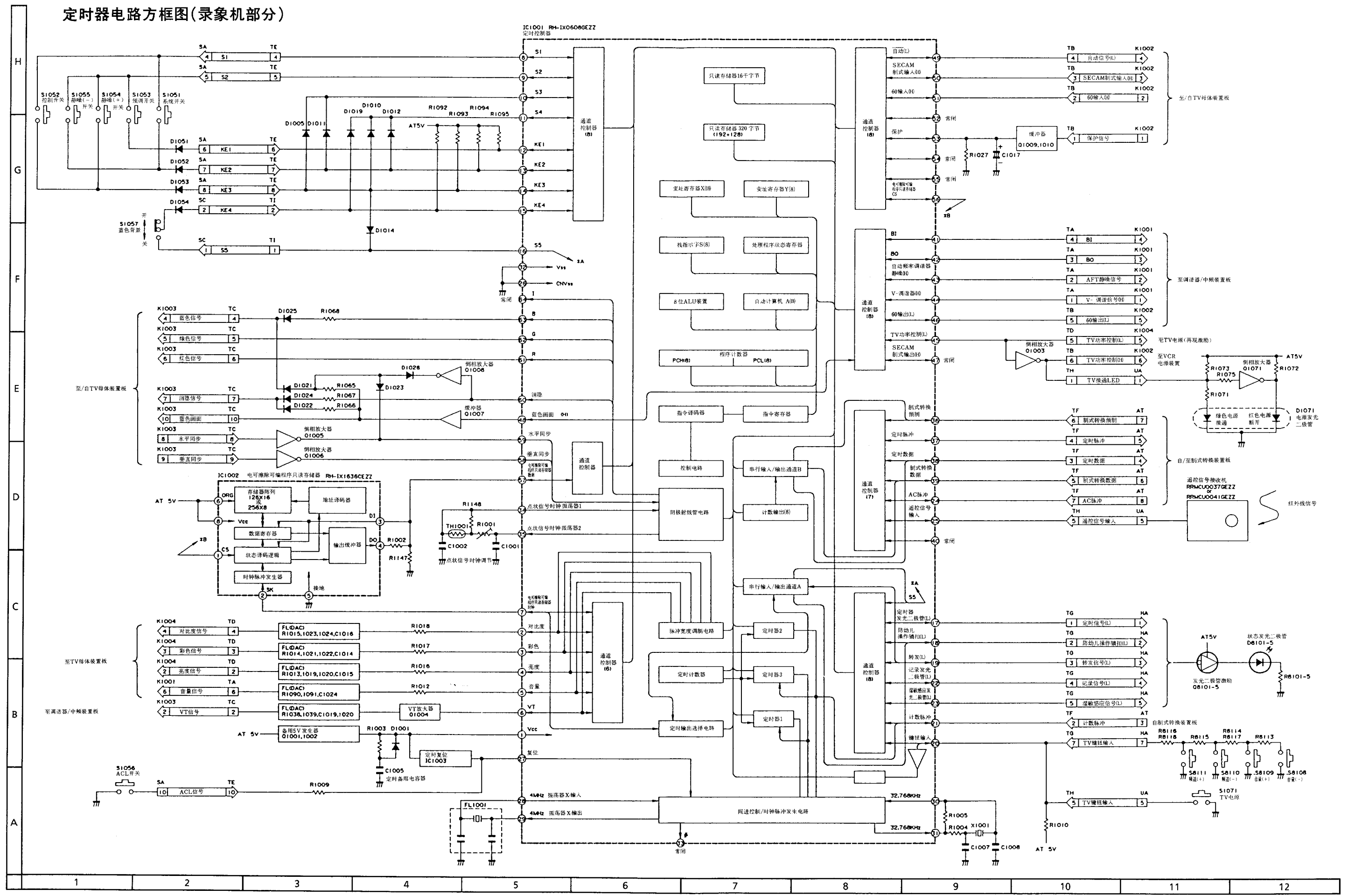
亮度/色度信号电路方框图(录象机部分)



电路方框图(电视机部分)



定时器电路方框图(录象机部分)





# SYSTEM CONTROL / SERVO CIRCUIT (VCR Section)

系统控制/伺服电路(录像机部分)

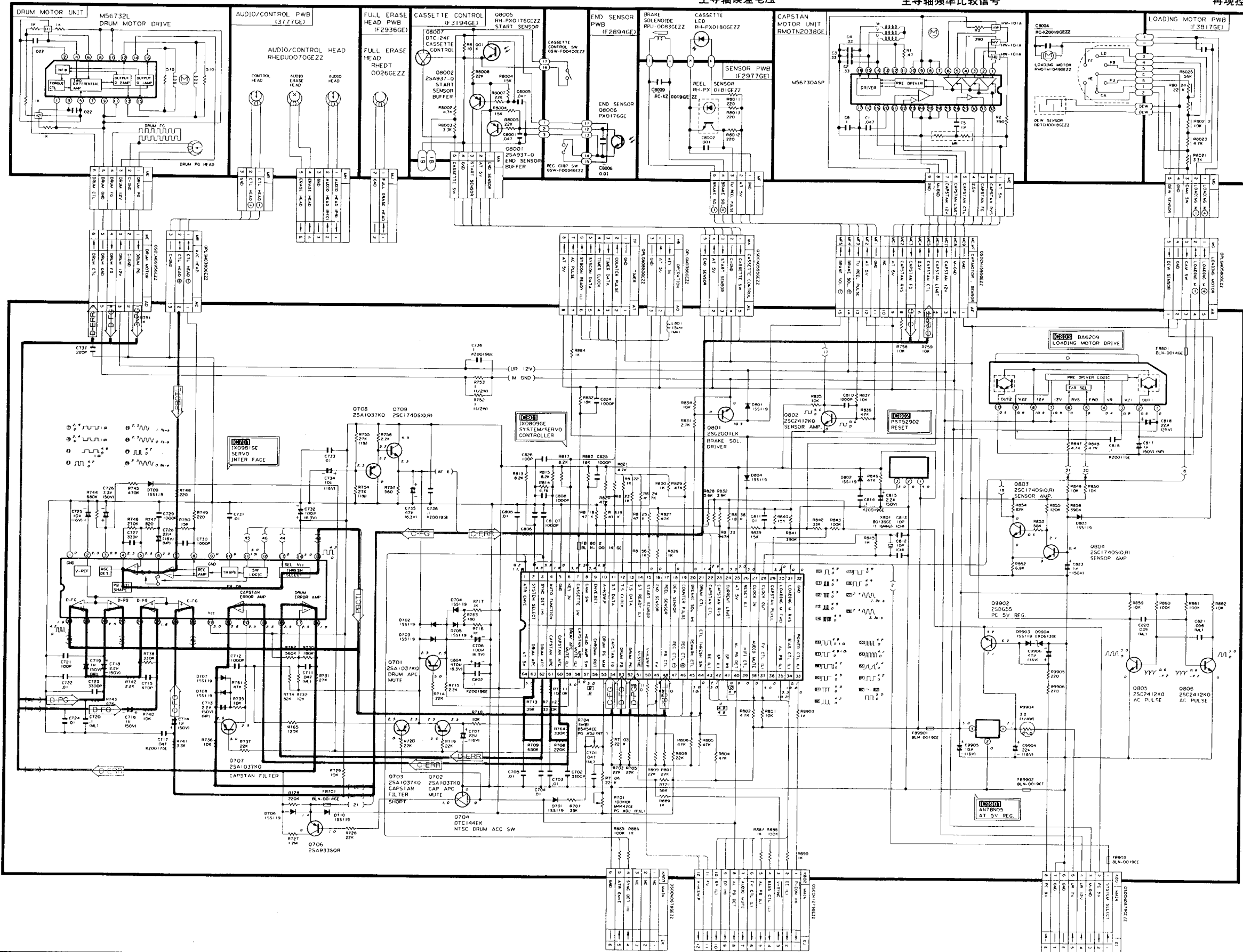
VT-1480D  
VT-2198 (D)

VT-1480D  
VT-2198 (D)

D-ERR → Drum Error Voltage  
磁鼓误差电压  
C-ERR → Capstan Error Voltage  
主导轴误差电压

D-FG → Drum Frequency Comparison Signal  
磁鼓频率比较信号  
C-FG → Capstan Frequency Comparison Signal  
主导轴频率比较信号

D-PG → Drum Phase Comparison Signal  
磁鼓相位比较信号  
PBCTL → Playback Control Comparison Signal  
再现控制比较信号



\* VOLTAGE MEASUREMENT MODE ★ 电压测定值  
PB ..... Parentheses ( ) 再现: 括号中的数值  
REC ..... Without Parentheses 记录: 括号外的数值

## DESCRIPTION OF SCHEMATIC DIAGRAM 电路原理图的说明

### SAFETY NOTE:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

### IMPORTANT SAFETY NOTICE:

BE SURE TO USE GENUINE PARTS FOR SECURING THE SAFETY AND RELIABILITY OF THE SET.  
PARTS MARKED WITH "△" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

### SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE ( - - - - - ) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

### CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

### NOTES:

1. The unit of resistance "ohm" is omitted. (K = 1000 ohms, M = 1Meg ohm).
2. All resistors are 1/8 watt, unless otherwise noted.
3. The unit of capacitance "F" is omitted. ( $\mu = \mu F$ , P =  $\mu\mu F$ ).
4. The values in parentheses are the ones in the PB mode; the values without parentheses are the ones in the REC mode.

### VOLTAGE MEASUREMENT CONDITIONS:

1. DC voltages are measured between points indicated and chassis ground by VTVM, with AC 220V, 50/60Hz supplied to unit and all controls are set to normal viewing picture unless otherwise noted.
2. Voltages are measured with 10000 $\mu V$  B&W or colour signal.

### WAVEFORM MEASUREMENT CONDITIONS:

10000 $\mu V$ , 87.5% modulated colour bar signal is fed into tuner.

### 安全注意事项:

1. 更换电路元件时, 必须先拔出电源插头, 切断电源。
2. 底盘电路处工作状态时, 应注意电路中半导体元件散热片高电位可能导致的电击危险。

### 安全使用注意要点:

为保证本机的安全以及持久、正常的使用, 电路元件必须使用规定的纯正牌元件。  
标有"△" ( ) 的元件为对保证本机长久的安全使用起重要作用的元件。更换这些元件时, 必须使用规定的纯正牌元件, 以保证本机的使用安全以及使用寿命。

### 维修注意事项:

电路中由粗断续线( - - - - - )所围部分为与交流电源直接相接线路。对这些部分的线路进行维修时, 应于本机与交流电源之间用隔离变压器相接, 以防止不意的电击之危险。

### 注意:

这里的电路原理图均为最初设计原图, 与您的机器的电路原理图可能有不同之处。

### 注:

1. 电阻单位为 $\Omega$ (欧姆), 图中省略。(K = 1000 $\Omega$ , M = 1000000 $\Omega$ )
2. 除另加标记者, 所有电阻之功率均为1/8W。
3. 电容单位为"F"(法拉), 图中省略。(  $\mu = 1 \times 10^{-6} F$ , P =  $1 \times 10^{-12} F$  )
4. 括号中的数值为再现工作状态时之数值, 括号外的数值为记录工作状态时之数值。

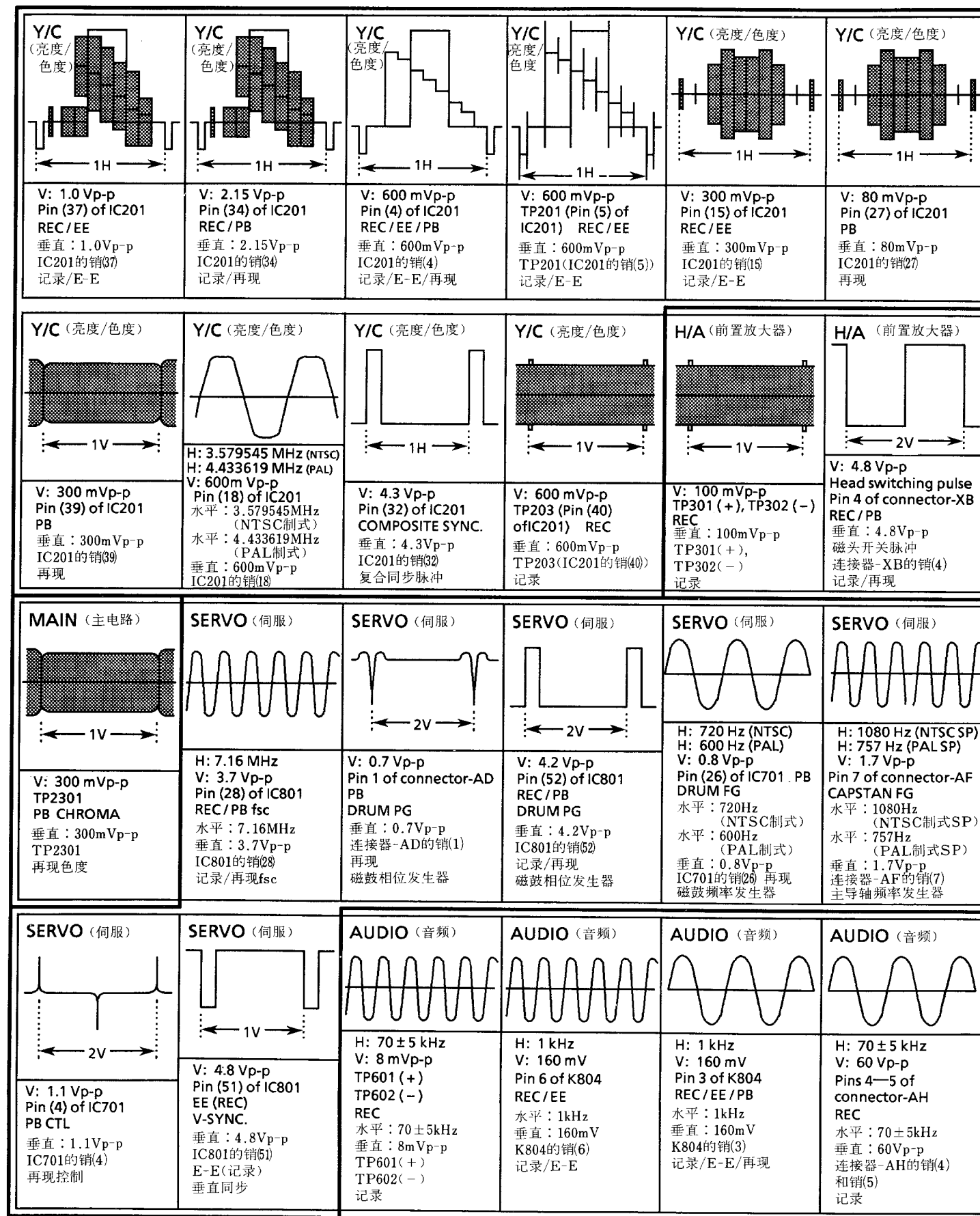
### 电压测定条件:

1. 除另加注明者, 直流电压指于本机加220V, 50/60Hz交流电源, 设所有控制调节为标准设定, 用电子管电压表(VTVM)于测点与底盘接地端之间所测电压值。
2. 交流电压由10,000 $\mu V$ 的黑白或彩色信号所测。

### 波形测定条件:

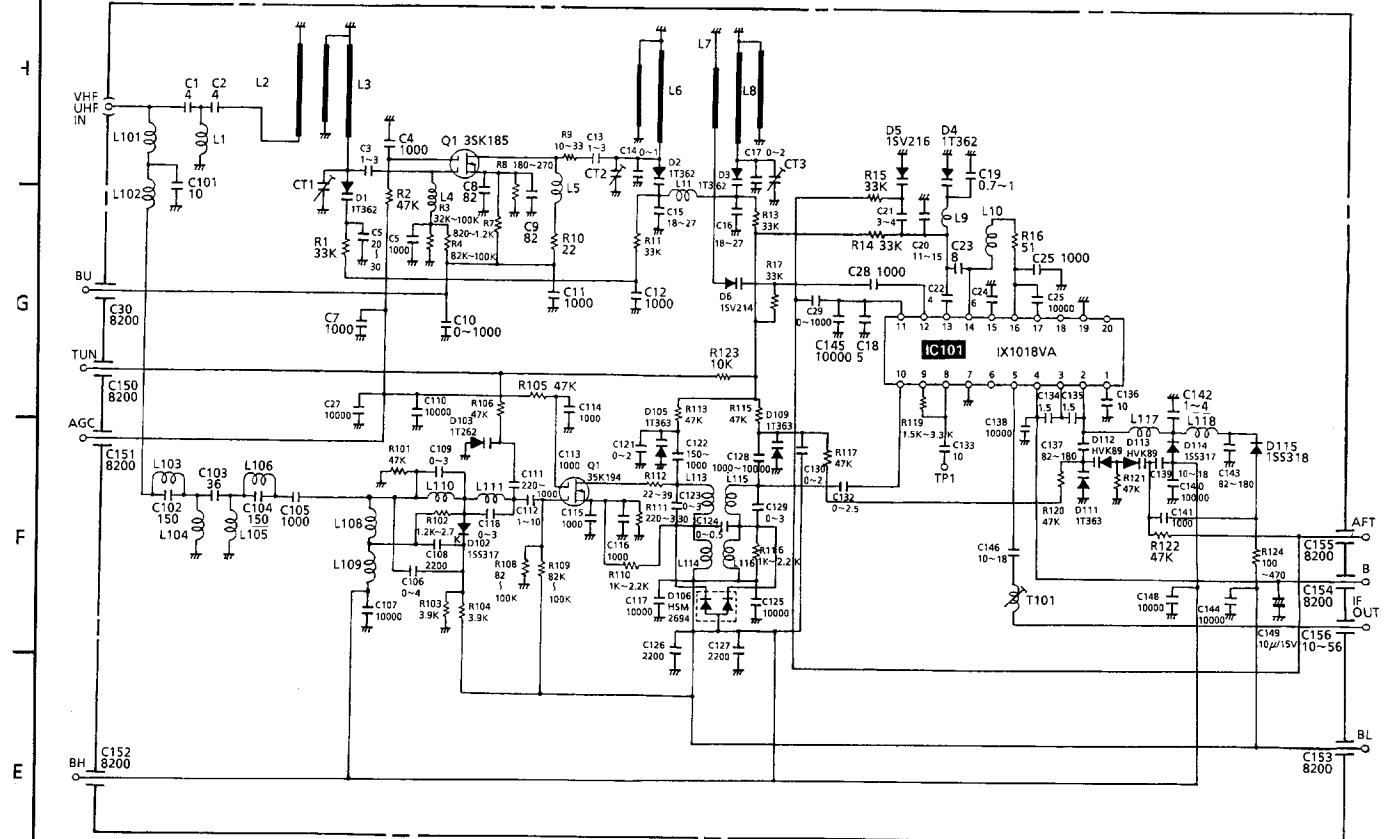
向调谐器输入10,000 $\mu V$ , 87.5%的调制彩条信号加以测定。

## WAVE FORMS (VCR Section) 波形图(录象机部分)

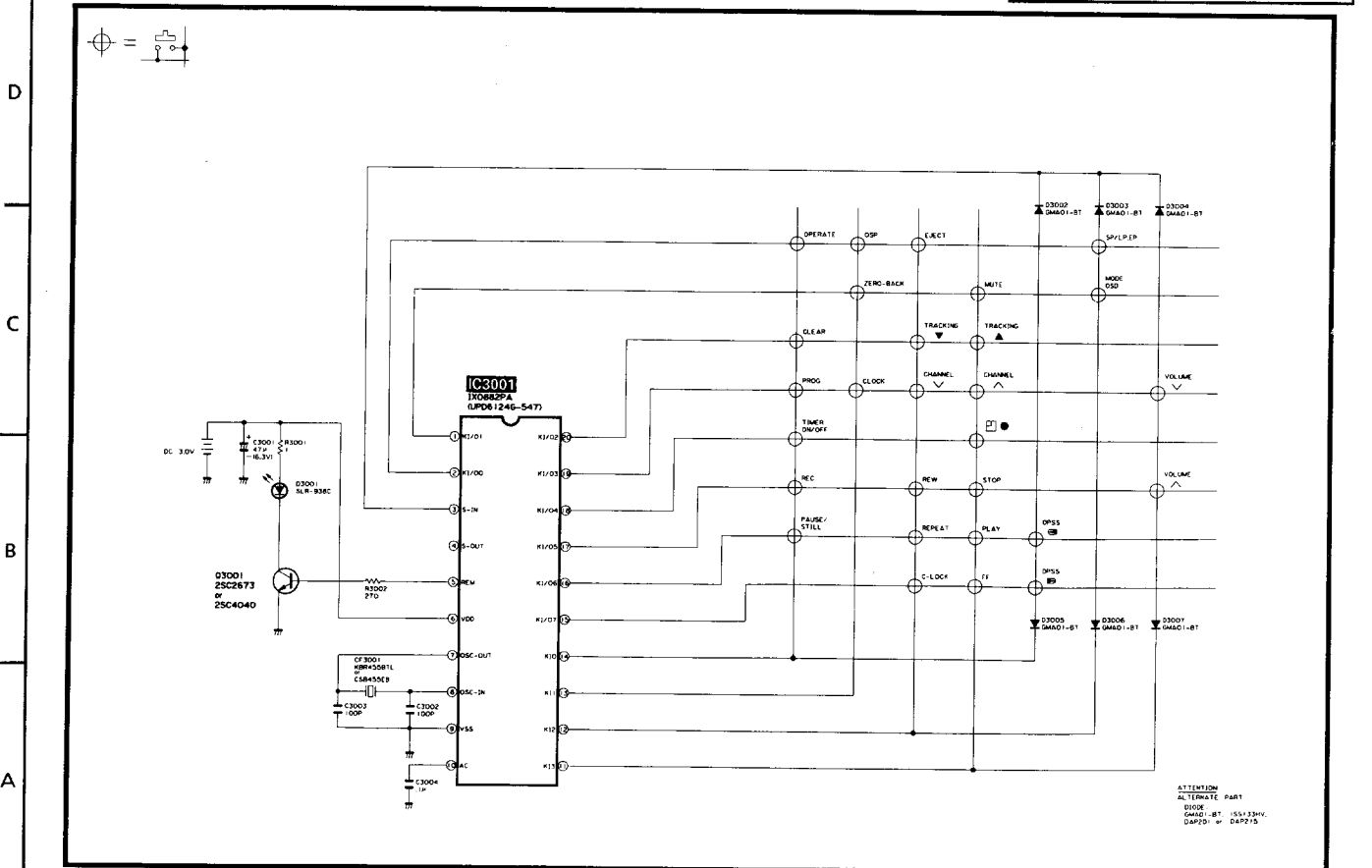


TUNER CIRCUIT (TV Section) 调谐器电路(电视机部分)

VTUVTSS60D//I



INFRARED REMOTE CONTROL CIRCUIT 红外线遥控器电路 RRMCG0894AJSA



1	2	3	4	5	6
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