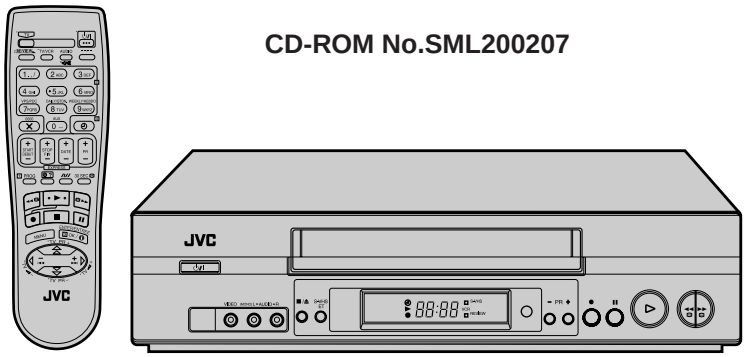
JVC

SCHEMATIC DIAGRAMS

VIDEO CASSETTE RECORDER

HR-S5950EU, HR-S5955EK, HR-S5955MS

CD-ROM No.SML200207



Hi-Fi S-VHS 625

Super VHS ET

SHOWVIEW®

SPECIFICATIONS *(The specifications shown pertain specifically to the model HR-S5950EU.)*

GENERAL

Power requirement : AC 220 V – 240 V∿, 50 Hz/60 Hz
Power consumption
  Power on : 18 W
  Power off : 3.3 W
Temperature
  Operating : 5°C to 40°C
  Storage : –20°C to 60°C
Operating position : Horizontal only
Dimensions (WxHxD)
  : 400 mm x 94 mm x 270 mm
Weight : 3.2 kg
Format : S-VHS/VHS PAL standard
Maximum recording time
  (SP) : 240 min. with E-240 video cassette
  (LP) : 480 min. with E-240 video cassette

VIDEO/AUDIO

Signal system : PAL-type colour signal and CCIR monochrome signal, 625 lines 50 fields
Recording system : DA4 (Double Azimuth) head helical scan system
Signal-to-noise ratio: 45 dB
Horizontal resolution
  : 250 lines (VHS)
  400 lines (S-VHS)
Frequency range : 70 Hz to 10,000 Hz (Normal audio)
  20 Hz to 20,000 Hz (Hi-Fi audio)
Input/Output : 21-pin SCART connectors:
  IN/OUT x 1, IN/DECODER x 1
  RCA connectors:
  VIDEO IN x 1, AUDIO IN x 1,
  AUDIO OUT x 1

TUNER/TIMER

TV channel storage capacity
  : 99 positions (+AUX position)
Tuning system : Frequency synthesized tuner
Channel coverage : VHF 47 MHz – 89 MHz/
  104 MHz – 300 MHz/
  302 MHz – 470 MHz
  UHF 470 MHz – 862 MHz
Aerial output : UHF channels 22 – 69 (Adjustable)
Memory backup time
  : Approx. 10 min.

ACCESSORIES

Provided accessories
  : RF cable,
  Infrared remote control unit,
  "R6" battery x 2

Specifications shown are for SP mode unless otherwise specified.
E.& O.E. Design and specifications subject to change without notice.

V15S0

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No.82922SCH
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SECTION 4
CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

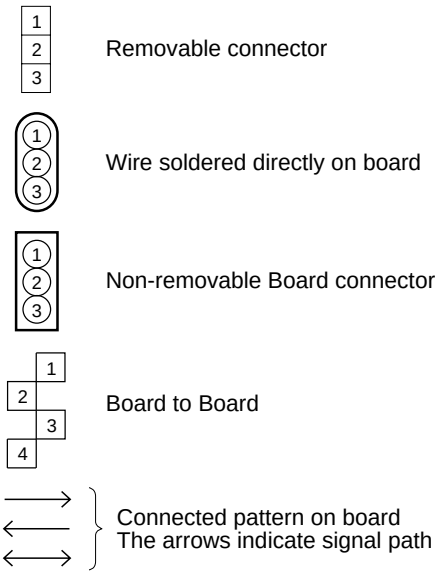
1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K or k: kΩ (1000Ω), M: MΩ (1000kΩ)
2) All capacitance values are in µF, (P: PF).
3) All inductance values are in µH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

AUX : Active at high

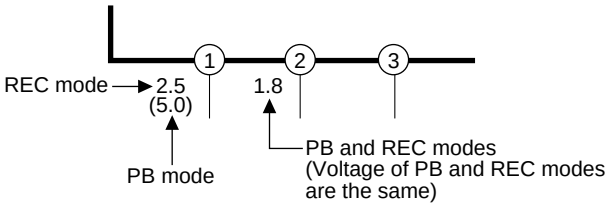
$\overline{\text{AUX}}$ or AUX(L) : Active at low

3. Interpreting Connector indications



4. Voltage measurement

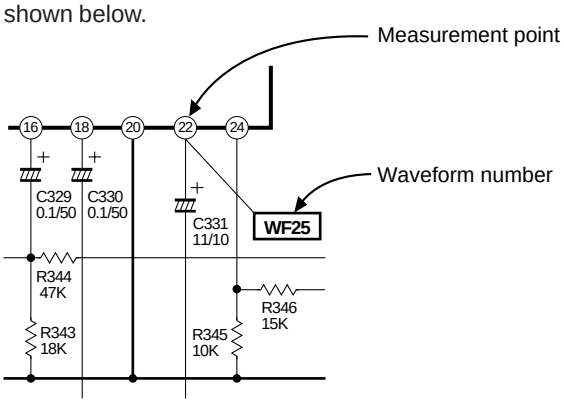
1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
   — : Unmeasurable or unnecessary to measure
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, Normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



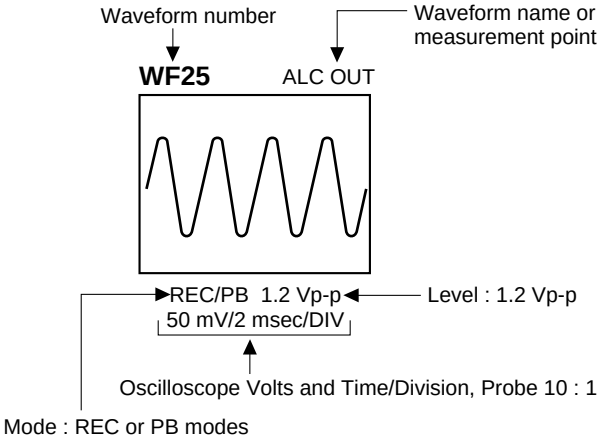
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Waveform measurement

1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test chatrs in the E-E mode
4) Indication on schematic diagram
   Waveform indications on the schematic diagram are as shown below.



5) Waveform indications



6. Signal path Symbols

The arrows indicate the signal path as follows.

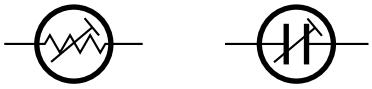
- Playback signal path
- Playback and recording signal path
- Recording signal path (including E-E signal path)
- Capstan servo path
- Drum servo path

(Example)

- R-Y Playback R-Y signal path
- Y Recording Y signal path

7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

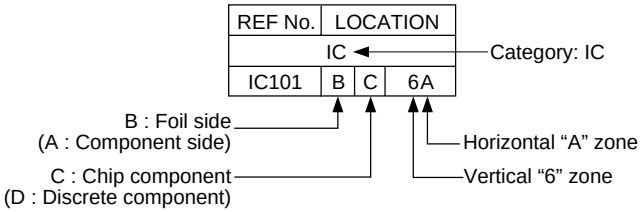
CIRCUIT BOARD NOTES

1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

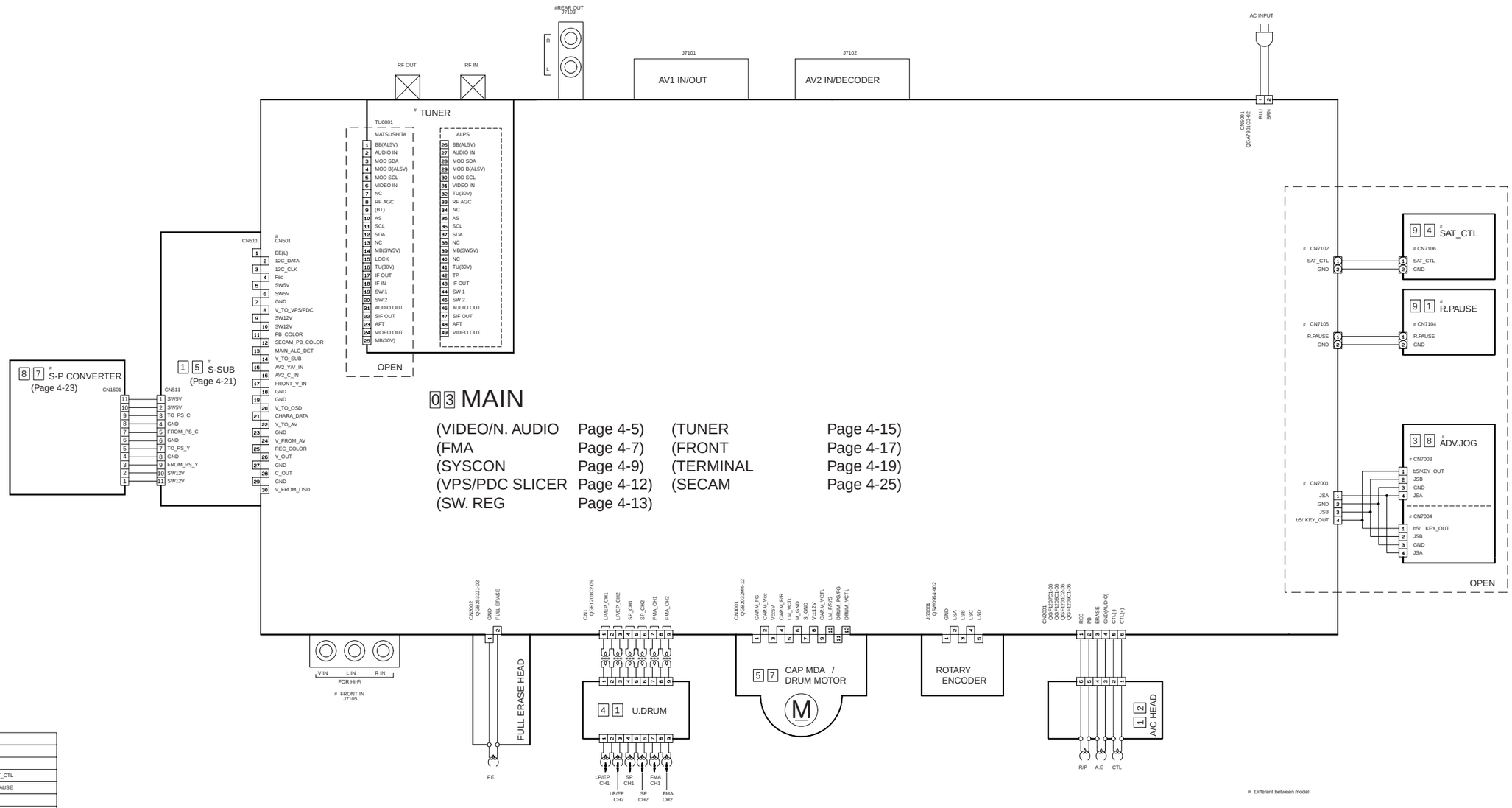
Parts location are indicated by guide scale on the circuit board.



Note:

For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

4.1 BOARD INTERCONNECTIONS



NO	NAME
94	SAT_CTL
91	R.PAUSE
87	S-P CONVERTER
57	CAP MDA
41	U.DRUM
38	ADV.JOG
15	S-SUB
12	A/C HEAD
03	MAIN

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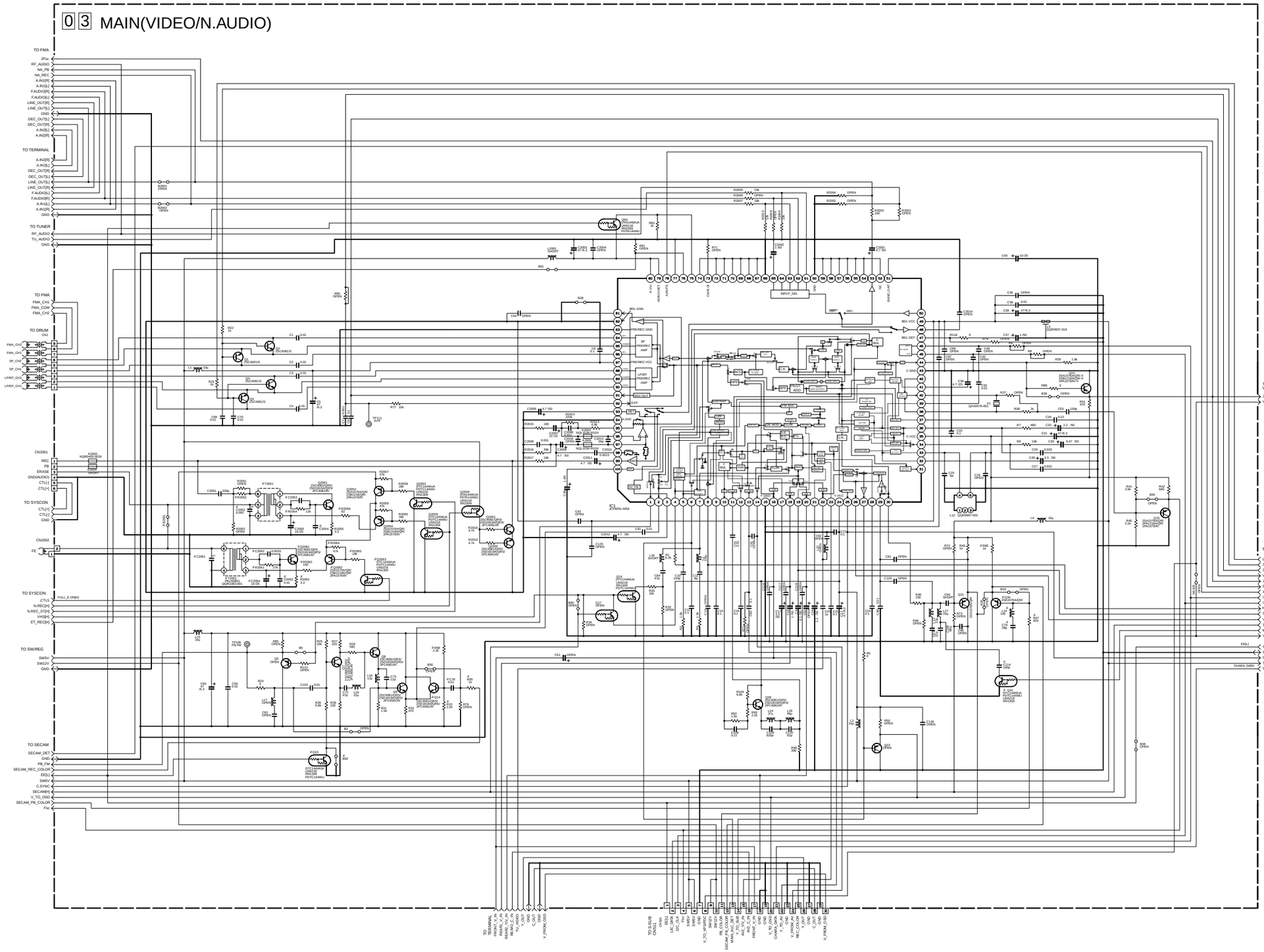
4.2 MAIN (VIDEO/N.AUDIO) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



#DIFFERENCE TABLE 1 — VIDEO

MESECAM REC/PB	"Q41," C114
YES	○
NO	×

SECAM REC/PB	"R23,R47,R65,R68,R80,", "C78,C79,L14," "Q14,Q15,Q34"	B62
YES	○	×
NO	×	○

#DIFFERENCE TABLE 2 — AUDIO

AUDIO DUBBING	B2051	Q2061-Q2063 C2062-C2063 C2065-C2067	R2053	R2054	R2056	C2052	C2053	C2054	C2061	T2051	T2052
YES	×	○	6.8k	15k	100	○	0.0033	0.01	0.033	PELN0860 or QQR1082-001	PELN0861 or QQR1083-001
NO	○	×	4.7k	12k	82	×	0.0047	0.022	0.082	PELN0832 or PELN0864 or QQR0032-001	×

○ : Used
× : Not used

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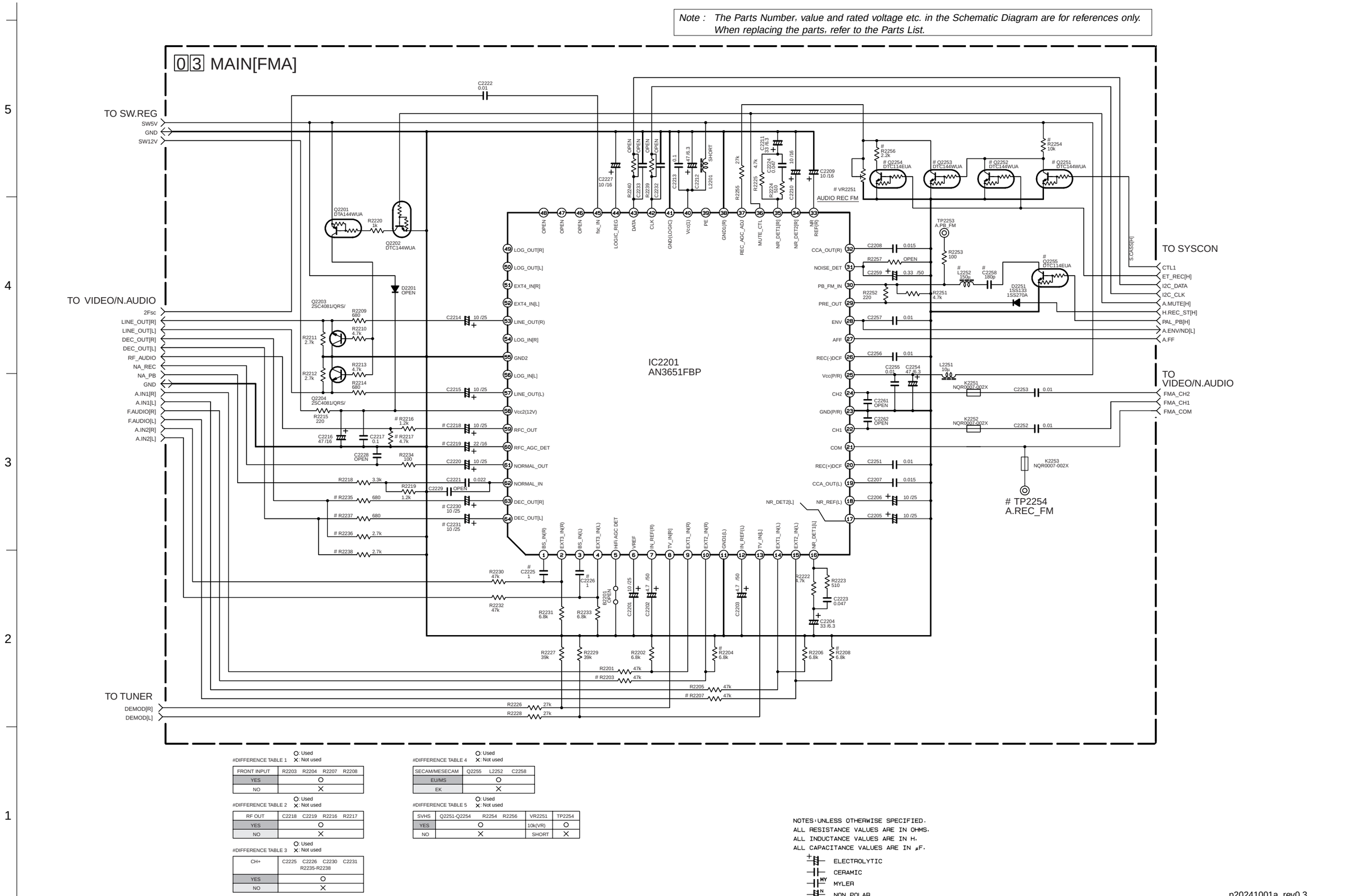
4.3 MAIN (FMA) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



#DIFFERENCE TABLE 1 (O: Used, X: Not used)

FRONT INPUT	R2203 R2204 R2207 R2208
YES	O
NO	X

#DIFFERENCE TABLE 2 (O: Used, X: Not used)

RF OUT	C2218 C2219 R2216 R2217
YES	O
NO	X

#DIFFERENCE TABLE 3 (O: Used, X: Not used)

CH+	C2225 C2226 C2230 C2231 R2235-R2238
YES	O
NO	X

#DIFFERENCE TABLE 4 (O: Used, X: Not used)

SECAM/MESECAM	Q2255 L2252 C2258
EU/MS	O
EK	X

#DIFFERENCE TABLE 5 (O: Used, X: Not used)

SVHS	Q2251-Q2254 R2254 R2256	VR2251	TP2254
YES	O	10k(VR)	O
NO	X	SHORT	X

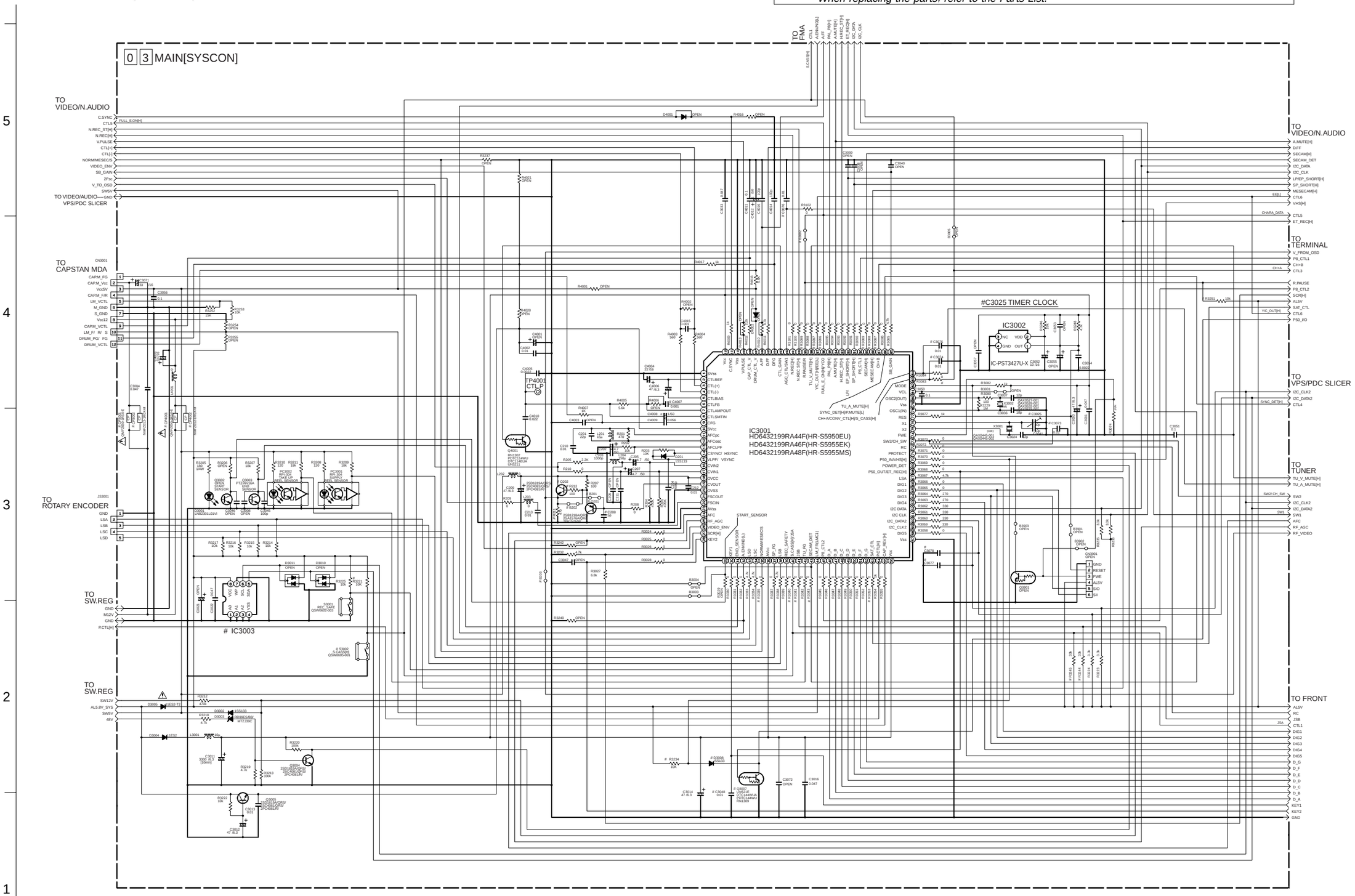
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p20241001a_rev0.3

4.4 MAIN (SYSCON) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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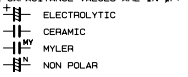
Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

JVC MODELS ○: Used
#DIFFERENCE TABLE 1 ×: Not used

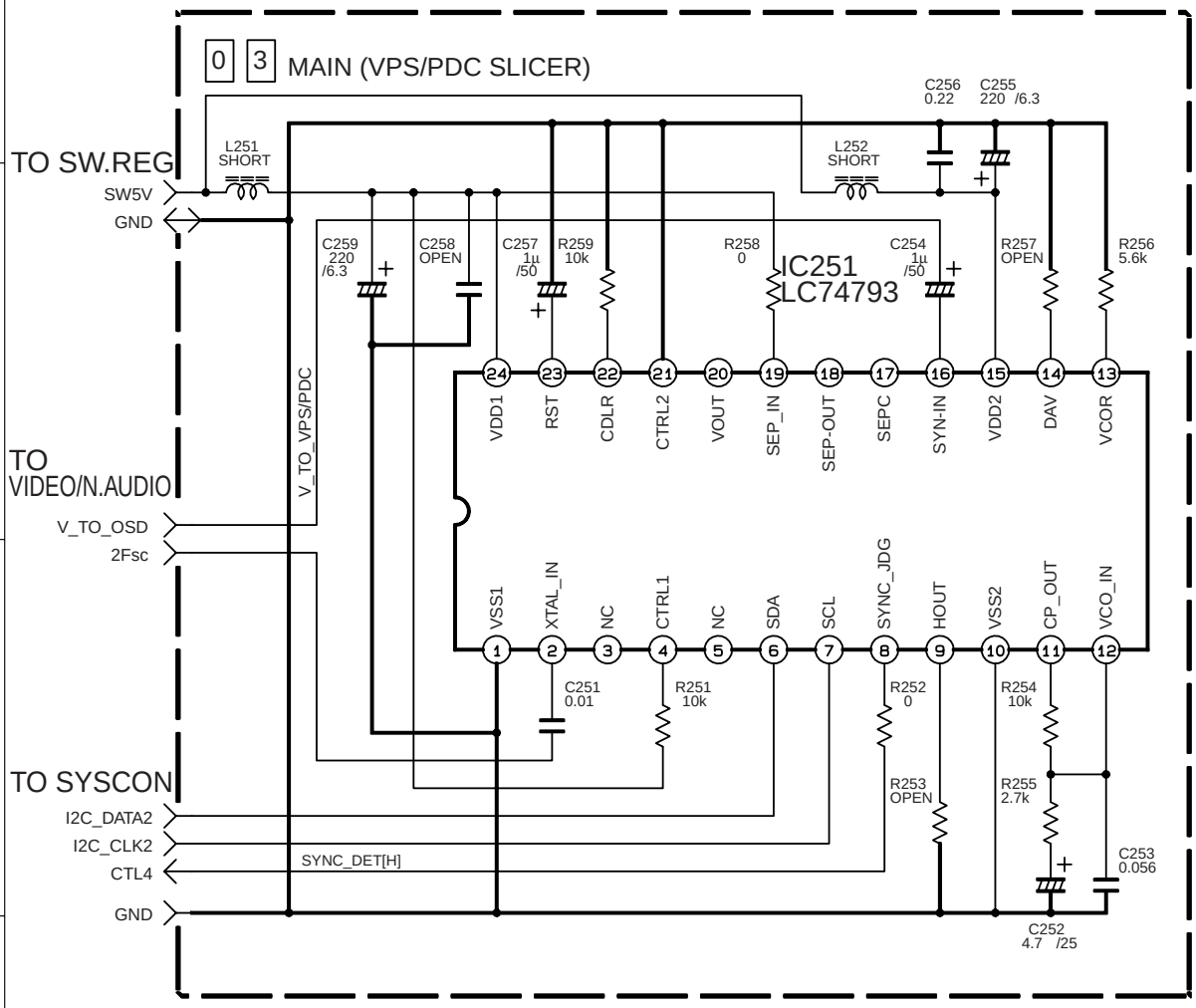
		HR-J690EU	HR-J695EK	HR-J690MS	HR-J790EU	HR-J795EK	HR-J790MS	HR-S5950EU	HR-S5950EK	HR-S5950MS
EEPROM	IC3003	16K	16K	16K	16K	16K	16K	16K	16K	16K
R.PAUSE	R3251	X	X	X	○	X	○	X	X	X
SVHS CHARA_DATA	R3099	X	X	X	○	X	○	○	○	○
	B3002	X	X	X	X	X	X	○	○	○
A.DUB	R3096	X	X	X	○	X	○	○	○	○
	C4007	X	X	X	○	X	○	X	X	X
ADV.JOG	R3244 R3245	X	X	X	○	○	○	X	X	X
	R3041	X	X	X	○	○	○	X	X	X
S.CASS [H]	R3040	X	X	X	○	○	○	○	○	○
	S3002	X	X	X	X	X	X	○	○	○
	R3221	X	X	X	X	X	X	○	○	○
SAT.CTL	R3053	○	○	○	○	○	○	X	X	X
SECAM	R3043 R3089	X	X	○	X	X	○	X	X	○
SVHS/SECAM	R3097	X	X	○	X	X	○	○	○	○
DECODER	R3083 R3087	○	X	○	○	X	○	○	○	○
MESECAM	R3035 R3088	○	X	○	○	X	○	○	X	○
OSD	B201	○	○	○	○	○	○	X	X	X
	R207	X	X	X	X	X	X	○	○	○
	Q201 Q202 R211 R212 B203	X	X	X	X	X	X	○	○	○
P50	D3008 R3234 Q3007	○	○	○	○	○	○	X	X	X
ESD	C3048 C3073 C3074 C3075 C3076	○	○	○	○	○	○	X	X	X
CURRENT PROTECTOR	CP3001 CP4001	○	○	○	○	○	○	○	○	○
	CP3002 CP4002	X	X	X	X	X	X	X	X	X
TRIM CAPACITOR	C3025	○	X	X	○	X	X	○	X	X

NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.



4.5 MAIN (VPS/PDC SLICER) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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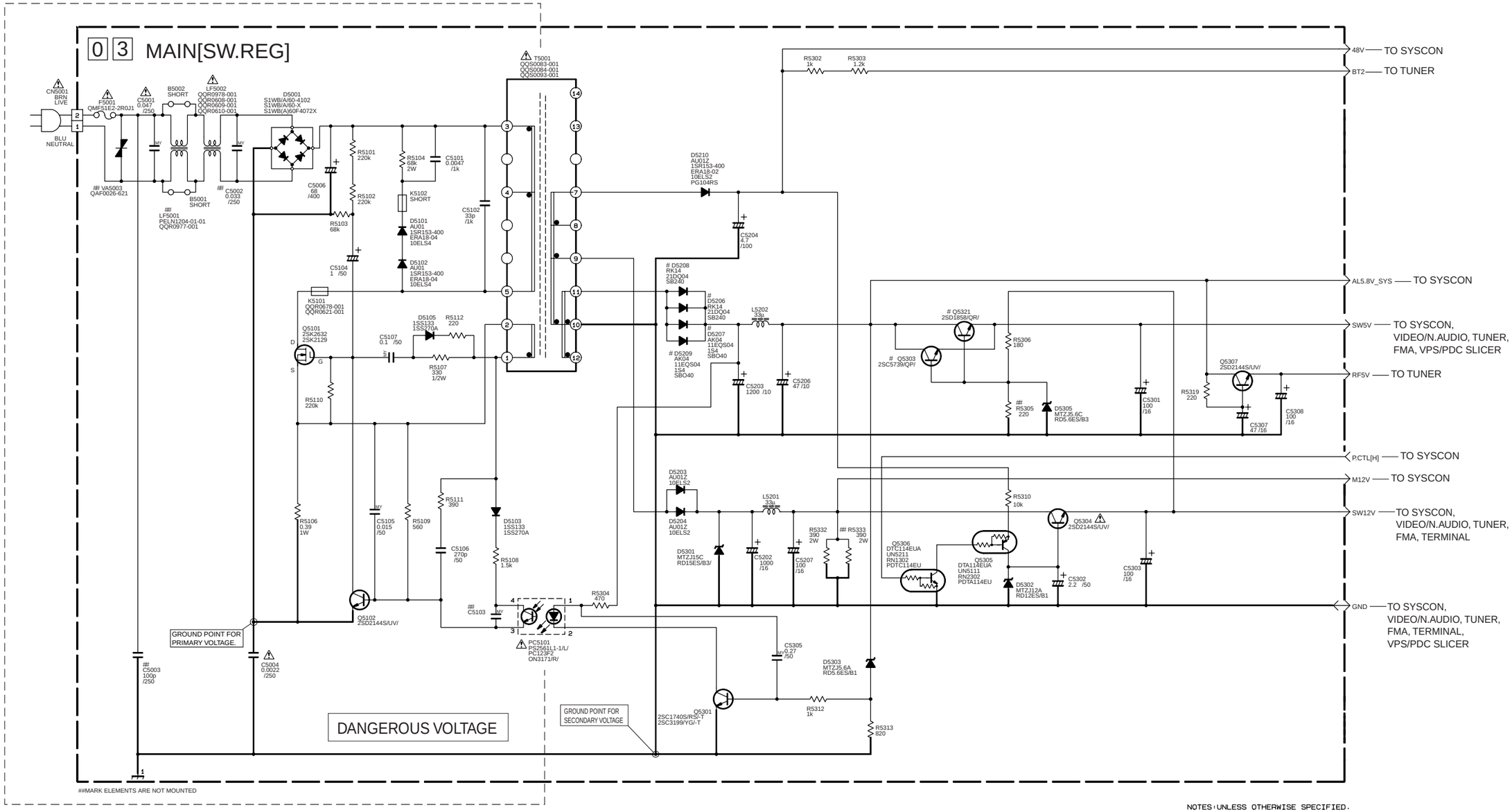
4.6 MAIN (SW REG) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



#DIFFERENCE TABLE 1

		D5206	D5208	D5207	D5209
S-VHS		NO	NO	YES	YES
VHS	EU,EK,MS	NO	NO	YES	YES
	ASIA	NO	NO	YES	NO

#DIFFERENCE TABLE 2

	Q5321	Q5303
VHS	YES	NO
S-VHS	NO	YES

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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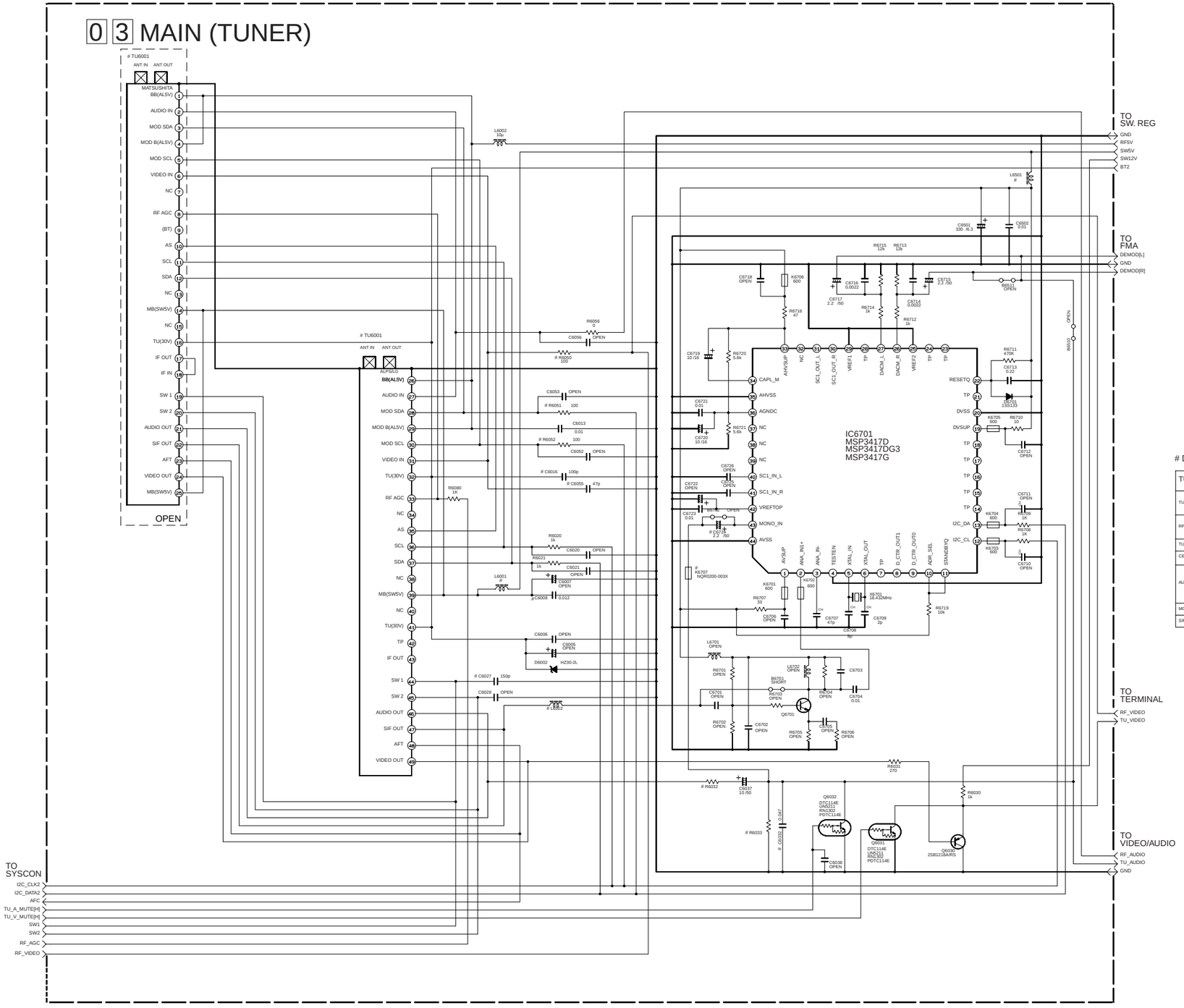
4.7 MAIN (TUNER) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE

○: Used
×: Not used

TUNER		EU		EK		FRANCE MS
		With CH+		Without CH+		With CH+
TUNER UNIT	TU6001	MITSUMI ALPS		MITSUMI ALPS		LG
		QAU0262	QAU0263	QAU0262	QAU0261	QAU0266
RF CONVERTER	R6050-R6052,	○	○	○	○	×
	C6055	○	×	○	×	×
TU 30V	C6016	×	○	×	○	×
CENELEC S2C	C6027	×	○	×	○	×
AUDIO OUT	R6032	1.8k	4.7k	1.8k	4.7k	18K
	R6033	2.7k	1.8k	2.7k	1.8k	18K
	C6032	○	○	○	○	×
MOND IN	K6707,C6724	×	×	×	×	○
SIF OUT	L6502	SHORT	SHORT	SHORT	SHORT	1.0μ

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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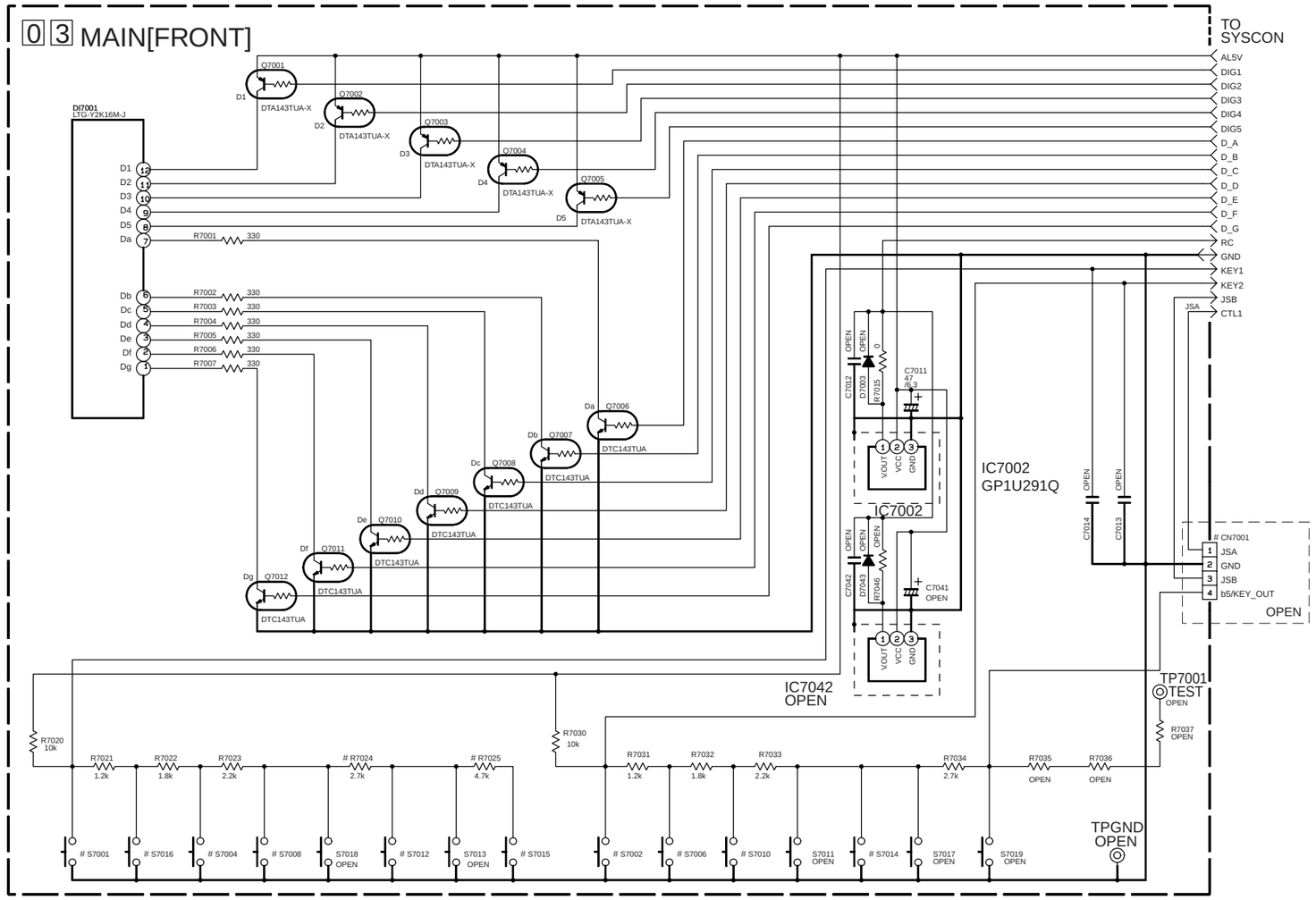
4.8 MAIN (FRONT) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE

O: Used
X: Not used

TOOL	MODEL	S7001	S7002	S7004	S7006	S7008	S7010	S7011	S7012	S7013	S7014	S7015	S7016	S7017	S7018	S7019	R7024	R7025	CN7001
400HA	HR-J790EU HR-J795EK HR-J795MS	POWER	ST/EJ	SAT	REC	PAUSE	PLAY	-	24H EXP	-	-	-	A.DUB	-	-	-	O	X	O
400H	HR-J690EU HR-J695EK HR-J695MS HR-S5950EU HR-S5955EK HR-S5955MS	POWER	ST/EJ	CH-	CH+	REC	PAUSE	-	PLAY	-	REW	FF	SAT	-	-	-	O	O	X
	S0	POWER	ST/EJ	CH-	CH+	REC	PAUSE	-	PLAY	-	REW	FF	SET	-	-	-	O	O	X

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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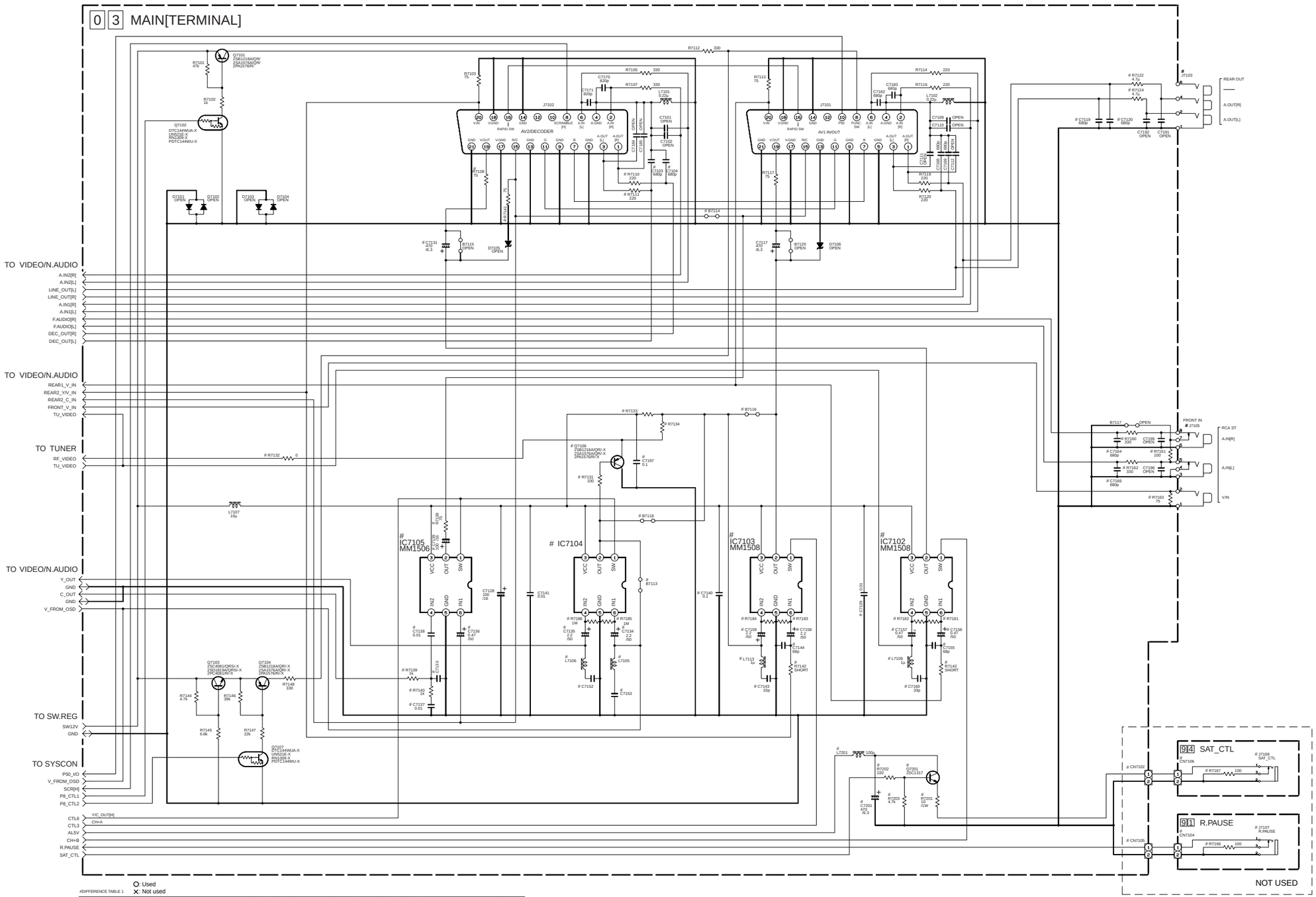
4.9 MAIN (TERMINAL) SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



O: Used
X: Not used

#DIFFERENCE TABLE 1

VIDEO			IC7102, IC7103, R7108, R7142, R7143, R7181~ R7184, C7131, C7143, C7144, C7155~ C7160, L7109, L7113	B7116	B7113 R7132	R7133	R7134	Q7106, R7131	B7118	B7114	IC7105, R7138~ R7141, R7185, R7186, C7129, C7133~ C7140, C7152, C7153, L7105, L7106	IC7104
VHS	DECODER	YES	O	X	O	QRE141J-471Y	470	O	X	O	X	X
		NO	X	O	O	QRE121J-331Y	0	O	X	O	X	X
S-VHS	DECODER	YES	O	X	X	QRE141J-471Y	470	O	X	X	O	MM1503
		NO	X	O	X	X	0	X	O	X	O	MM1507

#DIFFERENCE TABLE 2

AUDIO		R7110,R7111 C7103,C7104
DECODER	YES	O
	NO	X

#DIFFERENCE TABLE 3

REAR RCA OUT	R7122 R7124 C7120 C7119
YES	O
NO	X

#DIFFERENCE TABLE 4

FRONT IN	J7105, R7160-R7163 C7164,C7166
YES	O
NO	X

#DIFFERENCE TABLE 5

REMOTE PAUSE	J7107 R7166 CN7104,CN7105
YES	O
NO	X

#DIFFERENCE TABLE 6

SAT.CTL	J7108,Q7201,R7167 R7201-R7203,C7201 L7201,CN7102,CN7106
YES	O
NO	X

NOTES:UNLESS OTHERWISE SPECIFIED.

ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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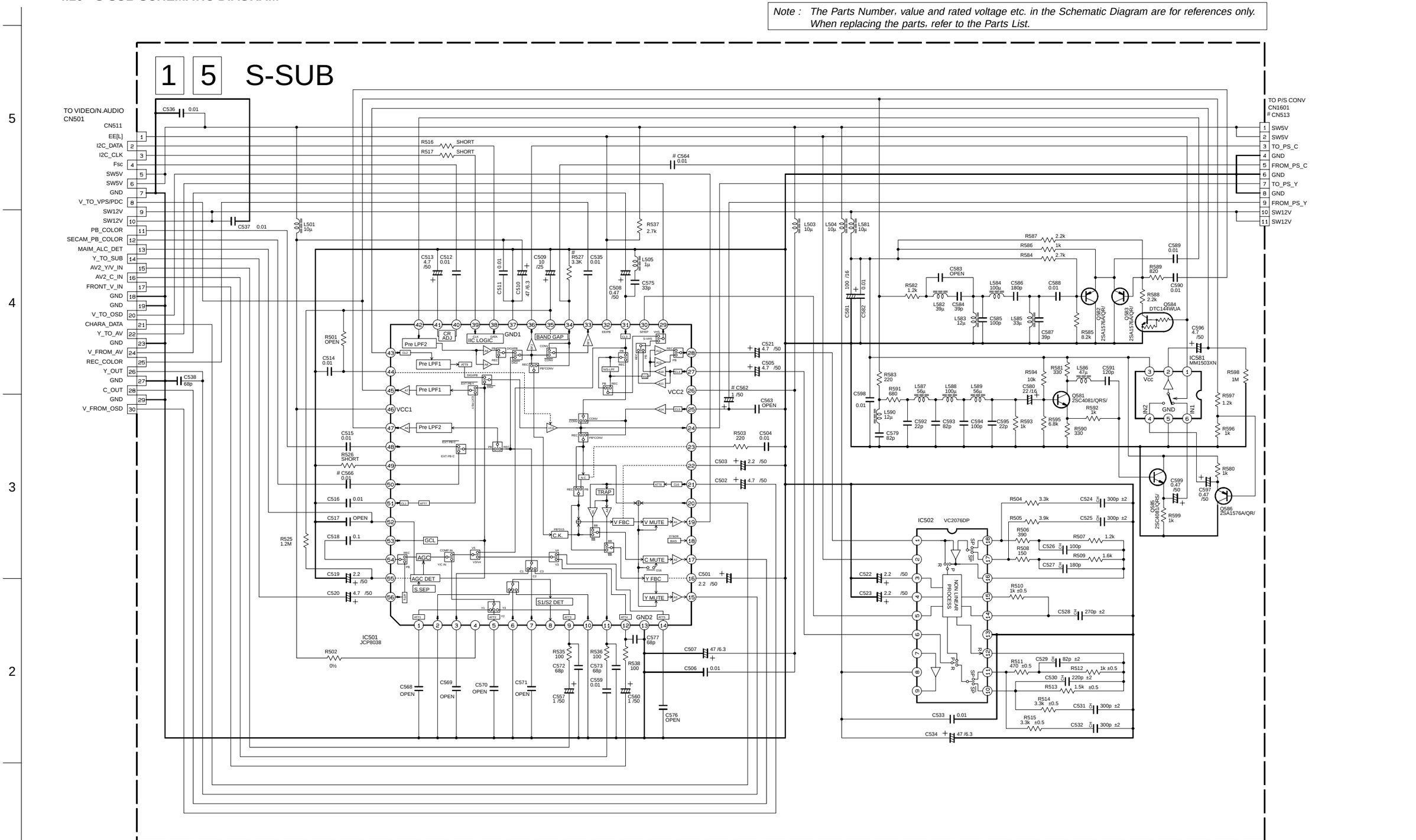
4.10 S-SUB SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE

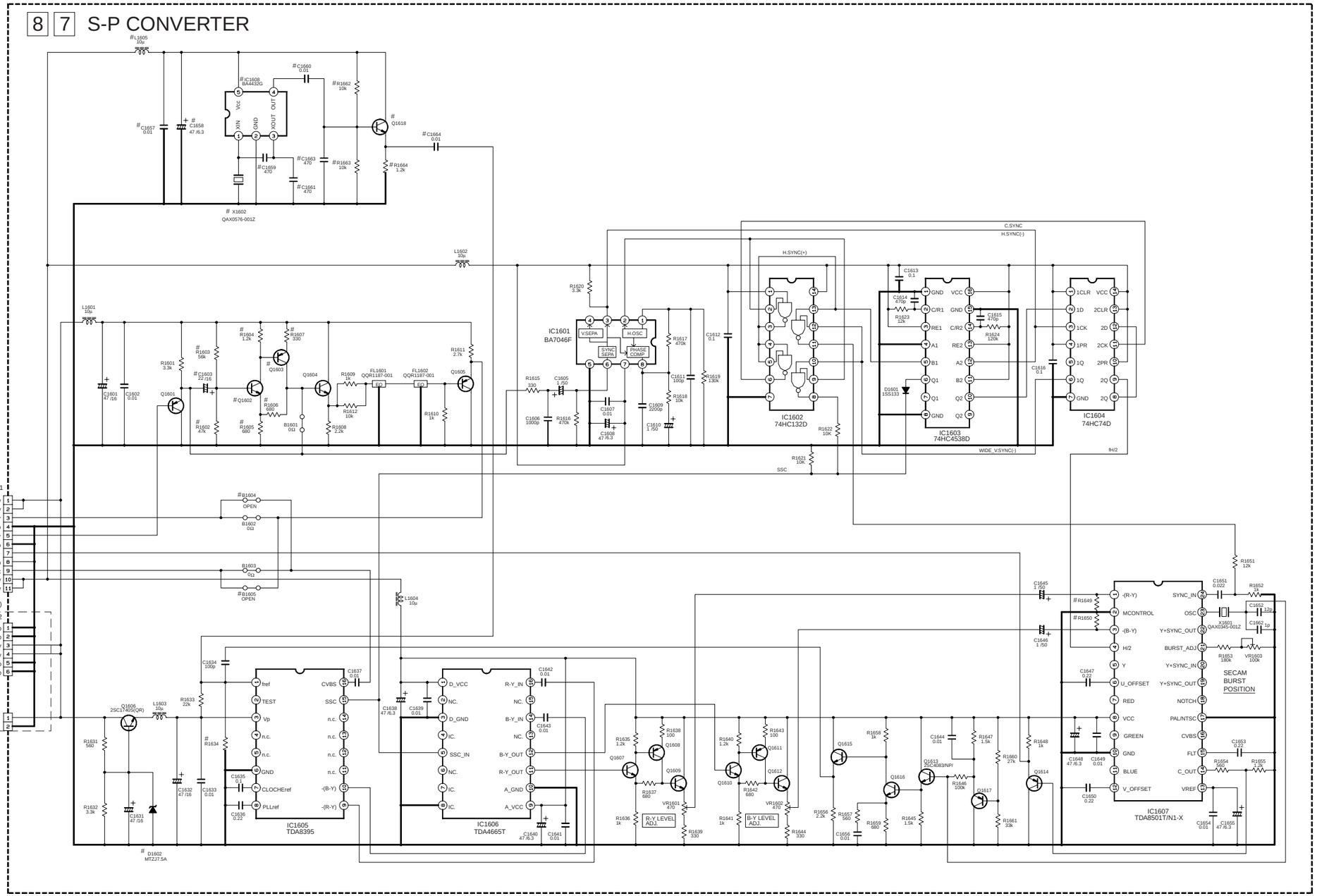
○ : Used
× : Not used

	CN513 C562 C564 C566	R527
MS	○	×
OTHERS	×	○

p20279001a_rev2.1

4.11 S-P CONVERTER SCHEMATIC DIAGRAM [MS MODEL]

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



MARKED ELEMENTS ARE NOT MOUNTED.

ABOUT ## MARKED ELEMENTS

MODELS \ ELEMENTS	CN1601	CN1602
HR-S6850MS HR-S7850MS HR-S8850MS HR-S5955MS	1pin-11pin	NOT USED
VR1200/39	3pin-11pin	3pin-6pin

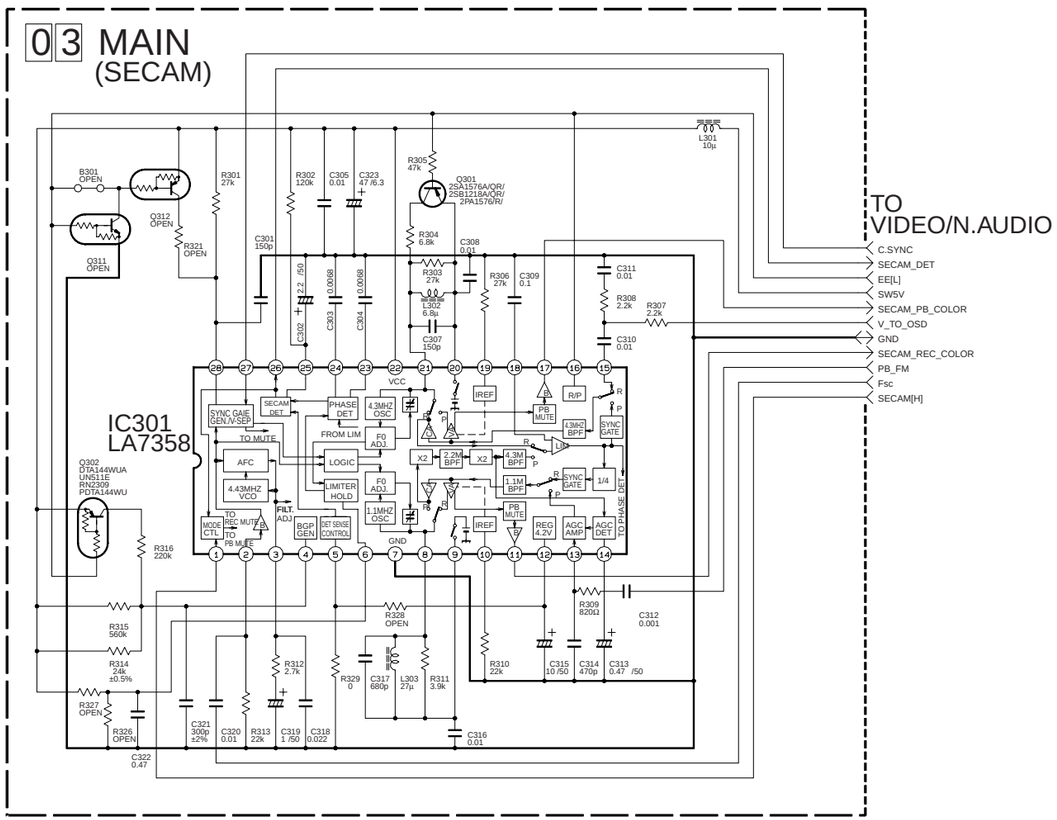
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p20219001a_rev0.1

4.12 MAIN (SECAM) SCHEMATIC DIAGRAM [MS MODEL]

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p40044001a_rev0

4.13 CPU PIN FUNCTION

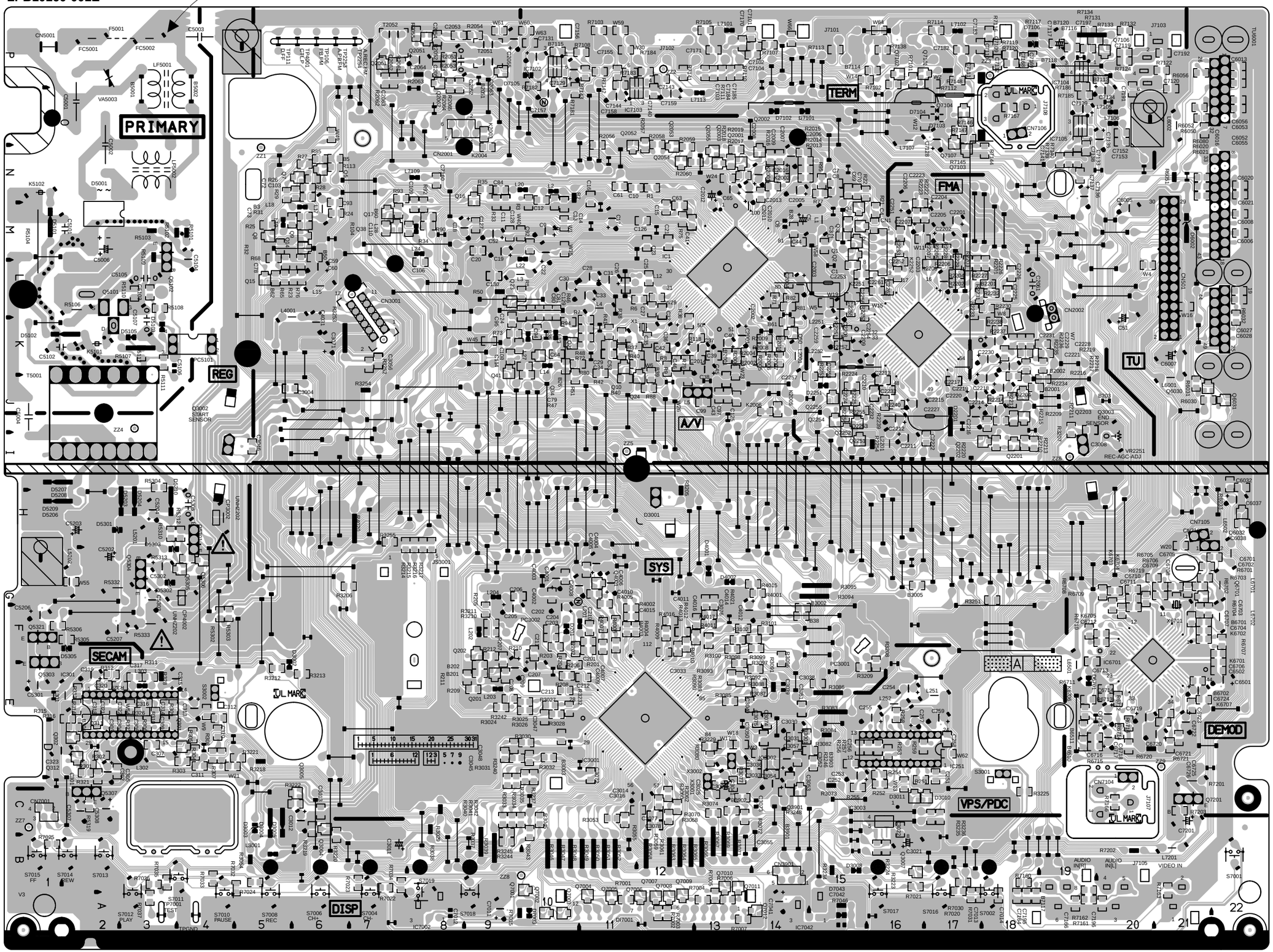
<SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	SVSS	-	GND
2	CTLREF	-	CTL REFERENCE VOLTAGE
3	CTL(+)	IN/OUT	CTL(+) SIGNAL
4	CTL(-)	IN/OUT	CTL(-) SIGNAL
5	CTLBIAS	-	CTL BIAS VOLTAGE
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLFB	IN	CTL PULSE FEEDBACK
8	CTLSMTIN	IN	CTL PULSE INPUT
9	CFG	IN	CAPSTAN FG PULSE INPUT
10	SVCC	-	SYSTEM POWER
11	AFCPC	OUT	AFC CLOCK (SYNC SEPARATOR FOR OSD / EXTERNAL CIRCUIT FOR AFC)
12	AFCOSC	OUT	AFC CLOCK (SYNC SEPARATOR FOR OSD / EXTERNAL CIRCUIT FOR AFC)
13	AFCLPF	IN	FILTER OUTPUT FOR HORIZONTAL SYNCHRONIZING OF OSD CHARACTER
14	CSYNC/HSYNC	IN	COMPOSITE SYNC/HORIZONTAL SYNC
15	VLPF/VSYNC	-	NC
16	CVIN1	IN	COMPOSITE VIDEO SIGNAL INPUT(1)
17	CVIN2	IN	COMPOSITE VIDEO SIGNAL INPUT(2)
18	OVCC	-	SYSTEM POWER
19	CVOUT	OUT	COMPOSITE VIDEO SIGNAL OUTPUT
20	OVSS	-	GND
21	FSCOUT	OUT	FSC OUTPUT FOR OSD
22	FSCIN	IN	FSC INPUT FOR OSD
23	AVSS	-	GND FOR ANALOG CIRCUIT
24	AFC	IN	TUNING CLOCK
25	RF AGC	IN	CHANGES IN ATS+IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN THE SAME CHANNEL IS RECEIVED MORE THAN ONCE ARE INPUT.
26	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
27	SCR(H)	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE:H)
28	KEY2	IN	OPERATION CONTROL SIGNAL
29	START_SENSOR	IN	START SENSOR
30	KEY1	IN	OPERATION CONTROL SIGNAL
31	END_SENSOR	IN	END SENSOR
32	A.ENV/ND(L)	IN	AUDIO PB FM ENV.INPUT/NON HiFi MODE:L
33	LSD	-	MECHANISM MODE DETECT(D)
34	LSC	-	MECHANISM MODE DETECT(C)
35	NORM/MESEC/S	IN	NORMAL MODE:L/MESECAM MODE:M/S VHS MODE:H
36	AVCC	-	SYSTEM POWER FOR ANALOG CIRCUIT
37	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
38	LSB	-	MECHANISM MODE DETECT(B)
39	REC_SAFETY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	S.CASS[H]/JSA	IN	DETECTION SIGNAL FOR SVHS CASSETTE (SVHS:H) //INPUT FOR THE JOG SHUTTLE
42	TU_FG	IN	DETECTION SIGNAL FOR TAKE-UP REEL ROTATION/TAPE REMAIN
43	SECAM_DET(H)	IN	DETECTION SIGNAL FOR SECAM ON P.B MODE (SECAM:H)
44	LM_FR(LMC1)	OUT	LOADING MOTOR DRIVE
45	PB_CTL2	OUT	PARALLEL CONTROLLER FOR CH+ IC (IN/OUT SWITCH)
46	D_A	OUT	LED DRIVE
47	D_B	OUT	LED DRIVE
48	D_C	OUT	LED DRIVE
49	D_D	OUT	LED DRIVE
50	D_E	OUT	LED DRIVE
51	D_F	OUT	LED DRIVE
52	D_G	OUT	LED DRIVE
53	SAT_CTL	OUT	CONTROL SIGNAL FOR SATELLITE RECEIVER
54	P.CTL(H)	OUT	CONTROL SIGNAL FOR SWITCHING POWER SUPPLY
55	CAP_REV(H)	OUT	CAPSTAN MOTOR REVERSE CONTROL (REV:H)
56	VCC	-	SYSTEM POWER

PIN NO.	LABEL	IN/OUT	FUNCTION
57	VCC	-	SYSTEM POWER
58	DIG5	OUT	LED DRIVE
59	I2C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
60	I2C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
61	I2C_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
62	I2C_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
63	DIG4	OUT	LED DRIVE
64	DIG3	OUT	LED DRIVE
65	DIG2	OUT	LED DRIVE
66	DIG1	OUT	LED DRIVE
67	LSA	IN	MECHANISM MODE DETECT(A)
68	P50_OUT/ET_REC(H)	OUT	CONTROL SIGNAL FOR TV LINK/ET REC MODE:H
69	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
70	P50_IN/VHS(H)	OUT	CONTROL SIGNAL FOR TV LINK/VHS MODE(H)
71	PROTECT	IN	DETECTION SIGNAL FOR SW POWER SUPPLY
72	RC	IN	REMOTE CONTROL DATA INPUT
73	SW2/CH_SW	IN	TUNER SYSTEM MODE:L /CHANNEL SWITCHING SIGNAL
74	FWE	OUT	FLASH WRITE ENABLE
75	X2	-	TIMER CLOCK (32.768KHz)
76	X1	-	TIMER CLOCK (32.768KHz)
77	$\overline{RES}$	-	RESET TERMINAL
78	OSC1(IN)	-	MAIN SYSTEM CLOCK(10MHz)
79	VSS	-	GND
80	OSC2(OUT)	-	MAIN SYSTEM CLOCK(10MHz)
81	VCL	-	SYSTEM POWER
82	MODE	-	NC
83	CH+A/CONV_CTL	OUT	AV1 OUTPUT SWITCH CONTROL / R/F CONVERTER ON/OFF CONTROL
84	TU_A_MUTE(H)	OUT	TUNER AUDIO MUTE CONTROL (MUTE:H)
85	SB_GAIN	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
86	SYNC_DET(H)/P.MUTE(L)	IN/OUT	DETECTION OF VIDEO SYNC SIGNAL (DETECTED:H)/ PICTURE CONTROL (MUTE:L)
87	CH+B	OUT	AV2 OUTPUT SWITCH CONTROL
88	MESECAM(H)	OUT	MESECAM:H
89	SECAM(H)	OUT	COLOUR SYSTEM SECAM:H
90	PB_CTL1	OUT	PARALLEL CONTROLLER FOR CH+ IC (IN/OUT SWITCH)
91	SP_SHORT(H)	OUT	MODE SELECT
92	LP/EP_SHORT(H)	OUT	MODE SELECT
93	H.REC_ST(H)	OUT	HIFI AUDIO SOUND RECORDING START
94	A.MUTE(H)	OUT	AUDIO MUTE CONTROL (MUTE:H)
95	PAL_PB(H)	OUT	PLAYBACK MODE FOR PAL:H
96	FULL_E_ON(H)/YCO	IN	FULL ERASE ON:H
97	Y/C_OUT/EE(L)	-	Y/C OUT[H]/EE:L
98	N.REC_ST(H)	OUT	NORMAL AUDIO SOUND RECORDING START
99	TU_V_MUTE(H)	OUT	TUNER VIDEO CONTROL (MUTE:H)
100	N.REC_ST(H)	OUT	NORMAL AUDIO SOUND RECORDING START
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	AGC_CTL/SW1	IN	AGC CONTROL INPUT/TUNER SYSTEM MODE:H
103	CTL GAIN	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHING
104	DFG	IN	DRUM FG PULSE INPUT
105	D.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/TIMING CONTROL SIGNAL FOR REC
106	A.FF	OUT	AUDIO FF OUTPUT
107	CAP_CTL_V	OUT	CAPSTAN MOTOR CONTROL
108	DRUM_CTL_V	OUT	DRUM MOTOR CONTROL
109	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
110	VSS	-	GND
111	C.SYNC	IN	COMPOSITE SYNC
112	VCC	-	SYSTEM POWER

4.14 MAIN CIRCUIT BOARD

<03> MAIN
LPB10160-001E



COMPONENT PARTS LOCATION GUIDE <MAIN>

REF.NO.	LOCATION		
CAPACITOR			
C1	B	C	15L
C2	B	C	15M
C3	B	C	15M
C4	B	C	16M
C5	A	D	14M
C6	A	D	14M
C7	B	C	15N
C8	B	C	15N
C9	A	D	10M
C10	B	C	11N
C11	B	C	9N
C12	B	C	10N
C13	B	C	10N
C14	B	C	10M
C15	B	C	12M
C16	B	C	11N
C17	A	D	11M
C18	A	D	9M
C19	A	D	9M
C20	B	C	9M
C21	B	C	12M
C22	A	D	10M
C23	B	C	12M
C24	B	C	10L
C25	B	C	12L
C26	B	C	11L
C27	B	C	12L
C28	A	D	11L
C29	B	C	11K
C30	A	D	10L
C31	A	D	11L
C32	B	C	12L
C33	A	D	11L
C34	B	C	11K
C35	B	C	12K
C36	A	D	12K
C37	A	D	12K
C38	A	D	13K
C39	B	C	13K
C40	A	D	13K
C41	B	C	12M
C42	B	C	12K
C43	B	C	13J
C44	B	C	14M
C45	B	C	13J
C46	B	C	12K
C51	A	D	20K
C52	A	D	9M
C53	B	C	11K
C59	B	C	6M
C60	A	D	6L
C61	B	C	11N
C63	B	C	12M
C64	B	C	10K
C65	A	D	13N
C69	B	C	15N
C70	B	C	15N
C72	B	C	6N
C73	B	C	6M
C78	B	C	5L
C79	B	C	10K
C80	B	C	10L
C81	B	C	10L
C84	B	C	9N
C92	B	C	10M
C93	B	C	6N
C94	B	C	10K
C95	B	C	9K
C97	B	C	13J
C99	B	C	13J
C103	B	C	6N
C106	B	C	8L
C108	B	C	9K
C109	B	C	8M
C110	B	C	8M
C114	B	C	9K
C125	B	C	13J
C126	B	C	12M
C127	B	C	9M
C128	B	C	9M
C129	B	C	10L
C130	B	C	9L
C201	B	C	11F
C202	A	D	10F
C203	B	C	10F
C204	B	C	10F
C205	A	D	9F
C206	B	C	9G
C207	A	D	10E
C208	B	C	9E
C209	A	D	9E
C210	B	C	11F
C211	B	C	10F
C212	B	C	11E
C213	B	C	10E
C251	B	C	17D
C252	A	D	15D
C253	B	C	15D
C254	A	D	16E
C255	A	D	16E
C256	B	C	16D
C257	A	D	16D
C258	B	C	17D
C259	A	D	17E
C301	B	C	2D
C302	A	D	2D
C303	B	C	2D

REF.NO.	LOCATION		
C304	B	C	3D
C305	B	C	2D
C307	B	C	3D
C308	B	C	3D
C309	B	C	3D
C310	B	C	4D
C311	B	C	4D
C312	B	C	4E
C313	A	D	4E
C314	B	C	3E
C315	A	D	3E
C316	B	C	3E
C317	B	C	3E
C318	B	C	2E
C319	A	D	2E
C320	B	C	2E
C321	B	C	2E
C322	B	C	3E
C323	A	D	2D
C2001	A	D	13K
C2002	A	D	14L
C2003	A	D	14L
C2004	B	C	14L
C2005	A	D	14N
C2006	B	C	14N
C2007	A	D	14N
C2008	A	D	14N
C2009	B	C	14N
C2010	B	C	14N
C2011	A	D	13N
C2012	A	D	13M
C2013	B	C	14N
C2014	B	C	13K
C2016	B	C	14N
C2051	B	C	8P
C2052	A	D	8P
C2053	B	C	8P
C2054	B	C	8P
C2055	A	D	9P
C2061	A	D	18L
C2062	B	C	7P
C2063	B	C	7P
C2064	A	D	8P
C2201	A	D	17M
C2202	A	D	17M
C2203	A	D	17L
C2204	A	D	17M
C2205	A	D	16M
C2206	A	D	16M
C2207	B	C	16M
C2208	B	C	15K
C2209	A	D	15K
C2210	A	D	16K
C2211	A	D	16I
C2212	A	D	16J
C2213	B	C	16J
C2214	A	D	18J
C2215	A	D	17J
C2216	A	D	17J
C2217	B	C	17J
C2218	A	D	18J
C2219	A	D	18K
C2220	A	D	18J
C2221	B	C	18K
C2222	B	C	17I
C2223	B	C	16M
C2224	B	C	15J
C2225	B	C	18L
C2226	B	C	18L
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C2228	B	C	19K
C2229	B	C	18K
C2230	A	D	18K
C2231	A	D	18K
C2232	B	C	16J
C2233	B	C	16J
C2251	B	C	16M
C2252	B	C	16L
C2253	B	C	15L
C2254	A	D	15L
C2255	B	C	15L
C2256	B	C	15L
C2257	B	C	15J
C2258	B	C	15K
C2259	A	D	15K
C2261	B	C	16L
C2262	B	C	16L
C3004	B	C	5J
C3008	B	C	19J
C3011	A	D	7B
C3012	A	D	6C
C3013	B	C	6C
C3014	A	D	12C
C3016	B	C	12C
C3021	A	D	16B
C3022	B	C	16C
C3024	B	C	13C
C3025	A	D	13C
C3030	A	D	14D
C3031	B	C	14D
C3033	B	C	12F
C3036	B	C	14D
C3037	B	C	14D
C3038	B	C	15E
C3039	A	D	14E
C3040	B	C	13E
C3041	B	C	13C
C3045	B	C	9D

REF.NO.	LOCATION		
C3046	B	C	5I
C3047	B	C	10E
C3048	B	C	9D
C3050	B	C	14D
C3051	B	C	14E
C3052	A	D	14D
C3053	B	C	14C
C3054	B	C	14D
C3055	A	D	14C
C3056	B	C	7K
C3057	B	C	14D
C3071	A	D	6K
C3072	B	C	11D
C3073	A	D	14C
C3074	B	C	14D
C3075	B	C	14E
C3076	B	C	13F
C3077	B	C	12C
C3078	B	C	12C
C4001	A	D	10G
C4002	B	C	10G
C4003	B	C	10G
C4004	A	D	11G
C4005	B	C	11G
C4006	A	D	11G
C4007	B	C	11F
C4008	A	D	11G
C4009	B	C	11F
C4010	B	C	11G
C4011	B	C	12F
C4012	A	D	13F
C4014	B	C	13G
C4015	B	C	11F
C4016	B	C	13F
C4031	A	D	6L
C5001	A	D	2P
C5002	A	D	2N
C5003	A	D	4P
C5004	A	D	1J
C5006	A	D	2M
C5101	A	D	2M
C5102	A	D	1K
C5103	B	C	3L
C5104	A	D	4M
C5105	A	D	3L
C5106	A	D	3J
C5107	A	D	3L
C5202	A	D	3G
C5203	A	D	2H
C5204	A	D	3H
C5206	A	D	1F
C5207	A	D	3F
C5301	A	D	1E
C5302	A	D	3G
C5303	A	D	3G
C5305	A	D	4H
C5307	A	D	2C
C5308	A	D	2C
C6005	A	D	20M
C6006	B	C	22M
C6007	A	D	21K
C6008	B	C	22M
C6013	B	C	22P
C6016	B	C	21O
C6020	B	C	22N
C6021	B	C	22N
C6027	B	C	22L
C6028	B	C	22L
C6032	B	C	22I
C6037	A	D	22H
C6038	B	C	22H
C6052	B	C	22O
C6053	B	C	22P
C6055	B	C	22O
C6056	B	C	22P
C6501	A	D	22E
C6502	B	C	22E
C6701	B	C	22G
C6702	B	C	21G
C6703	B	C	21F
C6704	B	C	21F
C6705	B	C	21G
C6706	B	C	22F
C6707	B	C	21F
C6708	B	C	21G
C6709	B	C	21G
C6710	B	C	20G
C6711	B	C	20F
C6712	B	C	20F
C6713	B	C	19F
C6714	B	C	20E
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C6716	B	C	19D
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C6718	B	C	20D
C6719	A	D	20E
C6720	A	D	21D
C6721	B	C	21E
C6722	A	D	21E
C6723	B	C	21E
C6724	A	D	21E
C6725	B	C	21D
C6726	B	C	21D
C7011	A	D	9A
C7012	A	D	8A
C7013	B	C	17A
C7014	B	C	18A
C7041	A	D	14A

REF.NO.	LOCATION		
C7042	A	D	15A
C7101	B	C	13P
C7102	B	C	14P
C7103	B	C	13P
C7104	B	C	14P
C7109	B	C	18P
C7110	B	C	18P
C7111	B	C	17P
C7112	B	C	18P
C7117	A	D	19P
C7119	B	C	20P
C7120	B	C	21O
C7128	A	D	17O
C7129	B	C	10P
C7131	A	D	10P
C7133	B	C	19N
C7134	A	D	20O
C7135	A	D	20O
C7136	A	D	19N
C7137	B	C	19N
C7138	B	C	19O
C7139	A	D	19O
C7140	B	C	12O
C7141	B	C	19N
C7143	B	C	12P
C7144	B	C	11P
C7152	B	C	20O
C7153	B	C	20O
C7155	B	C	11P
C7156	A	D	10P
C7157	A	D	10O
C7158	A	D	11O
C7159	A	D	12O
C7160	B	C	8N
C7164	B	C	18A
C7166	B	C	19A
C7168	B	C	18P
C7169	B	C	18P
C7170	B	C	13P
C7171	B	C	13P
C7182	B	C	17P
C7183	B	C	17P
C7184	B	C	13P
C7185	B	C	13P
C7191	B	C	20O
C7192	B	C	21P
C7195	B	C	18A
C7196	B	C	20A
C7197	B	C	19P
C7201	A	D	21C
CONNECTOR			
CN1	A	D	16M
CN501	A	D	21K
CN2001	A	D	9O
CN2002	A	D	19L
CN3001	A	D	7L
CN3901	A	D	14B
CN5001	A	D	1P
CN7001	A	D	1C
CN7102	A	D	21H
CN7104	A	D	20D
CN7105	A	D	21H
CN7106	A	D	18O
DIODE			
D201	A	D	10F
D2201	A	D	17I
D2251	A	D	15J
D3001	A	D	12H
D3002	A	D	5E
D3003	A	D	5B
D3004	A	D	5C
D3005	A	D	5C
D3008	A	D	15B
D3010	B	C	17C
D3011	B	C	16C
D4001	A	D	13G
D4002	A	D	13G
D5001	B	C	2M
D5101	A	D	1M
D5102	A	D	2K
D5103	A	D	3K
D5105	A	D	3K
D5203	A	D	3I
D5204	A	D	3I
D5206	A	D	2H
D5207	A	D	2I
D5208	A	D	2I
D5209	A	D	2H
D5210	A	D	3I
D5301	A	D	2H
D5302	A	D	4G
D5303	A	D	4G
D5305	A	D	2F
D6002	A	D	21M
D6701	A	D	19E
D7003	A	D	10A
D7043	A	D	15A
D7101	A	D	14O
D7102	A	D	14O
D7103	B	C	17O
D7104	B	C	17O
D7105	A	D	9P
D7106	A	D	18P
FUSE			
F5001	A	D	2P
FC5001	A	D	2P
FC5002	A	D	3P

REF.NO.	LOCATION		
IC			
IC1	B	C	13L
IC251	A	D	17D
IC301	A	D	2E
IC2201	B	C	16K
IC3001	B	C	12E
IC3002	B	C	14D
IC3003	B	C	16C
IC6701	B	C	20F
IC7002	A	D	8A
IC7042	A	D	15A
IC7102	B	C	10P
IC7103	B	C	12O
IC7104	B	C	19P
IC7105	B	C	19O
COIL			
L1	A	D	15M
L2	A	D	10N
L3	A	D	9L
L4	A	D	11L
L5	A	D	13J
L12	A	D	12L
L13	A	D	10K
L14	A	D	10K
L15	A	D	6L
L17	A	D	6N
L18	A	D	6M
L19	A	D	5M
L20	A	D	9N
L22	A	D	9M
L24	A	D	8M
L27	A	D	10K
L28	A	D	8M
L201	A	D	11F
L202	A	D	9F
L203	A	D	9E
L204	A	D	9G
L251	A	D	17E
L252	A	D	16E
L301	A	D	2E
L302	A	D	3D
L303	A	D	3E
L2001	A	D	14K
L2201	A	D	16I
L2251	A	D	15L
L2252	A	D	15K
L3001	A	D	5B
L4001	A	D	5L
L5201	A	D	3H
L5202	A	D	2G
L6001	A	D	21J
L6002	A	D	21O
L6501	A	D	19E
L6502	A	D	22G
L6701	A	D	22G
L6702	A	D	22F
L7101	A	D	13P
L7102	A	D	17P
L7105	A	D	20O
L7106	A	D	20O
L7107	A	D	16O
L7109	A	D	8N
L7113	A	D	13O
L7201	A	D	21B
TRANSISTOR			
Q1	B	C	15M
Q2	B	C	15M
Q3	B	C	15M
Q4	B	C	15M
Q5	B	C	6N
Q7	B	C	6N
Q8	B	C	5M
Q9	B	C	6M
Q10	B	C	11K
Q14	B	C	6M
Q15	B	C	5L
Q16	B	C	9N
Q17	B	C	7M
Q21	B	C	10K
Q23	B	C	9L
Q24	B	C	12J
Q34	B	C	10K
Q38	B	C	7M
Q41	B	C	9K
Q50	B	C	14K
Q201	B	C	9E
Q202	B	C	9F
Q301	B	C	4D
Q302	B	C	2D
Q311	B	C	2D
Q312	B	C	2D
Q2001	B	C	13N
Q2002	B	C	14N
Q2003	B	C	13N
Q2051	B	C	8P
Q2052	B	C	11N
Q2053	B	C	12N
Q2054	B	C	12N
Q2055	B	C	13N
Q2061	B	C	7P
Q2062	B	C	8P
Q2063	B	C	9P
Q2201	B	C	18I
Q2202	B	C	18I
Q2203	B	C	18J
Q2204	B	C	18J
Q2251	B	C	15I

REF.NO.	LOCATION		
Q2252	B	C	15J
Q2253	B	C	15J
Q2254	B	C	15J
Q2255	B	C	15J
Q3002	A	D	5I
Q3003	A	D	19I
Q3004	B	C	6C
Q3005	B	C	6C
Q3007	B	C	16B
Q3901	B	C	14C
Q4001	B	C	11G
Q5101	A	D	2L
Q5102	A	D	3M
Q5301	A	D	4G
Q5303	A	D	1F
Q5304	A	D	3G
Q5305	B	C	4G
Q5306	B	C	4G
Q5307	A	D	2C
Q5321	A	D	1F
Q6030	B	C	21J
Q6031	B	C	22J
Q6032	B	C	22H
Q6701	B	C	21G
Q7001	B	C	10B
Q7002	B	C	10A
Q7003	B	C	10A
Q7004	B	C	11A
Q7005	B	C	11A
Q7006	B	C	12A
Q7007	B	C	12A
Q7008	B	C	12A
Q7009	B	C	12A
Q7010	B	C	13B
Q7011	B	C	13B
Q7012	B	C	14A
Q7101	B	C	17P
Q7102	B	C	16P
Q7103	B	C	17N
Q7104	B	C	17O
Q7106	B	C	20P
Q7107	B	C	17O
Q7201	A	D	21C
RESISTOR			
R1	B	C	12N
R2	A	D	10N
R3	B	C	10N
R5	B	C	10L
R6	B	C	12L
R7	B	C	11K
R8	B	C	12K
R9	B	C	12K
R21	B	C	16M
R22	B	C	15N
R23	B	C	6L
R24	B	C	6M
R25	B	C	5M
R26	B	C	6N
R27	B	C	6N
R28	B	C	6N
R29	B	C	5N
R31	B	C	6M
R32	B	C	5M
R33	B	C	9N
R34	B	C	8M
R35	B	C	9N
R36	B	C	12K
R37	B	C	11K
R38	B	C	11K
R40	B	C	12K
R41	B	C	11K
R42	B	C	11K
R46	B	C	10L
R47	B	C	10K
R48	B	C	11K
R50	A	D	9L
R51	B	C	10J
R65	B	C	5L
R68	B	C	5M
R71	B	C	14L
R72	B	C	11K
R73	B	C	9K
R75	B	C	12M
R76	B	C	6L
R77	B	C	15N
R79	B	C	12K
R80	B	C	10K
R81	B	C	14L
R82	B	C	14L
R85	B	C	6N
R88	B	C	12J
R90	B	C	8M
R92	B	C	8M
R93	B	C	7N
R94	B	C	10K
R95	B	C	15N
R104	B	C	7M
R113	B	C	6N
R118	B	C	13K
R201	B	C	11F
R202	B	C	10F
R203	B	C	10F
R204	B	C	10F
R205	B	C	9F
R206	B	C	10E
R207	B	C	9F
R208	B	C	10E
R209	B	C	9E

REF.NO.	LOCATION		
R210	B	C	10F
R211	B	C	9E
R212	B	C	9F
R251	B	C	16C
R252	B	C	16C
R253	B	C	16D
R254	B	C	16D
R255	B	C	15C
R256	B	C	15D
R257	B	C	16D
R258	B	C	16E
R259	B	C	16D
R301	B	C	2D
R302	B	C	2D
R303	B	C	4D
R304	B	C	4D
R305	B	C	4D
R306	B	C	3D
R307	B	C	4D
R308	B	C	4D
R309	B	C	3E
R310	B	C	3E
R311	B	C	3E
R312	B	C	2E
R313	B	C	2E
R314	B	C	2E
R315	B	C	2E
R316	B	C	2D
R321	B	C	2D
R326	B	C	3E
R327	B	C	3D
R328	A	D	3E
R329	B	C	3E
R2001	B	C	13K
R2002	B	C	13K
R2003	B	C	13K
R2004	B	C	13K
R2005	B	C	14K
R2006	B	C	14K
R2007	B	C	14K
R2008	B	C	14K
R2009	B	C	14K
R2010	B	C	14K
R2013	B	C	14N
R2014	B	C	14N
R2015	B	C	14N
R2016	B	C	14N
R2017	B	C	13N
R2018	B	C	13N
R2019	B	C	13N
R2051	B	C	8P
R2052	B	C	8P
R2053	B	C	8P
R2054	B	C	9P
R2055	B	C	8P
R2056	B	C	11O
R2057	B	C	12N
R2058	B	C	12O
R2059	B	C	12N
R2060	B	C	13N
R2061	B	C	7P
R2062	B	C	7P
R2063	A	D	8P
R2064	B	C	8P
R2065	B	C	8P
R2201	B	C	17L
R2202	B	C	17L
R2203	B	C	17L
R2204	B	C	17L
R2205	B	C	17M
R2206	B	C	17L
R2207	B	C	17M
R2208	B	C	17L
R2209	B	C	18J
R2210	B	C	18I
R2211	B	C	18J
R2212	B	C	18J
R2213	B	C	18I
R2214	B	C	18J
R2215	B	C	18J
R2216	B	C	18J
R2217	B	C	18K
R2218	B	C	19K
R2219	B	C	19K
R2220	B	C	18I
R2222	B	C	17M
R2223	B	C	16M
R2224	B	C	15J
R2225	B	C	15J
R2226	B	C	18L
R2227	B	C	17L
R2228	B	C	17M
R2229	B	C	17L
R2230	B	C	18L
R2231	B	C	17L
R2232	B	C	18L
R2233	B	C	17L
R2234	B	C	19J
R2235	B	C	18K
R2236	B	C	18K
R2237	B	C	18K
R2238	B	C	18K
R2239	B	C	16J
R2240	B	C	16J
R2251	B	C	15K
R2252	B	C	15L
R2253	B	C	15K
R2254	A	D	16I

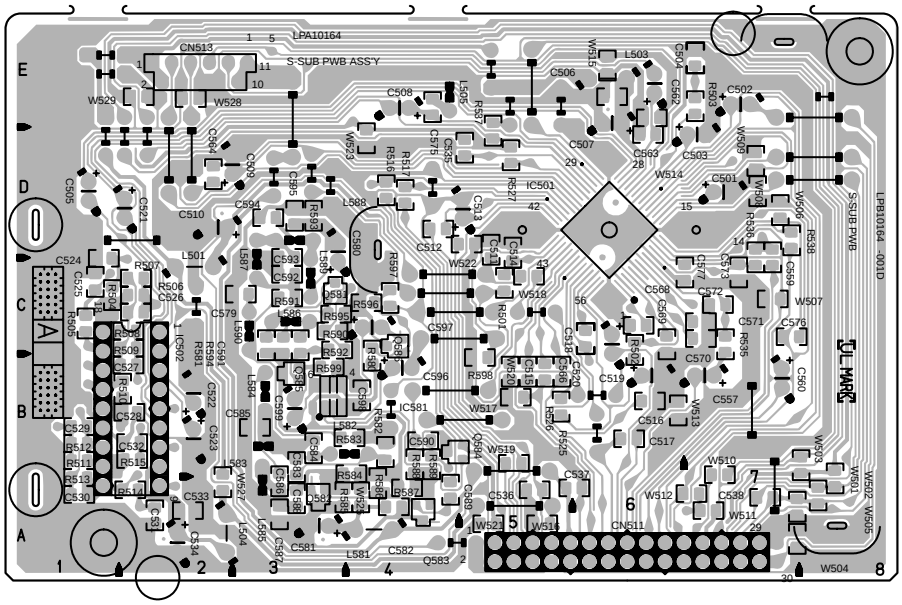
REF.NO.	LOCATION		
R2255	B	C	15J
R2256	B	C	15J
R2257	B	C	15K
R3024	B	C	9E
R3025	B	C	10E
R3026	B	C	10E
R3027	B	C	10E
R3028	B	C	10E
R3029	A	D	8C
R3030	B	C	10D
R3031	B	C	9D
R3032	B	C	10D
R3033	B	C	9C
R3034	B	C	9C
R3035	B	C	10D
R3037	A	D	9B
R3038	A	D	8B
R3039	A	D	9B
R3040	B	C	9C
R3041	B	C	9C
R3042	B	C	9C
R3043	B	C	10C
R3045	B	C	10C
R3046	A	D	10B
R3047	A	D	10B
R3048	A	D	10B
R3049	A	D	11B
R3050	A	D	11B
R3051	A	D	11B
R3052	A	D	11B
R3053	B	C	11C
R3054	A	D	5B
R3055	B	C	11C
R3058	A	D	12B
R3059	B	C	12C
R3060	B	C	12C
R3061	B	C	12C
R3062	B	C	12C
R3063	A	D	12B
R3064	A	D	12B
R3065	A	D	12B
R3066	A	D	13B
R3067	A	D	13B
R3068	B	C	13C
R3069	A	D	13B
R3070	B	C	13C
R3071	A	D	13B
R3072	B	C	13C
R3073	A	D	15C
R3074	B	C	13C
R3077	B	C	13D
R3080	B	C	13D
R3082	B	C	15D
R3083	A	D	15E
R3084	A	D	15D
R3085	B	C	13E
R3086	A	D	15E
R3087	B	C	14E
R3088	B	C	14E
R3089	B	C	13E
R3090	B	C	13E
R3091	A	D	14E
R3092	B	C	14E
R3093	B	C	13E
R3094	A	D	15G
R3095	A	D	15G
R3096	B	C	14F
R3097	B	C	14F
R3098	B	C	13F
R3099	B	C	14F
R3100	B	C	13F
R3101	B	C	14F
R3102	B	C	13F
R3205	A	D	12I
R3206	B	C	6G
R3207	B	C	19J
R3208	B	C	16E
R3209	B	C	15E
R3210	B	C	9F
R3211	B	C	9F
R3212	B	C	5E
R3213	B	C	6E
R3214	B	C	7H
R3215	B	C	8H
R3216	B	C	8H
R3217	B	C	8H
R3218	A	D	5D
R3219	B	C	6C
R3220	B	C	6B
R3221	B	C	5D
R3222	B	C	6C
R3223	B	C	16B
R3224	B	C	16B
R3225	B	C	18C
R3229	B	C	13D
R3232	B	C	10E
R3234	A	D	15B
R3235	B	C	17C
R3236	B	C	17C
R3237	B	C	10D
R3240	B	C	10D
R3242	B	C	9E
R3244	B	C	9B
R3245	B	C	9C
R3246	B	C	14D
R3248	B	C	14C
R3251	B	C	18G
R3252	B	C	7K

REF.NO.	LOCATION		
R3253	A	D	6K
R3254	A	D	7J
R3255	B	C	7H
R4001	B	C	14G
R4002	B	C	11F
R4003	B	C	11F
R4004	B	C	11F
R4005	B	C	11G
R4006	B	C	11F
R4007	B	C	11F
R4009	B	C	12F
R4010	B	C	13F
R4011	B	C	13F
R4012	B	C	12F
R4013	B	C	12F
R4015	B	C	14G
R4016	B	C	12F
R4017	B	C	13F
R4020	A	D	7H
R4021	B	C	13G
R5101	A	D	4M
R5102	A	D	4M
R5103	A	D	3M
R5104	A	D	1L
R5106	A	D	2L
R5107	A	D	3K
R5108	B	C	3L
R5109	A	D	3M
R5110	B	C	3L
R5111	B	C	3K
R5112	B	C	3K
R5302	B	C	4F
R5303	B	C	4F
R5304	B	C	3I
R5305	B	C	2F
R5306	B	C	1F
R5310	B	C	3H
R5312	B	C	4H
R5313	B	C	4G
R5319	B	C	2C
R5332	A	D	2G
R5333	A	D	3F
R6020	B	C	21N
R6021	B	C	21N
R6030	B	C	21J
R6031	B	C	21J
R6032	B	C	22K
R6033	B	C	22I
R6050	B	C	21O
R6051	A	D	21N
R6052	B	C	21O
R6056	B	C	21P
R6080	B	C	21N
R6701	B	C	21G
R6702	B	C	21G
R6703	B	C	21G
R6704	B	C	21F
R6705	B	C	20G
R6706	B	C	21G
R6707	B	C	22F
R6708	B	C	20G
R6709	B	C	20G
R6710	B	C	19F
R6711	B	C	19E
R6712	B	C	20E
R6713	B	C	20E
R6714	B	C	20D
R6715	B	C	19D
R6716	B	C	20D
R6719	B	C	20G
R6720	A	D	21D
R6721	B	C	21D
R7001	B	C	11A
R7002	B	C	12A
R7003	B	C	12A
R7004	B	C	13A
R7005	B	C	13A
R7006	B	C	13A
R7007	B	C	13A
R7015	A	D	9A
R7020	B	C	17B
R7021	B	C	16B
R7022	B	C	7B
R7023	B	C	7B
R7024	B	C	5B
R7025	B	C	1B
R7030	B	C	17B
R7031	B	C	17A
R7032	B	C	5B
R7033	B	C	4B
R7034	B	C	7B
R7035	B	C	3B
R7036	B	C	3B
R7037	B	C	3A
R7046	A	D	15A
R7101	B	C	16P
R7102	B	C	16P
R7103	B	C	11P
R7105	B	C	13P
R7107	B	C	14P
R7108	B	C	11P
R7110	B	C	13P
R7111	B	C	13P
R7112	A	D	17P
R7113	B	C	15P
R7114	B	C	17P
R7116	B	C	18P
R7117	A	D	19P

REF.NO.	LOCATION		
R7119	B	C	18P
R7120	B	C	18P
R7122	B	C	21P
R7124	B	C	20P
R7131	B	C	19P
R7132	B	C	20P
R7133	A	D	20P
R7134	B	C	19P
R7138	B	C	16P
R7139	B	C	19N
R7140	B	C	19N
R7141	B	C	12P
R7142	B	C	11P
R7143	B	C	11P
R7144	B	C	18N
R7145	B	C	17O
R7146	B	C	17O
R7147	B	C	17O
R7148	B	C	17P
R7160	B	C	18B
R7161	B	C	19A
R7162	B	C	19B
R7163	B	C	21B
R7166	B	C	20C
R7167	B	C	18O
R7181	B	C	10O
R7182	B	C	10P
R7183	B	C	11P
R7184	B	C	12P
R7185	B	C	19O
R7186	B	C	19P
R7201	A	D	21C
R7202	A	D	20B
R7203	B	C	21C
SWITCH			
S3001	A	D	18C
S3002	A	D	4E
S7001	A	D	22B
S7002	A	D	18B
S7004	A	D	7B
S7006	A	D	6B
S7008	A	D	5B
S7010	A	D	4B
S7011	A	D	4B
S7012	A	D	3B
S7013	A	D	2B
S7014	A	D	2B
S7015	A	D	1B
S7016	A	D	17B
S7017	A	D	16B
S7018	A	D	9B
S7019	A	D	8B
TESTPONIT			
TP106	A	D	6P
TP111	A	D	5P
TP2253	A	D	6P
TP2254	A	D	7P
TP4001	A	D	6P
TP7001	A	D	3A
TPGND	A	D	4A
OTHER			
CP3001	A	D	4H
CP3002	B	C	4H
CP4001	A	D	3G
CP4002	B	C	4G
DI7001	A	D	12A
J7101	A	D	16P
J7102	A	D	12P
J7103	A	D	21P
J7105	A	D	20A
J7107	A	D	20C
J7108	A	D	19O
JS3001	A	D	8G
K2001	B	C	14N
K2002	B	C	14N
K2003	B	C	9O
K2004	B	C	9N
K2005	B	C	14J
K2006	B	C	14J
K2251	B	C	15L
K2252	B	C	16L
K2253	B	C	16M
K5101	A	D	2K
K5102	A	D	1N
K6701	B	C	22F
K6702	B	C	21F
K6703	B	C	20F
K6704	B	C	20F
K6705	B	C	20F
K6706	B	C	19E
K6707	B	C	21E
LF5001	A	D	4P
LF5002	A	D	3N
PC3001	A	D	15F
PC3002	A	D	9F
PC5101	A	D	4K
T2051	A	D	9P
T2052	A	D	7P
T5001	A	D	1K
TU6001	A	D	22P
VA5003	A	D	2O
VR2251	A	D	20I
X1	A	D	12K
X3001	A	D	13C
X3002	A	D	13D
X6701	A	D	21G

4.15 S-SUB CIRCUIT BOARD

<15> S-SUB
LPB10164-001D



COMPONENT PARTS LOCATION GUIDE <S-SUB>

REF.NO.	LOCATION		
CAPACITOR			
C501	A	D	7D
C502	A	D	7E
C503	A	D	7D
C504	B	C	7E
C505	A	D	1D
C506	B	C	6E
C507	A	D	6E
C508	A	D	4E
C509	A	D	3D
C510	A	D	2D
C511	B	C	5C
C512	B	C	4D
C513	A	D	5D
C514	B	C	5C
C515	B	C	5B
C516	B	C	6B
C517	B	C	6B
C518	B	C	6C
C519	A	D	6B
C520	A	D	6C
C521	A	D	2D
C522	A	D	2B
C523	A	D	2B
C524	B	C	1C
C525	B	C	1C

REF.NO.	LOCATION		
C526	B	C	2C
C527	B	C	2B
C528	B	C	2B
C529	B	C	1B
C530	B	C	1A
C531	B	C	2A
C532	B	C	2B
C533	B	C	2A
C534	A	D	2A
C535	B	C	5D
C536	B	C	5A
C537	B	C	6A
C538	B	C	7A
C557	A	D	7B
C559	B	C	7C
C560	A	D	7B
C562	A	D	6E
C563	B	C	6D
C564	B	C	2D
C566	B	C	5B
C568	B	C	6C
C569	B	C	6C
C570	B	C	7C
C571	B	C	7C
C572	B	C	7C
C573	B	C	7C

REF.NO.	LOCATION		
C575	B	C	4E
C576	B	C	7C
C577	B	C	6C
C579	B	C	3C
C580	A	D	3C
C581	A	D	3A
C582	B	C	4A
C583	B	C	3B
C584	B	C	3B
C585	B	C	3B
C586	B	C	3A
C587	B	C	3A
C588	B	C	3A
C589	B	C	4A
C590	B	C	4B
C591	B	C	3C
C592	B	C	3C
C593	B	C	3C
C594	B	C	3D
C595	B	C	3D
C596	A	D	4B
C597	A	D	4C
C598	B	C	4B
C599	A	D	3B
CONNECTOR			
CN511	A	D	5A

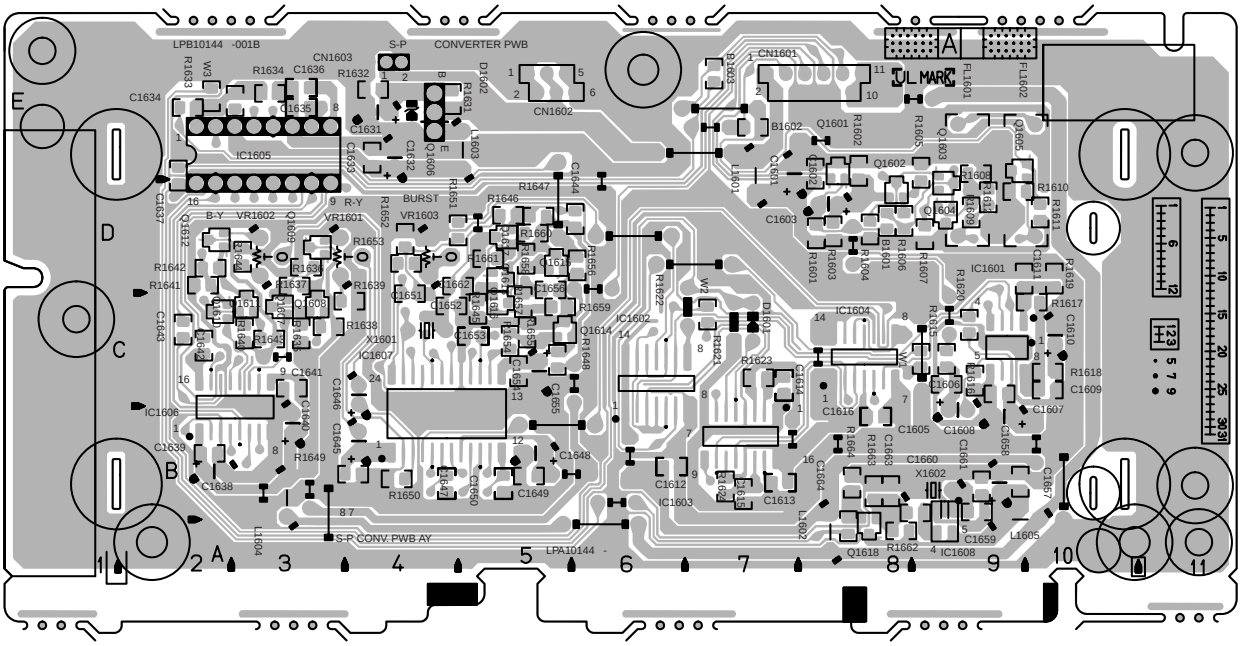
REF.NO.	LOCATION		
CN513	A	D	2E
IC			
IC501	B	C	6D
IC502	A	D	2C
IC581	B	C	3B
COIL			
L501	A	D	2C
L503	A	D	6E
L504	A	D	2A
L505	A	D	4E
L581	A	D	4A
L582	A	D	4B
L583	A	D	3B
L584	A	D	3B
L585	A	D	3B
L586	A	D	3C
L587	A	D	3C
L588	A	D	3D
L589	A	D	3C
L590	A	D	3C
TRANSISTOR			
Q581	B	C	3C
Q582	B	C	3A
Q583	B	C	4A
Q584	B	C	4B

REF.NO.	LOCATION		
Q585	B	C	3B
Q586	B	C	4C
RESISTOR			
R501	B	C	5C
R502	B	C	6C
R503	B	C	7E
R504	B	C	1C
R505	B	C	1C
R506	B	C	2C
R507	B	C	2C
R508	B	C	2C
R509	B	C	2C
R510	B	C	2B
R511	B	C	1B
R512	B	C	1B
R513	B	C	1A
R514	B	C	2A
R515	B	C	2B
R516	B	C	4D
R517	B	C	4D
R525	B	C	5B
R526	B	C	5B
R527	B	C	5D
R535	B	C	7C
R536	B	C	7C
R537	B	C	5D

REF.NO.	LOCATION		
R538	B	C	7D
R580	B	C	4B
R581	B	C	3C
R582	B	C	4B
R583	B	C	4B
R584	B	C	4A
R585	B	C	3A
R586	B	C	4A
R587	B	C	4A
R588	B	C	4B
R589	B	C	4B
R590	B	C	3C
R591	B	C	3C
R592	B	C	3C
R593	B	C	3D
R594	B	C	3C
R595	B	C	3C
R596	B	C	4C
R597	B	C	4C
R598	B	C	5B
R599	B	C	3B

4.16 S-P CONVERTER CIRCUIT BOARD [MS MODEL]

<87> S-P CONVERTER
LPB10144-001B



COMPONENT PARTS LOCATION GUIDE <S-P CONVERTER>

REF.NO.	LOCATION
CAPACITOR	
C1601	A D 7E
C1602	B C 8E
C1603	A D 8D
C1605	A D 9C
C1606	B C 9C
C1607	B C 9C
C1608	A D 9B
C1609	B C 10C
C1610	A D 10C
C1611	B C 9D
C1612	B C 6B
C1613	B C 7B
C1614	B C 7C
C1615	B C 7B
C1616	B C 8B
C1631	A D 4E
C1632	A D 4E
C1633	B C 4E
C1634	B C 2E
C1635	B C 3E
C1636	B C 3E
C1637	B C 2E
C1638	A D 2B
C1639	B C 2B
C1640	A D 3B
C1641	B C 3C
C1642	B C 2C
C1643	B C 2C
C1644	B C 6D
C1645	A D 4B
C1646	A D 4C
C1647	B C 4B
C1648	A D 5B
C1649	B C 5B
C1650	B C 5B
C1651	B C 4D
C1652	B C 4C
C1653	B C 5C
C1654	B C 5C
C1655	A D 5C
C1656	B C 5D
C1657	B C 9B
C1658	A D 9B
C1659	B C 9B
C1660	B C 9B
C1661	B C 9B
C1662	B C 5D
C1663	B C 8B
C1664	B C 8B
CONNECTOR	
CN1601	A D 7F
CN1602	A D 5F
CN1603	A D 4F
DIODE	
D1601	A D 7C
D1602	A D 4E
IC	
IC1601	B C 9C
IC1602	B C 6C
IC1603	B C 7B
IC1604	B C 8C
IC1605	A D 2E
IC1606	B C 3C
IC1607	B C 4C
IC1608	B C 9B
COIL	
L1601	A D 7E
L1602	A D 8A
L1603	A D 5E
L1604	A D 3B
L1605	A D 10B
TRANSISTOR	
Q1601	B C 8E
Q1602	B C 8D
Q1603	B C 9E
Q1604	B C 9D
Q1605	B C 9E
Q1606	A D 4E
Q1607	B C 3C
Q1608	B C 3C
Q1609	B C 3D
Q1610	B C 2C
Q1611	B C 3C
Q1612	B C 2D
Q1613	B C 5D
Q1614	B C 5C
Q1615	B C 5D
Q1616	B C 5C
Q1617	B C 5D
Q1618	B C 8B
RESISTOR	
R1601	B C 8D
R1602	B C 8E
R1603	B C 8D
R1604	B C 8D
R1605	B C 9E
R1606	B C 8D
R1607	B C 9D
R1608	B C 9E
R1609	B C 9D
R1610	B C 9D
R1611	B C 10D
R1612	B C 9D
R1615	B C 9C
R1616	B C 9C
R1617	B C 10C
R1618	B C 10C
R1619	B C 10D
R1620	B C 9C
R1621	A D 7C
R1622	A D 7C
R1623	B C 7C
R1624	B C 7B
R1631	B C 4E
R1632	B C 4E
R1633	B C 3E
R1634	B C 3E
R1635	B C 3C
R1636	B C 3D
R1637	B C 3D
R1638	B C 3C
R1639	B C 4C
R1640	B C 3C
R1641	B C 2D
R1642	B C 2D
R1643	B C 3C
R1644	B C 3D
R1645	B C 5C
R1646	B C 5D
R1647	B C 5D
R1648	B C 5C
R1649	B C 4B
R1650	B C 4B
R1651	B C 5D
R1652	B C 4D
R1653	B C 4D
R1654	B C 5C
R1655	B C 5C
R1656	B C 6D
R1657	B C 5C
R1658	B C 5D
R1659	B C 5C
R1660	B C 5D
R1661	B C 5D
R1662	B C 8A
R1663	B C 8B
R1664	B C 8B
VR1601	A D 3D
VR1602	A D 3D
VR1603	A D 4D
OTHER	
FL1601	A D 9D
FL1602	A D 10E
X1601	A D 4C
X1602	A D 9B

4.17 VOLTAGE CHARTS

<MAIN>

MODE PIN NO.	REC	PLAY
IC1		
1	1.5	2.3
2	2.8	2.8
3	2.6	2.6
4	1.9	1.5
5	1.9	1.5
6	2.4	2.1
7	1.4	0.8
8	0	0
9	2.6	3.1
10	2.3	2.3
11	3.1	3.1
12	2.8	2.8
13	3.1	3.1
14	2.3	2.3
15	0	0
16	2.8	2.8
17	1.4	1.4
18	2.8	2.8
19	2.8	2.8
20	2.8	2.8
21	2.0	2.0
22	2.8	2.8
23	2.8	2.8
24	5.0	5.0
25	0.4	0.4
26	0	0
27	2.3	2.3
28	2.3	2.3
29	1.9	1.9
30	2.1	2.1
31	0	0
32	2.5	2.5
33	5.0	5.0
34	2.7	2.3
35	5.0	5.0
36	2.5	0
37	2.3	2.3
38	-	-
39	1.2	1.2
40	-	-
41	2.5	2.5
42	-	-
43	0	0
44	2.2	2.2
45	4.6	4.6
46	4.9	4.6
47	2.9	2.9
48	2.6	2.6
49	5.0	5.0
50	2.5	2.5
51	2.8	2.8
52	0	0
53	2.6	2.6
54	0	0
55	0	0
56	0	0
57	0	0
58	0	0
59	0	0
60	0	0
61	0	0
62	0	0
63	0	0
64	0	0
65	2	2
66	0	0
67	0	0
68	0	0
69	0	0
70	0	0
71	0	0
72	0	0
73	3.1	3.1
74	0	0
75	0	0
76	0	0
77	0	0
78	0	0
79	5.0	5.0

MODE PIN NO.	REC	PLAY
80	5.0	5.0
81	0	0
82	0	0
83	0	0
84	2.2	2.2
85	2.4	2.4
86	2.2	2.2
87	5.0	5.0
88	0	0
89	0	0
90	0	0
91	0	4.0
92	2.6	2.6
93	0.8	0.5
94	0	0
95	2.5	2.5
96	2.5	2.5
97	2.5	2.5
98	0	0
99	2.5	2.5
100	0	0
IC251		
1	0	0
2	2.6	2.6
3	5.0	5.0
4	5.0	5.0
5	0	0.7
6	4.0	4.0
7	4.1	4.0
8	5.0	5.0
9	4.6	4.6
10	0	0
11	3.0	3.0
12	3.0	3.0
13	1.2	1.2
14	0.4	0.4
15	5.0	5.0
16	2.9	2.9
17	2.5	2.5
18	4.6	4.6
19	5.0	5.0
20	4.9	4.9
21	0	0
22	3.5	3.6
23	0	5.0
24	5.0	5.0
IC301[HR-S5955MS]		
1	0.2	0.2
2	1.9	1.9
3	3.8	3.8
4	0.4	0.4
5	0	0
6	3.1	3.1
7	0	0
8	2.4	2.4
9	2.4	2.4
10	2.2	2.2
11	2.4	0
12	4.4	4.4
13	2.4	2.4
14	3	1.9
15	2.7	2.7
16	0.3	4.9
17	0.2	2.5
18	2.2	2.2
19	2.3	2.3
20	2.4	2.4
21	2.4	2.4
22	4.8	4.8
23	3.1	3.1
24	3.1	3.1
25	2.7	2.7
26	0	0
27	0.4	0.4
28	0.3	0.3
IC2201		
1	2.3	2.3
2	0	0
3	2.3	2.3
4	0	0

MODE PIN NO.	REC	PLAY
5	0	0
6	2.4	2.4
7	2.0	2.0
8	0	0
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	0	0
14	0	0
15	0	0
16	2.4	2.4
17	0.5	0.5
18	2.4	2.4
19	2.4	2.4
20	2.4	2.4
21	2.4	0
22	2.5	0.7
23	0	0
24	2.5	0.7
25	4.8	4.8
26	2.5	0
27	0	-
28	4.1	2.8
29	4.3	1.7
30	4.4	1.6
31	1.1	1.8
32	2.4	2.4
33	2.4	2.4
34	0.8	0.8
35	2.4	2.4
36	0	0.2
37	1.6	1.6
38	0	0
39	0	0
40	4.8	4.8
41	0	0
42	4.8	0
43	4.7	4.7
44	3.3	3.3
45	0	0
46	4.7	4.7
47	2.4	2.4
48	2.4	2.4
49	0.4	0.4
50	0.2	0.2
51	0	0
52	0	0
53	4.3	4.3
54	0	0
55	0	0
56	0	0
57	4.4	4.4
58	9.6	9.6
59	4.4	0
60	0.8	0.8
61	2.4	2.4
62	2.4	2.4
63	4.2	4.2
64	4.3	4.3
IC3001		
1	0	0
2	2.8	2.9
3	3.3	2.8
4	2.1	2.9
5	2.8	2.9
6	0	0.9
7	2.9	3.0
8	2.7	2.8
9	1.5	1.6
10	5.7	5.8
11	2.1	2.1
12	2.2	2.2
13	2.6	2.7
14	0.4	0.4
15	1.0	1.0
16	3.1	3.2
17	2.7	2.8
18	5.8	6.0
19	2.7	2.8

MODE PIN NO.	REC	PLAY
20	0	0
21	0	0
22	2.9	3.0
23	0	0
24	5.3	5.3
25	4.5	4.6
26	0	2.6
27	0	0
28	5.8	5.8
29	0	0
30	5.7	5.9
31	5.5	5.5
32	4.9	2.9
33	5.6	5.9
34	0	0
35	0	0
36	5.6	5.8
37	2.7	2.9
38	5.6	5.8
39	5.7	5.9
40	5.7	5.9
41	5.7	5.9
42	2.8	2.5
43	0	0
44	2.9	3.0
45	0	0
46	0	0
47	1.1	1.1
48	1.1	1.1
49	1.0	0
50	2.2	0
51	1.0	0
52	1.0	5.6
53	0	0
54	5.5	5.6
55	0	0
56	5.6	0
57	0	0
58	0	4.6
59	4.5	4.8
60	0	4.6
61	5.6	5.6
62	5.6	5.6
63	0	4.6
64	0	0
65	2.3	4.5
66	4.5	4.6
67	0	0
68	0	0
69	0	0
70	5.8	5.9
71	5.0	5.1
72	5.8	5.9
73	0	0
74	0	0
75	1.6	1.7
76	1.6	1.6
77	5.8	5.9
78	2.7	2.9
79	0	0
80	2.8	2.8
81	3.7	3.7
82	5.7	5.7
83	5.6	5.6
84	5.5	5.6
85	0	3.2
86	5.7	5.9
87	0	0
88	0	0
89	0	0
90	0	5.6
91	0	0
92	5.3	5.3
93	5.5	0
94	0	0
95	5.5	5.8
96	5.6	0
97	0	5.8
98	5.5	5.6
99	0	0

MODE PIN NO.	REC	PLAY
100	5.6	0
101	5.6	0
102	0	0
103	5.6	5.7
104	1.5	1.5
105	2.8	2.8
106	0	2.8
107	0	0
108	3.0	3.0
109	0	0
110	0	0
111	0.4	0
112	5.6	5.7
IC3002		
1	4.9	4.9
2	4.9	4.9
3	0	0
4	0	0
IC3003		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.8	4.8
6	4.9	4.9
7	0	0
8	5.1	5.1
IC6701		
1	4.3	4.3
2	1.5	1.5
3	1.5	1.5
4	0	0
5	2.0	2.0
6	1.9	1.9
7	0.2	0.2
8	0	0
9	0	0
10	3.6	3.6
11	3.6	3.6
12	4.5	4.5
13	4.5	4.5
14	2.2	2.2
15	2.1	2.1
16	0	0
17	0.3	0.3
18	0.3	0.3
19	4.5	4.5
20	0	0
21	0.3	0.3
22	4.7	4.7
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	2.4	2.4
31	2.4	2.4
32	0	0
33	4.7	4.7
34	3.8	3.8
35	0	0
36	2.4	2.4
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	2.5	2.5
43	2.4	2.4
44	0	0
IC7002		
1	0	5.1
2	0	5.0
3	0	0
IC7102		
1	0	0
2	4.0	4.0
3	12.8	12.8

MODE PIN NO.	REC	PLAY
4	3.6	3.1
5	0	0
6	3.2	4.5
IC7103		
1	5.3	5.4
2	4.0	3.9
3	12.8	12.8
4	3.6	3.6
5	0	0
6	3.2	3.1
IC7104	-	-
IC7105	-	-
CN1		
1	0	0
2	0	0
3	0	0
4	2.7	2.6
5	2.7	2.6
6	2.7	2.6
7	2.9	0
8	2.9	0
9	2.9	0
CN501	-	-
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.6	2.9
6	2.9	2.8
CN2002		
1	0	0
2	0	0
CN3001		
1	2.6	2.7
2	13.5	13.5
3	6.0	6.0
4	0	0
5	0	8.0
6	0	0
7	0	0
8	13.3	13.3
9	3.0	3.1
10	3.0	3.0
11	1.5	1.5
12	3.0	3.1
CN5001	-	-

<S-SUB>

MODE PIN NO.	REC	PLAY
IC501	-	-
IC502	-	-
IC581	-	-
CN511	-	-
CN513 [HR-S5955MS]		
	-	-

<S-P CONVERTER> [MS MODEL]

MODE PIN NO.	REC	PLAY
IC1601		
1	2	2
2	4.4	4.4
3	0	0.9
4	4.8	4.1
5	0	0
6	2.1	4.9
7	4.9	4.9
8	2.2	2.2
IC1602		
1	4.9	4.9
2	4.4	4.4
3	0.4	0.4
4	0.4	0.4
5	0.4	0.4
6	4.4	4.4

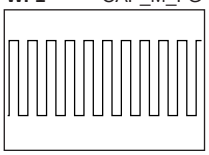
MODE PIN NO.	REC	PLAY
7	0	0
8	0.5	0.5
9	4.4	4.4
10	0	4.7
11	0	4.4
12	0	4.7
13	0.4	0.4
14	4.9	4.9
IC1603		
1	0	0
2	4.6	4.6
3	4.9	4.9
4	0	0
5	0.4	0.4
6	0.3	0.3
7	4.5	4.5
8	0	0
9	1.5	1.5
10	3.3	3.3
11	4.9	4.9
12	0	0.9
13	4.9	4.9
14	2.3	2.3
15	0	0
16	4.9	4.9
IC1604		
1	4.9	4.9
2	3.3	3.3
3	0.9	0.9
4	4.9	4.9
5	0.1	0.1
6	4.7	4.7
7	0	0
8	2.4	2.4
9	2.4	2.4
10	4.9	4.9
11	0	4.4
12	2.4	2.4
13	4.9	4.9
14	4.9	4.9
IC1605		
1	8	8.1
2	1.1	1.1
3	8.1	8.1
4	0	0
5	0	0
6	0	0
7	3.2	3.2
8	4.2	4.1
9	2.8	2.8
10	2.9	2.8
11	0	0
12	0	0
13	0	0
14	0	0
15	0.5	0.5
16	0	0
IC1606		
1	4.8	4.8
2	0	0
3	0	0
4	0.1	0.4
5	0.5	0.5
6	0	0
7	0.1	0.4
8	0	0
9	4.8	4.8
10	0	0
11	3	3
12	3	3
13	0.5	0
14	1.5	1.4
15	0.6	0
16	1.5	1.4
IC1607		
1	2.5	2.5
2	0	0
3	2.5	2.5
4	2.4	2.4
5	2.1	2.1

MODE PIN NO.	REC	PLAY
6	2	2
7	2.3	2.2
8	4.8	4.8
9	2.3	2.2
10	0	0
11	2.3	2.2
12	2	2
13	2.5	2.5
14	0	1.7
15	0	0.8
16	0.6	0.6
17	0	0
18	0	0
19	0	0
20	0	0.1
21	2.5	2.5
22	0	1.9
23	1.2	1.2
24	0	2.1
CN1601		
1	12.0	12.0
2	12.0	12.0
3	2.1	2.1
4	0	0
5	2.8	2.8
6	0	0
7	1.8	1.8
8	0	0
9	2.8	2.8
10	4.9	4.9
11	4.9	4.9

4.18 WAVEFORMS

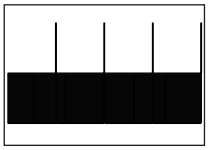
< SYSCON >

WF1 CN3001-1 CAP_M_FG



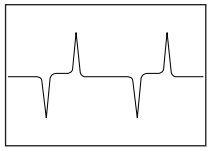
REC/PB 4.6 Vp-p
0.1 V/0.5 msec/DIV

WF2 CN3001-11 D. PG/FG



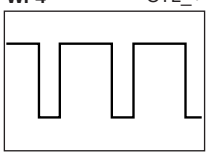
REC/PB 5 Vp-p
0.1 V/5 msec/DIV

WF3 TP4001 CTL.P



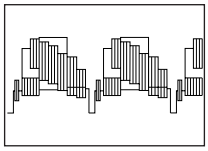
PB 2.7 Vp-p
50 mV/5 msec/DIV

WF4 IC3001-3 CTL_+



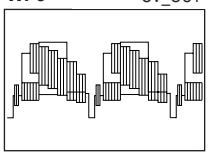
REC 4.2 Vp-p
0.1 V/5 msec/DIV

WF5 IC3001-17 CV_IN_1



REC/PB 2 Vp-p
50 mV/5 µsec/DIV

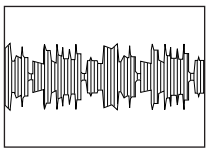
WF6 IC3001-19 CV_OUT



REC/PB 2 Vp-p
50 mV/5 µsec/DIV

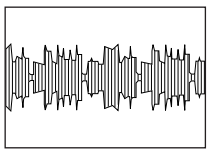
< S-P CONVERTER >

WF1-1 CN1601-9



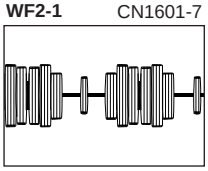
SECAM REC 0.46 Vp-p
10 mV/20 µsec/DIV

WF1-2 CN1601-9



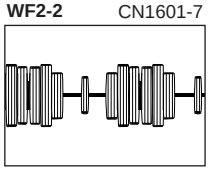
SECAM PB 0.4 Vp-p
10 mV/20 µsec/DIV

WF2-1 CN1601-7



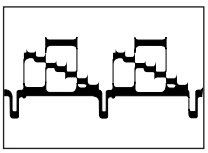
SECAM REC 0.52 Vp-p
10 mV/20 µsec/DIV

WF2-2 CN1601-7



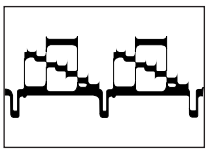
SECAM PB 0.68 Vp-p
10 mV/20 µsec/DIV

WF3 CN1601-5



SECAM REC/PB 1.0 Vp-p
20 mV/20 µsec/DIV

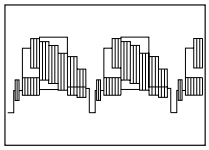
WF4 CN1601-3



SECAM REC/PB 1.5 Vp-p
10 mV/20 µsec/DIV

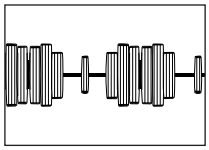
< VIDEO >

WF1 IC1-27



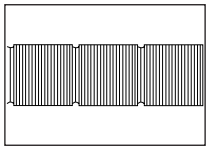
REC/PB 2 Vp-p
50 mV/5 µsec/DIV

WF2 IC1-30



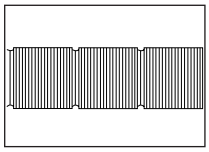
PB 0.6 Vp-p
20 mV/5 µsec/DIV

WF3 IC1-1



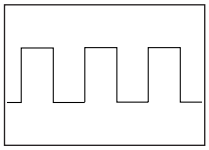
PB 0.4 Vp-p
20 mV/5 msec/DIV

WF4 TP106 PB.FM



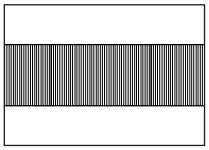
PB 0.4 Vp-p
20 mV/5 msec/DIV

WF5 TP111 D.FF



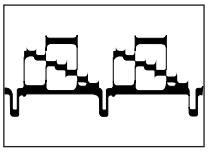
REC/PB 3.5 Vp-p
0.1 V/5 msec/DIV

WF6 IC1-85



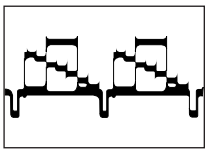
REC 1.2 Vp-p
50 mV/2 msec/DIV

WF7 IC1-13



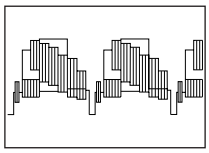
REC/PB 0.48 Vp-p
10 mV/5 µsec/DIV

WF8 IC1-11



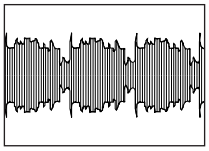
REC/PB 0.48 Vp-p
10 mV/5 µsec/DIV

WF9 IC1-18



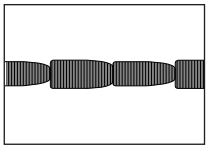
REC 1.0 Vp-p
20 mV/5 µsec/DIV

WF10 IC301-11



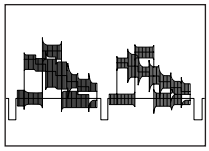
SECAM REC 0.44 Vp-p
10 mV/20 µsec/DIV

WF11 IC301-13



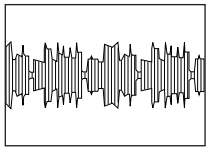
SECAM PB 0.24 Vp-p
20 mV/2 msec/DIV

WF12 IC301-15



SECAM REC/PB 1.3 Vp-p
50 mV/20 µsec/DIV

WF13 IC301-17

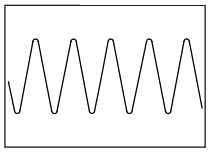


SECAM PB 0.44 Vp-p
10 mV/20 µsec/DIV

***WF10 - WF13 is used only for HR-S5955MS.**

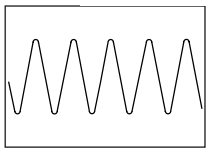
< AUDIO >

WF1 IC2201-9



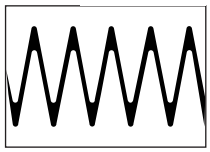
REC 0.47 Vp-p
10 mV/0.2 msec/DIV

WF2-1 IC2201-53



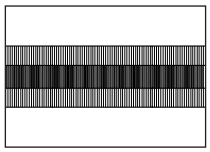
REC 5 Vp-p
0.1 V/0.2 msec/DIV

WF2-2 IC2201-53



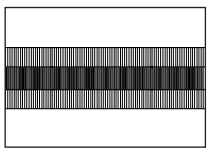
PB 5 Vp-p
0.1 V/0.2 msec/DIV

WF3 IC2201-21



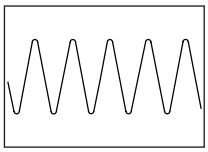
REC 1.5 Vp-p
50 mV/2 msec/DIV

WF4 TP2253 A.PB.FM



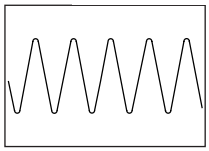
PB 1 Vp-p
20 mV/0.5 msec/DIV

WF5 IC1-53



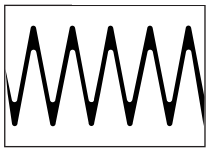
REC 1.4 Vp-p/PB 1.5 Vp-p
20 mV/0.2 msec/DIV

WF6 IC1-63



REC 0.2 Vp-p
5 mV/0.2 msec/DIV

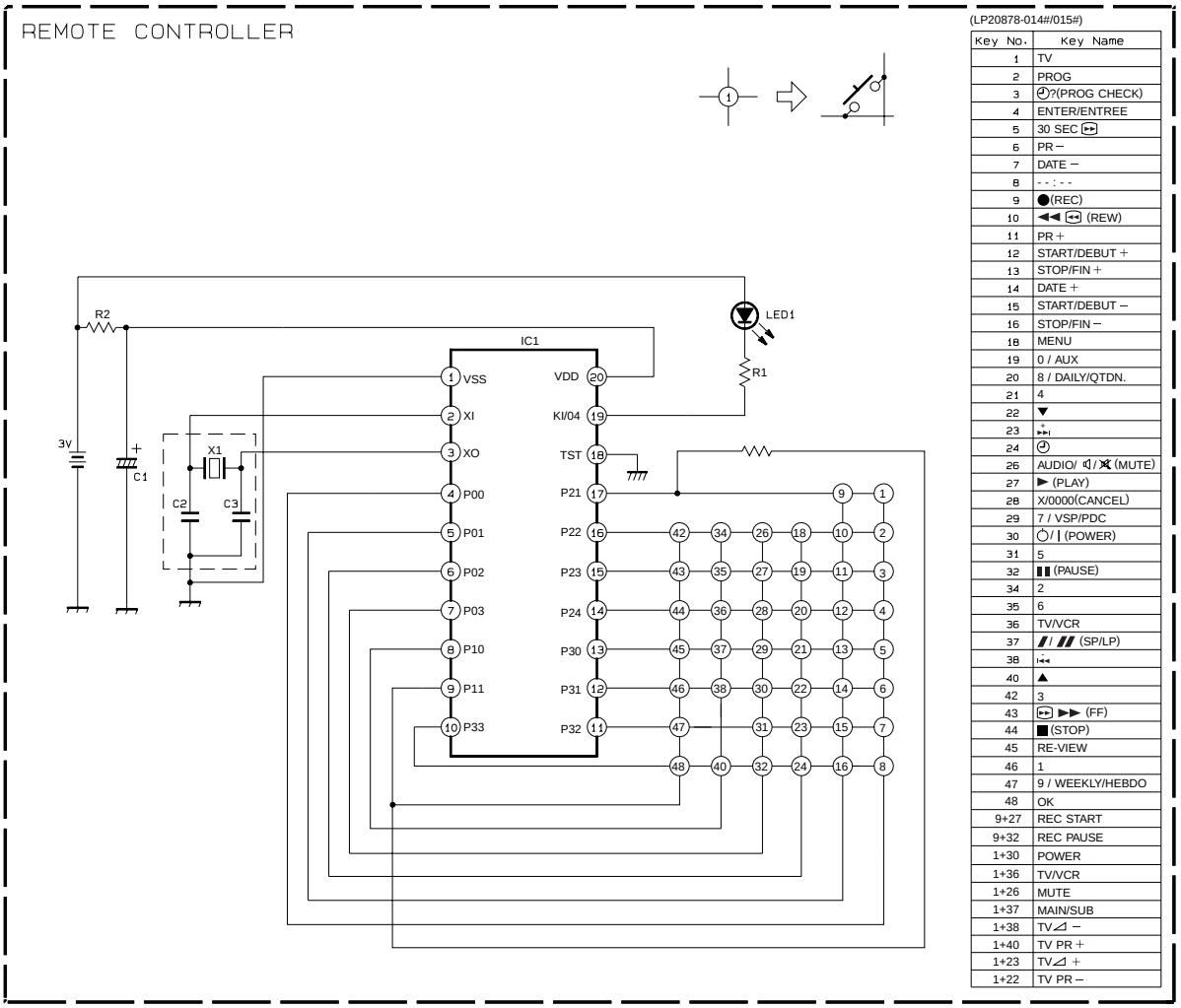
WF7 IC1-99



REC 2.1 Vp-p
50 mV/0.2 msec/DIV

4.19 REMOTE CONTROLLER SCHEMATIC DIAGRAM

NOTES:
1. All parts shown in this schematic are critical for safety.
2. This schematic is only for reference.
   Avoid replacing individual parts.
   Replace the entire unit only.

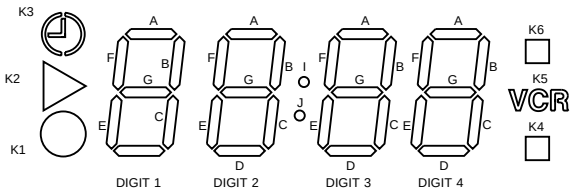


(LP20878-014#/015#)

Key No.	Key Name
1	TV
2	PROG
3	?(PROG CHECK)
4	ENTER/ENTREE
5	30 SEC
6	PR −
7	DATE −
8	- - : - -
9	●(REC)
10	◀◀ (REW)
11	PR +
12	START/DEBUT +
13	STOP/FIN +
14	DATE +
15	START/DEBUT −
16	STOP/FIN −
18	MENU
19	0 / AUX
20	8 / DAILY/QTDN.
21	4
22	▼
23	
24	
26	AUDIO/ / (MUTE)
27	▶ (PLAY)
28	X/0000(CANCEL)
29	7 / VSP/PDC
30	/ (POWER)
31	5
32	❚❚ (PAUSE)
34	2
35	6
36	TV/VCR
37	/ (SP/LP)
38	
40	▲
42	3
43	▶▶ (FF)
44	■ (STOP)
45	RE-VIEW
46	1
47	9 / WEEKLY/HEBDO
48	OK
9+27	REC START
9+32	REC PAUSE
1+30	POWER
1+36	TV/VCR
1+26	MUTE
1+37	MAIN/SUB
1+38	TV −
1+40	TV PR +
1+23	TV +
1+22	TV PR −

4.20 FDP GRID ASSIGNMENT AND ANODE CONNECTION

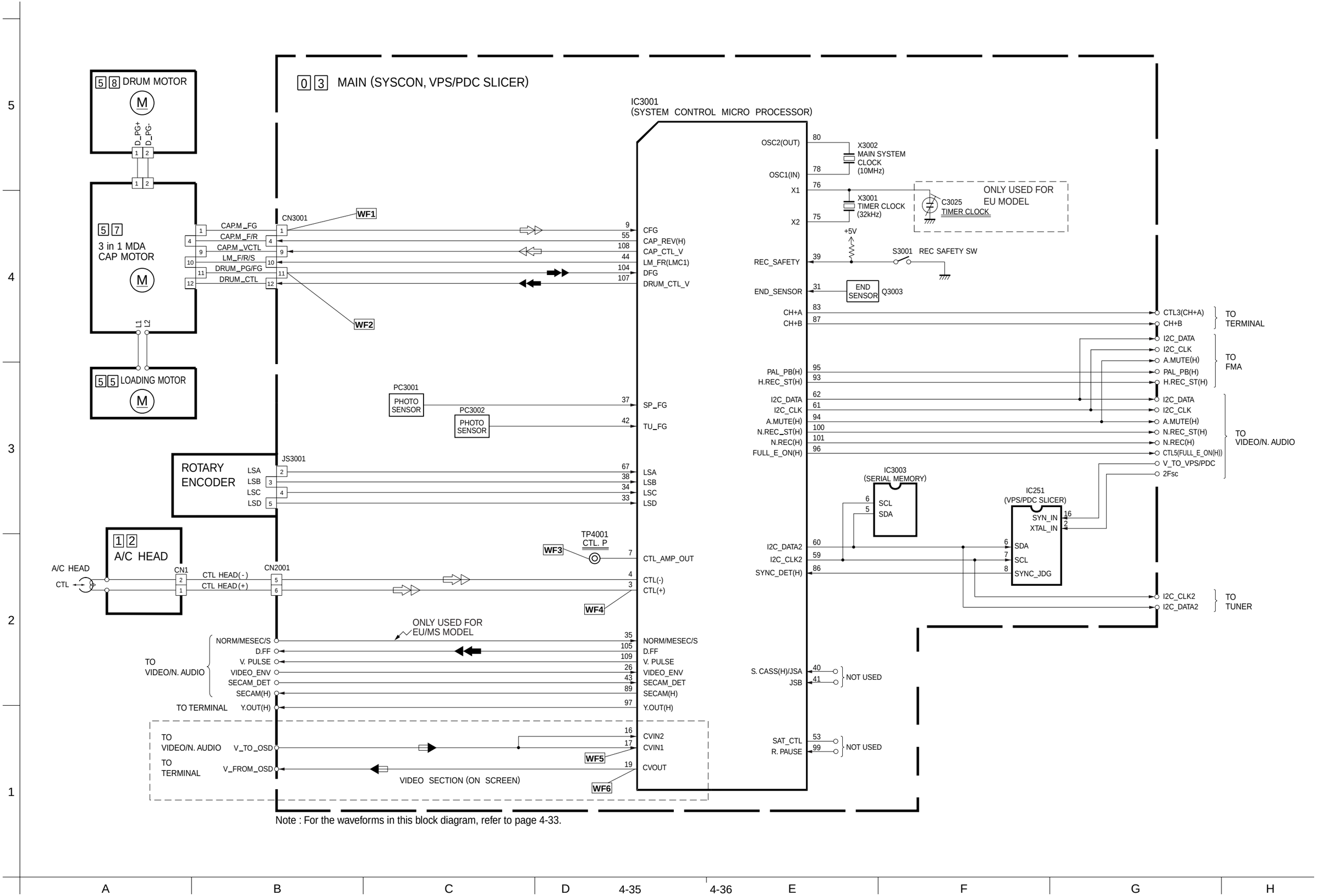
GRID ASSIGNMENT



ANODE CONNECTION

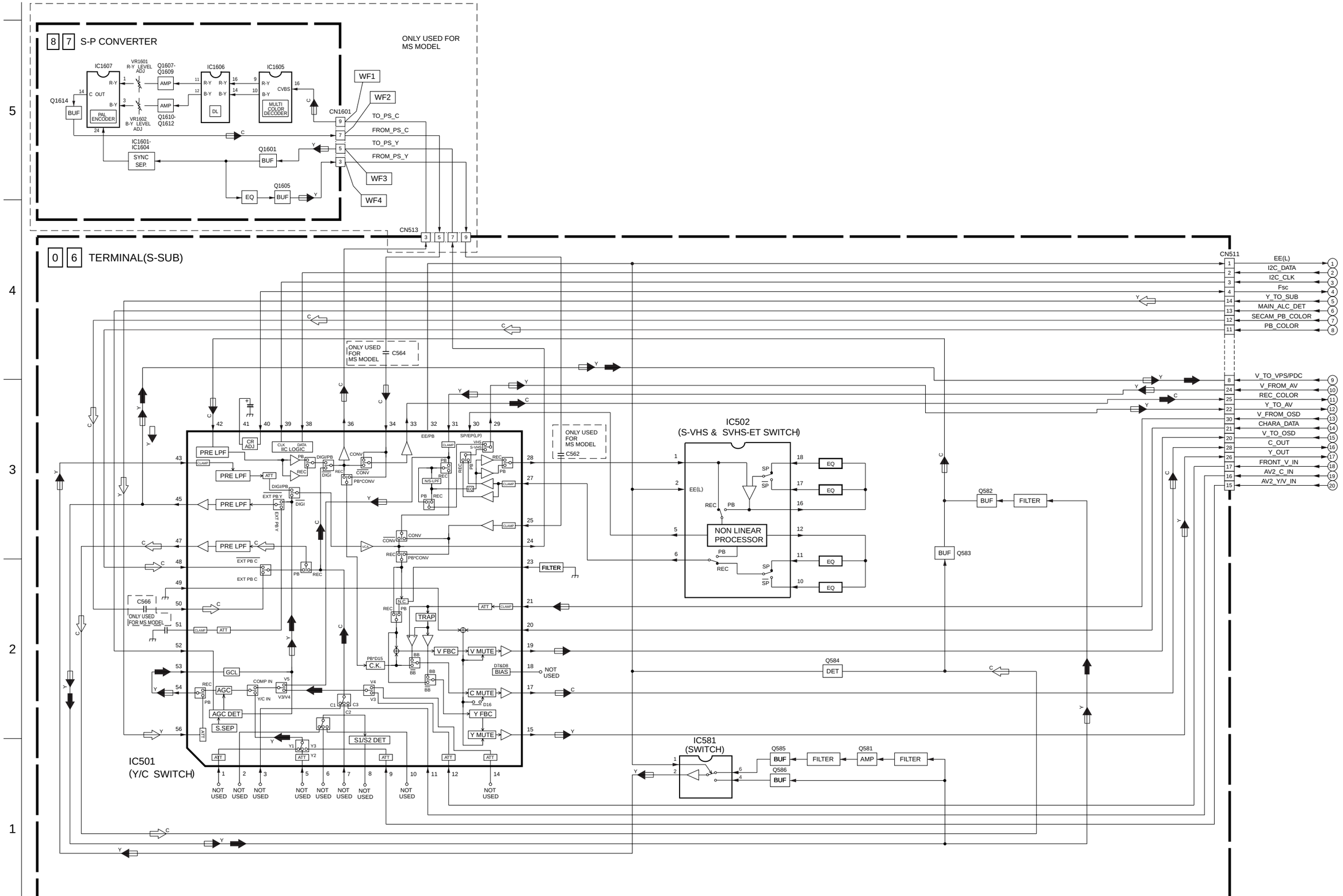
No.	CONNECTION
1	CATHODE 1G, 2G, 3G, 4G, I, J
2	CATHODE 1F, 2F, 3F, 4F, K6
3	CATHODE 1E, 2E, 3E, 4E, K1
4	CATHODE 1D, 2D, 3D, 4D, K4
5	CATHODE 1C, 2C, 3C, 4C, K5
6	CATHODE 1B, 2B, 3B, 4B, K2
7	CATHODE 1A, 2A, 3A, 4A, K3
8	COMMON ANODE K3, K2, K5, K4, K1, K6, I, J
9	COMMON ANODE DIGIT 4
10	COMMON ANODE DIGIT 3
11	COMMON ANODE DIGIT 2
12	COMMON ANODE DIGIT 1

4.21 SYSTEM CONTROL BLOCK DIAGRAM

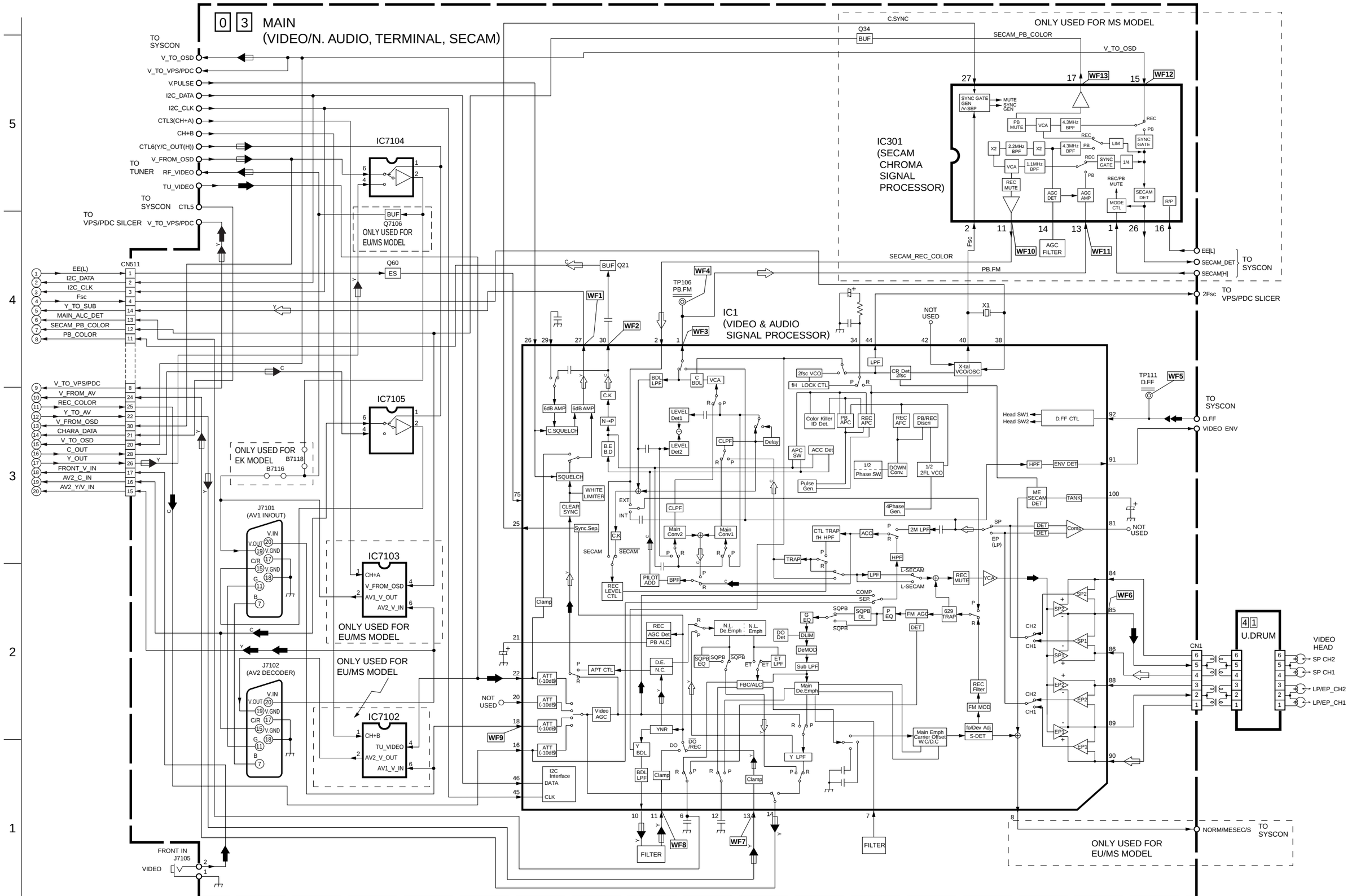


Note : For the waveforms in this block diagram, refer to page 4-33.

4.22 VIDEO BLOCK DIAGRAM

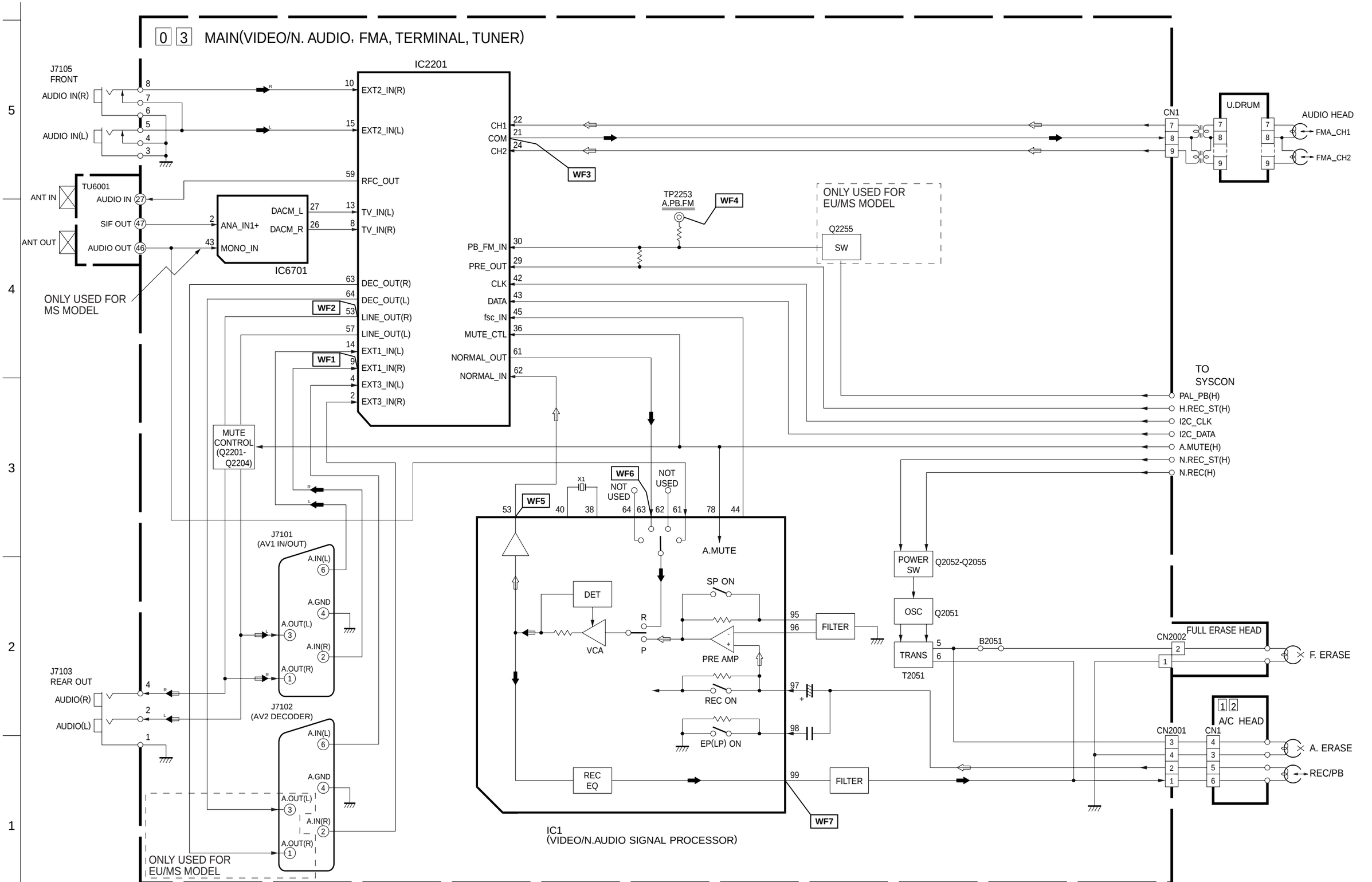


Note : For the waveforms in this block diagram, refer to page 4-33.



Note : For the waveforms in this block diagram, refer to page 4-33.

4.23 AUDIO BLOCK DIAGRAM



Note : For the waveforms in this block diagram, refer to page 4-33.

E. & O. E. No.82922(VP)-V15S0

JVC

VICTOR COMPANY OF JAPAN, LIMITED
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