


# 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.

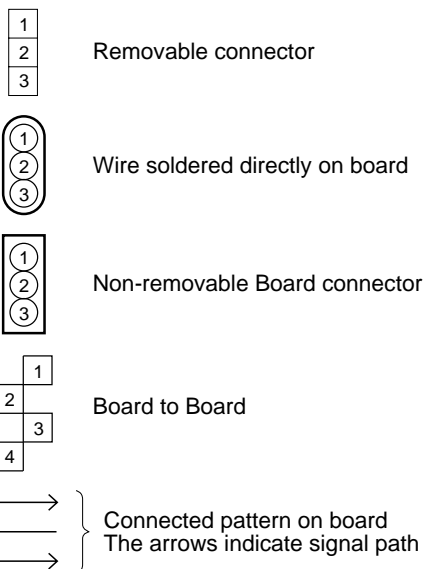
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).  
Chip resistors are 1/16 W.  
K or k: k $\Omega$  (1000 $\Omega$ ), M: M $\Omega$  (1000k $\Omega$ )
- 2) All capacitance values are in  $\mu$ F, (P: PF).
- 3) All inductance values are in  $\mu$ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

### 2. Indications of control voltage

AUX : Active at high

AUX or AUX(L) : Active at low

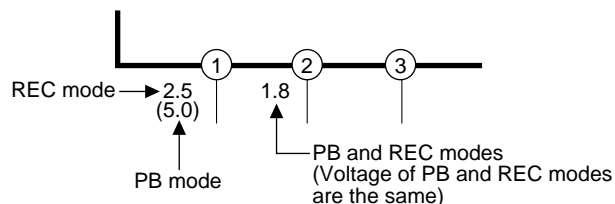
### 3. Interpreting Connector indications



### 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

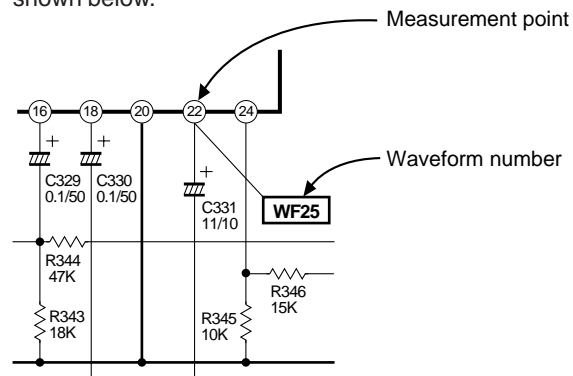
- 4) Indication on schematic diagram  
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



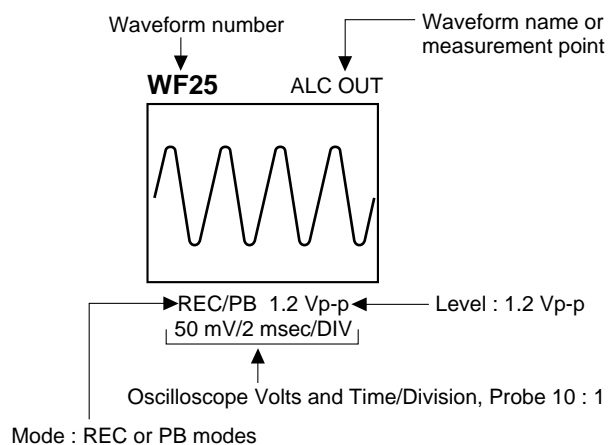
**Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.**

### 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 charts in the E-E mode
- 4) Indication on schematic diagram  
Waveform indications on the schematic diagram are as shown below.

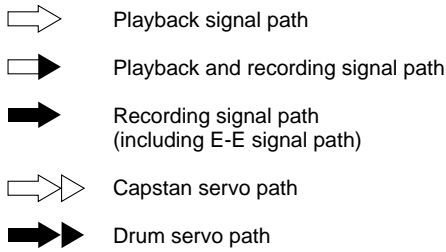


### 5) Waveform indications

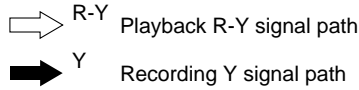


## 6. Signal path Symbols

The arrows indicate the signal path as follows.



(Example)



## 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.



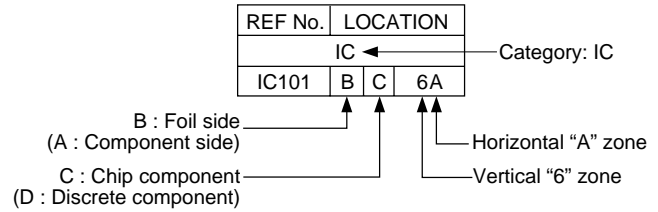
## CIRCUIT BOARD NOTES

### 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

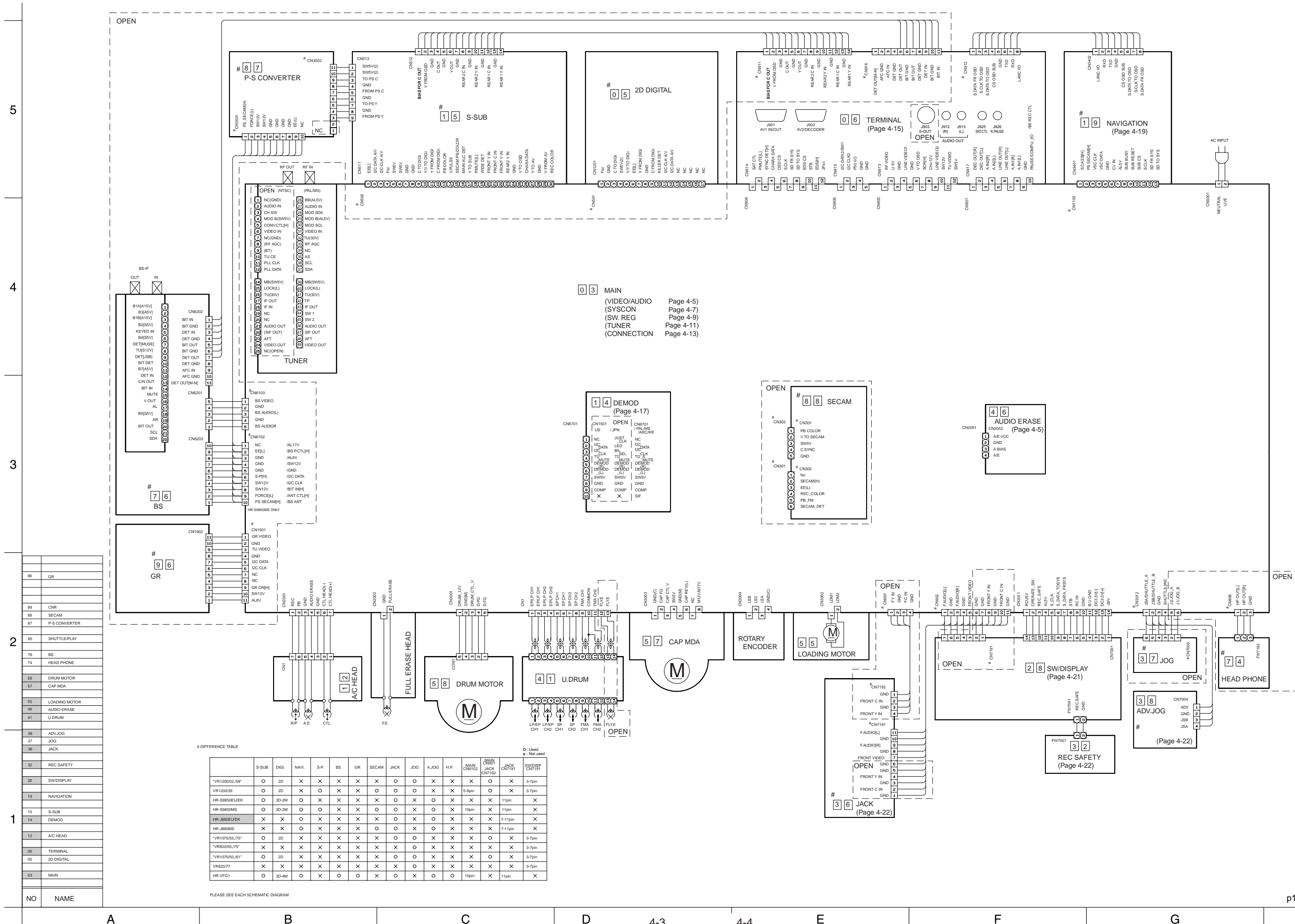
Parts location are indicated by guide scale on the circuit board.



### 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



5  
4  
3  
2  
1

96 GR  
88 CHR  
86 SECAM  
87 P-S CONVERTER  
85 SHUTTLEPLAY  
76 BS  
74 HEAD PHONE  
58 DRUM MOTOR  
57 CAP MDA  
55 LOADING MOTOR  
46 AUDIO ERASE  
41 U.DRUM  
38 ADV JOG  
37 JOG  
36 JACK  
32 REC SAFETY  
28 SW/DISPLAY  
19 NAVIGATION  
15 S-SUB  
14 DEMOD  
12 A/C HEAD  
08 TERMINAL  
05 2D DIGITAL  
03 MAIN

NO NAME

# DIFFERENCE TABLE

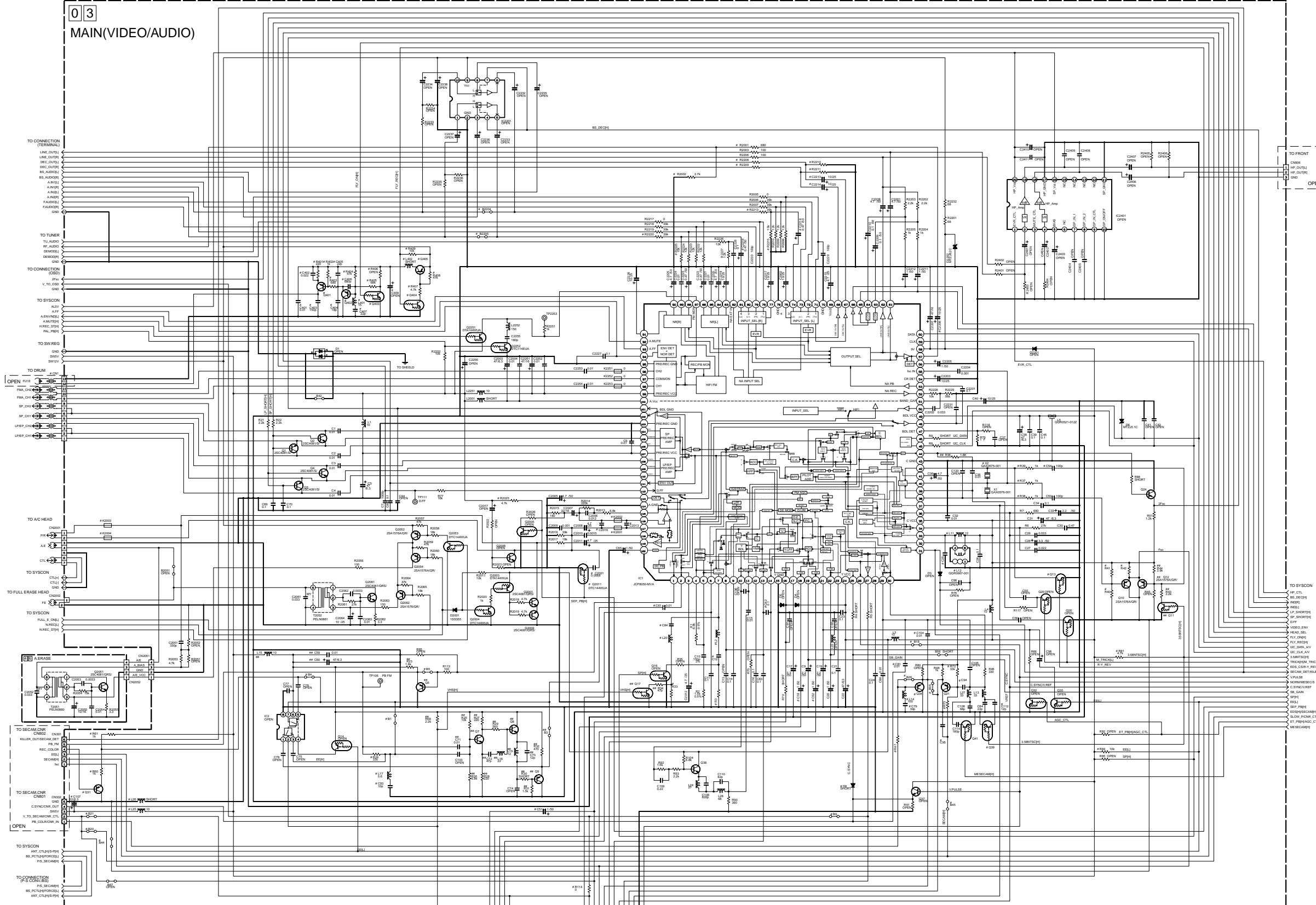
	S-SUB	DIGI	NAVL	S-P	BS	GR	SECAM	JACK	JOG	A.JOG	H.P.	MAIN CN6102	MAIN CN7192	JACK CN7191	SW/DISP CN7191
"VR1200/02_58"	O	2D	X	X	X	X	X	O	O	X	X	X	O	X	3-7pin
VR120039	O	2D	X	O	X	X	X	O	O	X	X	X	O	X	3-7pin
HR-S9850LUEK	O	3D-2M	O	X	X	X	X	O	X	O	X	X	X	X	11pin
HR-S9850MS	O	3D-2M	O	O	X	X	X	O	O	X	X	X	X	X	10pin
HR-J880LUEK	X	X	O	X	X	X	X	O	X	O	X	X	X	X	7-11pin
HR-J880MS	X	X	O	X	X	X	X	O	X	O	X	X	X	X	7-11pin
"VR1070/55_75"	O	2D	X	X	X	X	X	O	O	X	X	X	O	X	3-7pin
"VR820/55_75"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3-7pin
"VR1070/50_61"	O	2D	X	X	X	X	X	O	O	X	X	X	O	X	3-7pin
VR82077	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3-7pin
HR-VFG1	O	3D-4M	O	X	O	O	X	O	O	O	O	X	X	X	10pin

O : Used  
X : Not used

PLEASE SEE EACH SCHEMATIC DIAGRAM

4.2 MAIN (VIDEO/AUDIO) & AUDIO ERASE SCHEMATIC DIAGRAMS

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.



## MARK ELEMENTS ARE MOUNTED ONLY S-VHS MODELS

NOTES UNLESS OTHERWISE SPECIFIED:  
 ALL NPN TYPE TRANSISTORS ARE 2SC4081(QRS) or 2SD1819A(QRS) or 2PC4081(RL)  
 ALL PNP TYPE TRANSISTORS ARE 2SA1679A(QRS) or 2SB1218A(QRS) or 2SA1679(RL)  
 ALL NPN TYPE DIGITAL TRANSISTORS ARE DTC144W(A) or UMS21E or PDTA144W(U) or RNV300.  
 ALL PNP TYPE DIGITAL TRANSISTORS ARE DTA144W(A) or UMS11E or PDTA144W(U) or RNV300.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.

ALL CAPACITANCE VALUES ARE IN  $\mu$ F.  
 ELECTROLYTIC  
 CERAMIC  
 MYLAR  
 NON POLAR

#DIFFERENCE TABLE

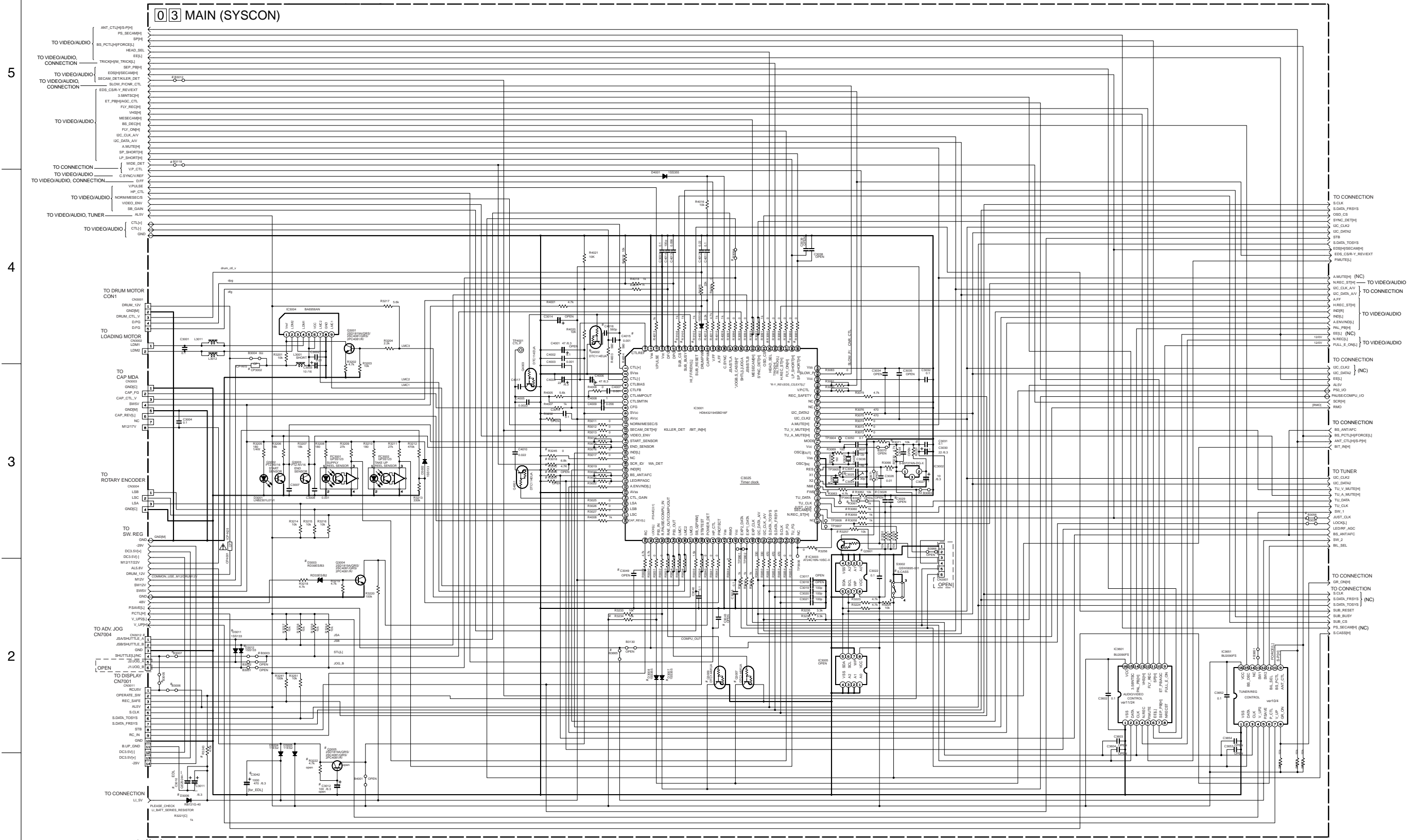
Model	CNR1	PRYERASE	CNR/SECAM	CNR	SECAM	VHS	DE EMPH	C84	L30	R33	X2	R37	R38	R39	R40	R41	R42	Q39	R73	C112	C81	C94	C95	R114	C81	R81	R84	C25	L11	L12	C52	R2001	R2002	R2003	R2009	R2210	R2211	R2213	R2215	R2220	R2221	R2222	R2223	R2224	Q13	Q2011	R2025	R2001	R2002	C2013	C2016								
VR-8800	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
VR-8805	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
VR-8805/75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
VR-8805/75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

5  
4  
3  
2  
1

A B C D 4-5 4-6 E F G H

### 4.3 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.



1

# DIFFERENCE TABLE  
O : Used  
X : Not used

BACK UP TIME	C3010	C3011	C3042
3MIN	X	3300	X
10MIN	X	4700	X
60MIN	220	X	O
BATT	X	3300	X

JOG CTL TYPE	CN3012	B3003 D3011 B3005	D3012 D3012 B3007	B3005
JIS	6Pin	O	X	X
ADV.JOG	4Pin	X	O	O

FEATURE TYPE	D3008 Q3007	D3007	Q3009	S3002
SYHS	X	X	X	O
TV-LINKING	O	X	X	X
R.PAUSE	X	SHORT	X	X
R.A.EDIT	X	O	O	X
VR120039	O	SHORT	X	O

SUB CLK ADJ.	X3001	C3025	C3041	C3024
ADJ.	GA30445	O	X	220
FIX	GA30444	X	10p	12p

	R3242	R3247	B3012	B3030	B3035	B3036	B3118	B3051	B3055
JPH	X	X	X	X	O	X	O	X	O
UMK	01	O	X	O	X	O	X	X	X
LATIN	01	O	O	O	X	O	X	X	X
PH EURO	4.7k	X	O	O	X	O	X	O	O
JVC EURO	4.7k	X	O	O	X	X	X	O	O
ARC	01	O	O	O	X	O	X	O	X

MECHA TYPE	C4015	C4016	Q4002	C4005	C4017	Q4003
Y29-2	0.001	X	X	O	X	X
Y29-T	0.001	X	X	X	O	O
Y29-T-SEP	680p	O	O	X	O	O

NOTES: UNLESS OTHERWISE SPECIFIED.  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN  $\mu$ F.  
ELECTROLYTIC  
CERAMIC  
MYLAR  
NON POLAR

A

B

C

D

4-7

4-8

E

F

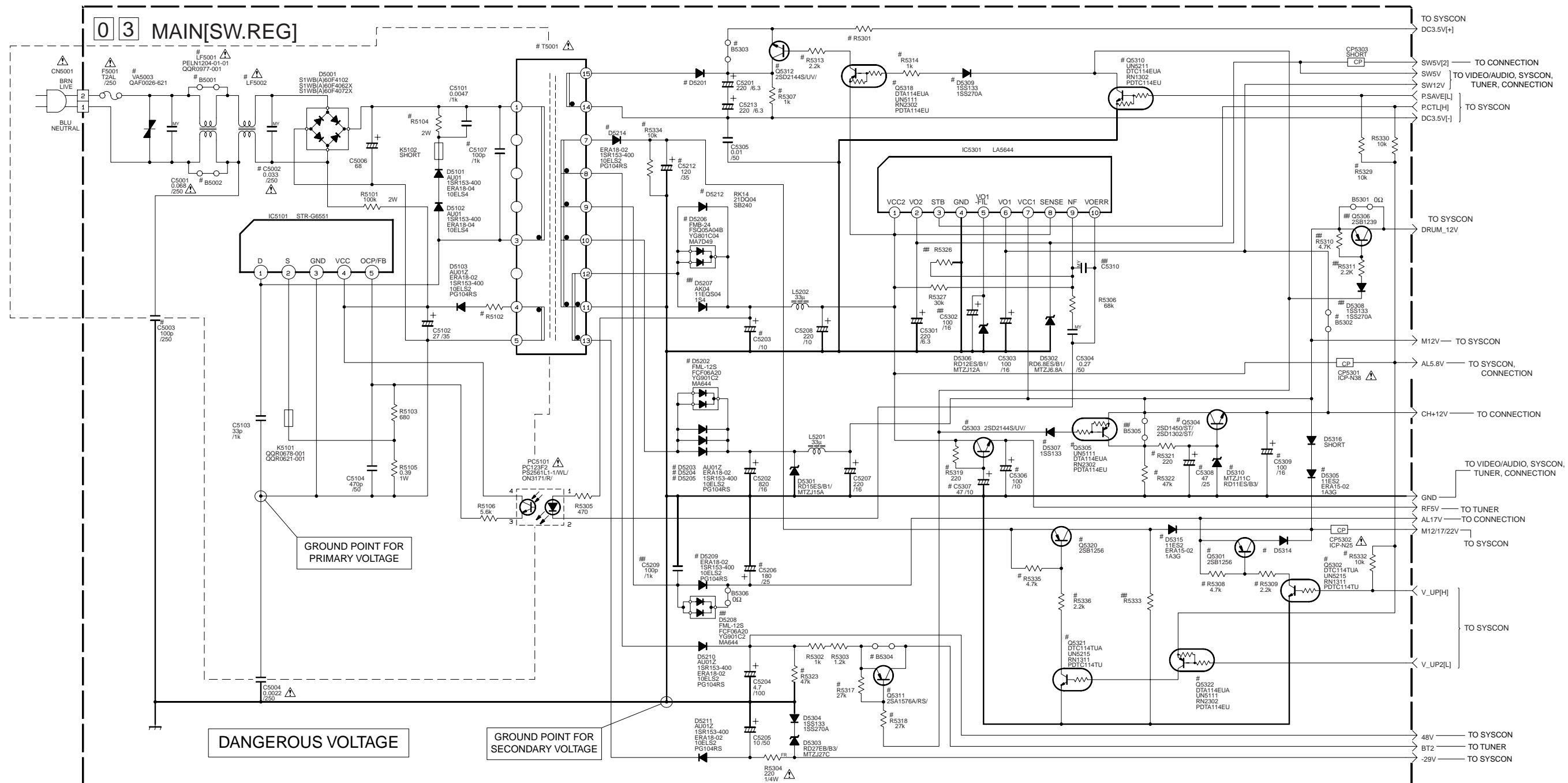
G

H

4.4 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.

5  
4  
3  
2  
1



# DIFFERENCE TABLE 1

		D5202	D5203	D5204	D5205	D5206	D5212	C5203
D25	EUI/EKMS/A/M	NO	YES	NO	YES	NO	YES	1200
S1	EUI/EK	YES	NO	YES	NO	NO	NO	1200
	MS	YES	NO	YES	NO	NO	NO	2200
	A	YES	NO	YES	NO	NO	NO	1200
S2	EUI/EKMS	YES	NO	YES	NO	NO	NO	2200
	S25	EUI/EKMS	YES	NO	YES	NO	NO	2200

# DIFFERENCE TABLE 6

	R5104	C5003	C5103	C5107	K5102
PHILIPS /75	68k	YES	33p	NO	SHORT
OTHER	150k	NO	33p	NO	SHORT

# DIFFERENCE TABLE 2

	LF5001	LF5002	C5002	B5001	B5002	C5107
AC INPUT 220-240V (CE)	YES	QQR0978-001 QQR0608-001 QQR0610-001	YES	NO	NO	YES
AC INPUT 110-240V (OTHER)	NO	QQR0532-001 QQR0533-001 QQR0516-001 QQR0627-001 QQR0816-001	NO	YES	NO	NO

# DIFFERENCE TABLE 7

	Q5301	Q5302	R5308	D5305	D5314	D5315	Q5320	C5212	T5001	R5102
HIGH SPEED FF/REW	Q5301	Q5302	R5308	D5305	D5314	D5315	Q5320	C5212	T5001	R5102
NO	NO	NO	SHORT	NO	NO	NO	NO	NO	QQS0052-001	4.7
100s	85s	YES	YES	SHORT	NO	NO	NO	NO	QQS0052-001	4.7
75s	S1,S2	YES	YES	11ES2 ERA15-02 1A3G	YES	YES	YES	YES	QQS0057-001	33
	S25,S36	YES	YES	11ES2 ERA15-02 1A3G	YES	YES	YES	YES	QQS0057-001	39

# DIFFERENCE TABLE 3

	CH+12V	Q5304	R5322
		D5310	C5308
		R5321	C5309
YES	NO	YES	NO
NO	YES	NO	NO

# DIFFERENCE TABLE 8

	VA5003
JVC	NO
PHILIPS	YES

# DIFFERENCE TABLE 9

	Q5303	C5306
	R5319	C5307
PHILIPS /50 /61 /77	NO	NO
OTHER	YES	YES

# DIFFERENCE TABLE 4

	PSAVE	B5303	Q5305	Q5318	R5313	R5323
		B5304	Q5310	D5307	R5314	R5329
			Q5311	D5309	R5317	
			Q5312	R5307	R5318	
FF/REW 75s	NO	NO	YES	YES	YES	YES
OTHER	NO	NO	YES	YES	YES	YES
NO	YES	NO	NO	NO	NO	NO

# DIFFERENCE TABLE 5

		R5301	D5201
LEVEL IND	YES	EUI/EKMS	1
		OTHER	SHORT
LEVEL IND	NO	SHORT	AU10Z 10ELS2

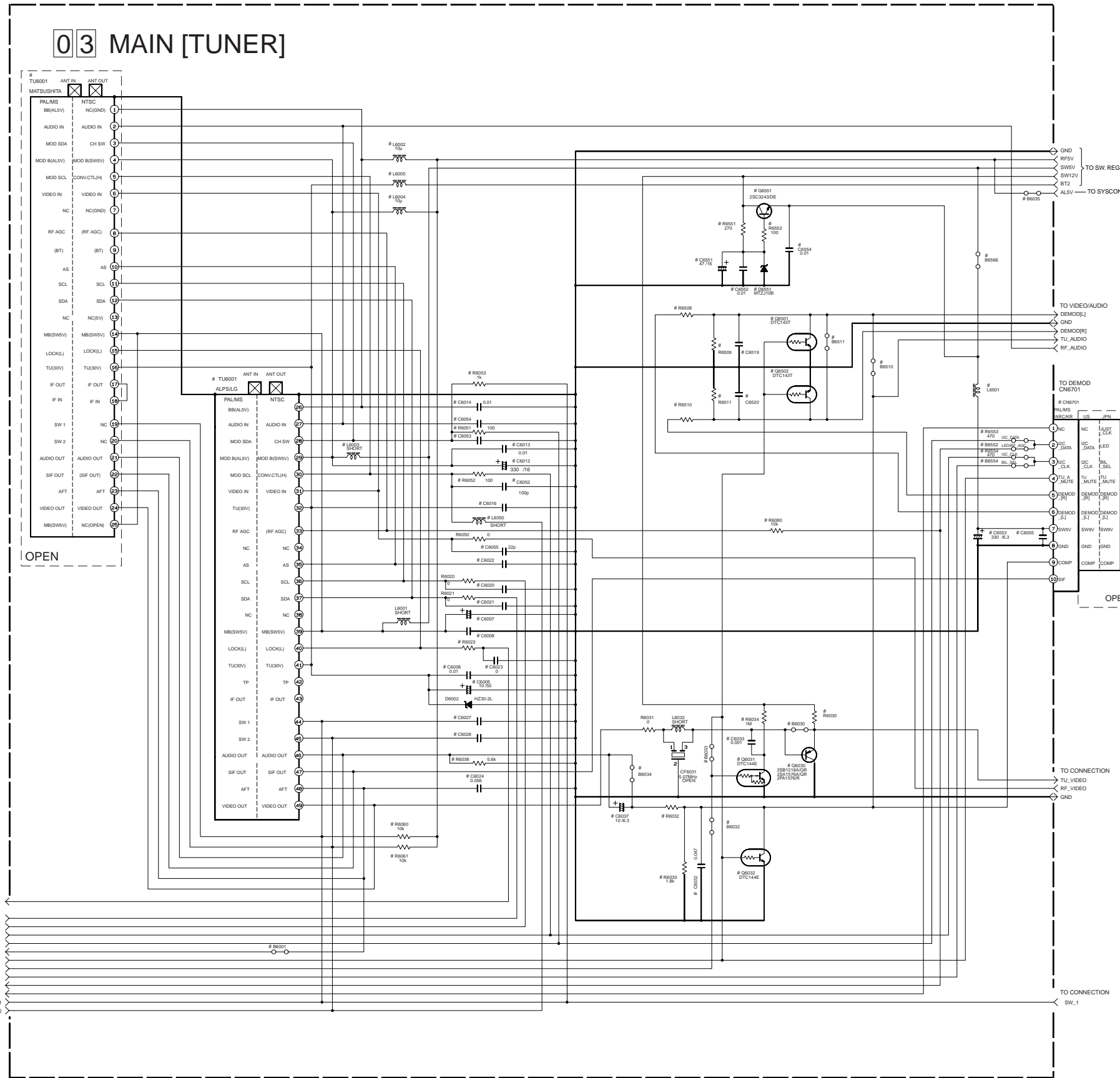
## MARK ELEMENTS ARE NOT MOUNTED

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

4.5 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.

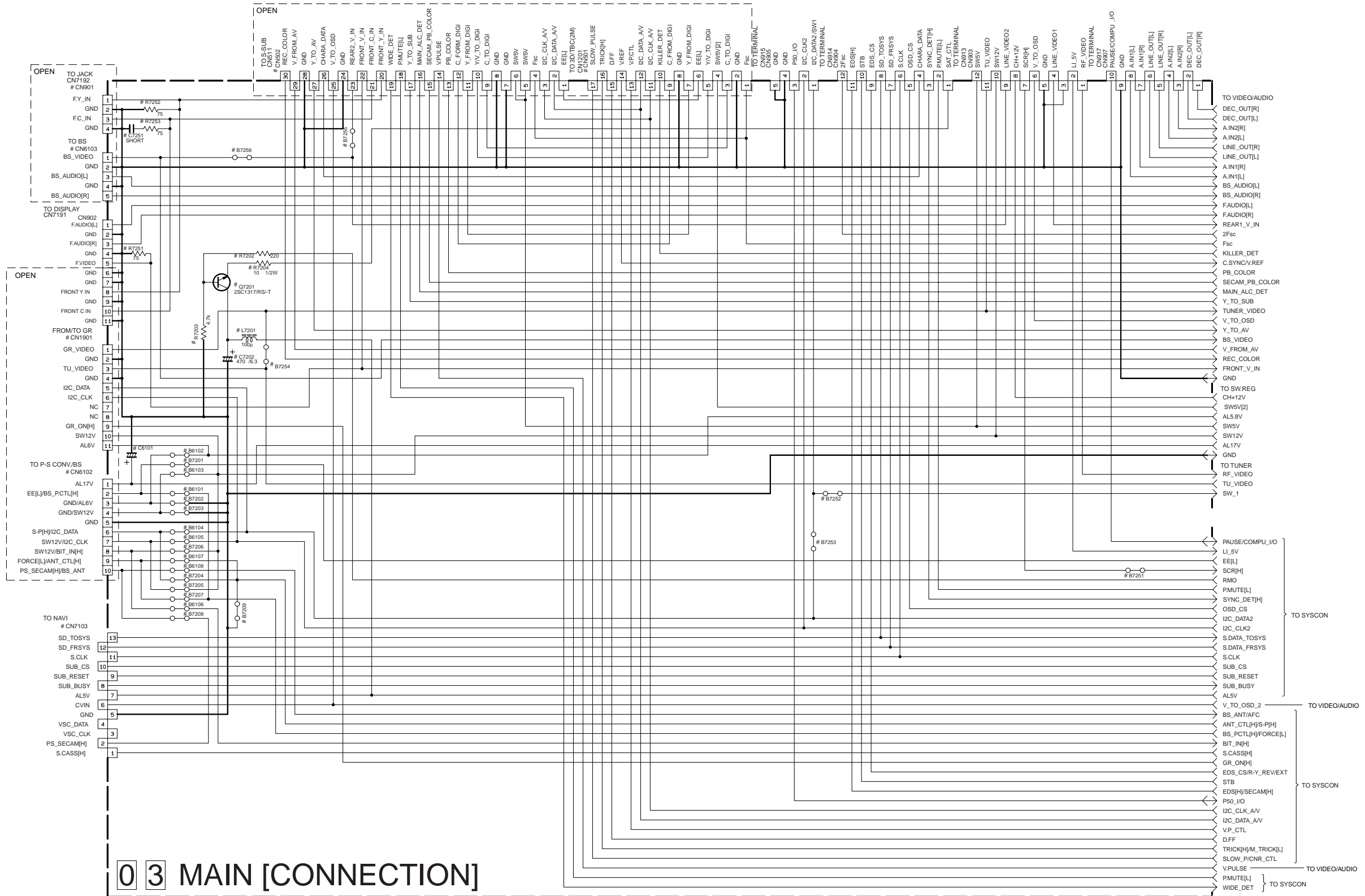


# DIFFERENCE TABLE

TUNER UNIT		# DIFFERENCE TABLE						
		'02,'58'	'EK,EU'	'MS,'3P'	'S5,'7S'	'S0,'7T'	#61	JAPAN
RF CONVERTER								
BB (RF SV)	L6002,C6014*	○	○	○	○	×	×	×
AUDIO IN	C6054	×	×	×	×	×	×	×
MOD SDA/CH SW	R6051	×	×	×	×	×	×	×
	R6053	×	×	×	×	○	○	×
	C6053	×	×	×	×	×	×	×
MOD B	L6003	×	×	×	×	○	○	×
	L6004	×	○	×	×	×	×	×
	C6012	×	×	×	×	×	×	×
	C6013	×	×	×	×	×	×	×
MOD SCL/CONVCTL	R6052	×	○	×	×	×	×	×
	C6052	×	×	×	×	×	×	×
	L6050	×	×	×	×	○	○	×
VIDEO IN	R6050	×	○	×	×	○	○	×
	C6055	×	×	×	×	×	×	×
TU (30V)	C6016	×	○	×	○	×	×	×
FRONT END								
RF AGC	R6080	○	○	○	×	×	×	×
AS	C6022	×	×	×	×	×	×	×
SCL	R6020	1k	1k	1k	1k	1k	1k	1k
	C6020	×	×	×	×	×	×	×
SDA	R6021	1k	1k	1k	1k	1k	1k	1k
	C6021	×	×	×	×	×	×	×
MB (30V)	L6001	10k	10k	10k	SHORT	SHORT	SHORT	SHORT
	C6007	×	×	×	×	×	×	×
	C6008	×	×	×	×	×	×	×
LOCK	R6023	×	×	×	×	×	×	×
TU (30V)	C6005	×	×	×	×	×	×	×
	C6006	×	×	×	×	×	×	×
#								
SW1	R6060	○	○	○	×	×	×	×
	C6027	×	×	×	×	×	×	×
SW2	R6061	○	○	○	○	○	○	×
	C6028	×	×	×	×	×	×	×
AUDIO OUT	R6038	×	×	×	×	×	×	×
	C6037	○	○	○	○	×	×	×
	R6034	×	×	×	×	○	×	○
	R6032	3.3k	3.3k	18k	0Ω	12k	×	0Ω
	R6033	1.5k	1.5k	18k	×	×	×	×
	C6032	○	○	×	×	×	×	×
AFT	C6034	×	×	×	×	×	×	×
	R6001	○	○	○	○	○	○	×
VIDEO OUT	C6030	○	○	○	○	○	○	○
	R6030	1k	1k	1k	1k	3.3k	3.3k	3.3k
	R6030	×	×	×	×	×	×	×
AUDIO MUTE	C6032	○	○	○	○	×	×	×
VIDEO MUTE	C6031	○	○	○	○	×	×	×
	R6034	×	×	×	×	×	×	×
	C6033	0Ω	0Ω	0Ω	0Ω	×	×	×
	R6052	○	○	○	○	×	×	×
	R6033	×	×	×	×	×	×	×
DEMODO REG	'R6051,R6052,' 'C6054	×	×	×	×	○	×	○
	'C6051,C6052,' C6054	×	×	×	×	×	×	×
	R6056	○	○	○	○	×	○	×
	C6053	○	○	○	○	×	○	×
	C6055	×	×	×	×	×	×	×
	L6001	SHORT	SHORT	3.3k	SHORT	×	3.3k	×
DEMODO OUT	'R6038,R6010'	0Ω	0Ω	0Ω	0Ω	0Ω	0Ω	0Ω
	'R6020,R6011'	×	×	×	×	×	×	×
	'C6019,C6020'	×	×	×	×	×	×	×
	'C6001,C6002'	×	×	×	×	×	×	×
	'R6010,R6011'	×	×	×	×	×	×	×
DEMODO OPTION	R6053	○	○	○	○	0Ω	0Ω	×
	R6052	×	×	×	×	×	×	○
	R6054	○	○	○	○	0Ω	0Ω	×
	R6054	×	×	×	×	×	×	○
DEMODO UNIT	CN6701	LPA10094 -04*	LPA10094 -04*	LPA10094 -05*	LPA10094 -07*	PB11076A	LPA10094 -08*	PB11087A
OPTION	R6035	×	×	×	×	○	○	×

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ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN μF.  
ELECTROLYTIC  
CERAMIC  
MYLER  
NON POLAR

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.



# 0 3 MAIN [CONNECTION]

O : Used  
x : Not used

	CN6102	B6101 B6108 C6101 CN6103	B7201 B7202 B7203 B7207 B7208	B7204 B7205 B7206	B7209	R7202 R7203 R7204 Q7201 L7201 C7202	B7251 B7253	B7252	B7255	B7256	CN901	R7252 R7253 C7251	R7251
VR1200/02_58	X	X	X	X	X	O	O	X	O	X	O	O	O
HR-S9850/EU/EK	X	X	X	X	X	O	O	X	O	X	O	O	O
VR1200/39	X	X	X	O	O	O	O	X	O	X	O	O	O
HR-S9850MS	X	X	X	X	X	O	O	X	O	X	O	X	O
HR-J880E/EK/MS	X	X	X	X	X	O	O	X	O	X	O	X	O
VR1070/55_75	X	X	X	X	X	X	X	X	X	X	X	X	X
VR820/55_75	X	X	X	X	X	X	X	X	X	X	X	X	X
VR1070/50_61	X	X	X	X	X	X	X	X	X	X	X	X	X
VR820/77	X	X	X	X	X	X	X	X	X	X	X	X	X
HR-VFG1	1-10pin	O	X	X	X	X	X	O	X	X	O	X	X

NAVI	CN7103
YES	O
NO	X

GR	CN1901	B7254
YES	O	X
NO	X	O

SVHS	CN501 CN502
YES	O
NO	X

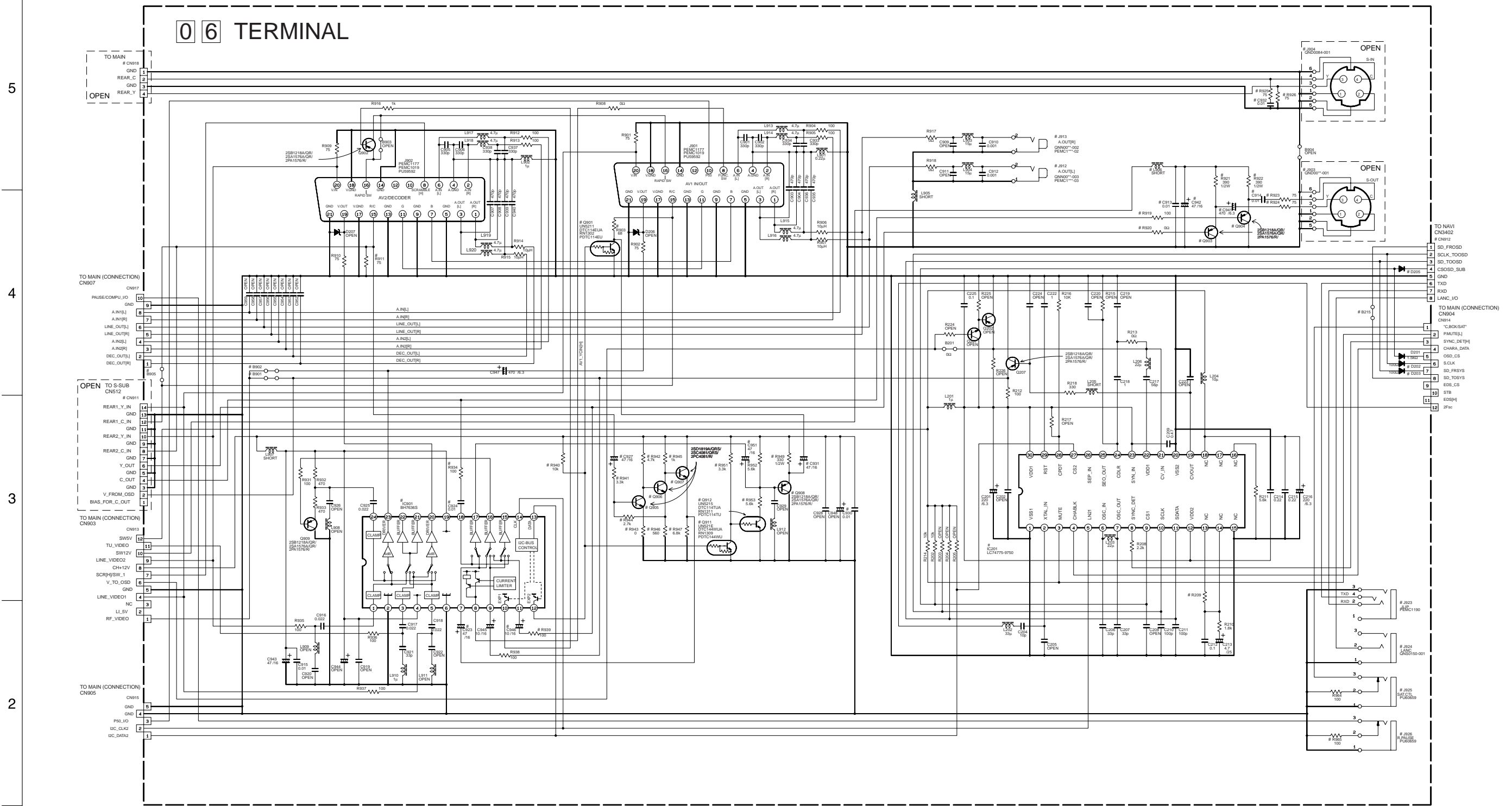
NOTES: UNLESS OTHERWISE SPECIFIED.  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN µF.

⊞ ELECTROLYTIC  
 CERAMIC  
 MYLER  
 NON POLAR



4.7 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.



# DIFFERENCE TABLE

○ : Used  
x : Not used

SYMBOLS	S-VHS	B902	B905	B901	S IN	OSD LANGUAGE	NAVIGATION	S OUT	A. OUT	JLIP	LANC	SECIL	R.RUSE	CH+G
MODELS	R903, R911, R919, R924, R939, R947, R958, R969, R985, R990, C911, C914, C942, C946, C951, C961, C965, C968, C971, C912, L905, J903, CN911					IC201	D202, D203, CN912	B215	J912, J913	J923	J924	J925	J926, R995	IC901
V1336 EU(EK)	○	○	x	x	x	6-9791	12x	x	○	x	85	21/126	○	○
V1336 MS	○	○	x	x	x	5-9750	5.1x	x	○	x	85	21/126	○	○
V1336 EU(PHILIPS)	○	○	x	x	x	6-9791	12x	x	○	x	84	23/309	x	○
V1332S EU(EK)	○	○	x	x	x	6-9791	12x	x	○	x	84	23/309	○	○
V1332S MS	○	○	x	x	x	5-9750	5.1x	x	○	x	84	23/309	○	○
V1332S22 EU(EK)S21 EU*	○	○	x	x	x	6-9791	12x	○	x	x	84	23/309	x	○
V1332S EU(EK)(PHILIPS)	○	○	x	x	x	5-9750	5.1x	○	x	x	84	23/309	x	x
V1332S MS	○	○	x	x	x	5-9750	5.1x	○	x	x	84	23/309	x	x
V1332S MS(PHILIPS)	○	○	x	x	x	5-9750	5.1x	○	x	x	84	23/309	x	x
V1331 EU(EK)S11EU.S12E*	○	○	x	x	x	6-9791	12x	○	x	x	84	23/309	x	x
V1331 MS	○	○	x	x	x	5-9750	5.1x	○	x	x	84	23/309	x	x
V1332 EU(EK)	x	○	○	○	○	6-9791	12x	x	○	x	23/309	○	○	○
V1332 MS	x	x	○	○	x	5-9750	5.1x	x	○	x	23/309	○	○	○
HR-J901EU(EK)	x	○	○	x	x	5-9750	5.1x	x	○	x	23/309	○	○	○

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

LAST NO	VACANT NO
R 226 955	'201-206,207,219-223'
C 225 959	'203,221'
D 207	204
Q 207 912	203-206
L 206 920	910
B 215 905	202-214
J	926
IC 201 901	'905-911,914-922'
CN	918
	'901-910,916'

1

2

3

4

5

A

B

C

D

4-15

4-16

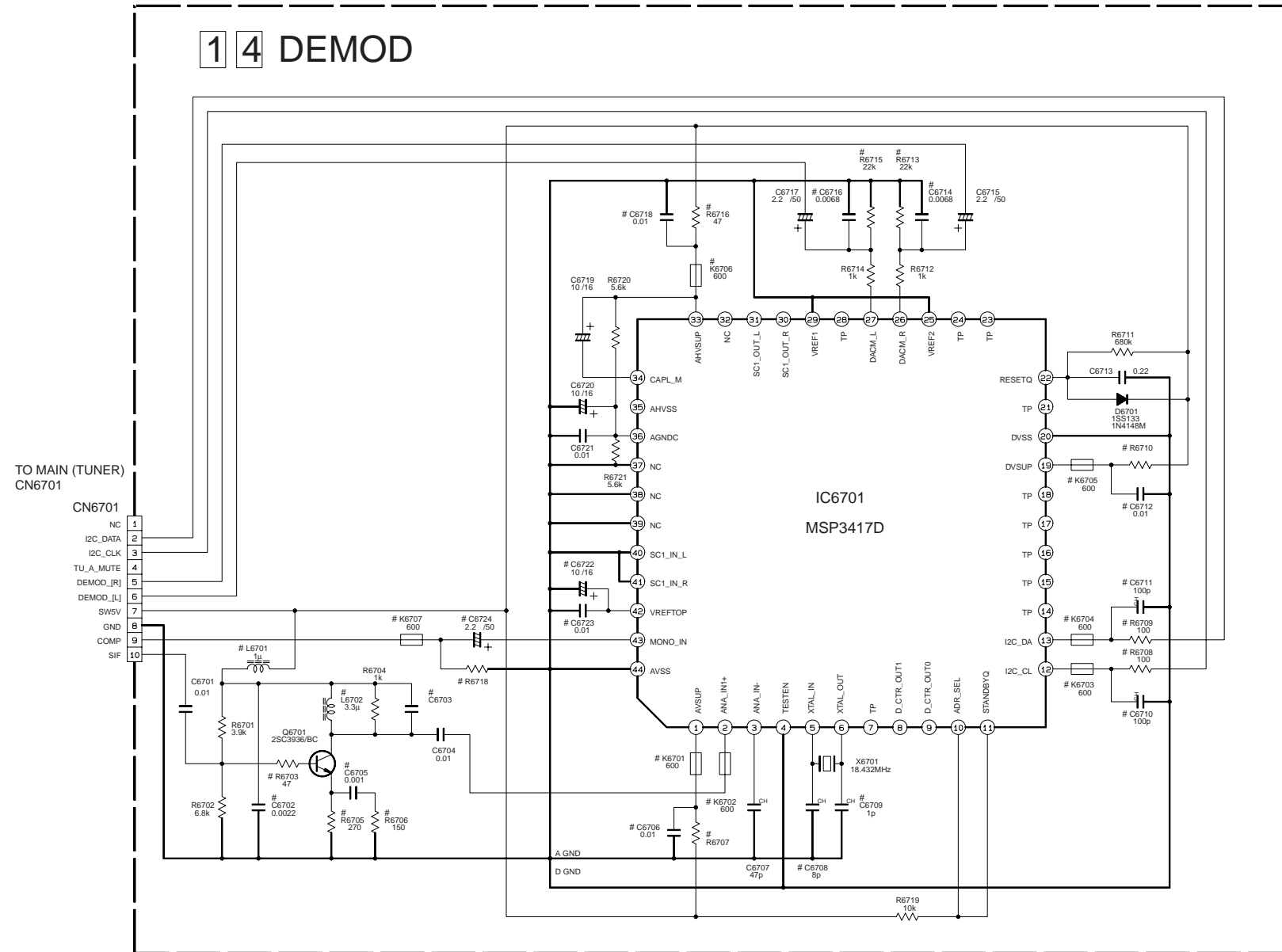
E

F

G

4.8 DEMODULATOR 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.

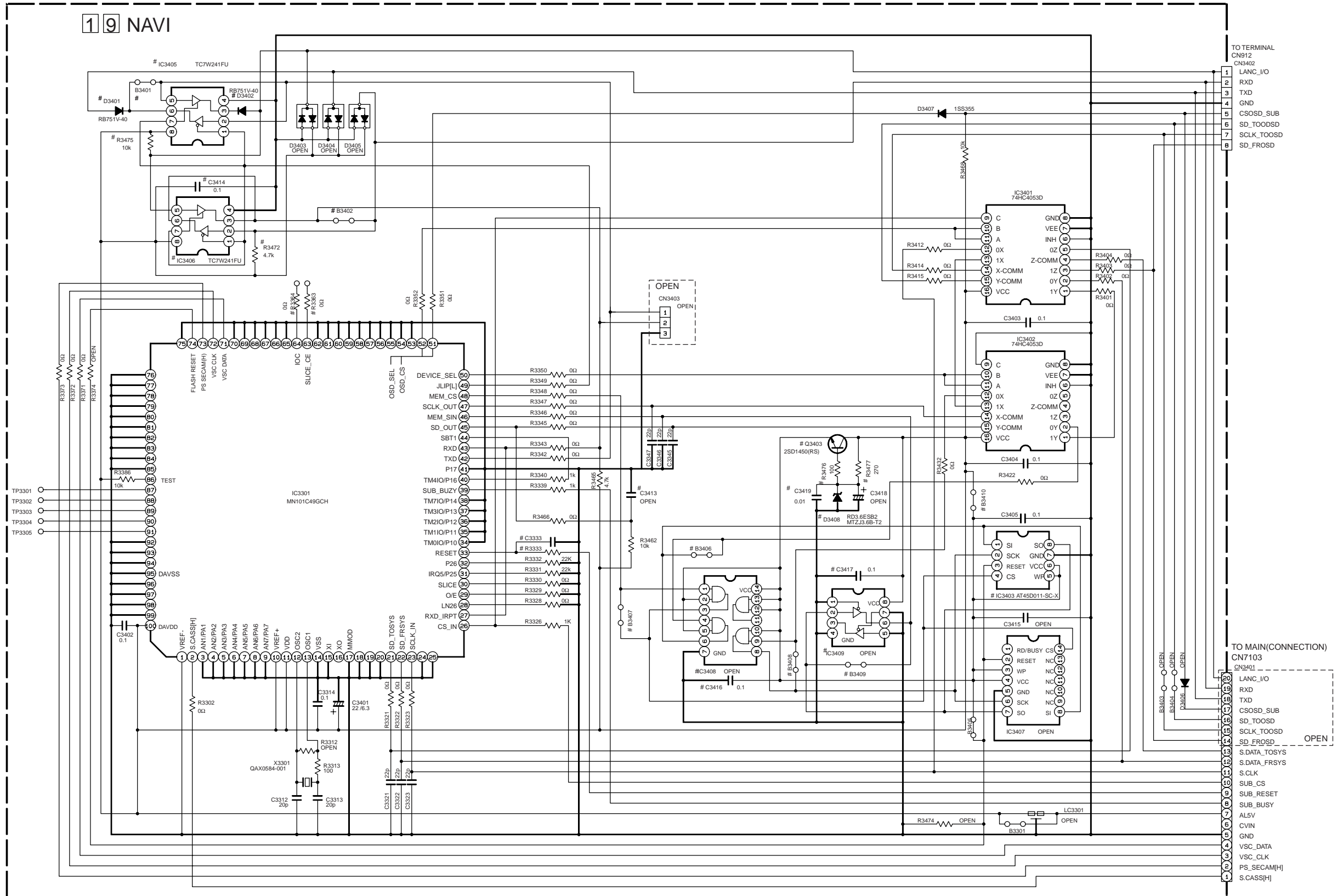


NOTES-UNLESS OTHERWISE SPECIFIED.  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN  $\mu$ F.  
 + - - ELECTROLYTIC  
 - - - CERAMIC  
 - - - MYLAR  
 - - - NON POLAR

# DIFFERENCE TABLE

		V13			V14				
		FRANCE MS	EU/EK	ARC	EU/EK	FRANCE MS	KOREA	ARC 4SYSTEM	ARC 3SYSTEM
DEMOP PWB ASSY		LPA10094 -01*	LPA10094 -02*	LPA10094 -03*	LPA10094 -04*	LPA10094 -05*	LPA10094 -06*	LPA10094 -07*	LPA10094 -08*
PRE AMP	R6703	47	47	47	0	0	47	0	0
	R6705	270	270	100	270	270	270	270	270
	R6706	150	150	X	X	X	100	X	X
	C6702	0.0022	0.0022	0.0022	X	X	X	X	X
	C6703	X	X	220p	X	X	X	220p	180p
	C6705	0.001	0.001	X	X	X	0.001	X	X
	L6701	1 $\mu$	1 $\mu$	1 $\mu$	SHORT	SHORT	SHORT	SHORT	SHORT
MONO IN	L6702	3.3 $\mu$	3.3 $\mu$	3.3 $\mu$	X	X	3.3 $\mu$	3.3 $\mu$	3.3 $\mu$
	K6707	FE 600	X	X	X	FE 600	X	X	X
	C6724	0.22/50	X	X	X	0.22/50	X	X	X
I2C-BUS	R6718	X	X	X	X	X	X	X	X
	R6708,R6709	100	100	100	FE 600	FE 600	FE 600	FE 600	FE 600
	K6703,K6704	FE 600	FE 600	FE 600	1K	1K	1K	1K	1K
ANALOG Vcc	C6710,C6711	X	X	X	X	X	X	X	X
	R6707	22	47	47	FE 600	FE 600	FE 600	FE 600	FE 600
	K6701	FE 600	FE 600	FE 600	33	33	33	33	33
DIGITAL Vcc	C6706	X	X	X	X	X	X	X	X
	R6710	10	12	12	FE 600	FE 600	FE 600	FE 600	FE 600
DAC Vcc	K6705	FE 600	FE 600	FE 600	10	10	10	10	10
	C6712	X	X	X	X	X	X	X	X
XTAL	R6716	47	47	47	FE 600	FE 600	FE 600	FE 600	FE 600
	K6706	FE 600	FE 600	FE 600	47	47	47	47	47
	C6718	X	X	X	X	X	X	X	X
DAC OUT	C6708	8p	8p	8p	7p	7p	7p	7p	7p
	C6709	1p	1p	1p	3p	3p	3p	3p	3p
VREF	R6713,R6715	X	X	X	X	X	X	X	X
	C6714,C6716	0.0068	0.0068	0.0068	0.0022	0.0068	0.0022	0.0022	0.0022
SIF	C6722	X	X	X	X	X	X	X	X
	C6723	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01

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

			AT45D011-SC	AT45D011-SC
IC3408	IC3409	Q3403	X	O
D3408	R3476	R3477		
C3416	C3417	C3419		
B3406-B3410			O	X
R3333			1k	330
C3333			0.1µF	4.7kΩ

LANC	WITH LANC	WITHOUT LANC
IC3405, C3414		
IC3406, D3402	O	X
R3472, R3475		

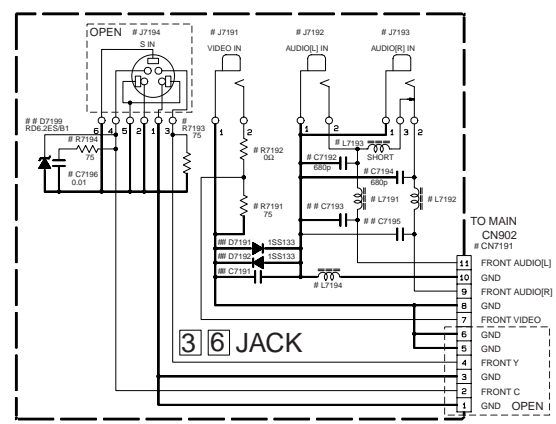
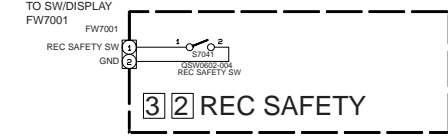
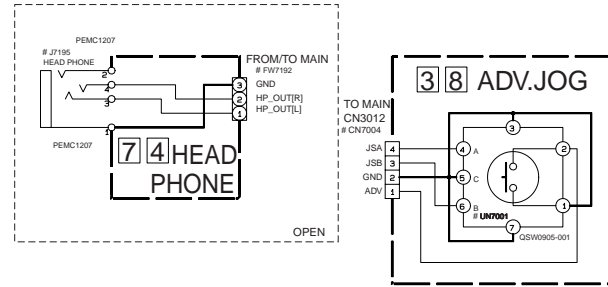
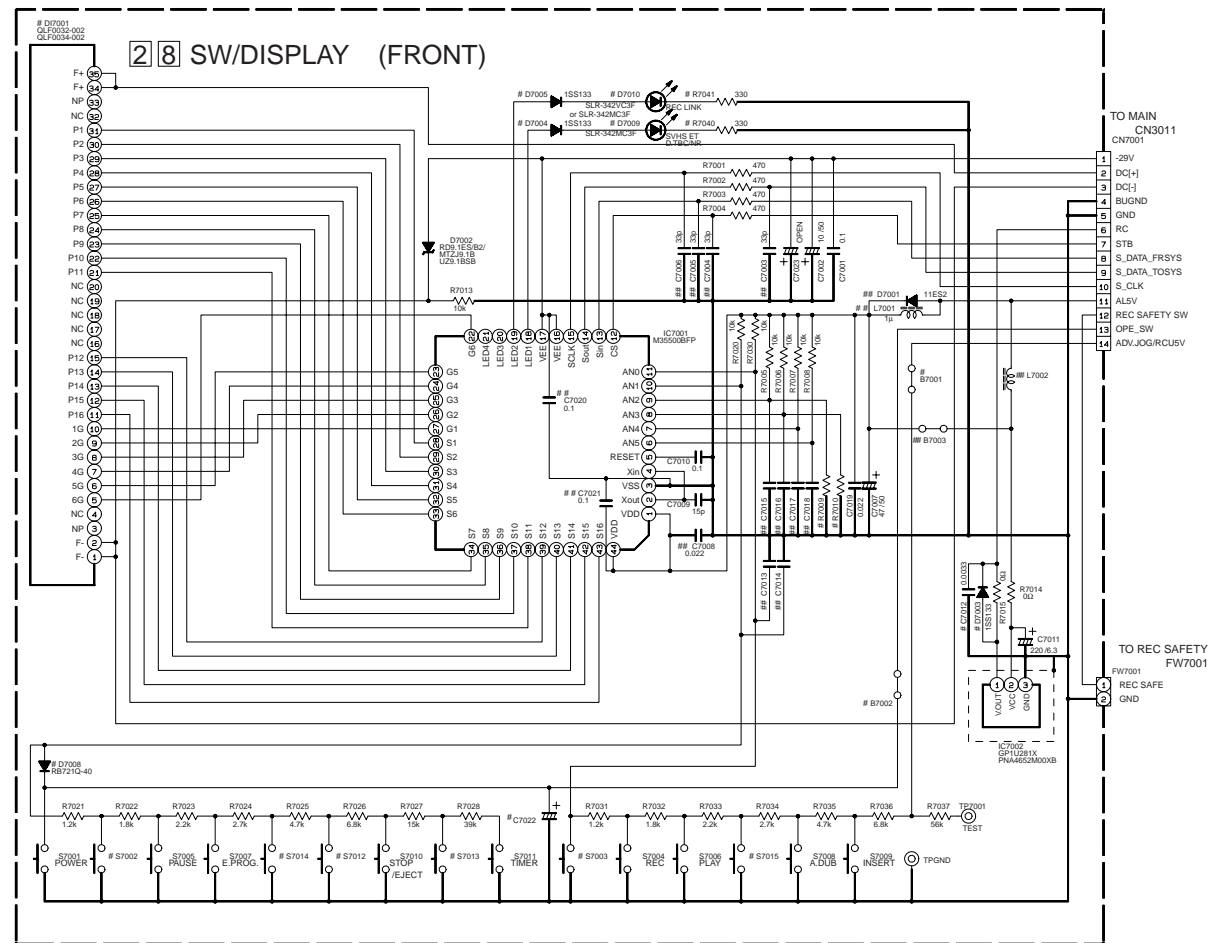
JLIP	WITH JLIP	WITH JLIP WITHOUT LANC
D3401	O	O
B3401	X	O
B3402		

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

4.10 SW/DISPLAY, REC SAFETY, JACK AND ADV.JOG SCHEMATIC DIAGRAMS

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

	FDP	OPTION										IR DETECT	LED	DISP OFF	ADV.JOG	HEAD PHONE	FRONT RCA INPUT			FRONT RCA INCE			FRONT S INPUT						
	D7001	S7002	S7003	S7012	S7013	S7014	S7015	R7009	R7010	R7015	C7012 D7003	D7006 D7010 R7041	D7004 D7009 R7008	B7002 D7008	C7022	LN7001 CN7004 B7001	FW7192 J7195	CN7191	R7191	J7191	J7192	J7193	L7191 L7192	L7193 L7194	C7192 C7194	R7194	R7193	C7196	J7194
V14D25 EU/EK/MS	330r34	MARK	ERASE	DISPLAY	SAT.TIMER	C.RESET	SYN.EDIT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
V14S35 EU/EK/MS	330r34	MARK	ERASE	SVHS ET	SAT.TIMER	C.RESET	SYN.EDIT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
V14S78 D	330r34	CH-	CH+	TBC 3D	BS.TIMER	SPEEP/SEP	HEAD PH.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

# DIFFERENCE TABLE

	ESD					CE				
	D7001	C7003 C7004 C7005 C7006	C7013 C7014	C7015 C7016 C7017 C7018	C7023 C7021 C7191	D7191 D7192 C7191	D7199	C7193 C7195	L7001 L7002	B7003
V14D25 EU/EK/MS	X	X	X	X	X	X	X	X	X	X
V14S35 EU/EK/MS	X	X	X	X	X	X	X	X	X	SHORT
V14S78 D	X	X	X	X	X	X	X	X	X	SHORT

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

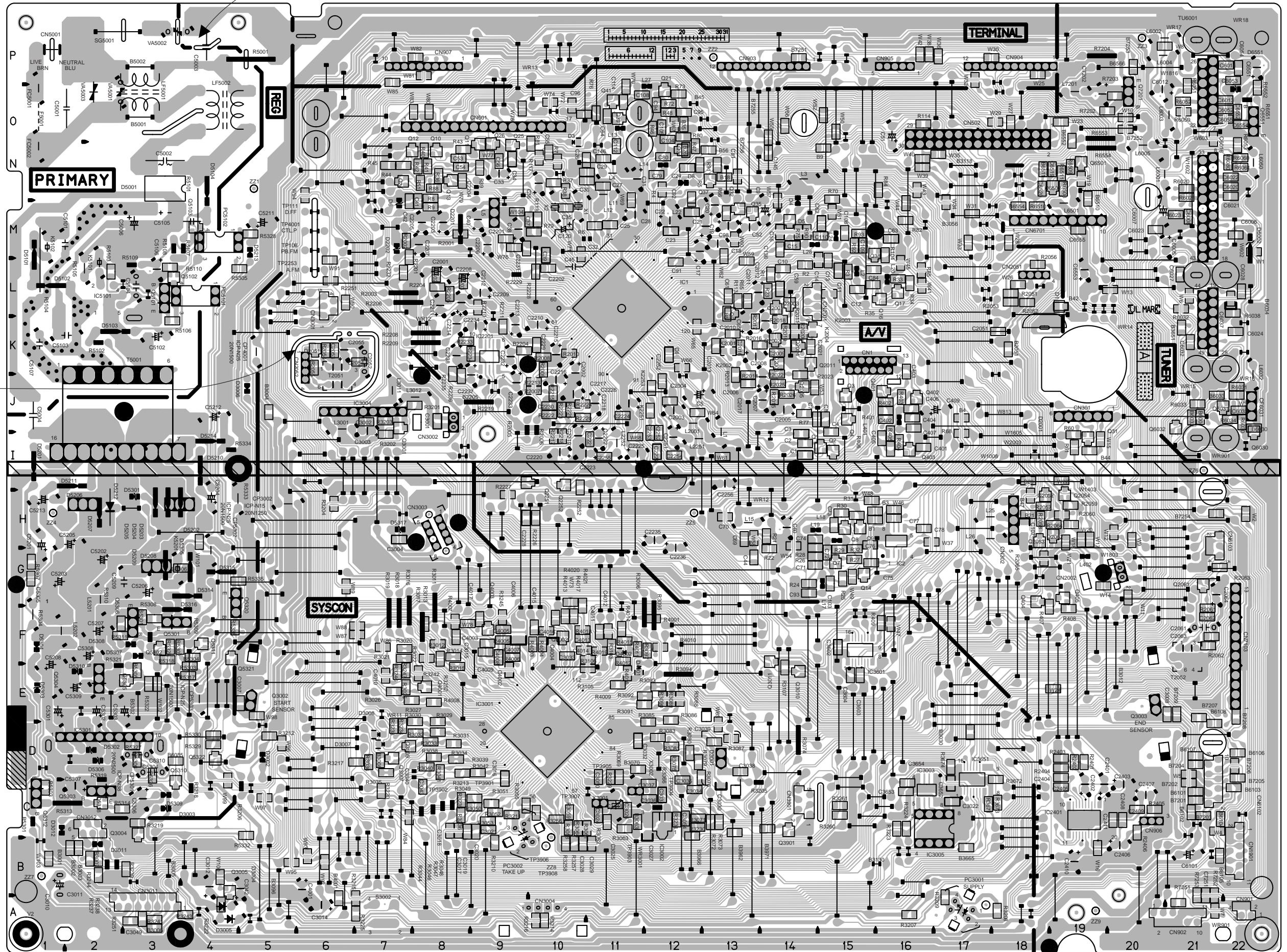
LAST NO	VACANT NO
R 7194	7011, 7012, 7016-7019, 7029, 7038, 7039, 7042-7190.
C 7196	7024-7190.
D 7199	7006, 7007, 7011-7190, 7193-7198
J 7195	
L 7194	7003-7190.
S 7041	7016-7040.
B 7003	

4.11 MAIN AND AUDIO ERASE CIRCUIT BOARDS

<03> MAIN, <46> AUDIO ERASE  
LPB10147-001B

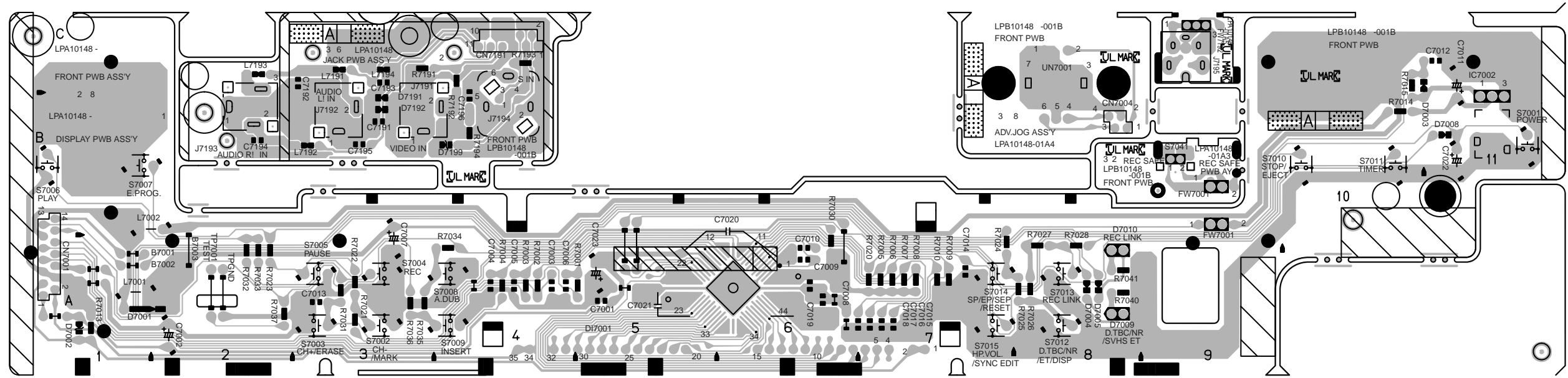
**DANGEROUS VOLTAGE**

<46> AUDIO ERASE





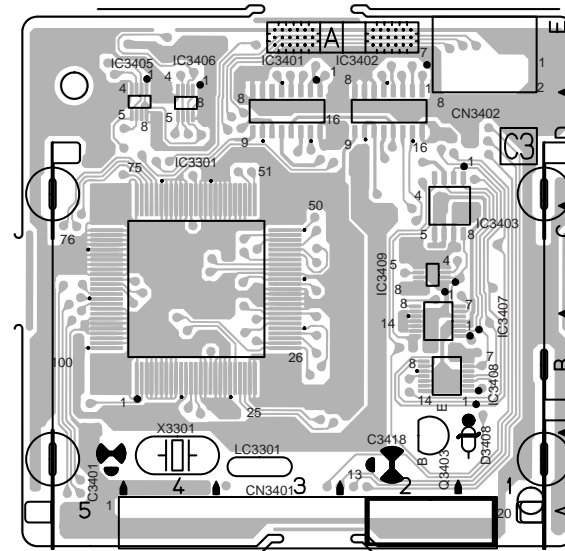
4.13 SW/DISPLAY, REC SAFETY, JACK, ADV.JOG, DEMODULATOR AND NAVIGATION CIRCUIT BOARDS



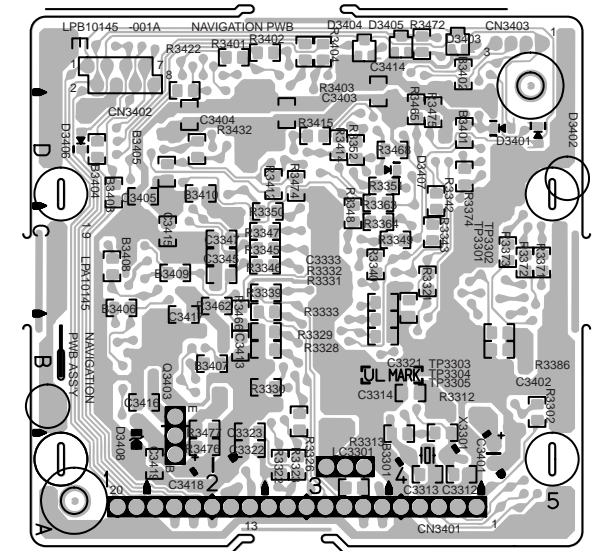
<28> SW/DISPLAY, <32> REC SAFETY, <36> JACK, <38> ADV.JOG  
LPB10148-001B

<19> NAVIGATION  
LPB10145-001A

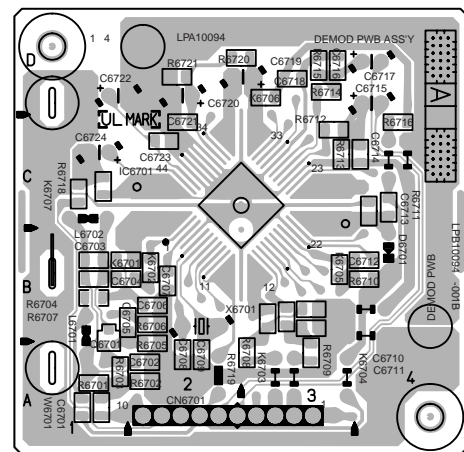
COMPONENT SIDE(A)



FOIL SIDE(B)



<14> DEMODULATOR  
LPB10094-001C



COMPONENT PARTS LOCATION GUIDE  
<DEMODULATOR>

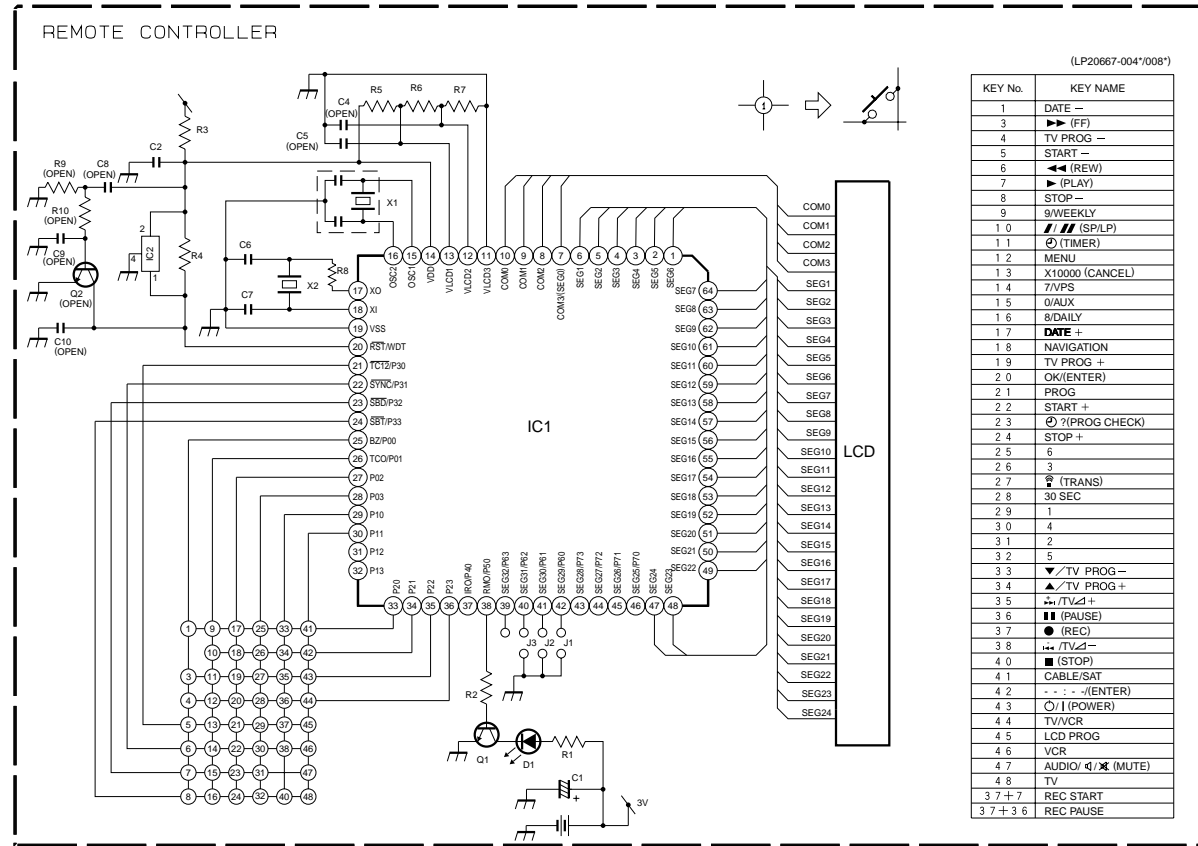
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
<b>CAPACITOR</b>					
C1501	A D 4C	C1520	A D 3A	R1509	A D 3B
C1502	A D 3D	C1521	A D 2C	R1510	A D 4B
C1503	A D 4D	<b>CONNECTOR</b>			
C1504	A D 4C	CN1501	A D 3A	R1511	A D 3A
C1505	A D 3D	<b>IC</b>			
C1506	A D 3C	IC1501	B C 2C	R1514	A D 2B
C1507	A D 2C	<b>TRANSISTOR</b>			
C1508	A D 1D	Q1501	A D 3B	R1515	A D 2C
C1509	A D 2C	Q1502	A D 3B	R1517	A D 2C
C1510	A D 1B	<b>RESISTOR</b>			
C1511	A D 1A	R1501	A D 4C		
C1512	A D 2A	R1502	A D 2C		
C1513	A D 2B	R1503	A D 2C		
C1514	A D 2A	R1504	A D 2B		
C1515	A D 3B	R1505	A D 2B		
C1516	A D 3C	R1506	A D 2B		
C1517	A D 3B	R1507	A D 2B		
C1518	A D 3A	R1508	A D 3B		
C1519	A D 3B				

COMPONENT PART LOCATION GUIDE <NAVIGATION>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
<b>CAPACITOR</b>							
C3312	B C 4A	D3401	B C 5D	R3321	B C 4C	R3373	B C 5C
C3313	B C 4A	D3402	B C 5D	R3322	B C 3A	R3374	B C 4D
C3314	B C 4B	D3403	B C 4E	R3323	B C 3A	R3386	B C 5B
C3321	B C 4C	D3404	B C 3E	R3326	B C 3B	R3401	B C 2E
C3322	B C 2A	D3405	B C 4E	R3328	B C 3B	R3402	B C 3E
C3323	B C 2B	D3406	B C 1D	R3329	B C 3B	R3403	B C 3E
C3333	B C 4C	D3407	B C 4D	R3330	B C 4B	R3404	B C 3E
C3345	B C 2C	D3408	A D 1A	R3331	B C 4B	R3412	B C 3D
C3346	B C 2C	<b>IC</b>					
C3347	B C 2C	R3333	B C 4C	R3332	B C 4C	R3415	B C 3D
C3401	A D 5A	IC3301	A C 4C	R3339	B C 3C	R3422	B C 2E
C3402	B C 5B	IC3401	A C 3D	R3340	B C 4C	R3432	B C 2D
C3403	B C 3D	IC3402	A C 2D	R3342	B C 4D	R3462	B C 2C
C3404	B C 2D	IC3403	A C 2D	R3343	B C 4C	R3465	B C 4D
C3405	B C 1D	IC3405	A C 4D	R3345	B C 3C	R3466	B C 2C
C3413	B C 2B	IC3406	A C 4D	R3346	B C 3C	R3468	B C 4D
C3414	B C 4E	IC3407	A C 2B	R3347	B C 3C	R3472	B C 4E
C3415	B C 2C	IC3408	A C 2B	R3348	B C 3C	R3474	B C 3D
C3416	B C 2B	IC3409	A C 2C	R3349	B C 4C	R3475	B C 4D
C3417	B C 2C	<b>TRANSISTOR</b>					
C3418	A D 2A	Q3403	A D 2B	R3350	B C 3C	R3476	B C 2A
C3419	B C 2A	<b>RESISTOR</b>					
		R3351	B C 4D	R3352	B C 3D	R3477	B C 2B
		R3352	B C 4D	<b>OTHER</b>			
		R3363	B C 4C	LC3301	A D 3A		
		R3364	B C 4C	TP3301	B C 4C		
		R3371	B C 5C	TP3302	B C 4C		
		R3372	B C 5C	TP3303	B C 5C		
<b>CONNECTOR</b>							
CN3401	A D 4A	R3302	B C 5B				
CN3402	A D 1E	R3312	B C 4B				
		R3313	B C 4A				

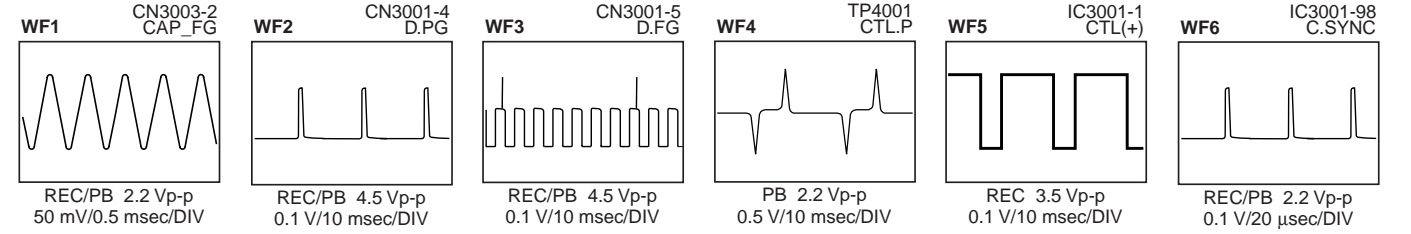
#### 4.14 REMOTE CONTROLLER SCHEMATIC DIAGRAM

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.

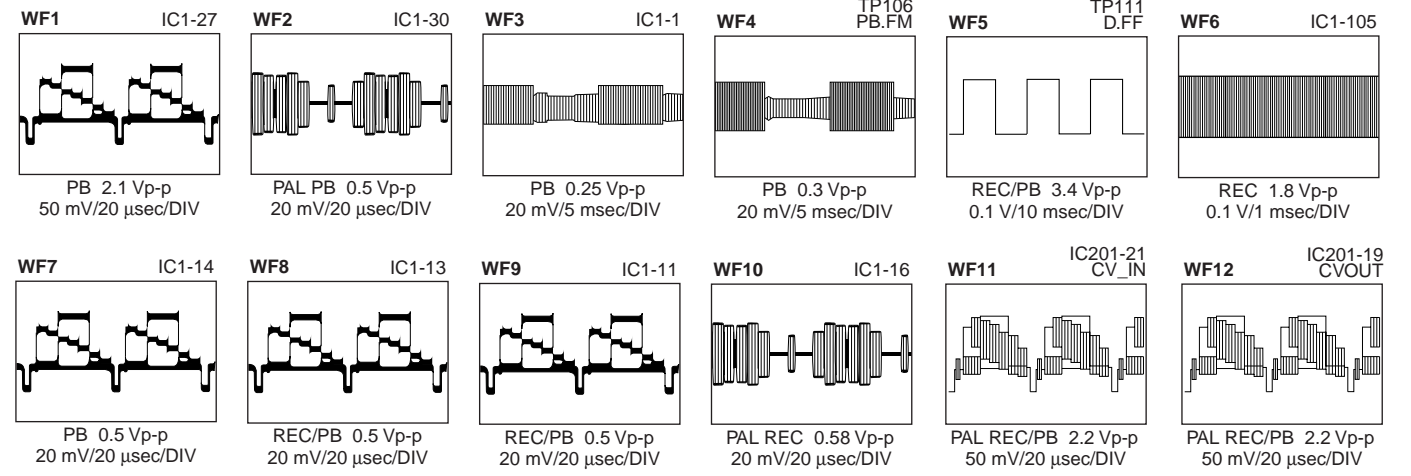


#### 4.16 WAVEFORMS

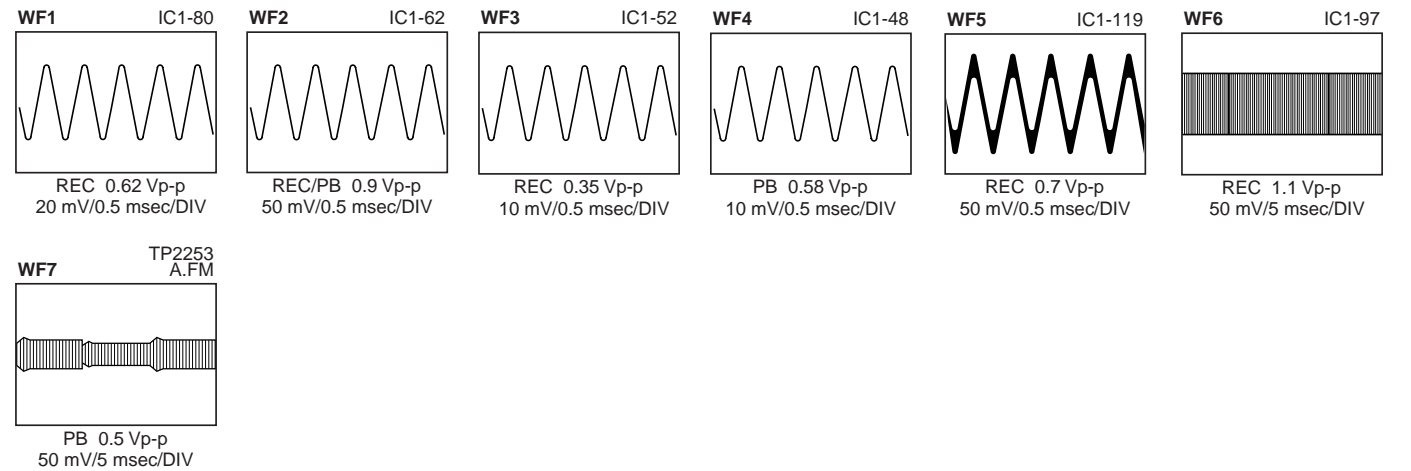
##### < SYSCON >



##### < VIDEO >

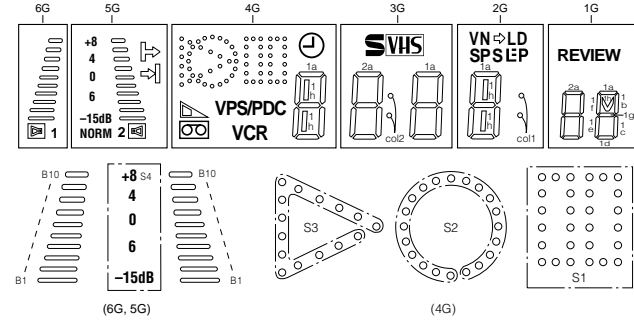


##### < AUDIO >

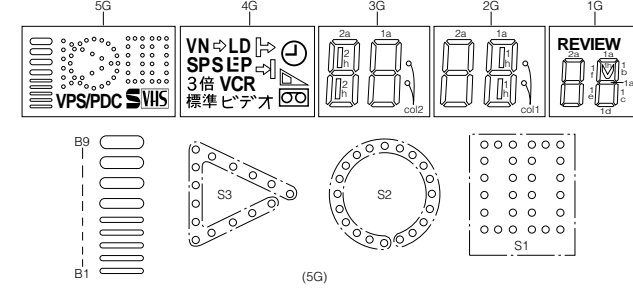


#### 4.15 FDP GRID ASSIGNMENT AND ANODE CONNECTION

[A] (FDP with audio level indicator)



[B] (FDP without audio level indicator)



##### ANODE CONNECTION [A]

	6G	5G	4G	3G	2G	1G
P 1	—	▶	S2	1a	1a	1a
P 2	—	◀	S1	1b	1b	1b
P 3	—	S4	S3	1f	1f	1f
P 4	—	NORM	VPS/PDC	1g	1g	1g
P 5	1	2	⊙	1c	1c	1c
P 6	▶	◀	▶	1e	1e	1e
P 7	B10	B10	⊙	1d	1d	1d
P 8	B9	B9	VCR	col2	1h	1h
P 9	B8	B8	▶	1a	2a	col1
P10	B7	B7	▶	1b	2b	2b
P11	B6	B6	1f	2f	VN	2f
P12	B5	B5	1g	2g	LD	2g
P13	B4	B4	1c	2c	SP	2c
P14	B3	B3	1e	2e	S	2e
P15	B2	B2	1d	2d	⋮	2d
P16	B1	B1	1h	SVHS	LP	REVIEW

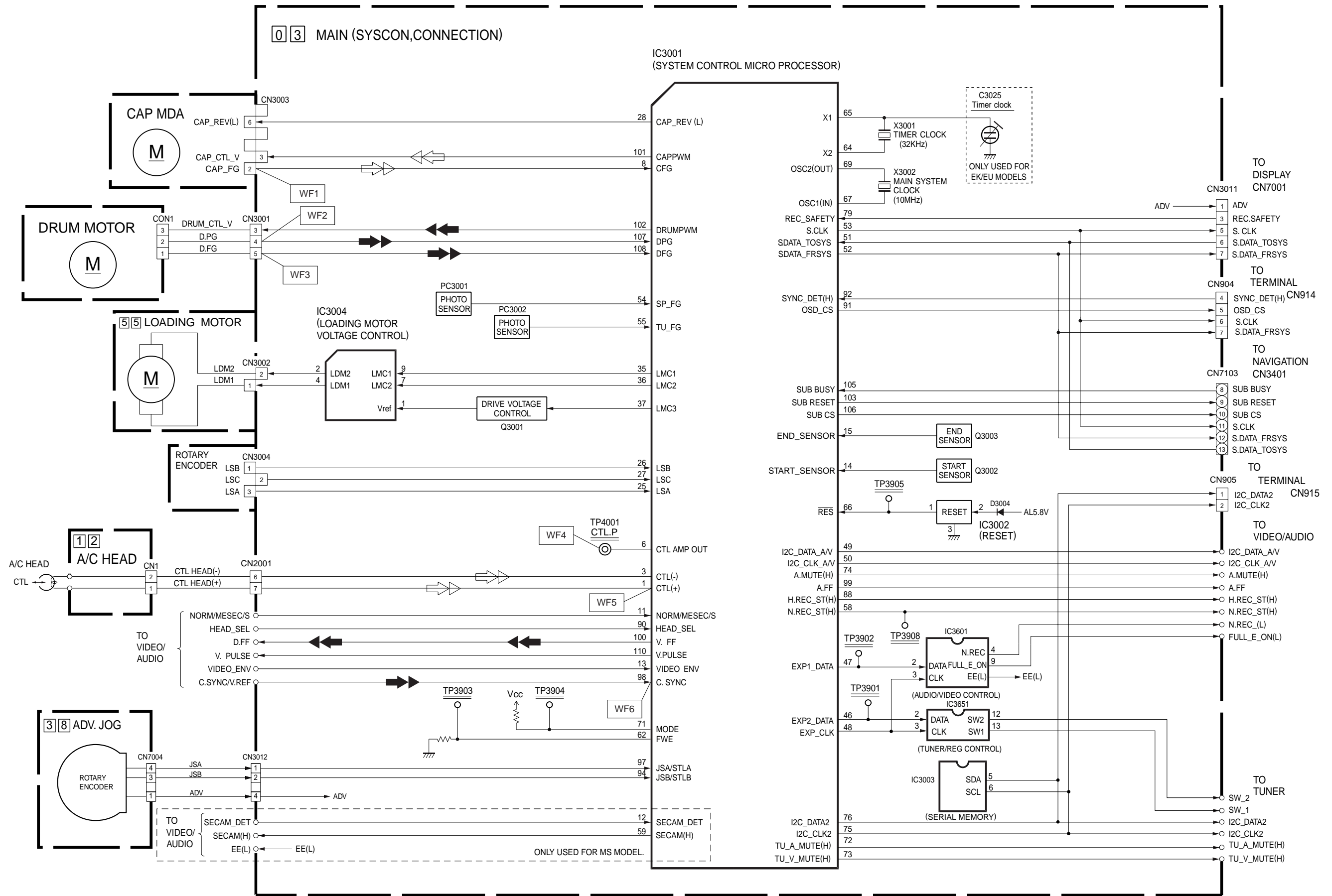
##### ANODE CONNECTION [B]

	5G	4G	3G	2G	1G
P 1	S2	▶	1a	1a	1a
P 2	S1	◀	1b	1b	1b
P 3	S3	3倍	1f	1f	1f
P 4	VPS/PDC	標準	1g	1g	1g
P 5	SVHS	⊙	1c	1c	1c
P 6	—	▶	1e	1e	1e
P 7	—	⊙	1d	1d	1d
P 8	B9	VCR	col2	1h	1h
P 9	B8	▶	2a	2a	2a
P10	B7	▶	2b	2b	2b
P11	B6	VN	2f	2f	2f
P12	B5	LD	2g	2g	2g
P13	B4	SP	2c	2c	2c
P14	B3	S	2e	2e	2e
P15	B2	⋮	2d	2d	2d
P16	B1	LP	2h	col1	REVIEW



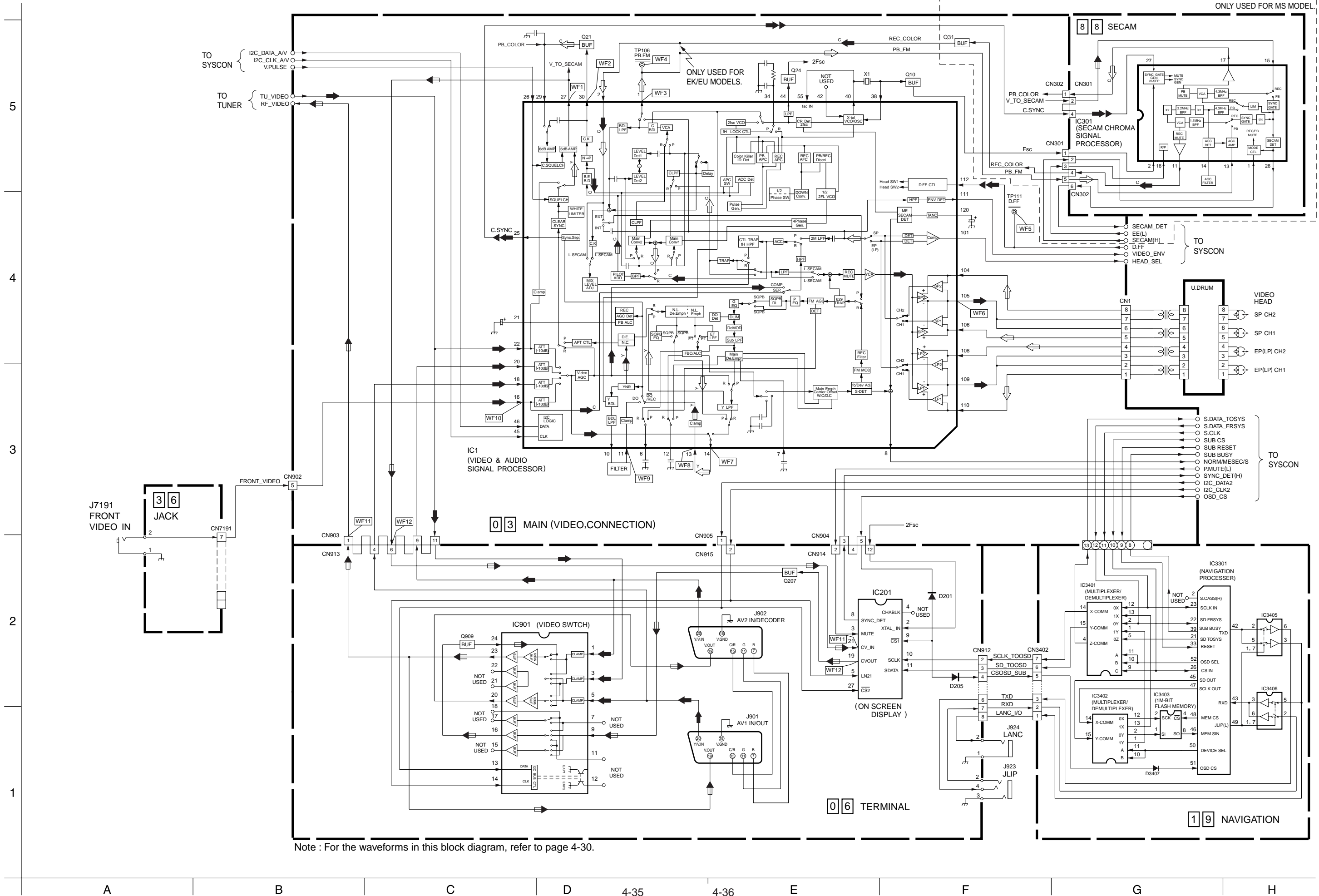


4.19 SYSTEM CONTROL BLOCK DIAGRAM



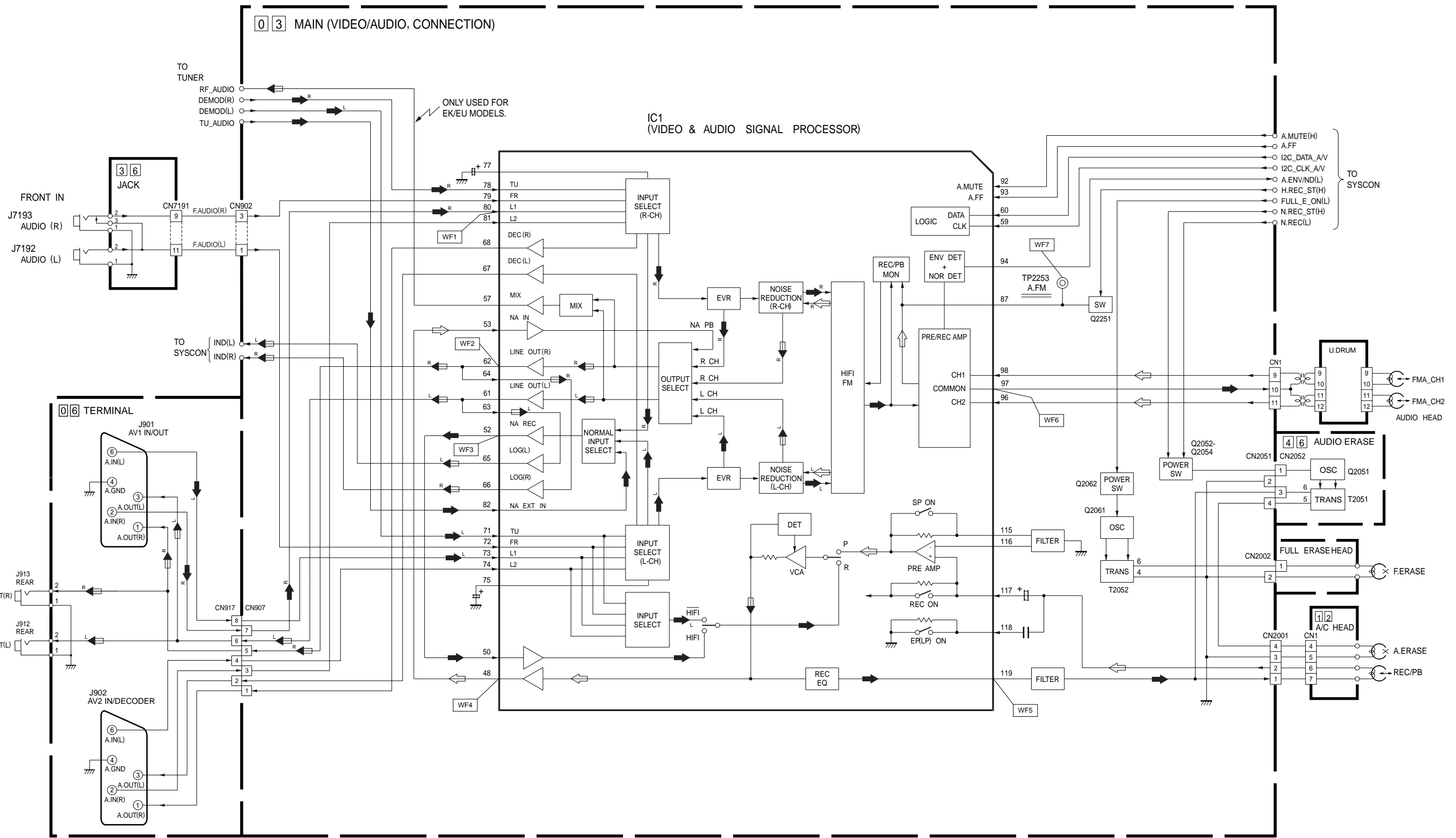
Note : For the waveforms in this block diagram, refer to page 4-30.

4.20 VIDEO BLOCK DIAGRAM



Note : For the waveforms in this block diagram, refer to page 4-30.

4.21 AUDIO BLOCK DIAGRAM



Note : For the waveforms in this block diagram, refer to page 4-30.