


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.

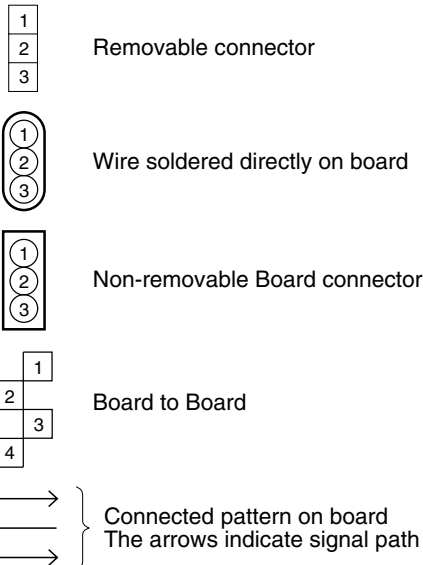
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K or k: k Ω (1000 Ω), M: M Ω (1000k Ω)
- 2) All capacitance values are in μ F, (P: PF).
- 3) All inductance values are in μ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

AUX : Active at high

AUX or AUX(L) : Active at low

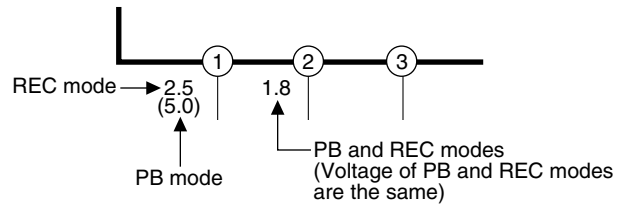
3. Interpreting Connector indications



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

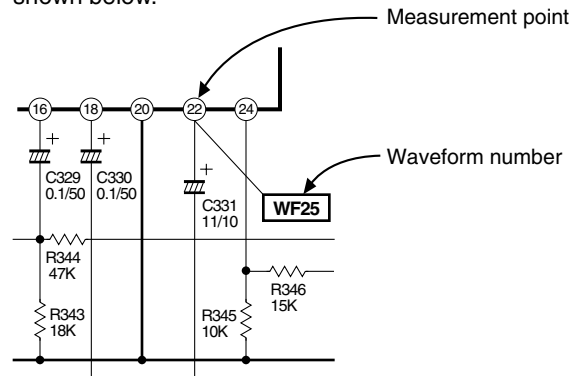
- 4) Indication on schematic diagram
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



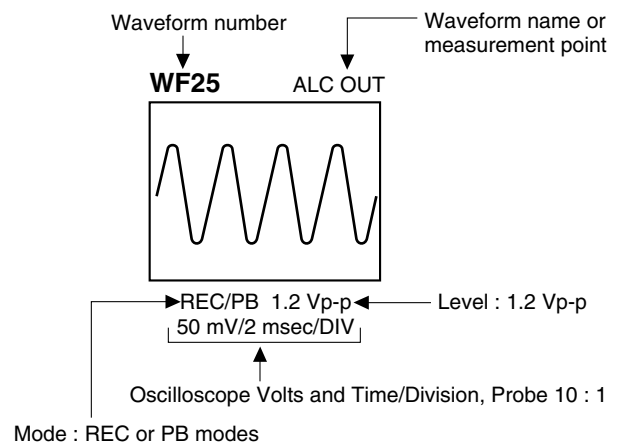
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

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.

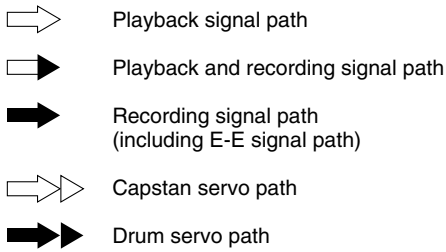


5) Waveform indications

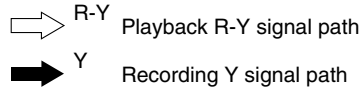


6. Signal path Symbols

The arrows indicate the signal path as follows.

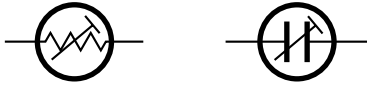


(Example)



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.



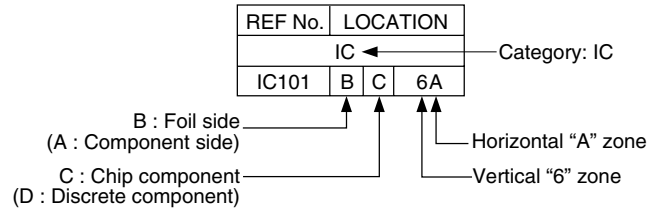
CIRCUIT BOARD NOTES

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

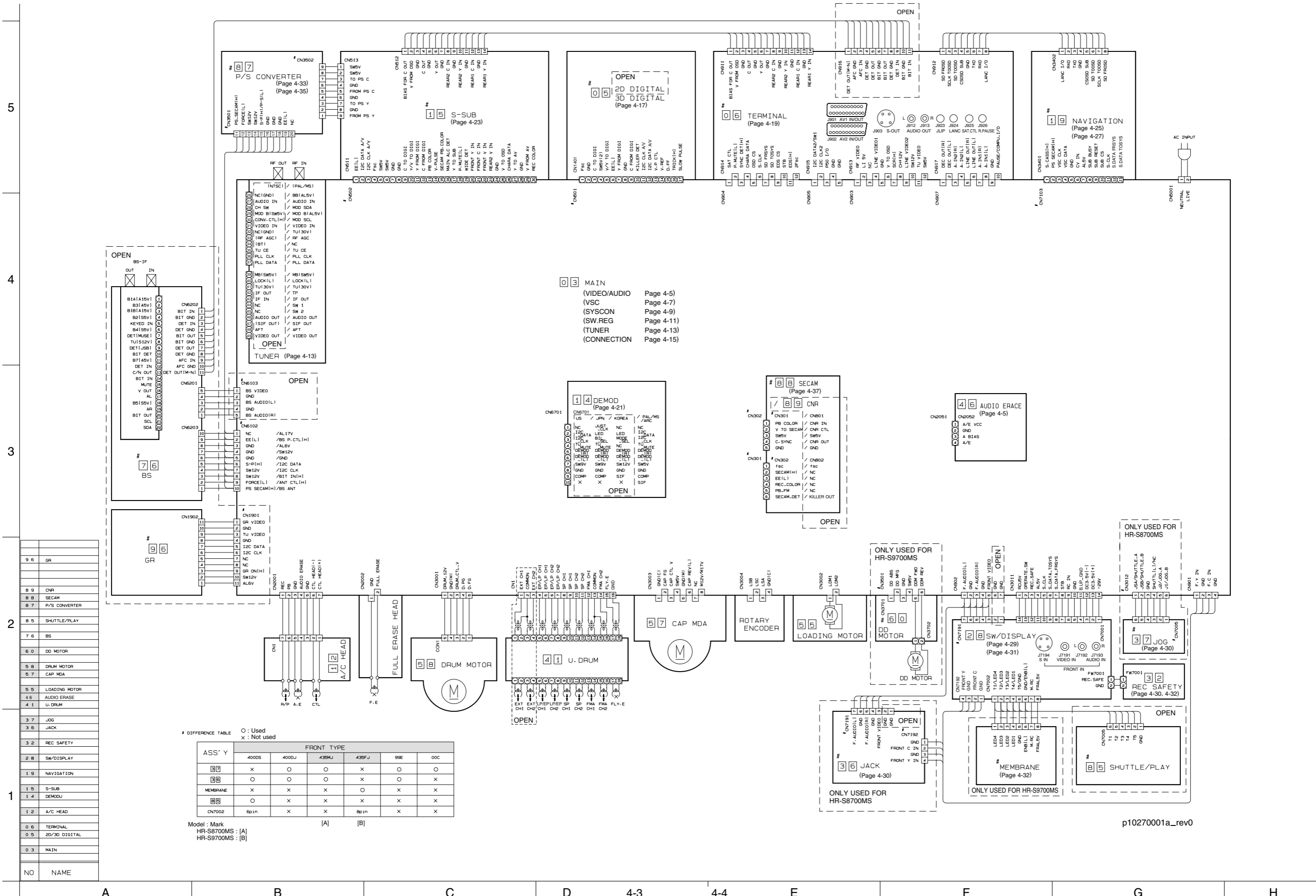
Parts location are indicated by guide scale on the circuit board.



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



9 6	GR
8 9	CNR
8 8	SECAM
8 7	P/S CONVERTER
8 5	SHUTTLE/PLAY
7 6	BS
6 0	DD MOTOR
5 8	DRUM MOTOR
5 7	CAP MDA
5 5	LOADING MOTOR
4 6	AUDIO ERASE
4 1	U. DRUM
3 7	JOG
3 6	JACK
3 2	REC SAFETY
2 8	SW/DISPLAY
1 9	NAVIGATION
1 5	S-SUB
1 4	DEMOD
1 2	A/C HEAD
0 6	TERMINAL
0 5	2D/3D DIGITAL
0 3	MAIN
NO	NAME

DIFFERENCE TABLE

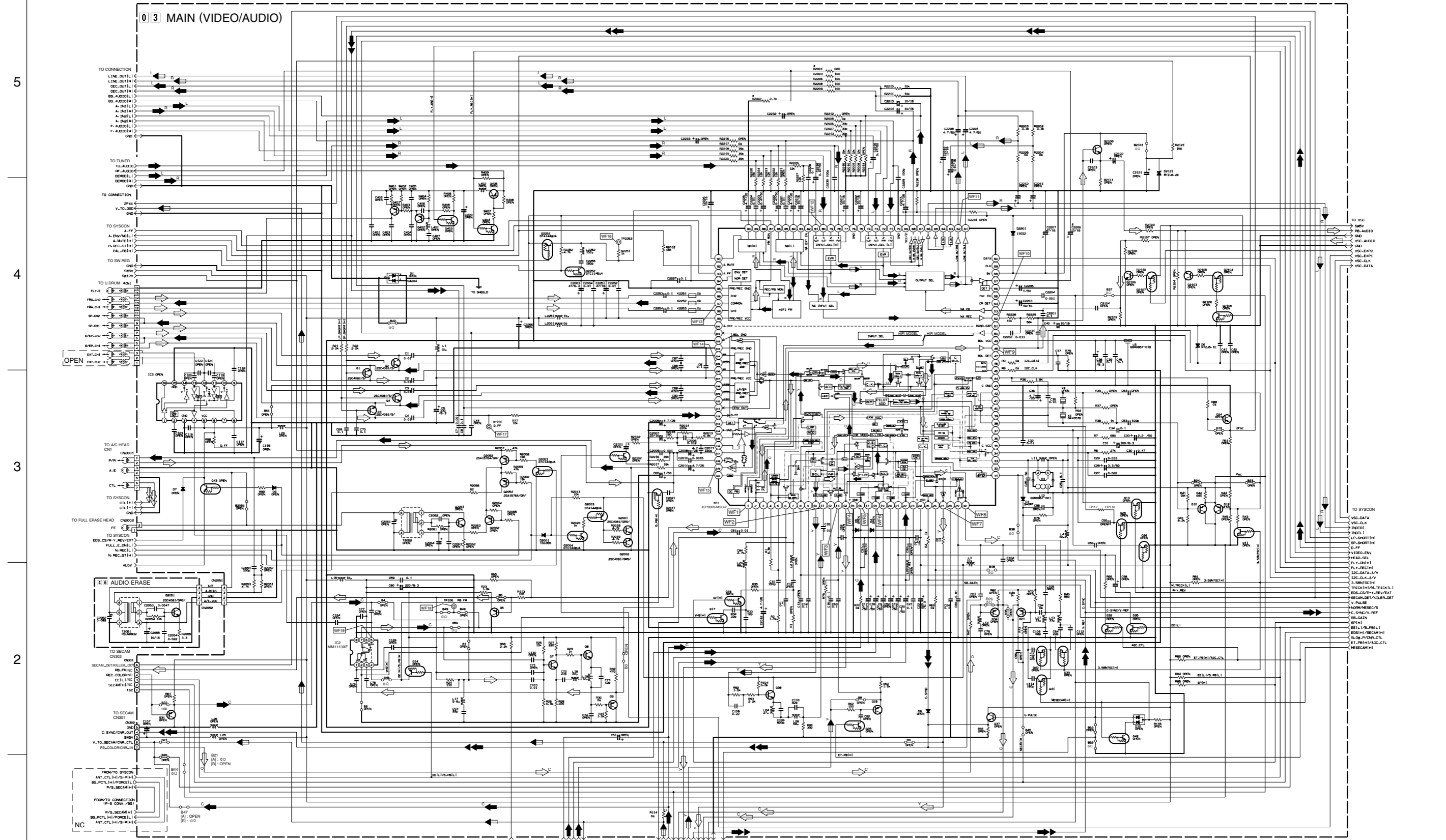
ASS'Y	FRONT TYPE				
	400DS	400DJ	435MJ	435FJ	99E
07	X	O	O	X	O
08	O	O	O	X	O
MEMBRANE	X	X	X	O	X
09	O	X	X	X	X
CN7002	6p1n	X	X	8p1n	X

[A] [B]

Model : Mark
 HR-S8700MS : [A]
 HR-S9700MS : [B]

4.2 VIDEO/AUDIO AND 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.



#DIFFERENCE TABLE

O : Used
x : Not used

Part No.	SP-OUT	CH1
HR-56700EK/EU	O	1-14
HR-56711EU	O	1-14
HR-56722EK	O	1-14
VSH2150G	O	1-14
HR-56700MS	X	1-14
VSH2150F	X	1-14
HR-56700EK/EU	O	4-14
HR-56700MS/STATIONS	X	4-14

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

Note : For the waveforms in this schematic diagram, refer to page 4-52.

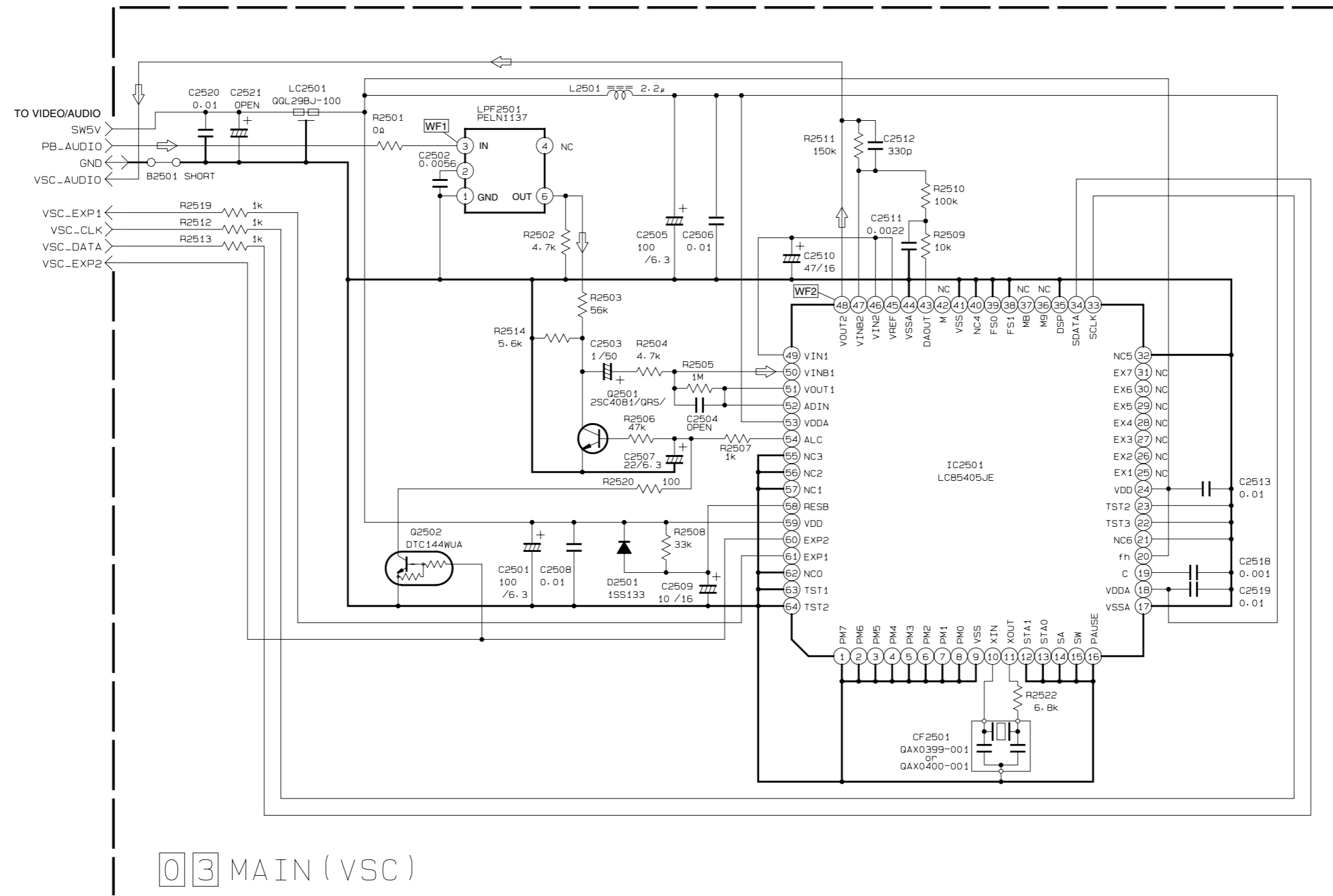
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5
4
3
2
1

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

4.3 VSC SCHEMATIC DIAGRAM [HR-S9700MS]

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.



Note : For the waveforms in this schematic diagram, refer to page 4-52.

p30072001a_rev0

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

A

B

C

D

4-7

4-8

E

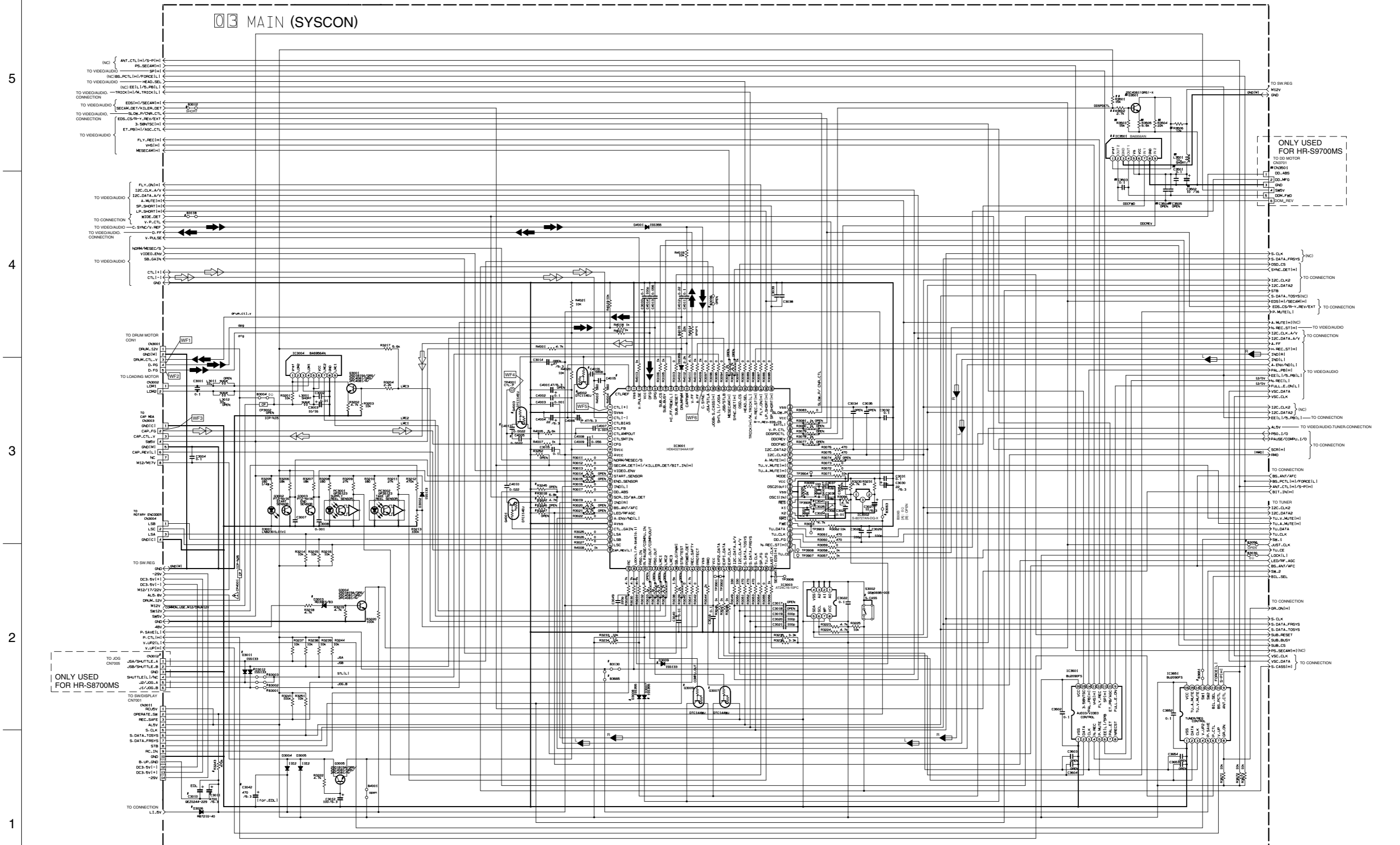
F

G

H

4.4 SYSTEM CONTROL 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.



ONLY USED FOR HR-S8700MS

DIFFERENCE TABLE	C3010	C3011	C3042	R3243	B3303	B3369	OTHER
BACKUP_TIME	36IN	X	3300	X	X	0	
10MIN	X	4700	X	X	0		
60MIN	-209	X	0	X	0		
BATT	X	3300	X	X	0		
FULL-P.SAVE	-47A	X	X	0	X		

FEATURE TYPE	03008	03007	03009	03002
TV-LINK(PRO)	0	0	0	0
R.PAUSE	0	0	0	0
R.A.EDIT	0	0	0	0
AV.COMPU	0	0	0	0

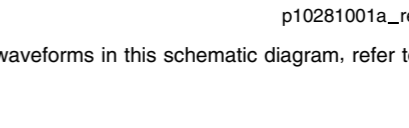
SUB_CLK_ADJ.	X3001	C3025	C3041	C3024
ADJ	0	0	0	0
FX	0	100	120	0

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

RESISTOR SYMBOLS:
 - ELECTROLYTIC
 - CERAMIC
 - MYLAR
 - NON POLAR

MECH. TYPE	C4015	C4016	G4002	C4005	C4017	G4003
Y29-2	0.001	X	X	0	X	X
Y29-1	0.001	X	X	X	X	0
Y29-TSEP	330p	0	0	0	X	0

ONLY USED FOR HR-S8700MS



ONLY USED FOR HR-S9700MS

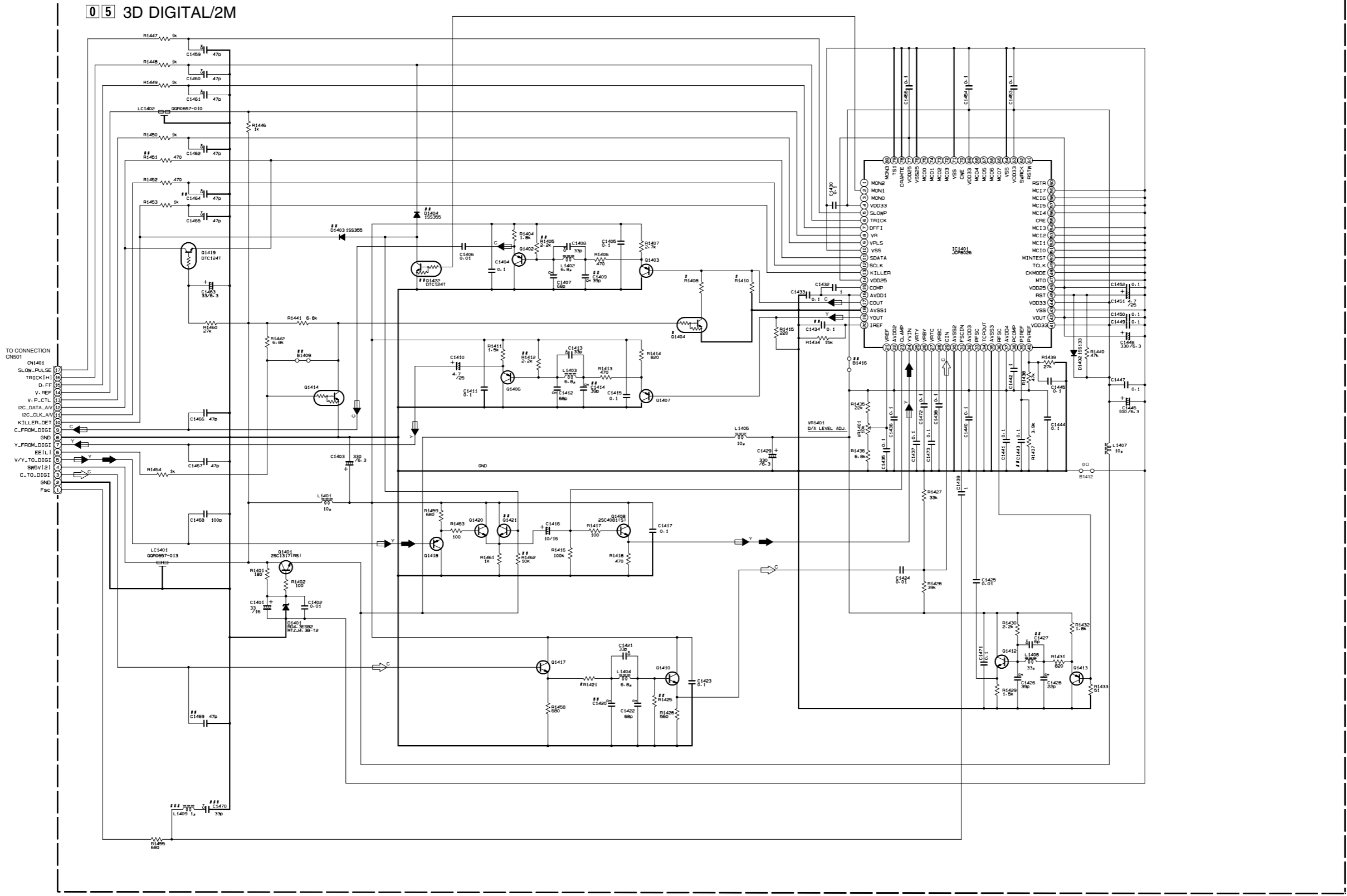
TO DO MOTOR
 1 GND
 2 DD.MFG
 3 GND
 4 DDV
 5 DDM.FWD
 6 DDM.REV

Note : For the waveforms in this schematic diagram, refer to page 4-52.

p10281001a_rev0

4.8 3D DIGITAL/2M 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.



TO CONNECTION
CNS01

CN401
 SLOW_PULSE
 TRICK1(H)
 D_FF
 V_REF
 V_P_CTL
 ISC_DATA_AV
 ISC_CLK_AV
 KILLER_DET
 C_FROM_D101
 GND
 Y_FROM_D101
 EE1(L)
 V/Y_TO_D101
 SPOV121
 C_TO_D101
 GND
 Fsc

0 5 3D DIGITAL/2M

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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

MARK ELEMENTS ARE NOT MOUNTED.
 ALL SINGLE DIODE: 1SS133 OR 1N4148.
 ALL PNP TRANSISTOR: 2SA1576A1(QR) OR 2SB1218A(QR) OR 2PA1576(1R)
 ALL NPN TRANSISTOR: 2SC4081(QRS) OR 2SD1619A(QRS) OR 2PC4081(1R)
 ALL NPN DIGITAL TRANSISTOR: DTC144W(A) OR UN521E OR RN1309
 ### Marked elements may differ depending on the model.
 Be sure to check the Parts List.

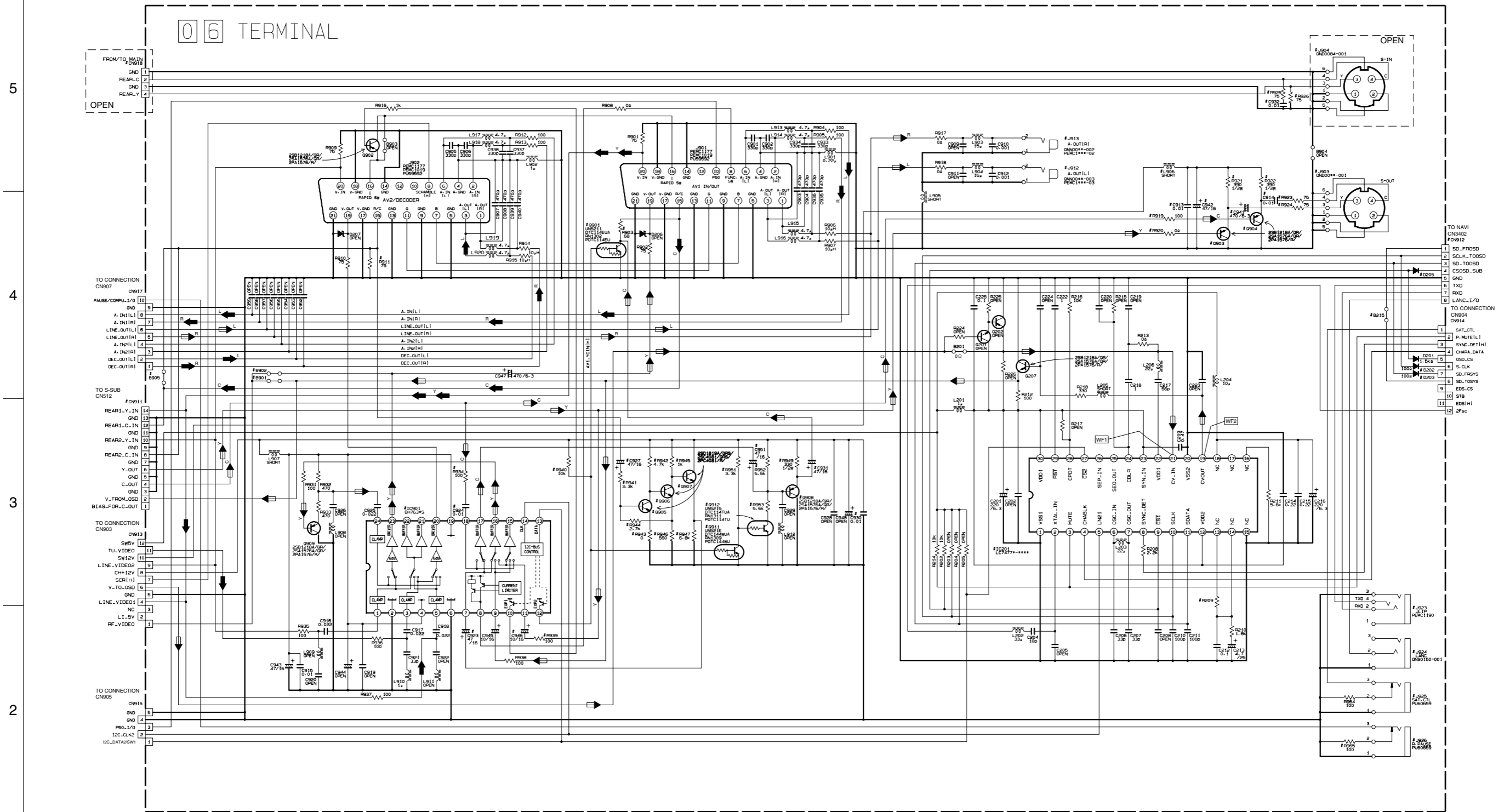
○ : Used
 × : Not used

DIFFERENCE TABLE

PAL/MS	○	×	1-2k	300	300
NTSC	×	×	OPEN	240	330

4.9 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.



p10275001a_rev0

DIFFERENCE TABLE

SYMBOLS	0 : Used	X : Not used
MODELS	8900B, 8900C, 8900D, 8900E, 8900F, 8900G, 8900H, 8900I, 8900J, 8900K, 8900L, 8900M, 8900N, 8900O, 8900P, 8900Q, 8900R, 8900S, 8900T, 8900U, 8900V, 8900W, 8900X, 8900Y, 8900Z	8900A, 8900B, 8900C, 8900D, 8900E, 8900F, 8900G, 8900H, 8900I, 8900J, 8900K, 8900L, 8900M, 8900N, 8900O, 8900P, 8900Q, 8900R, 8900S, 8900T, 8900U, 8900V, 8900W, 8900X, 8900Y, 8900Z
V1336 EU/EK	0	X
V1336 MS	0	X
V1336 EU(PHILIPS)	0	X
V1336 EU/EK	0	X
V1332 MS	0	X
V1332/S22 EU/EK-S21 EU	0	X
V1332 EU/EK(PHILIPS)	0	X
V1332 MS	0	X
V1332 MS(PHILIPS)	0	X
V1351 EU/EK-S12EU-S12EK	0	X
V1351 MS	0	X
V1302 EU/EK	X	0
V1302 MS	X	0

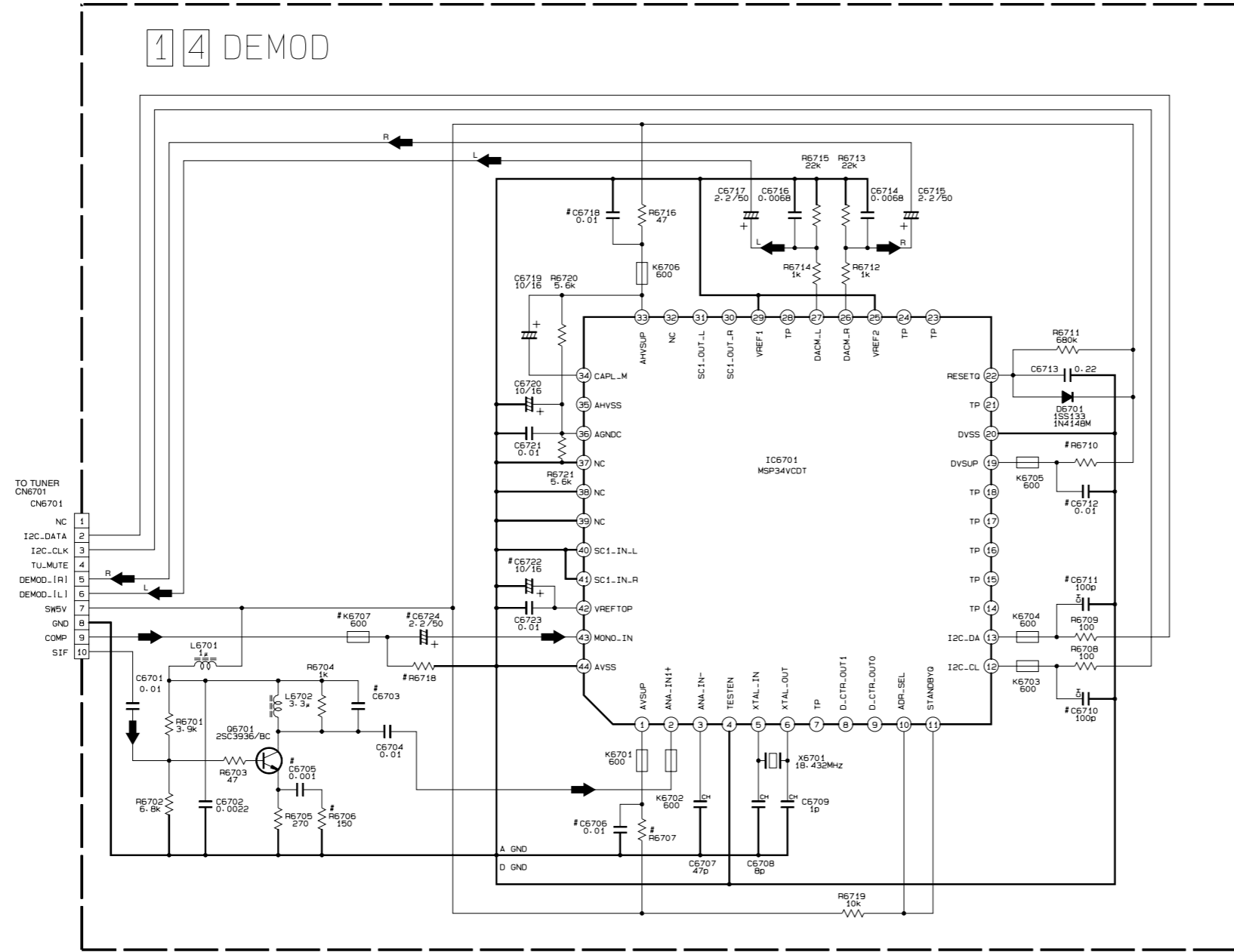
Note : For the waveforms in this schematic diagram, refer to page 4-52.

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

LAST NO	205	206	207	219	223	VACANT NO	927	930	949	950	954	963
R	225	999	203	221								
C	207		204									
D	207		204									
G	207	912	203	206					910			
L	206	920										
B	215	905	202	214								
J		926							905	911	914	922
IC	201	901										
CN		918								901	910	916

4.10 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.



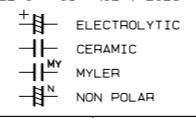
DIFFERENCE TABLE

O : Used
X : Not used

SYMBOL	FRANCE MS		BASIC	ARC	
	STEP	UP EU/EK		3SYSTEM	4SYSTEM
PRE AMP R6706 C6705	O	O	O	X	X
C6703	X	X	X	180p	220p
MONO IN C6724 K6707	O	X	X	X	X
R6718	X	X	X	X	X
ANALOG VCC R6707 C6706	22	47	47	47	47
I2C-bus C6710 C6711	X	X	X	X	X
DIGITAL VCC R6710 C6712	10	12	12	12	12
DAC VCC C6718 C6722	X	X	X	X	X

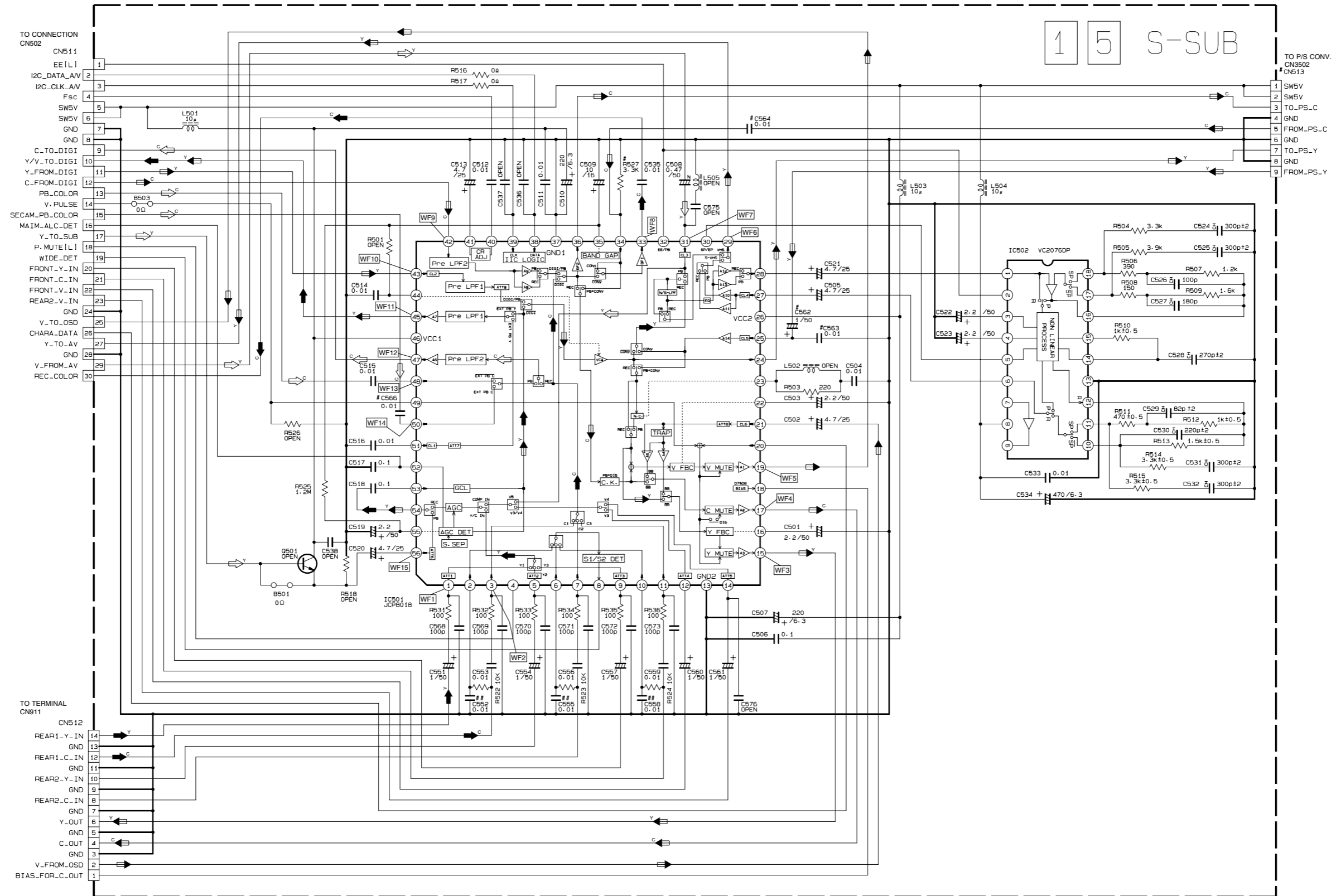
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NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.



4.11 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.



Note : For the waveforms in this schematic diagram, refer to page 4-52.

p20168001a_rev0

DIFFERENCE TABLE

	CN513 C562 C564 C566	C563 R527
MS	○	×
OTHERS	×	○

○ : Used
× : Not used

Marked elements may differ depending on the model.
Be sure to check the Parts List.

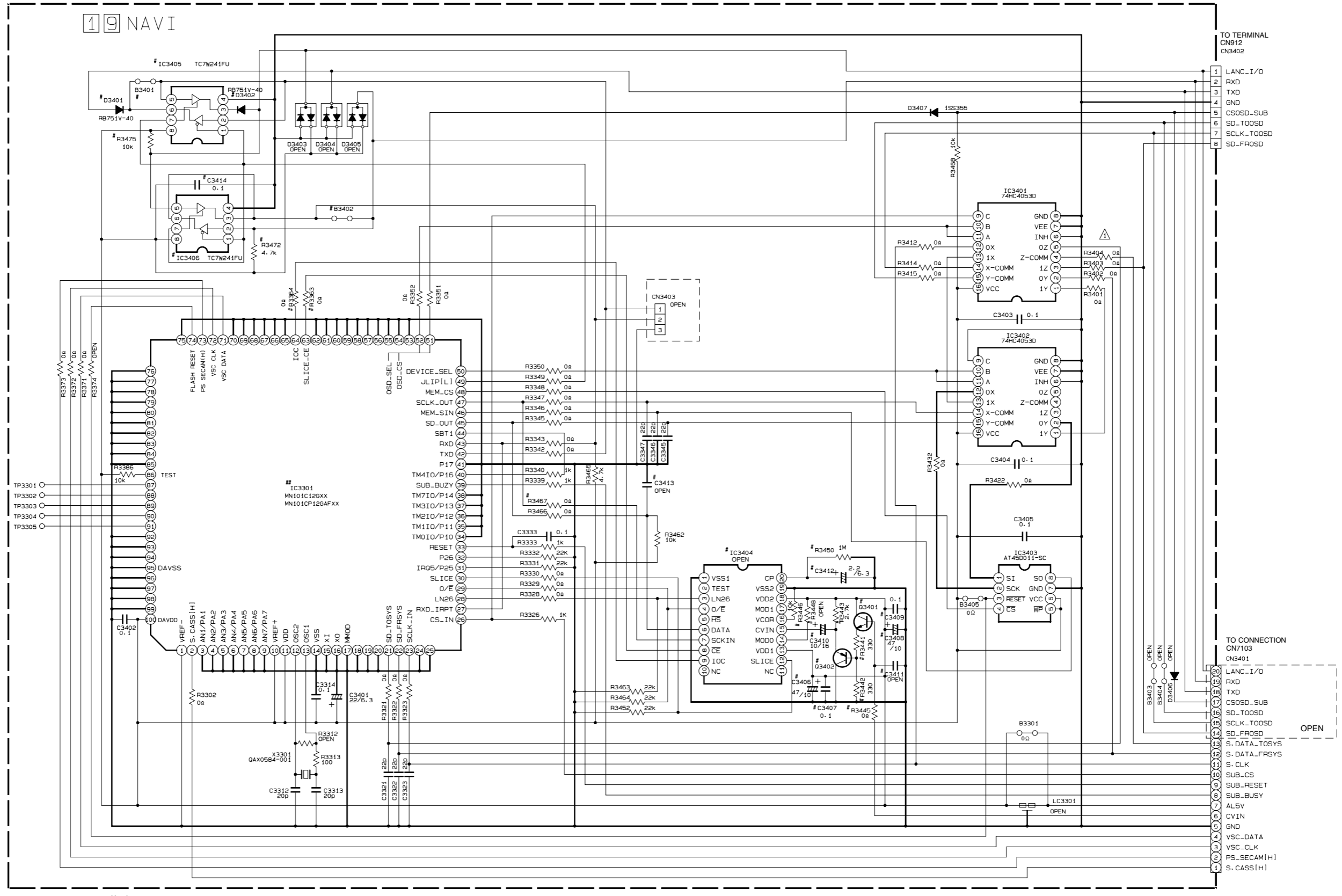
NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

- ⊞ ELECTROLYTIC
- ⊞ CERAMIC
- ⊞ MYL
- ⊞ N NON POLAR

4.12 NAVIGATION SCHEMATIC DIAGRAM [LPB10108-001*]

There are currently two types of Navigation boards in used, these are the LPB10108-001* and the LPB10108-002*. These two boards have different Schematic Diagrams and Parts Lists. Be sure to check the board number before selecting its corresponding Schematic Diagram and Parts List.

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

LANC	WITH LANC	WITHOUT LANC
IC3405, C3414 IC3406, D3402 R3472, R3475	○	×

DIFFERENCE TABLE

ALL SET	WITH ALL SET	WITHOUT ALL SET
03401, 03402 C3406-C3413 R3363, R3364 R3441, R3450 R3467 IC3404	○	×

DIFFERENCE TABLE

JLIP	WITH JLIP	WITHOUT LANC
D3401	○	○
B3401 B3402	×	○

DIFFERENCE TABLE

IC3301	MODEL
CC	HR-S9800U
CD	PHILIPS US-UM.M.K
CE	PHILIPS /B5-/75-/77-HR-VXG300
CG	JVC EU-EK-MS-VR1600/5B

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

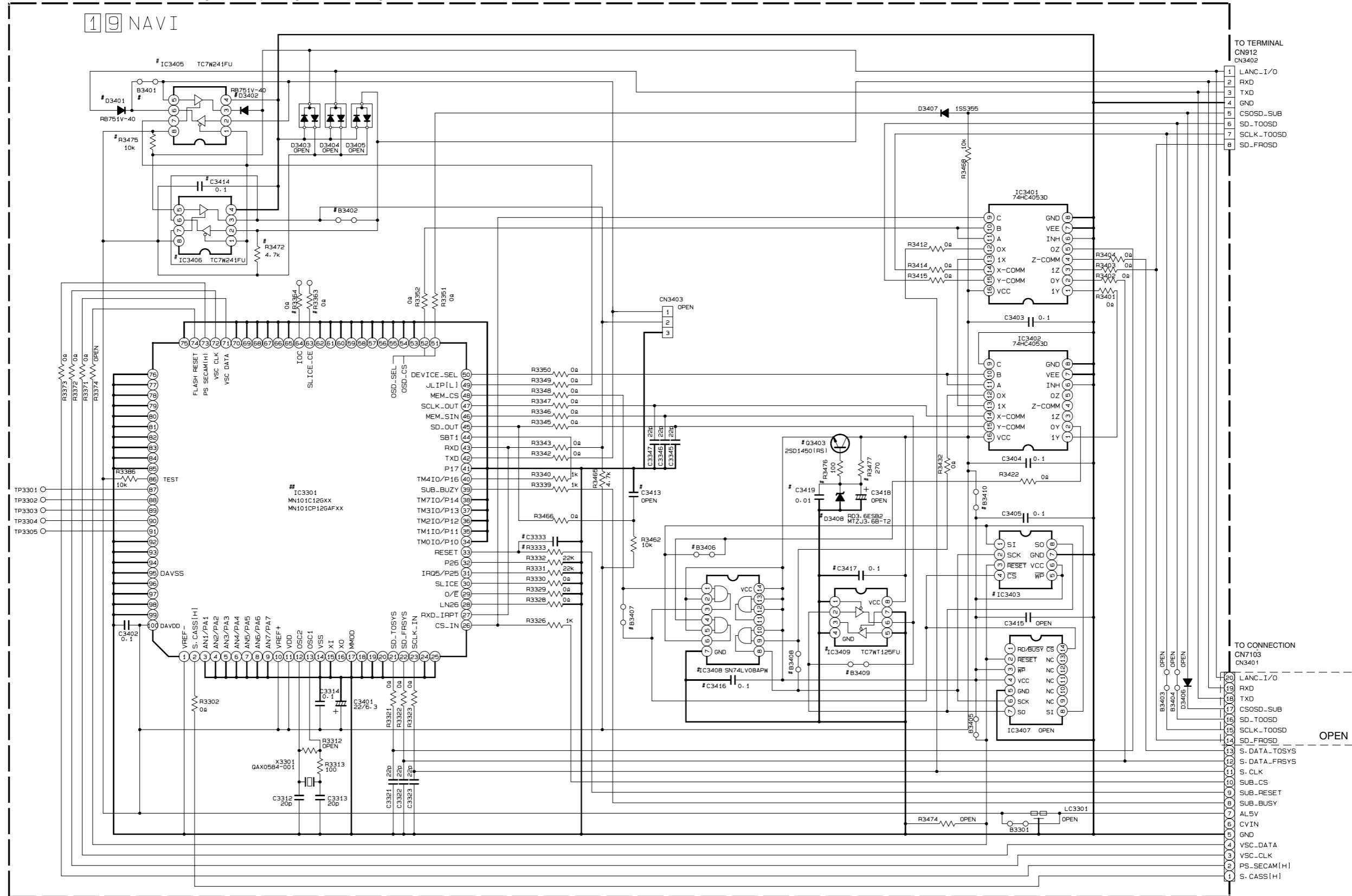
- ⊕ ELECTROLYTIC
- ⊖ CERAMIC
- MY MYLER
- NON POLAR

p20167001a_rev1

4.13 NAVIGATION SCHEMATIC DIAGRAM [LPB10108-002*]

There are currently two types of Navigation boards in used, these are the LPB10108-001* and the LPB10108-002*. These two boards have different Schematic Diagrams and Parts Lists. Be sure to check the board number before selecting its corresponding Schematic Diagram and Parts List.

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

IC3403			AT450011-SC	AT45DB011-SC
IC3408	IC3409	Q3403	X	O
D3408	R3475	R3477		
C3416	C3417	C3419		
B3406-B3410			O	X
R3333			1k	330
C3333			0.1µF	4.7k

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

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

DIFFERENCE TABLE

IC3301 ROM CODE	MODEL
CC	HR-S9800U
CD	PHILIPS US-UM, M, K
CE	PHILIPS /55- /75- /77- HR-VX6300
CG	JVC EU-EK-MS-VR1600/58

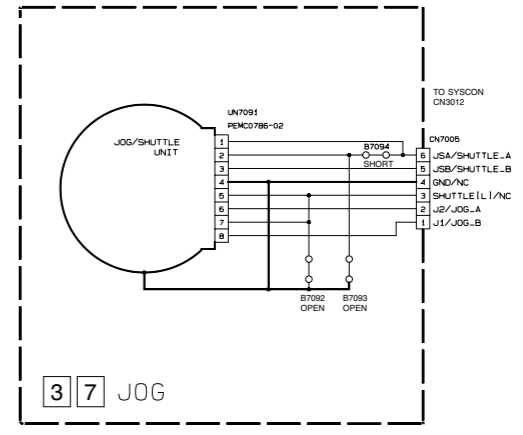
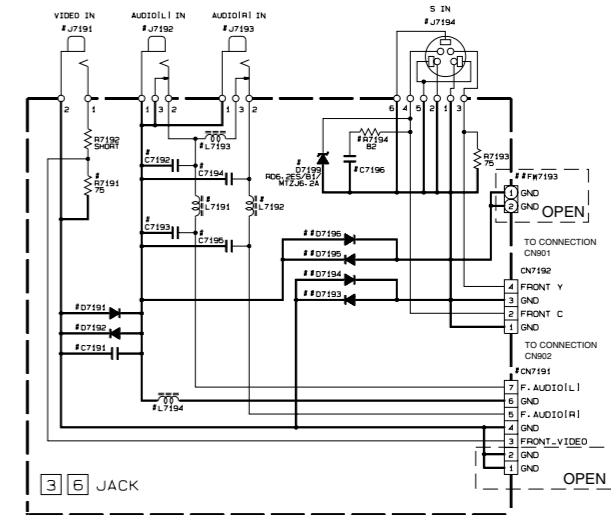
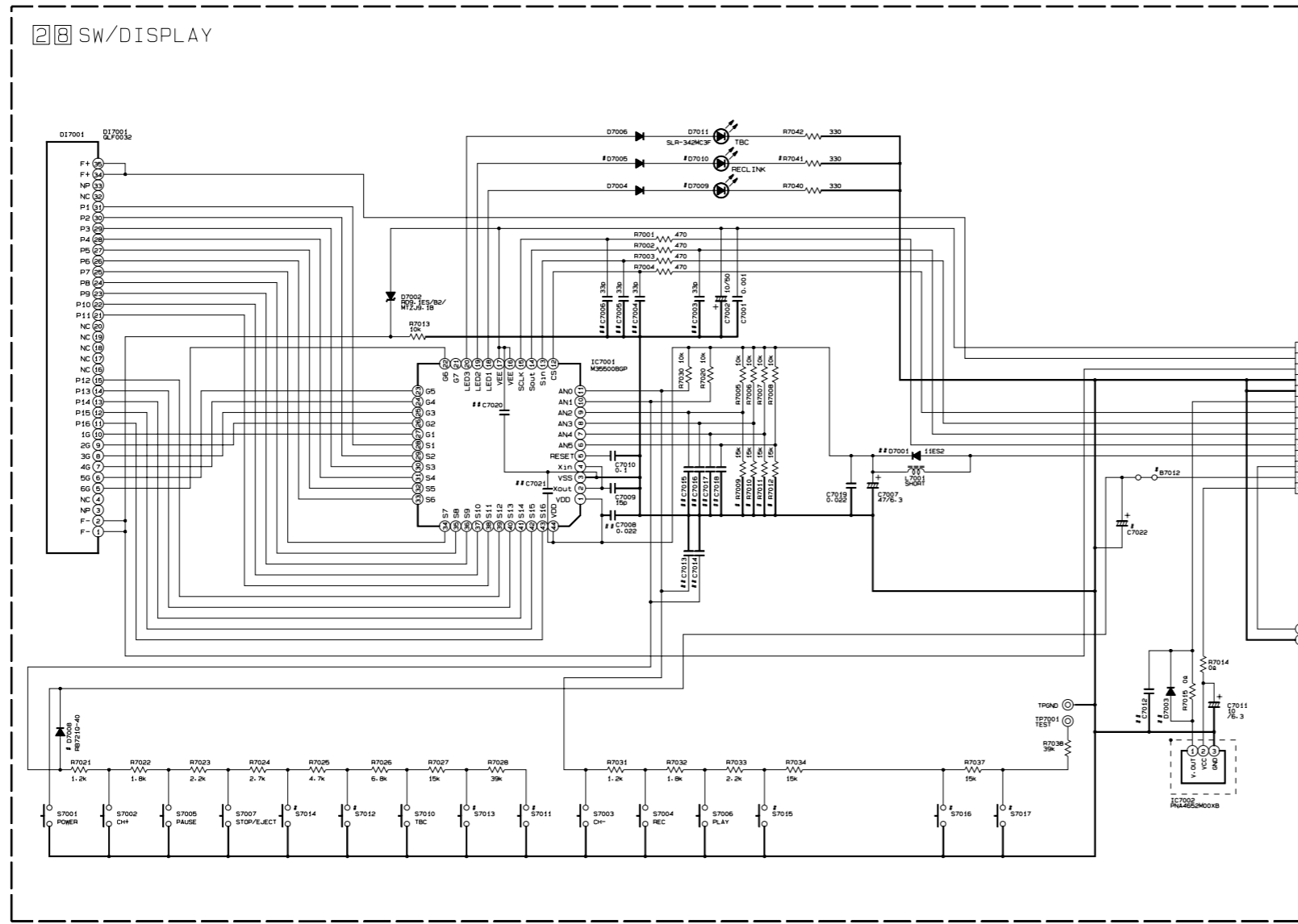
NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

p20167002a_rev0

4.14 SW/DISPLAY, REC SAFETY, JACK AND JOG SCHEMATIC DIAGRAMS [HR-S8700MS]

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.



p10193001a_rev0

O : Used
X : Not used

DIFFERENCE TABLE 1

	S7011	S7012	S7013	S7014	S7015	S7016	S7017	D7009	D7005 R7041	D7010	D7008	B7012	C7022
S26U S36U	REVIEW	S-ET	RECLINK	OK	MENU	INSERT	A. DUB	SLR-342MC3F S-ET	YES	SLR-342VC3F	SHORT	NO	NO
S26EU S26EK	TIMER	REVIEW (S-ET)	RECLINK	SP/LP	SYNC. EDIT	INSERT	A. DUB	SLR-342DC3F REVIEW (SLR-342MC3F)	YES	SLR-342VC3F	SHORT	NO	NO
S26MS (S26MS)	TIMER	REVIEW (S-ET)	RECLINK	SP/LP	SYNC. EDIT	INSERT	A. DUB	REVIEW (SLR-342MC3F)	YES	SLR-342VC3F	SHORT	NO	NO
S26A S26EA	TIMER	REVIEW	C. SYSTEM	SP/LP/EP	SYNC. EDIT	INSERT	A. DUB	SLR-342DC3F REVIEW	NO	NO	SHORT	NO	NO
S66D	TIMER	S-ET	RECLINK	SP/EP	P. SAVE	INSERT	A. DUB	SLR-342MC3F S-ET	YES	SLR-342VC3F	YES	YES	NO
S66D	TIMER	S-ET	RECLINK	SP/EP	P. SAVE	REW	FF	SLR-342MC3F S-ET	YES	SLR-342VC3F	YES	YES	NO

DIFFERENCE TABLE 2

OPTION	R7009	R7010	R7011	R7012
S26U S66D	NO	NO	NO	NO
S36U S66D	39k	NO	NO	NO
S26EU S26EK S26MS (S26EUEK) (S26MS)	15k (NO)	10k (NO)	NO	NO

DIFFERENCE TABLE 3

AV IN	J7191	J7192	J7193	CN7191	R7191	R7192	L7191	L7193	C7192	C7193	D7191	C7191
S26U S36U S66D S66D	YES	YES	3-7	YES	YES	SHORT	SHORT	NO	NO	NO	NO	NO
S26EU S26EK S26MS (S26EUEK) (S26MS)	YES	YES	3-7	NO	YES	100k	SHORT	YES	NO	NO	NO	NO

DIFFERENCE TABLE 4

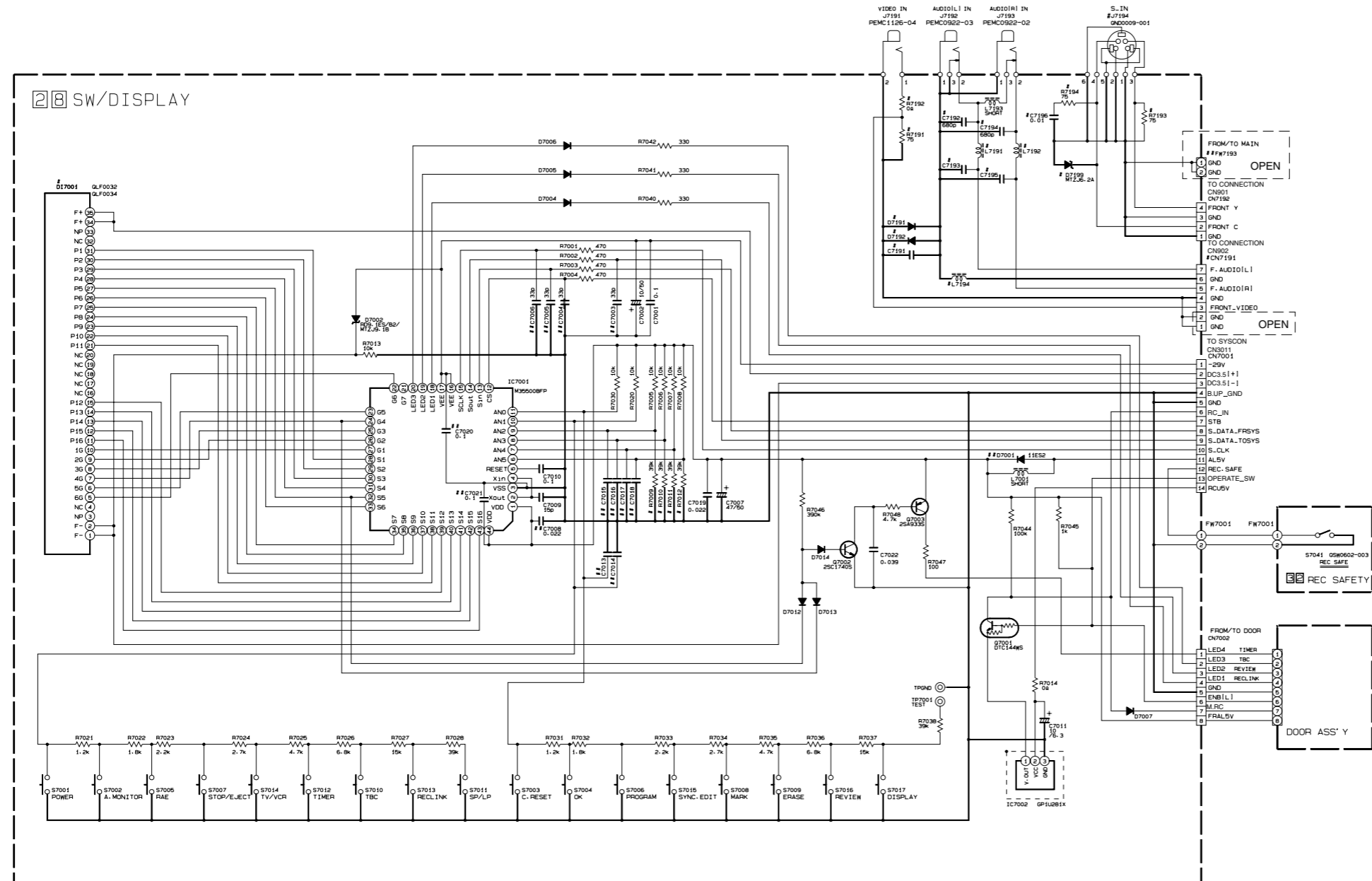
S-JACK	J7194	R7193	R7194	C7196	D7199
S26U S36U	YES	YES	YES	SHORT	YES
S66D S66D	YES	YES	YES	0.01	YES
S26EU S26EK S26MS (S26EUEK) (S26MS)	YES	YES	NO	SHORT (NO)	NO
S26A/EA	YES	YES	YES	SHORT	NO

NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL DIODES ARE 1N4148M OR 1SS133
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR
 ## NOT USED

4.15 SW/DISPLAY AND REC SAFETY SCHEMATIC DIAGRAMS [HR-S9700MS]

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 1

OPTION	R7009	R7010	R7011	R7012
S36EU S36EK S36MS	NO	NO	NO	NO

#1 DIFFERENCE TABLE 2

AV IN	CN7191	R7191	L7191	L7193	C7192	C7193	D7191	C7191
S36EU S36EK S36MS	3-7	NO	YES	100A	SHORT	YES	NO	NO

#1 DIFFERENCE TABLE 3

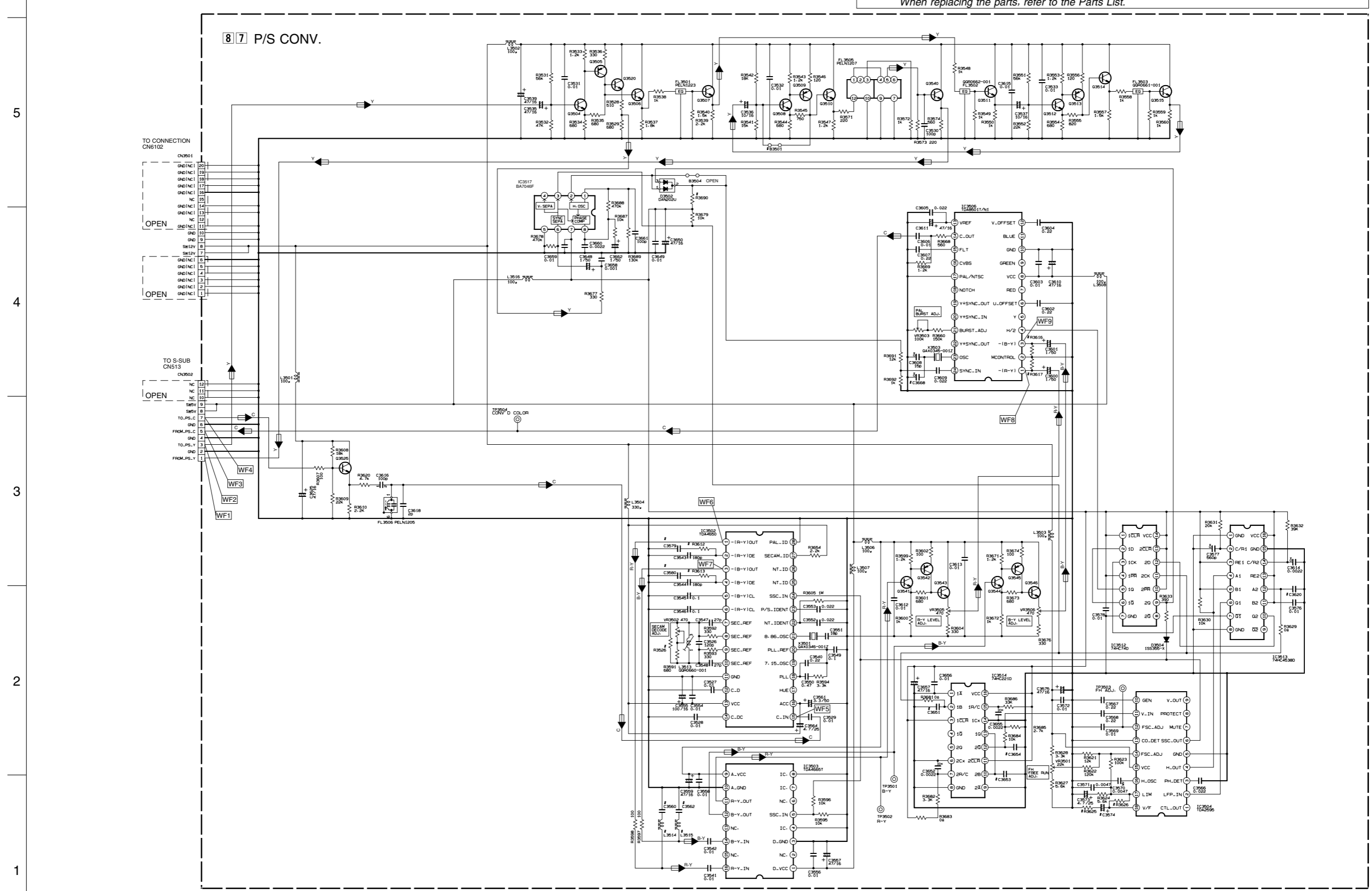
S-JACK	J7194	R7193	R7194	C7196	D7199
S36EU S36EK S36MS	YES	NO	NO	NO	NO

NOTES/UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 [Symbol] ELECTROLYTIC
 [Symbol] CERAMIC
 [Symbol] MYLAR
 [Symbol] NON POLAR
 ALL DIODES ARE 1SS133.
 ## NOT USED

5
4
3
2
1

4.16 P/S CONVERTER SCHEMATIC DIAGRAM [HR-S8700MS]

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.



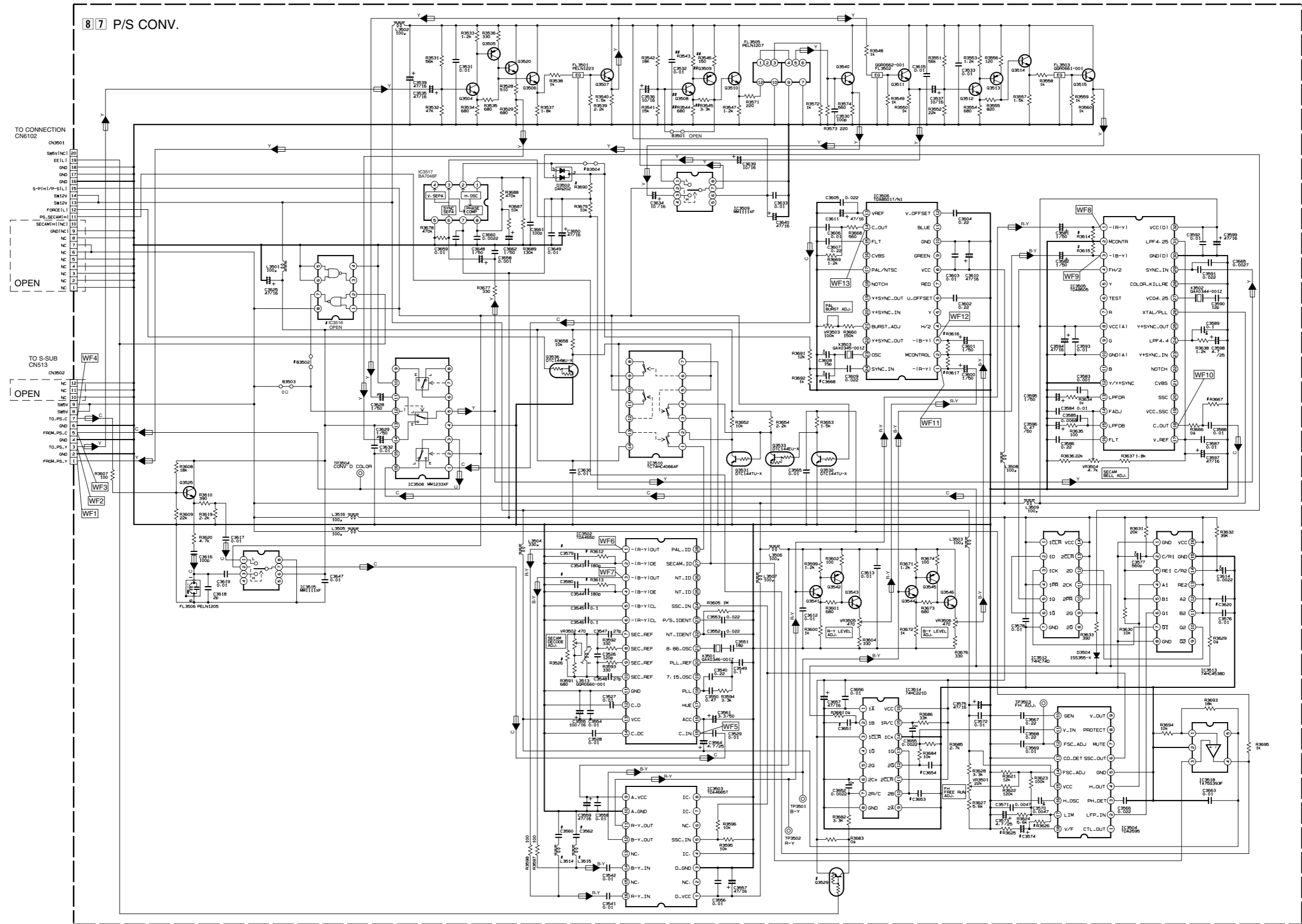
Note : For the waveforms in this schematic diagram, refer to page 4-52.

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

p10207002a_rev0

4.17 P/S CONVERTER SCHEMATIC DIAGRAM [HR-S9700MS]

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.



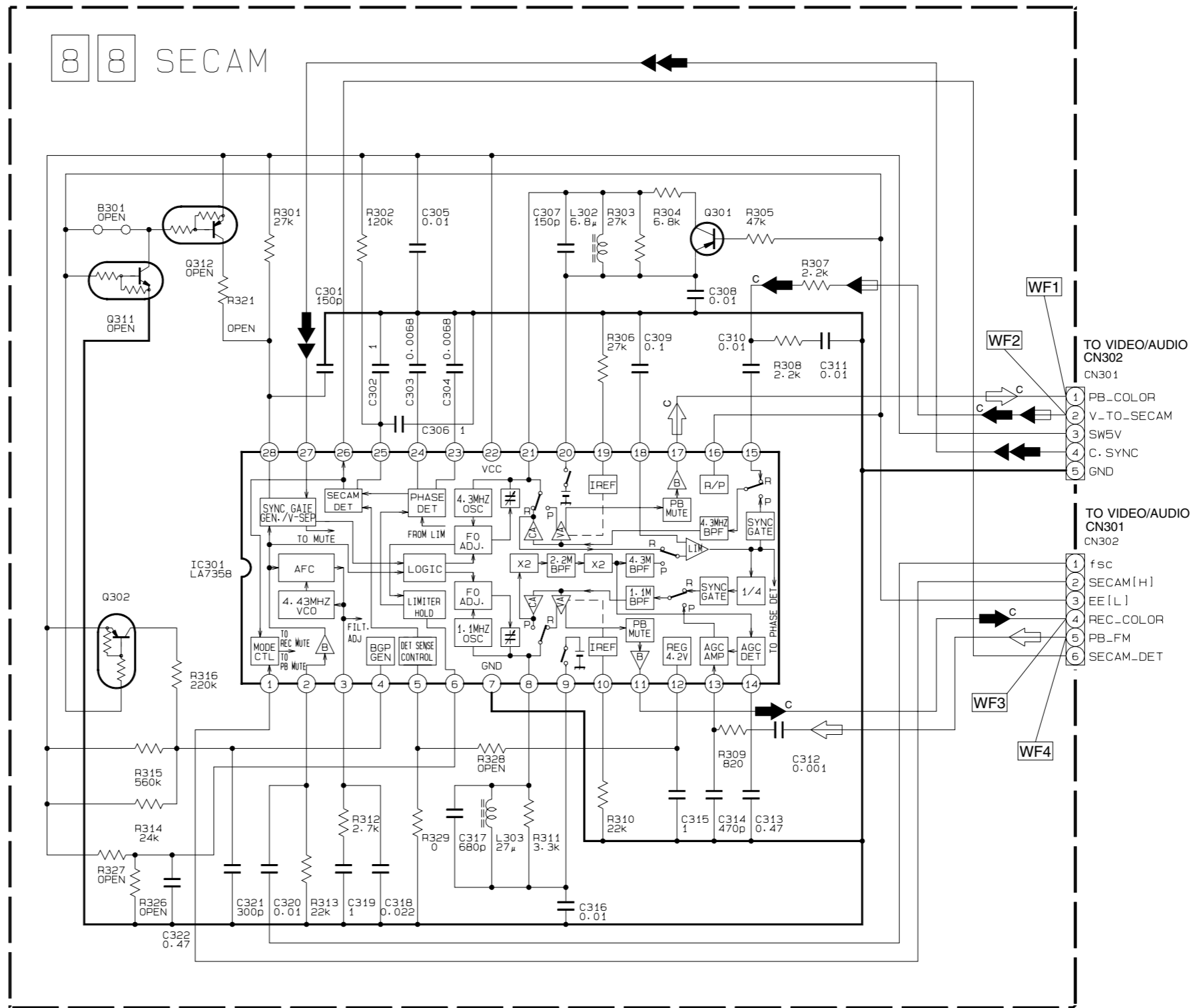
Note : For the waveforms in this schematic diagram, refer to page 4-52.

NOTES UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 * MARK ELEMENTS ARE NOT MOUNTED.
 ** Marked elements may differ depending on the model.
 Be sure to check the Parts List.

p10206001a_rev0

4.18 SECAM 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.



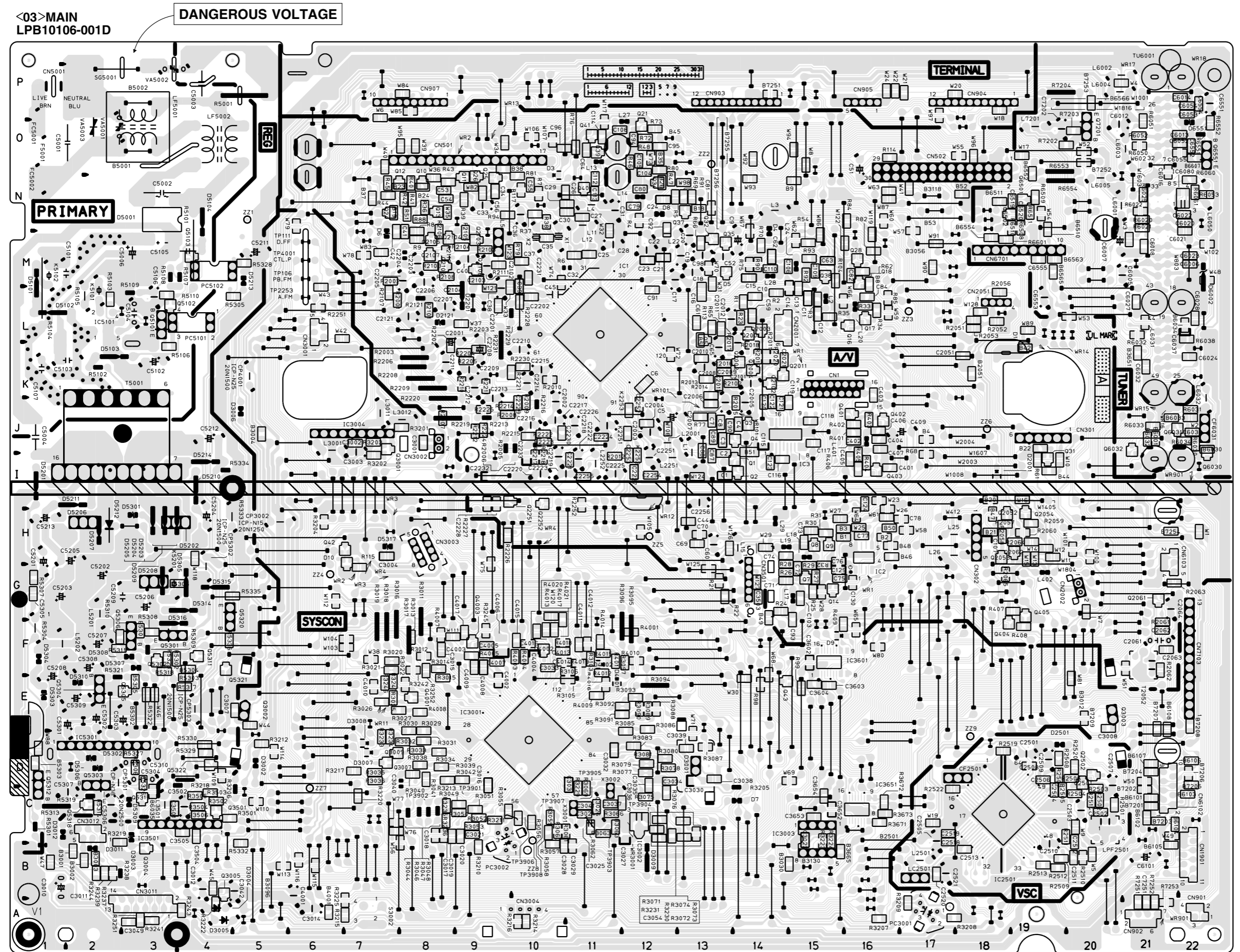
Note : For the waveforms in this schematic diagram, refer to page 4-52.

p30054001a_rev0

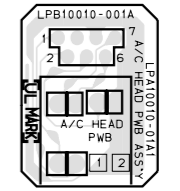
NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

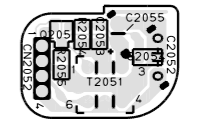
4.21 MAIN, A/C HEAD, AUDIO ERASE AND LOADING MOTOR CIRCUIT BOARDS



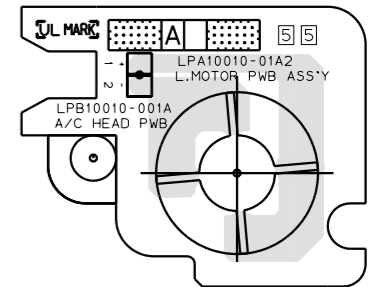
<12>A/C HEAD
LPB10010-001A



<46>AUDIO ERASE
LPB10106-001D



<55>LOADING MOTOR
LPB10010-001A

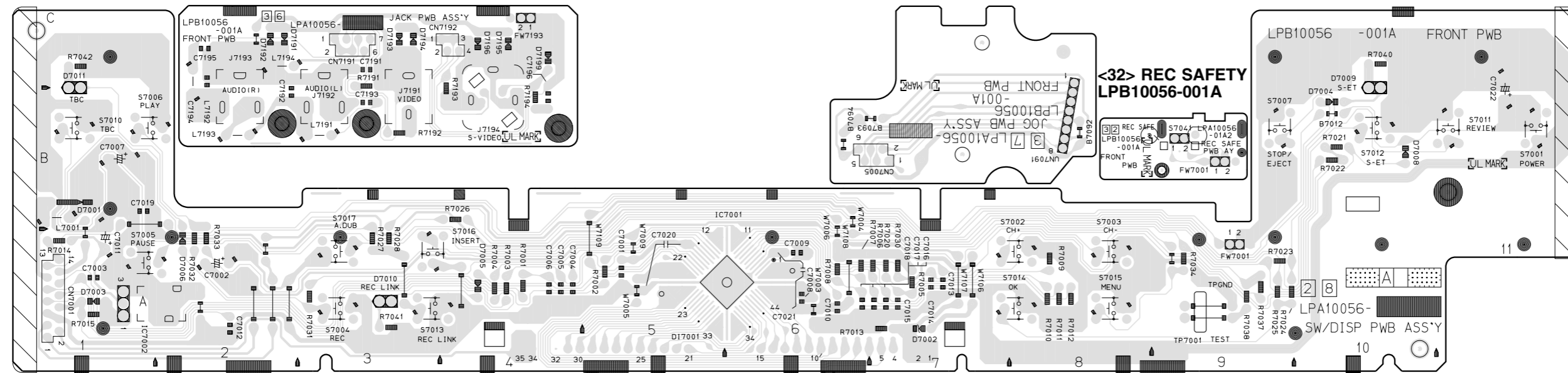


4.23 SW/DISPLAY, REC SAFETY, JACK AND JOG CIRCUIT BOARDS

<28> SW/DISPLAY [HR-S8700MS]
LPB10056-001A

<36> JACK
LPB10056-001A

<37> JOG
LPB10056-001A



COMPONENT PARTS LOCATION GUIDE <SW/DISPLAY> [HR-S8700MS]

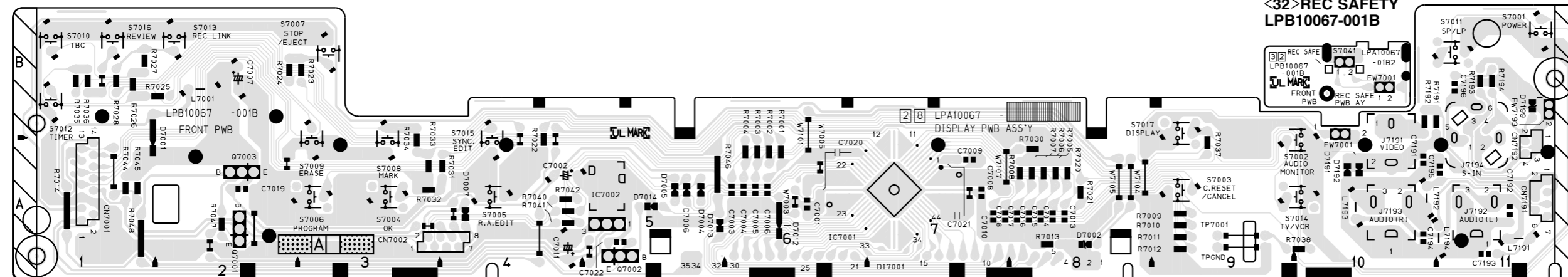
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION		
CAPACITOR				IC				SWITCH					
C7001	A D 2A	C7015	A D 7A	D7005	A D 4A	R7004	A D 4A	R7024	A D 9A	S7001	A D 11B		
C7002	A D 2A	C7017	A D 7A	D7006	A D 2A	R7005	A D 7A	R7025	A D 9A	S7002	A D 8A		
C7003	A D 4A	C7018	A D 6A	D7008	A D 10B	R7006	A D 7A	R7026	A D 4B	S7003	A D 8A		
C7004	A D 4A	C7019	A D 1B	D7010	A D 3A	R7007	A D 6A	R7027	A D 3A	S7004	A D 3A		
C7005	A D 4A	C7020	A D 5A	D7011	A D 1C	R7008	A D 6A	R7028	A D 7A	S7005	A D 1A		
C7006	A D 4A	C7021	A D 6A			R7009	A D 8A	R7030	A D 3A	S7006	A D 1B		
C7007	A D 1B	C7022	A D 11B			R7010	A D 8A	R7031	A D 2A	S7007	A D 9B		
C7008	A D 6A	CONNECTOR		COIL		R7011	A D 8A	R7032	A D 2A	S7010	A D 1B		
C7009	A D 6A	CN7001	A D 1A	L7001	A D 1B	R7012	A D 8A	R7033	A D 2B	S7011	A D 11B		
C7010	A D 6A					R7013	A D 7A	R7034	A D 9A	S7012	A D 10B		
C7011	A D 1A					R7014	A D 1A	R7037	A D 9A	S7013	A D 3A		
C7012	A D 2A					R7015	A D 1A	R7038	A D 9A	S7014	A D 8A		
C7013	A D 7A					R7020	A D 7A	R7040	A D 10C	S7015	A D 8A		
C7014	A D 7A					R7021	A D 10B	R7041	A D 3A	S7016	A D 3A		
								R7022	A D 10B	R7042	A D 1C		
								R7023	A D 9A				

COMPONENT PARTS LOCATION GUIDE <SW/DISPLAY> [HR-S9700MS]

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR				DIODE				JACK				RESISTOR				OTHER					
C7001	A D 6A	C7017	A D 8A	CN7192	A D 11B	IC7002	A D 5A	Q7003	A D 2A	R7020	A D 8A	R7037	A D 9A	S7002	A D 10A	D7001	A D 7A				
C7002	A D 4A	C7018	A D 2A							R7021	A D 4B	R7038	A D 9A	S7003	A D 9A	D7002	A D 8A				
C7003	A D 6A	C7019	A D 7A							R7022	A D 3B	R7040	A D 4A	S7004	A D 4A	FW7001	A D 10B				
C7004	A D 6A	C7020	A D 6A							R7023	A D 2B	R7041	A D 4A	S7005	A D 4A	FW7193	A D 11B				
C7005	A D 6A	C7021	A D 7A							R7024	A D 2B	R7042	A D 1A	S7006	A D 3B	TP7001	A D 9A				
C7006	A D 6A	C7022	A D 5A							R7025	A D 1B	R7044	A D 1A	S7007	A D 3A						
C7007	A D 6A	C7191	A D 10A							R7026	A D 1B	R7045	A D 1A	S7008	A D 3A						
C7008	A D 2B	C7192	A D 11A							R7027	A D 1B	R7046	A D 5A	S7009	A D 3A						
C7009	A D 7A	C7193	A D 11A							R7028	A D 1B	R7047	A D 2A	S7010	A D 1B						
C7010	A D 7A	C7194	A D 10A							R7029	A D 8A	R7048	A D 1A	S7011	A D 11B						
C7011	A D 4A	C7195	A D 11B							R7030	A D 4A	R7049	A D 11B	S7012	A D 1B						
C7012	A D 8A	C7196	A D 11B							R7031	A D 3A	R7049	A D 11B	S7013	A D 2B						
C7013	A D 8A	CONNECTOR								R7032	A D 3A	R7191	A D 10B	S7014	A D 10A						
C7014	A D 8A	CN7001	A D 1A							R7033	A D 3A	R7192	A D 11B	S7015	A D 4A						
C7015	A D 8A	CN7002	A D 3A							R7034	A D 1B	R7193	A D 11B	S7016	A D 1B						
C7016	A D 8A	CN7191	A D 11A							R7035	A D 1B	R7194	A D 11B	S7017	A D 9B						
				IC				TRANSISTOR				SWITCH									
				IC7001				Q7001				S7001									
				B C 7A				A D 2A				A D 11B									
				Q7002				R7013				S7017									
				A D 5A				A D 1A				A D 9B									

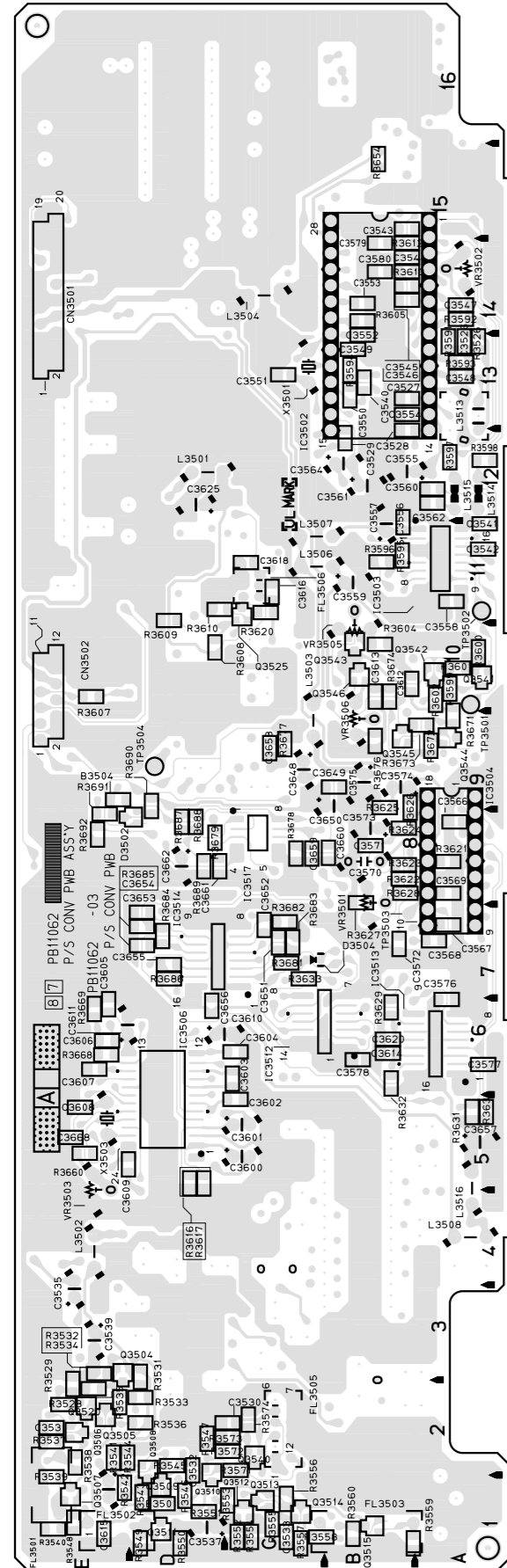
<28> SW/DISPLAY [HR-S9700MS]
LPB10067-001B

<32> REC SAFETY
LPB10067-001B



4.24 P/S CONVERTER CIRCUIT BOARDS

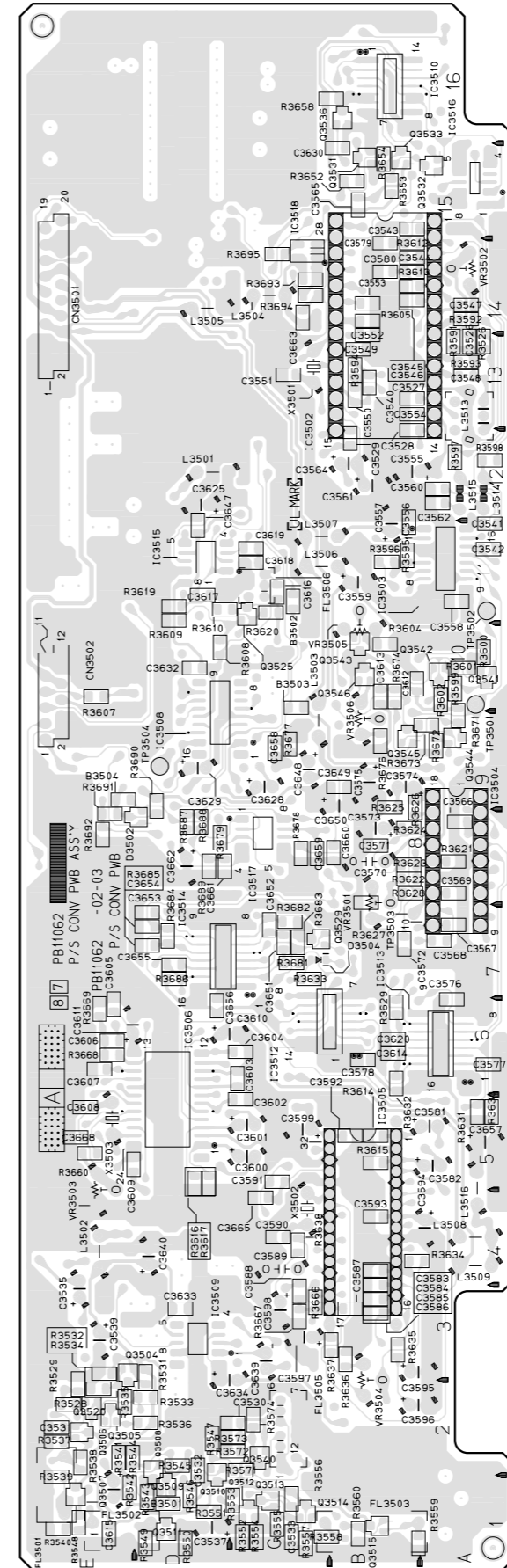
<87>P/S CONVERTER [HR-S8700MS]
PB11062-03



COMPONENT PARTS LOCATION GUIDE
<P/S CONVERTER> [HR-S8700MS]

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	
CAPACITOR								
C3521	A D 16C	C3648	A D 9C	R3543	B C 1D	FL3506	A D 11C	
C3522	A D 15C	C3649	A D 9B	R3544	B C 2E	TP3501	A D 10A	
C3523	A D 15D	C3650	A D 9B	R3545	B C 2D	TP3502	A D 11A	
C3524	A D 16E	C3651	A D 7C	R3546	B C 1D	TP3503	A D 7B	
C3525	A D 14D	C3652	B C C 7C	R3547	B C 2D	TP3504	A D 9D	
C3526	A D 13A	C3653	B C C 7D	R3548	B C 1E	VR3501	A D D 8B	
C3527	B C C 12B	C3654	A D 7D	R3549	B C 1D	VR3502	A D D 14A	
C3528	B C C 13B	C3655	B C C 7D	R3550	B C 1D	VR3503	A D D 5E	
C3529	B C C 12B	C3656	B C C 6D	R3551	B C 1D	VR3505	A D D 10B	
C3530	B C C 2C	C3657	A D 5A	R3552	B C 1C	VR3506	A D D 9B	
C3531	B C C 2E	C3658	B C C 9C	R3553	B C 1C	X3501	A D D 13C	
C3532	B C C 2D	C3659	B C C 8C	R3554	B C 1C	X3503	A D 5E	
C3533	B C C 1C	C3660	B C C 8B	R3555	B C 1C			
C3535	A D D 3E	C3661	A D 8D	R3556	B C 1C			
C3536	A D D 1E	C3662	A D 8D	R3557	B C 1C			
C3537	A D D 1D	C3668	A D 5E	R3558	B C 1B			
C3538	A D D 2D	CONNECTOR				R3559	B C 1B	
C3539	A D D 3E	CN3501	A D 13E	R3560	B C 1C			
C3540	B C C 13B	CN3502	A D 9E	R3571	B C 2C			
C3541	B C C 12A	DIODE				R3572	B C 2C	
C3542	B C C 11A	D3502	B C 8D	R3573	B C 2C			
C3543	B C C 15B	D3504	B C 7C	R3574	B C 2C			
C3544	B C C 14B	IC				R3591	B C 13A	
C3545	B C C 14B	IC3501	A D 17D	R3592	B C 14A			
C3546	B C C 14B	IC3502	A D 15A	R3593	B C 13A			
C3547	B C C 14A	IC3503	B C 11A	R3594	B C 13B			
C3548	B C C 13A	IC3504	A D D 9A	R3595	B C 11B			
C3549	B C C 13B	IC3506	B C C 5D	R3596	B C 11B			
C3550	B C C 13B	IC3511	A D D 11E	R3597	B C 12A			
C3551	B C C 13C	IC3512	B C 6B	R3598	B C 12A			
C3552	B C C 13B	IC3513	B C 6A	R3599	B C 10A			
C3553	B C C 14B	IC3514	B C 7D	R3600	B C 10A			
C3554	B C C 13B	IC3517	B C 8C	R3601	B C 10A			
C3555	B C C 12B	COIL				R3602	B C 10B	
C3556	B C C 12B	L3501	A D 12D	R3603	B C 14B			
C3557	B C C 11B	L3502	A D 4E	R3607	B C 10E			
C3558	B C C 11A	L3503	A D 9C	R3608	B C 10D			
C3559	B C C 11B	L3504	A D 14C	R3609	B C 10D			
C3560	B C C 12A	L3506	A D 11C	R3610	B C 11D			
C3561	B C C 12A	L3507	A D 11C	R3611	B C 14B			
C3562	B C C 12A	L3508	A D 4A	R3612	B C 5D			
C3563	B C C 8A	L3510	A D 12E	R3613	B C 5D			
C3564	B C C 7A	L3511	A D 16C	R3620	B C 11C			
C3565	B C C 7A	L3512	A D 16E	R3621	B C 8A			
C3566	B C C 8A	L3513	A D 13A	R3622	B C 8B			
C3567	B C C 8A	L3514	A D 12A	R3623	B C 8B			
C3568	B C C 8B	L3515	A D 12A	R3624	B C 8B			
C3569	B C C 8B	L3516	A D 5A	R3625	B C 8B			
C3570	B C C 7B	TRANSISTOR				R3626	B C 9B	
C3571	B C C 8B	Q3504	B C 3E	R3627	B C 8B			
C3572	B C C 8B	Q3505	B C 2E	R3628	B C 8B			
C3573	B C C 9B	Q3506	B C 2E	R3629	B C 6B			
C3574	B C C 7A	Q3507	B C 1E	R3630	B C 5A			
C3575	B C C 6B	Q3508	B C 2D	R3631	B C 5A			
C3576	B C C 14B	Q3509	B C 1D	R3632	B C 6B			
C3577	B C C 14B	Q3510	B C 2D	R3633	B C 7C			
C3578	B C C 5C	Q3511	B C 1D	R3654	B C 15B			
C3579	B C C 5C	Q3512	B C 1C	R3660	B C 5E			
C3580	B C C 5C	Q3513	B C 1C	R3668	B C 6E			
C3600	B C C 6C	Q3514	B C 1C	R3669	B C 6E			
C3601	B C C 6C	Q3515	B C 1B	R3671	B C 9A			
C3602	B C C 6C	Q3520	B C 2E	R3672	B C 9A			
C3603	B C C 6E	Q3525	B C 11C	R3673	B C 9A			
C3604	B C C 6E	Q3540	B C 2C	R3674	B C 10B			
C3605	B C C 6E	Q3541	B C 10A	R3677	B C 9C			
C3606	B C C 5E	Q3542	B C 10A	R3678	B C 8C			
C3607	B C C 5E	Q3543	B C 10B	R3679	B C 8D			
C3608	B C C 6D	Q3544	B C 9A	R3681	B C 7C			
C3609	B C C 6D	Q3545	B C 9B	R3682	B C 7C			
C3610	B C C 10B	Q3546	B C 10B	R3683	B C 7C			
C3611	B C C 10B	RESISTOR				R3684	B C 7D	
C3612	B C C 6B	R3526	B C 13A	R3685	B C 7D			
C3613	B C C 1E	R3528	B C 2E	R3686	B C 7D			
C3614	B C C 11C	R3529	B C 2E	R3687	B C 8D			
C3615	B C C 6B	R3531	B C 3D	R3688	B C 8D			
C3616	B C C 12D	R3532	B C 3E	R3689	B C 8D			
C3617	B C C 10C	R3533	B C 2D	R3690	B C 9D			
C3618	B C C 10C	R3534	B C 2E	R3691	B C 8E			
C3619	B C C 4D	R3535	B C 2E	R3692	B C 8E			
C3620	B C C 4D	R3536	B C 2D	OTHER				
C3621	B C C 3D	R3537	B C 2E	FL3501	A D 2E			
C3622	B C C 3D	R3538	B C 2E	FL3502	A D 1E			
C3623	B C C 11E	R3539	B C 1E	FL3503	A D 1C			
C3624	B C C 13E	R3540	B C 1E	FL3504	A D 1A			
C3645	B C C 11E	R3541	B C 2E	FL3505	A D 2C			
C3646	B C C 12E	R3542	B C 1E					

<87>P/S CONVERTER [HR-S9700MS]
PB11062-02-03

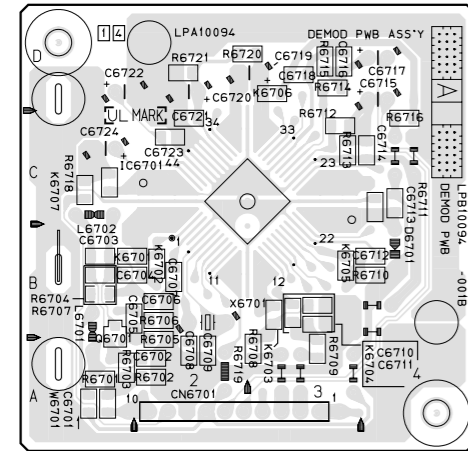


COMPONENT PARTS LOCATION GUIDE
<P/S CONVERTER> [HR-S9700MS]

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR							
C3610	A D 6D	C3611	A D 6E	L3514	A D 12A	R3614	B C 5B
C3521	A D 16C	C3612	B C 10B	L3515	A D 12A	R3615	B C 5B
C3522	A D 15C	C3613	B C 10B	L3516	A D 5A	R3616	B C 5D
C3523	A D 15D	C3614	B C 6B	TRANSISTOR			
C3524	A D 16E	C3615	B C 1E	Q3504	B C 3E	R3617	B C 5D
C3525	A D 14D	C3616	B C 11C	Q3505	B C 2E	R3619	B C 11C
C3526	B C C 13A	C3617	B C 11D	Q3506	B C 2E	R3620	B C 8A
C3527	B C C 12B	C3618	B C 11C	Q3507	B C 2E	R3621	B C 8B
C3528	B C C 13B	C3619	B C 11C	Q3508	B C 2D	R3622	B C 8B
C3529	B C C 12B	C3620	B C 6B	Q3509	B C 1D	R3623	B C 8B
C3530	B C C 2C	C3621	A D 12D	Q3510	B C 2D	R3625	B C 9B
C3531	B C C 2E	C3622	A D 10C	Q3511	B C 1D	R3626	B C 9B
C3532	B C C 2D	C3623	A D 10C	Q3512	B C 1C	R3627	B C 8B
C3533	B C C 1C	C3624	A D 9D	Q3513	B C 1C	R3628	B C 8B
C3535	A D D 3E	C3625	B C 15B	Q3514	B C 1C	R3629	B C 6B
C3536	A D D 1E	C3626	B C 10D	Q3515	B C 2E	R3630	B C 5A
C3537	A D D 2D	C3627	B C 3D	Q3520	B C 2E	R3631	B C 5A
C3538	A D D 3E	C3628	B C 7C	Q3525	B C 11C	R3632	B C 6B
C3539	A D D 3E	C3629	B C 7C	Q3540	B C 2C	R3633	B C 7C
C3540	B C C 13B	C3630	B C 5A	Q3541	B C 10A	R3634	B C 4B
C3541	B C C 12A	C3631	B C 5A	Q3542	B C 10A	R3635	B C 3B
C3542	B C C 11A	C3632	B C 5A	Q3543	B C 10B	R3636	B C 3B
C3543	B C C 15B	C3633	B C 5A	Q3544	B C 9A	R3637	B C 3B
C3544	B C C 14B	C3634	B C 5A	Q3545	B C 9B	R3638	B C 3B
C3545	B C C 14B	C3635	B C 5A	Q3546	B C 10B	R3652	B C 4C
C3546	B C C 14B	C3636	B C 8A	RESISTOR			
C3547	B C C 14A	C3637	B C 7A	R3526	B C 13A	R3653	B C 15B
C3548	B C C 13A	C3638	B C 7A	R3528	B C 2E	R3654	B C 15B
C3549	B C C 13B	C3639	B C 7A	R3529	B C 2E	R3655	B C 16B
C3550	B C C 13B	C3640	B C 8A	R3531	B C 3D	R3660	B C 5E
C3551	B C C 13C	C3641	B C 8A	R3532	B C 3D	R3661	B C 3C
C3552	B C C 13B	C3642	B C 8A	R3533	B C 2D	R3662	B C 6E
C3553	B C C 14B	C3643	B C 7C	R3534	B C 2E	R3663	B C 6E
C3554	B C C 13B	C3644	B C 7C	R3535	B C 2E	R3664	B C 6E
C3555	B C C 12B	C3645	B C 7C	R3536	B C 2D	R3665	B C 6E
C3556	B C C 12B	C3646	B C 8A	R3537	B C 2E	R3666	B C 6E
C3557	B C C 11B	C3647	B C 7D	R3538	B C 2E	R3667	B C 6E
C3558	B C C 11A	C3648	B C 7D	R3539	B C 1E	R3668	B C 6E
C3559	B C C 11B	C3649	B C 7D	R3540	B C 1E	R3669	B C 6E
C3560	B C C 12A	C3650	B C 7C	R3541	B C 2E	R3670	B C 6E
C3561	B C C 12B	C3651	B C 7C	R3542	B C 1E	R3671	B C 6E
C3562	B C C 12A	C3652	B C 7C	R3543	B C 1E	R3672	B C 6E
C3563	B C C 8A	C3653	B C 7C	R3544	B C 2E	R3673	B C 6E
C3564	B C C 7A	C3654	B C 7C	R3545	B C 2E	R3674	B C 6E
C3565	B C C 7A	C3655	B C 7C	R3546	B C 2E	R3675	B C 6E
C3566	B C C 8A	C3656	B C 8A	R3547	B C 2E	R3676	B C 6E
C3567	B C C 7A	C3657	B C 8A	R3548	B C 2E	R3677	B C 6E
C3568	B C C 7A	C3658	B C 8A	R3549	B C 2E	R3678	B C 6E
C3569	B C C 8A	C3659	B C 8A	R3550	B C 2E	R3679	B C 6E
C3570	B C C 8B	C3660	B C 8A	R3551	B C 2E	R3680	B C 6E
C3571	B C C 8B	C3661	B C 8A	R3552	B C 2E	R3681	B C 6E
C3572	B C C 8B	C3662	B C 8A	R3553	B C 2E	R3682	B C 6E
C3573	B C C 8B	C3663	B C 8A	R3554	B C 2E	R3683	B C 6E
C3574	B C C 8B	C3664	B C 8A				

4.25 DEMODULATOR AND SECAM CIRCUIT BOARDS

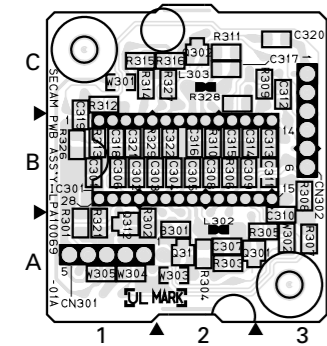
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LPB10094-001B



COMPONENT PARTS LOCATION GUIDE
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CAPACITOR					
C6701	B C 1A	CONNECTOR			
C6702	B C 2A	CN6701	A D 3A	R6711	B C 4C
C6703	B C 1B	DIODE			
C6704	B C C 1B	D6701	A D 4B	R6712	B C 3C
C6705	B C C 2B	IC			
C6706	B C C 2B	IC6701	B C 3C	R6713	B C 3D
C6707	B C C 2B	COIL			
C6708	B C C 2A	L6701	A D 1A	R6715	B C C 3D
C6709	B C C 2A	L6702	A D 1C	R6716	B C C 4C
C6710	B C C 3B	TRANSISTOR			
C6711	B C C 3B	Q6701	B C 1B	R6718	B C C 1C
C6712	B C C 4B	RESISTOR			
C6713	B C C 4C	R6701	B C 1A	R6719	A D 2A
C6714	B C C 4C	R6702	B C 2A	R6720	B C C 3D
C6715	A D 4D	R6703	B C C 1A	R6721	B C C 2D
C6716	B C C 3D	R6704	B C C 1B	OTHER	
C6717	A D 4D	R6705	B C C 2A	K6701	B C 1B
C6718	B C C 3D	R6706	B C C 2B	K6702	B C 2B
C6719	A D 3D	R6707	B C C 1B	K6703	B C 3B
C6720	A D 2D	R6708	B C C 3A	K6704	B C C 3B
C6721	B C C 2C	R6709	B C C 3A	K6705	B C C 3D
C6722	A D 1D	R6710	B C 4B	K6706	B C C 3D
C6723	B C C 2C	RESISTOR			
C6724	A D 1C	R6701	B C 1A	K6707	B C C 1C
		R6702	B C 2A	X6701	A D 2B
		R6703	B C C 1A		
		R6704	B C C 1B		
		R6705	B C C 2A		
		R6706	B C C 2B		
		R6707	B C C 1B		
		R6708	B C C 3A		
		R6709	B C C 3A		
		R6710	B C 4B		

<88>SECAM
LPB10069-001A

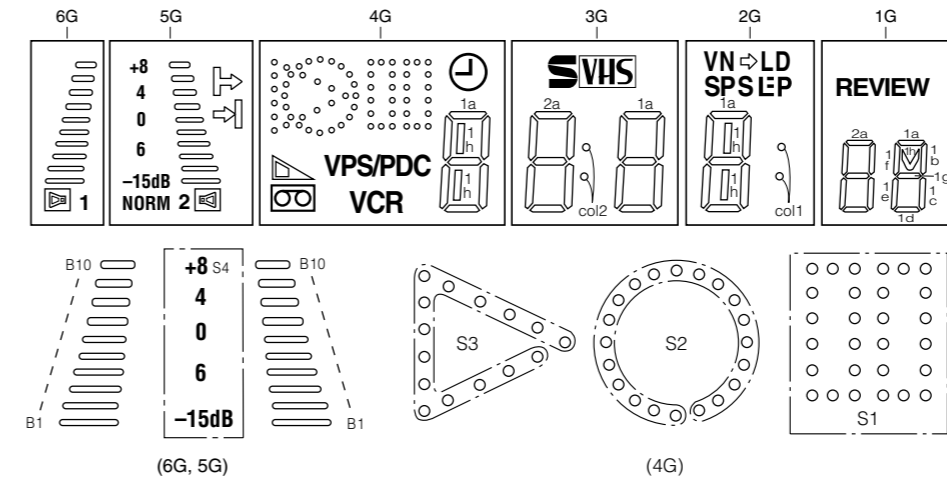


COMPONENT PARTS LOCATION GUIDE <SECAM >

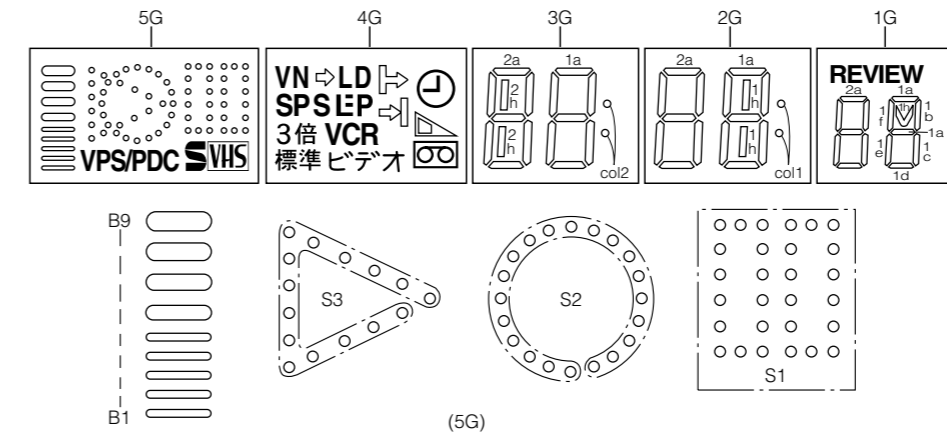
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C302	B C 1B	C314	B C 2B	IC301	A D 1B	R301	B C 1A
C303	B C 1B	C315	B C 2B	COIL			
C304	B C 2B	C316	B C 2B	L302	A D 2A	R302	B C 1A
C305	B C 2B	C317	B C 2C	L303	A D 2C	R303	B C 2A
C306	B C 1B	C318	B C 1B	TRANSISTOR			
C307	B C 2A	C319	B C 1B	Q301	B C 2A	R304	B C 2A
C308	B C 2B	C320	B C 3C	Q302	B C 2C	R305	B C 2A
C309	B C 2B	C321	B C 1B	Q311	B C 2A	R306	B C 2B
C310	B C 3A	C322	B C 2B	Q312	B C 1A	R307	B C 3A
C311	B C 2B	CONNECTOR				R308	B C 3B
C312	B C 3C	CN301	A D 1A	R309	B C 2C	R309	B C 2C
		CN302	A D 3C	R310	B C 2B	R310	B C 2B
				R311	B C 2C	R311	B C 2C
				R312	B C 1B	R312	B C 1B

4.26 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	2a
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 _(SEP)	2e
P15	B2	B2	1d	2d	⋮ _(SEP)	2d
P16	B1	B1	1h	SVHS	LP _(SEP)	REVIEW

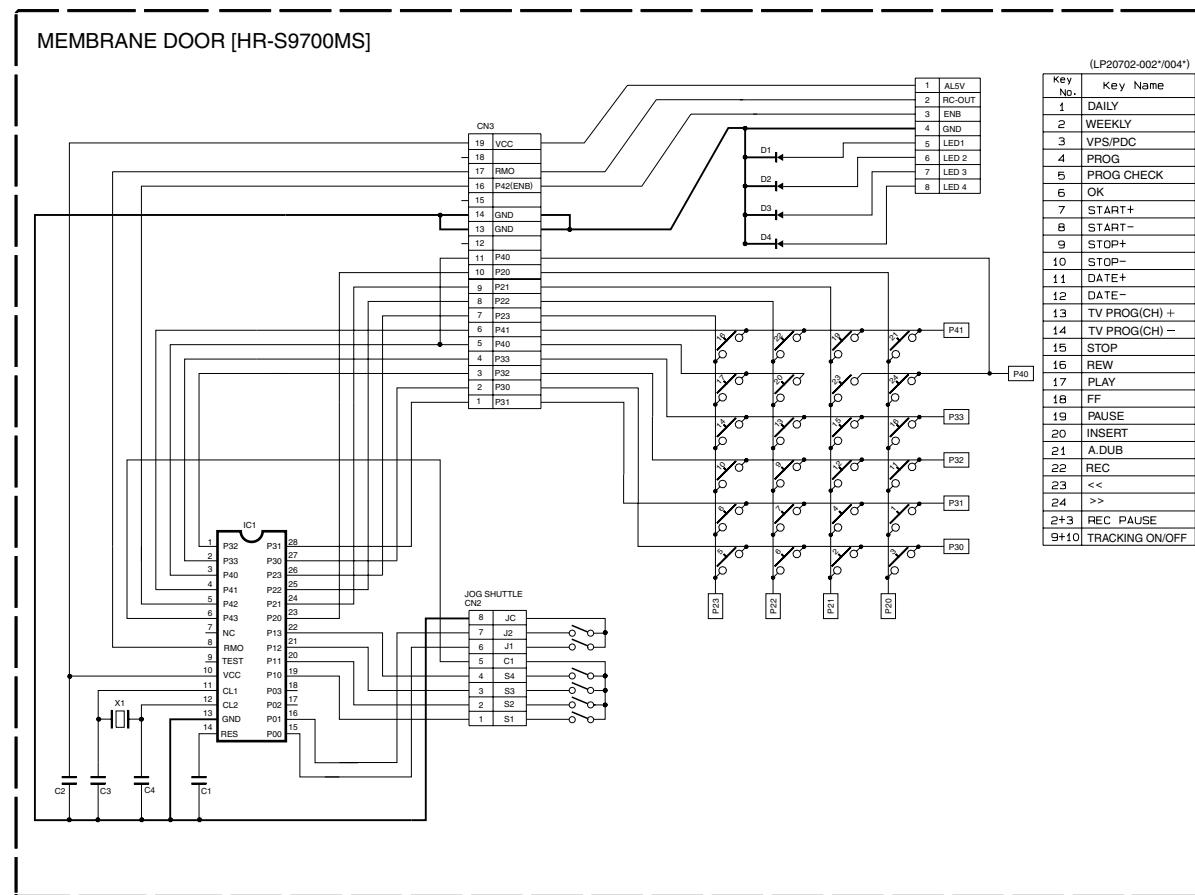
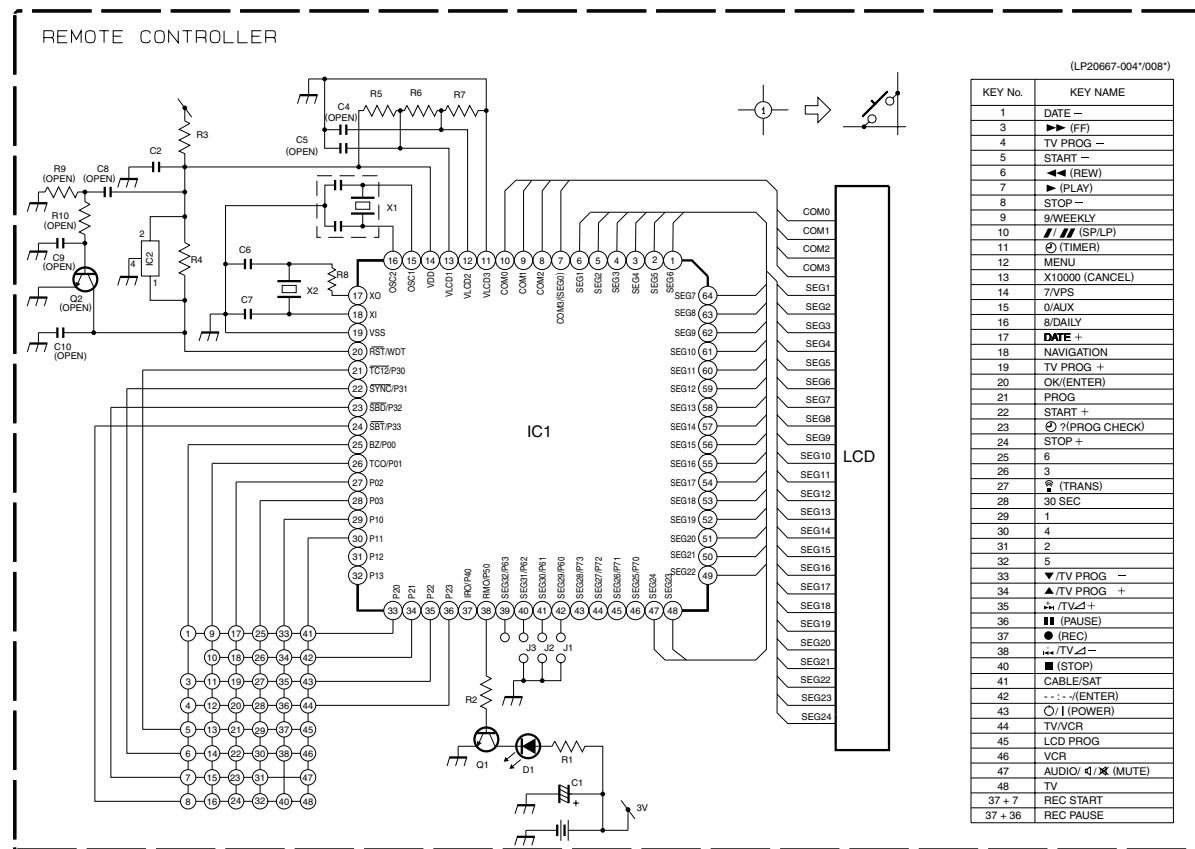
ANODE CONNECTION

[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	ビデオ	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 _(SEP)	2e	2e	2e
P15	B2	⋮ _(SEP)	2d	2d	2d
P16	B1	LP _(SEP)	2h	col1	REVIEW

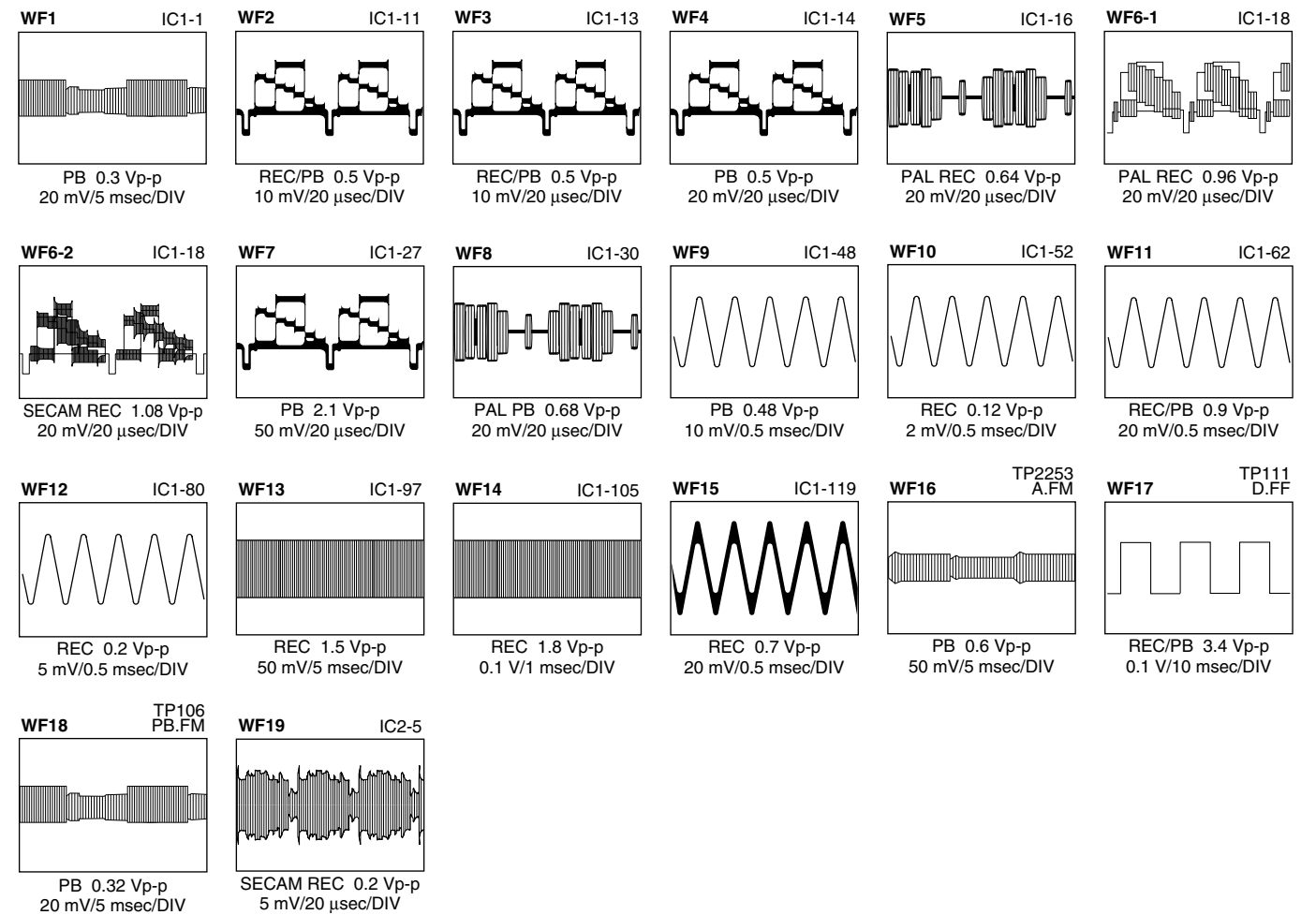
4.27 REMOTE CONTROL AND MEMBRANE DOOR SCHEMATIC DIAGRAMS

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.

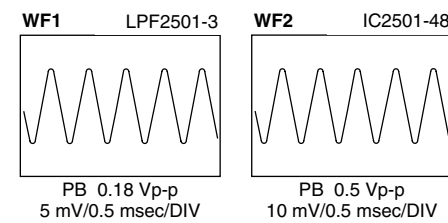


4.28 WAVEFORMS

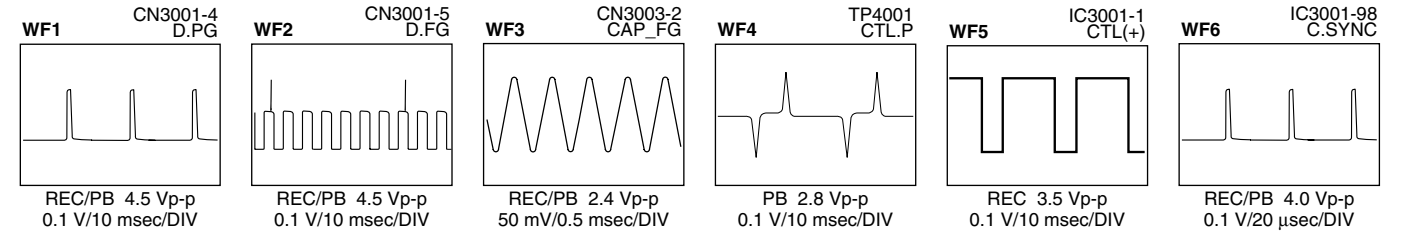
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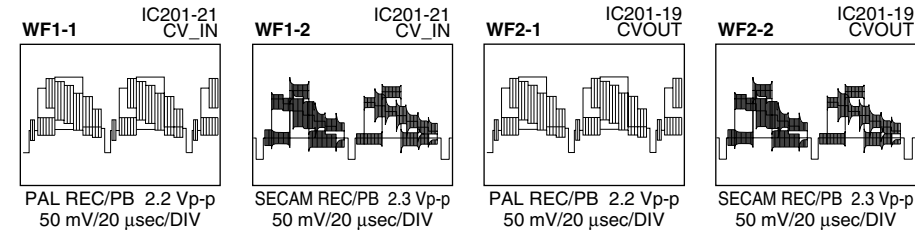
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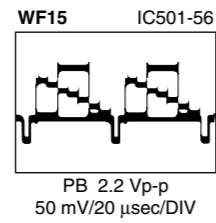
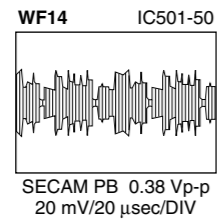
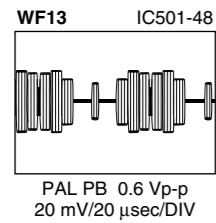
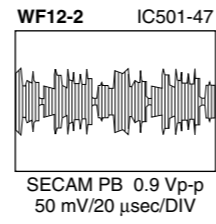
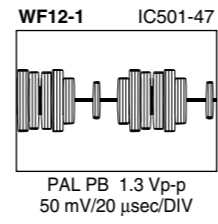
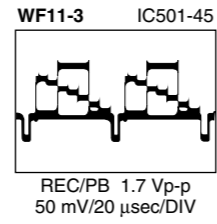
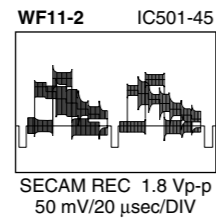
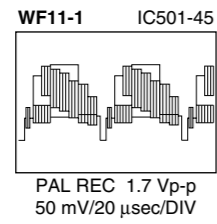
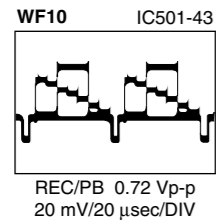
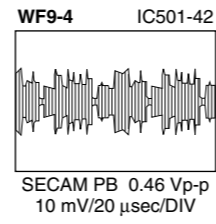
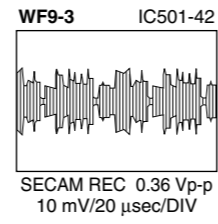
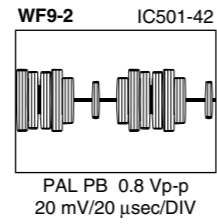
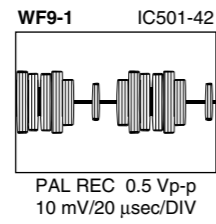
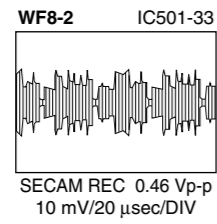
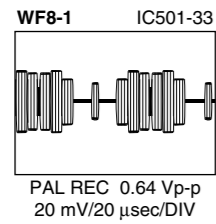
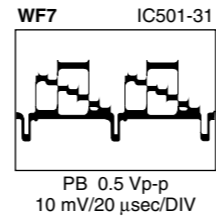
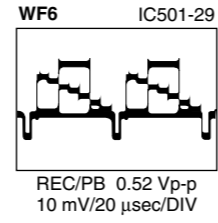
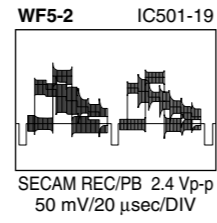
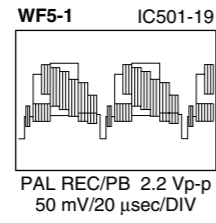
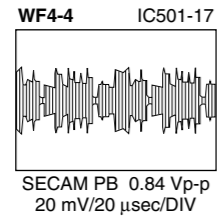
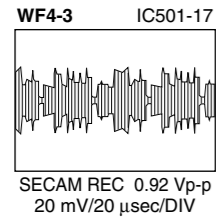
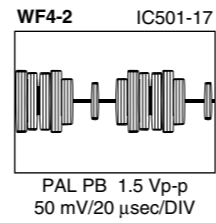
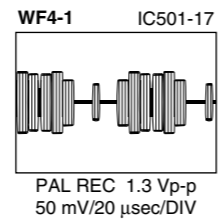
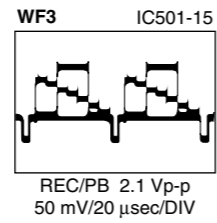
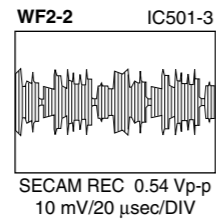
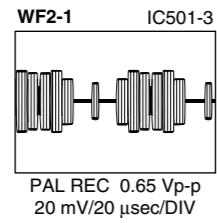
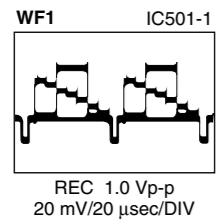
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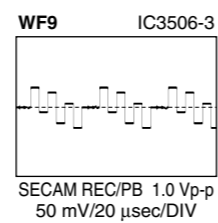
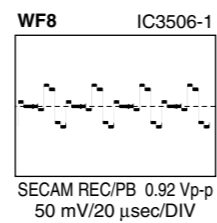
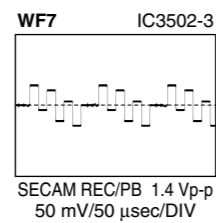
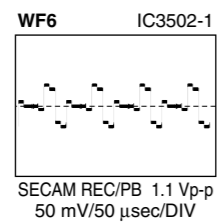
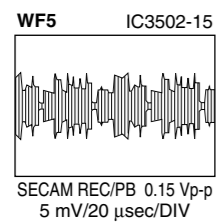
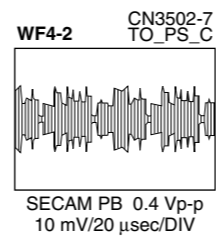
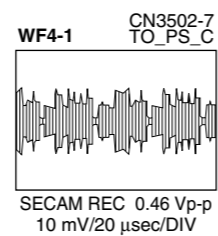
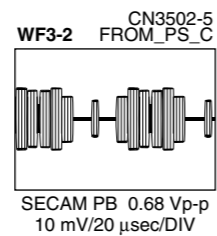
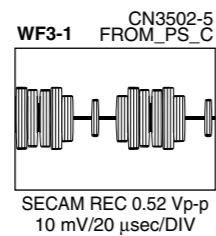
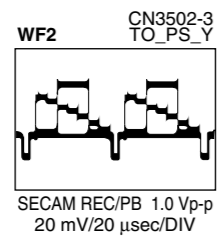
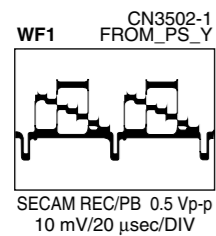
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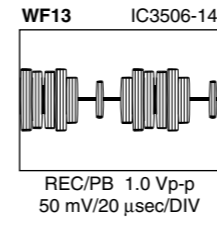
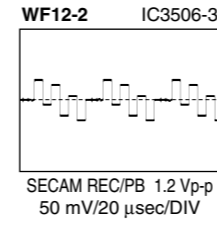
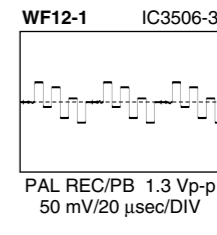
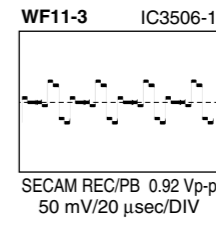
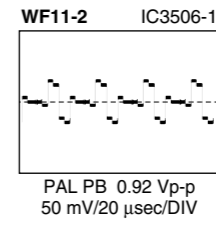
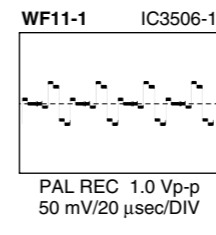
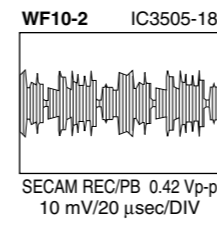
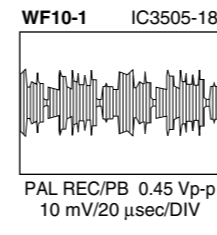
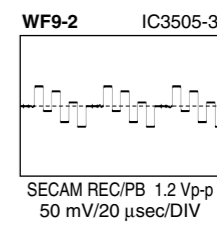
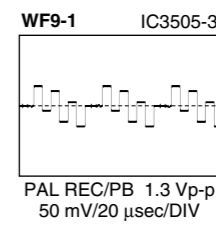
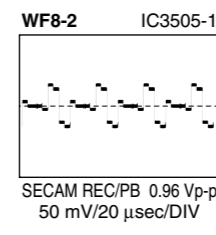
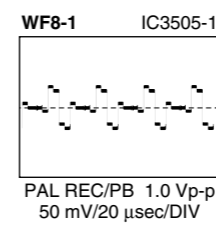
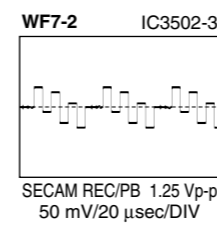
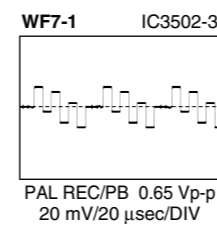
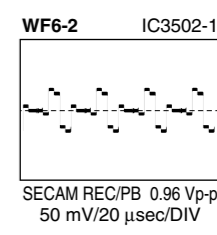
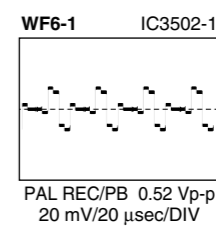
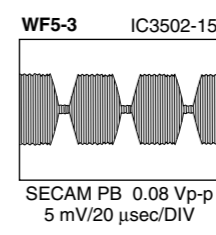
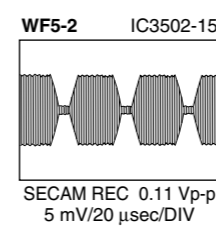
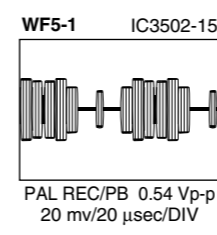
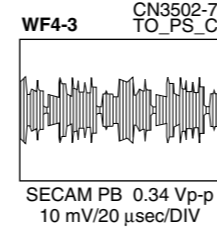
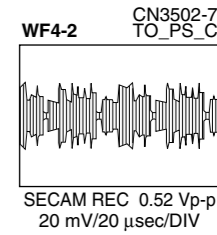
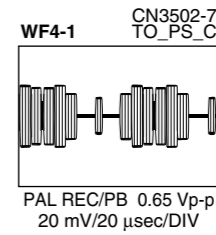
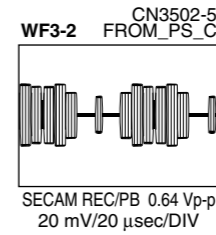
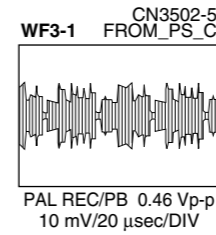
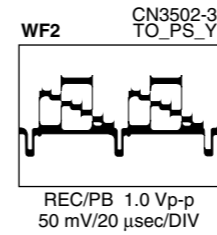
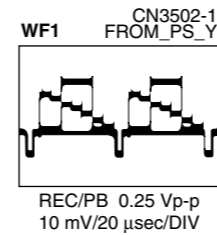
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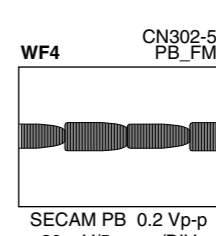
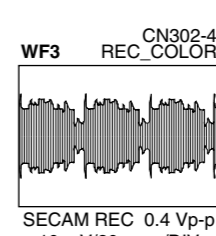
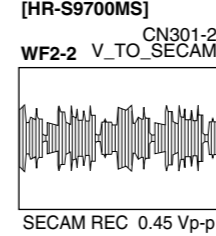
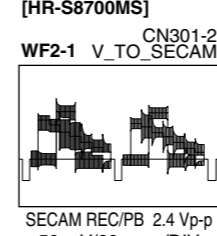
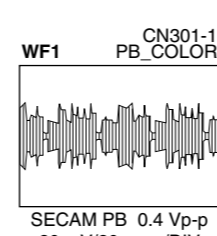
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[HR-S8700MS]



< P/S CONV. >
[HR-S9700MS]



< SECAM >



4.29 VOLTAGE CHARTS

<VIDEO/AUDIO>

MODE PIN NO.	REC	PLAY
IC1		
1	4.2	2.1
2	2.8	2.8
3	2.6	2.6
4	1.9	1.9
5	1.9	1.9
6	2.4	2.1
7	1.5	1.2
8	0	4.1
9	2.6	1.9
10	2.8	2.8
11	3.1	3.1
12	2.8	2.5
13	3.1	3.1
14	3.5	2.5
15	0	0
16	2.8	2.8
17	1.5	1.5
18	2.8	2.8
19	3.3	3.3
20	2.8	2.8
21	1.6	2.0
22	2.8	2.8
23	3.1	2.8
24	4.9	5.0
25	0.3	0.3
26	0	0
27	1.3	2.1
28	2.8	2.3
29	1.9	1.9
30	2.1	2.1
31	0	0
32	2.6	2.6
33	4.9	4.9
34	2.7	2.2
35	4.9	4.9
36	2.5	2.5
37	2.3	2.3
38	-	-
39	1.3	1.3
40	-	-
41	2.7	2.7
42	2.2	2.2
43	0	0
44	2.1	2.1
45	4.7	4.7
46	4.1	4.1
47	3.0	3.0
48	2.6	2.6
49	4.9	4.9
50	2.5	2.5
51	2.8	2.8
52	2.3	2.3
53	2.3	2.3
54	2.5	2.5
55	2.2	2.2
56	0.4	0.4
57	2.4	2.4
58	8.3	8.3
59	4.7	4.7
60	4.1	4.1
61	4.2	4.2
62	4.2	4.2
63	2.3	2.3
64	2.3	2.3
65	0.6	0.6
66	3.2	3.2
67	4.2	4.2
68	4.2	4.2
69	2.4	2.4
70	0	0
71	0.3	0.3
72	0.2	0.2
73	0.3	0.3
74	2.3	2.3
75	2.6	2.6
76	0	0
77	2.6	2.6
78	0.3	0.3
79	0.2	0.2
80	0.2	0.2
81	2.3	2.3
82	0.8	0.8
83	0	0
84	2.4	2.4
85	2.3	2.3
86	2.3	2.3
87	1.7	1.9
88	2.3	2.3
89	2.3	2.3
90	2.4	2.4
91	0	0
92	0	0
93	0	2.3
94	1.9	1.3
95	0	0
96	2.5	2.3
97	2.7	2.3
98	2.5	2.3
99	5.0	5.0
100	5.0	5.0

MODE PIN NO.	REC	PLAY
101	0	0
102	0	0
103	0	0
104	2.4	2.4
105	2.4	2.4
106	2.4	2.4
107	5.0	5.0
108	0	0
109	0	0
110	0	0
111	0	4.0
112	2.6	2.6
113	0.5	0.4
114	0	0
115	2.5	2.5
116	2.5	2.5
117	2.5	2.5
118	0	0
119	2.5	2.5
120	4.5	4.4
IC2		
1	2.8	2.8
2	4.3	4.3
3	2.8	2.8
4	5.0	0
5	2.8	2.8
6	5.0	5.0
7	2.1	2.1
8	0	0
CN1		
4	0	0
5	0	0
6	0	0
7	0	0
8	2.4	2.3
9	2.4	2.3
10	2.4	2.3
11	2.4	2.3
12	2.7	2.3
13	2.7	2.3
14	2.7	2.3
15	0	0
16	0	0
CN301		
1	2.4	2.4
2	0	0
3	0	5.1
4	2.5	0
5	4.9	2.7
6	0.2	0
CN302		
1	0	2.5
2	2.3	2.3
3	4.9	4.9
4	0.4	0.4
5	0	0
CN2001		
1	0	0
2	0	0
3	0	0
4	2.4	2.4
5	0	0.3
6	2.5	2.5
7	2.4	2.4
8	2.4	2.4
9	5.0	5.0
10	4.9	4.9
11	0	0
12	0	0
13	0	3.1
14	4.7	4.7
15	4.8	4.8
16	0.5	0.5
17	0	0
18	0	0
19	3.2	3.2
20	4.5	4.5
21	3.9	3.9
22	1.9	1.4
23	0	0
24	4.8	4.8
25	0	0
26	4.9	4.9
27	4.9	4.9
28	4.9	4.9
29	4.9	4.9
30	4.9	4.9
31	4.9	4.9
32	0.6	0.6
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	3.4	3.3
39	4.3	4.3
40	0	0
41	4.9	4.9
42	4.5	4.5
43	0	0
44	0	0
45	4.9	4.9
46	0	0

MODE PIN NO.	REC	PLAY
15	0	0
16	0	0
17	0	0
18	5.0	5.0
19	0	1.4
20	5.0	5.0
21	0	0
22	0	0
23	0	0
24	5.0	5.0
25	5.0	5.0
26	5.0	5.0
27	5.0	5.0
28	5.0	5.0
29	5.0	5.0
30	5.0	5.0
31	5.0	5.0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	5.0	5.0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	2.4	2.4
44	0	0
45	2.5	2.5
46	2.5	2.5
47	2.5	2.5
48	2.5	2.5
49	2.5	2.5
50	2.5	2.5
51	2.5	2.5
52	2.5	2.5
53	5.0	5.0
54	0	0
55	0	0
56	0	0
57	0	0
58	4.9	4.9
59	5.0	5.0
60	5.0	5.0
61	0	0
62	0	0
63	5.0	5.0
64	0	0
65	0	0
66	0	0
67	0	0
68	5.0	5.0
69	0	0
70	5.0	5.0
71	5.0	5.0
72	5.0	5.0
73	5.0	5.0
74	0	0
75	4.5	4.5
76	4.5	4.5
77	0	0
78	0	0
79	5.0	5.0
80	0	0
81	0	0
82	4.9	4.9
83	-	-
84	0	0
85	0	0
86	5.0	5.0
87	5.0	5.0
88	4.9	4.9
89	0	0
90	0	0
91	2.8	2.8
92	4.9	4.9
93	0	0
94	4.9	4.9
95	4.9	4.9
96	4.9	4.9
97	0.3	0.3
99	0	0
100	-	-
101	2.8	2.8
102	1.2	1.2
103	5.0	5.0
104	4.8	4.8
105	4.8	4.8
106	4.8	4.8
107	0	0
108	1.5	1.5
109	4.9	4.9
110	0	0
111	0	0
112	2.4	2.4
IC3002		
1	4.9	4.9
2	4.9	4.9
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	-17.8	-17.8
13	-14.2	-14.2
14	-14.2	-14.2
15	4.8	4.8
16	0.5	0.5
17	0	0
18	0	0
19	3.2	3.2
20	4.5	4.5
21	3.9	3.9
22	1.9	1.4
23	0	0
24	4.8	4.8
25	0	0
26	4.9	4.9
27	4.9	4.9
28	4.9	4.9
29	4.9	4.9
30	4.9	4.9
31	4.9	4.9
32	0.6	0.6
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	3.4	3.3
39	4.3	4.3
40	0	0
41	4.9	4.9
42	4.5	4.5
43	0	0
44	0	0
45	4.9	4.9
46	0	0

MODE PIN NO.	REC	PLAY
47	0	0
48	-	-
49	4.0	4.0
50	4.8	4.6
51	4.9	4.9
52	4.0	4.0
53	4.3	4.3
54	-	-
55	-	-
56	0	0
57	0	0
58	4.9	0
59	0	0
60	0	0
61	0	0
62	0	0
63	5.0	5.0
64	-	-
65	-	-
66	-	-
67	-	-
68	0	0
69	-	-
70	5.0	5.0
71	5.0	5.0
72	5.0	5.0
73	5.0	5.0
74	0	0
75	4.5	4.5
76	4.5	4.5
77	0	0
78	0	0
79	5.0	5.0
80	0	0
81	0	0
82	4.9	4.9
83	-	-
84	0	0
85	0	0
86	5.0	5.0
87	5.0	5.0
88	4.9	4.9
89	0	0
90	0	0
91	2.8	2.8
92	4.9	4.9
93	0	0
94	4.9	4.9
95	4.9	4.9
96	4.9	4.9
97	0.3	0.3
99	0	0
100	-	-
101	2.8	2.8
102	1.2	1.2
103	5.0	5.0
104	4.8	4.8
105	4.8	4.8
106	4.8	4.8
107	0	0
108	1.5	1.5
109	4.9	4.9
110	0	0
111	0	0
112	2.4	2.4
IC3002		
1	4.9	4.9
2	4.9	4.9
3	0	0
4	0	0
5	0	0
6	4.5	4.5
7	0	0
8	4.9	4.9
9	4.9	4.9
10	0	0
11	0	0
12	-17.8	-17.8
13	-14.2	-14.2
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	2.3	2.3
26	0	0
27	2.4	2.3
28	0	0
29	3.5	2.4
30	2.8	2.8
CN901		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
CN902		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9		

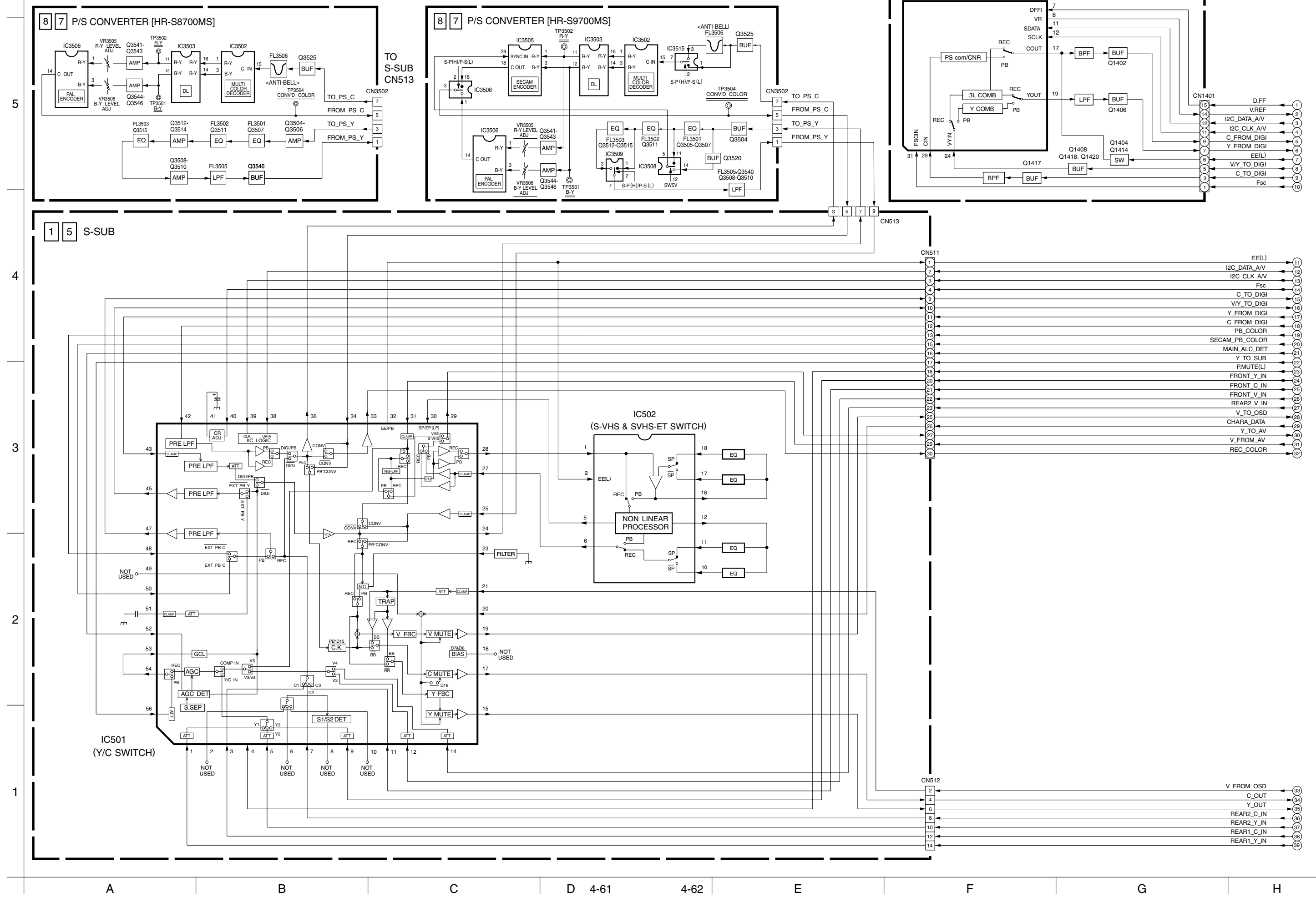
4.30 CPU PIN FUNCTION

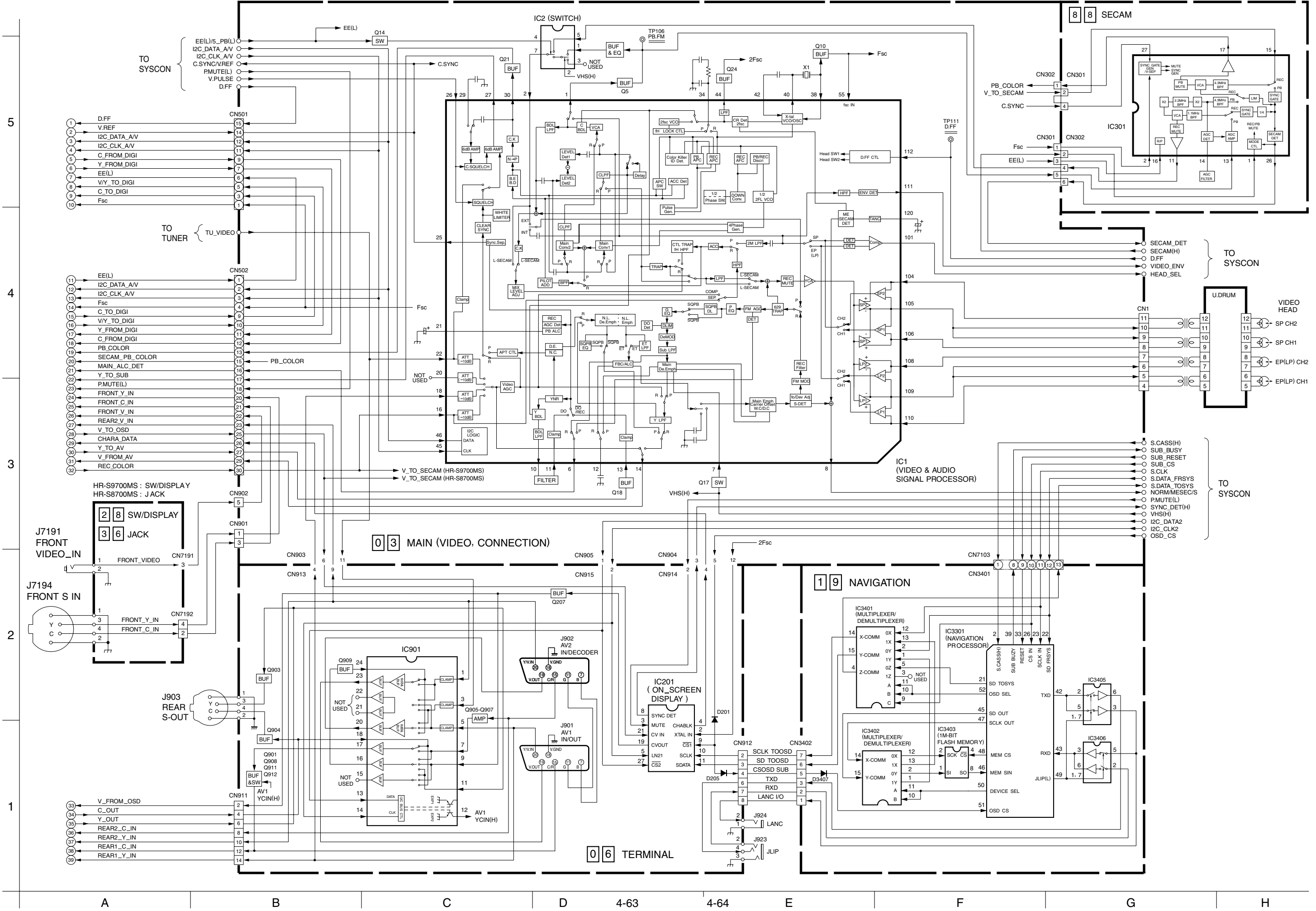
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PIN NO.	LABEL	IN/OUT	FUNCTION
1	CTL(+)	IN/OUT	CTL(+) SIGNAL
2	SVSS	-	GND
3	CTL(-)	IN/OUT	CTL(-) SIGNAL
4	CTLBIAS	-	CTL BIAS VOLTAGE
5	CTLFB	IN	CTL PULSE FEEDBACK
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLSMTIN	IN	CTL PULSE INPUT
8	CFG	IN	CAPSTAN FG PULSE INPUT
9	SVCC	-	SYSTEM POWER
10	AVCC	-	SYSTEM POWER FOR ANALOG CIRCUIT
11	NORM/MESEC/S	IN	SVHS MODE:H
12	SECAM_DET(H)/KILLER_DET/BI_IN(H)	IN	DETECTION SIGNAL FOR SECAM ON P.B MODE (SECAM:H)/NC/NC
13	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	IND(L)	IN	AUDIO INPUT (LCH) FOR THE FDP AUDIO INDICATOR
17	DD_ABS	IN	DYNAMIC DRUM POSITION DETECT [HR-S9700MS]
18	SCR_ID/WA_DET	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE:H)/NC
19	IND(R)	IN	AUDIO INPUT (RCH) FOR THE FDP AUDIO INDICATOR
20	BS_ANT/AFC	IN	TUNING CLOCK
21	LED/RF AGC	IN	NC/CHANGES IN A/T-S+IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN THE SAME CHANNEL IS RECEIVED MORE THAN ONCE ARE INPUT
22	A_ENV/ND(L)	IN	AUDIO PB FM ENV.INPUT/NON HIFI MODE:L
23	AVSS	-	GND FOR ANALOG CIRCUIT
24	CTL_GAIN	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHING
25	LSA	IN	MECHANISM MODE DETECT(A)
26	LSB	IN	MECHANISM MODE DETECT(B)
27	LSC	IN	MECHANISM MODE DETECT(C)
28	CAP_REV(L)	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:H/REV:L)
29	RC	IN	REMOTE CONTROL DATA INPUT
30	LOCK(L)/P.SAVE[0.1]	IN	TUNING PLL LOCK DETECT:L/NC
31	P50_IN	IN	CONTROL SIGNAL FOR TV LINK
32	R.PAUSE/COMPU_IN	IN	REMOTE PAUSE CONTROL / A/V COMPULINK INPUT
33	RAE_OUT/COMPUOUT	OUT	NC / A/V COMPULINK OUTPUT
34	P50_OUT	OUT	CONTROL SIGNAL FOR TV LINK
35	LMC1	OUT	LOADING MOTOR DRIVE(1)
36	LMC2	OUT	LOADING MOTOR DRIVE(2)
37	LMC3	OUT	LOADING MOTOR DRIVE(3)
38	SB_G(PWM)	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
39	STB/TEST	OUT	STROBE SIGNAL (FOR FDP DRIVER)
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	REC_SAFETY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
42	PROTECT	IN	DETECTION SIGNAL FOR SW POWER SUPPLY
43	VSS	-	GND
44	RMO	OUT	REMOTE CONTROL OUTPUT FOR SATELLITE RECEIVER
45	VCC	-	SYSTEM POWER
46	EXP2_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR TUNER/REG CONTROL
47	EXP1_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR AUDIO/VIDEO CONTROL
48	EXP_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR AUDIO/VIDEO AND TUNER/REG CONTROL
49	I2C_DATA_AV	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR THE VIDEO/AUDIO IC
50	I2C_CLK_AV	OUT	SERIAL DATA TRANSFER CLOCK FOR THE VIDEO/AUDIO IC
51	S.DATA_TOSYS	IN	SERIAL DATA TRANSFER OUTPUT FROM THE ON-SCREEN IC TO THE FDP DRIVER
52	S.DATA_FRSYS	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN IC
53	S.CLK	OUT	SERIAL DATA TRANSMISSION CLOCK FROM THE FDP DRIVER TO THE ON-SCREEN IC
54	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
55	TU_FG	IN	DETECTION SIGNAL FOR TAKE-UP REEL ROTATION/TAPE REMAIN
56	JUST_CLK/SECAM(H)/EDS(H)	OUT	NC/COLOUR SYSTEM SECAM:H/NC

PIN NO.	LABEL	IN/OUT	FUNCTION
57	TU_CE	OUT	CHIP ENABLE OF THE TUNER UNIT
58	N.REC_ST(H)	OUT	NORMAL AUDIO SOUND RECORDING START
59	DD_FG	IN	DYNAMIC DRUM FG INPUT [HR-S9700MS]
60	TU_CLK	OUT	CLOCK FOR DATA TRANSFER TO THE TUNER UNIT
61	TU_DATA	OUT	TUNING DATA
62	FWE	-	NC
63	NMI(L)	-	NC
64	X2	-	TIMER CLOCK (32.768KHz)
65	X1	-	TIMER CLOCK (32.768KHz)
66	RES(L)	-	RESET TERMINAL (RESET ON:L)
67	OSC1(IN)	-	MAIN SYSTEM CLOCK(10MHz)
68	VSS	-	GND
69	OSC2(OUT)	-	MAIN SYSTEM CLOCK(10MHz)
70	VCC	-	SYSTEM POWER
71	MODE	-	NC
72	TU_A_MUTE(H)	OUT	TUNER AUDIO MUTE CONTROL (MUTE:H)
73	TU_V_MUTE(H)	OUT	TUNER VIDEO CONTROL (MUTE:H)
74	A.MUTE(H)	OUT	AUDIO MUTE CONTROL (MUTE:H)
75	I2C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	I2C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	DDCFWD	OUT	DYNAMIC DRUM CONTROL (FORWARD) [HR-S9700MS]
78	DDCREV	OUT	DYNAMIC DRUM CONTROL (REVERSE) [HR-S9700MS]
79	DDSPDCTL	OUT	DYNAMIC DRUM SPEED CONTROL [HR-S9700MS]
80	V.P.CTL	OUT	V.PULSE CONTROL, V COMPENSATION DURING SPECIAL PLAYBACK
81	R-Y_REV/EDS_CS/EXT(L)	-	NC
82	VCC	-	SYSTEM POWER
83	SLOW_P/ICNR_CTL	OUT	MEMORY TIMING CONTROL IN THE SLOW MODE / NC
84	VSS	-	GND
85	SP_SHORT(H)	-	NC
86	LP_SHORT(H)	-	NC
87	FLY_ON(H)	OUT	FLYING ERASE ON:H
88	H.REC_ST(H)	OUT	HIFI AUDIO SOUND RECORDING START
89	TRICK(H)/M_TRICK(L)	OUT	SPECIAL PLAYBACK: H/REC AFC FILTER, PB APC FILTER, BURST ACC FILTER, COLOR KILLER DET FILTER
90	HEAD_SEL	OUT	HEAD SELECT(LP HEAD:H, SP HEAD:L)
91	OSD_CS	OUT	CHIP SELECT FOR THE ON-SCREEN IC
92	SYNC_DET(H)	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED:H)
93	MESECAM(H)	OUT	MESECAM:H
94	JSB/STLB	IN	INPUT FOR THE JOG SHUTTLE [HR-S8700MS]
95	SHTL(L)/JOGA	IN	INPUT FOR THE JOG SHUTTLE [HR-S8700MS]
96	JOGB/S_CASS(H)	-	NC
97	JSA/STLA	IN	INPUT FOR THE JOG SHUTTLE [HR-S8700MS]
98	C.SYNC	IN	COMPOSITE SYNC
99	A.FF	OUT	AUDIO FF OUTPUT
100	V.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/TIMING CONTROL SIGNAL FOR REC
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	DRUMPWM	OUT	DRUM MOTOR CONTROL
103	SUB_RESET	OUT	RESET SIGNAL FOR THE SUB CPU (NAVI)
104	HI_FF/REW(L)	OUT	HIGH FF/REW:L
105	SUB_BUSY	IN	SUB CPU (NAVI) BUSY
106	SUB_CS	OUT	CHIP SELECT FOR THE SUB CPU (NAVI)
107	DPG	IN	DRUM PICKUP PULSE INPUT (SWITCHING PULSE)
108	DFG	IN	DRUM FG PULSE INPUT
109	VCC	-	SYSTEM POWER
110	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
111	VSS	-	GND
112	CTLREF	-	CTL REFERENCE VOLTAGE

4.32 VIDEO BLOCK DIAGRAM





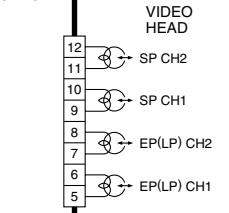
TO SYSCON

TO TUNER

8 8 SECAM

TO SYSCON

U.DRUM



TO SYSCON

IC1 (VIDEO & AUDIO SIGNAL PROCESSOR)

0 3 MAIN (VIDEO CONNECTION)

1 9 NAVIGATION

0 6 TERMINAL

4.33 AUDIO BLOCK DIAGRAM

