


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: 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



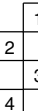
Removable connector



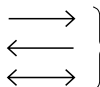
Wire soldered directly on board



Non-removable Board connector



Board to Board



Connected pattern on board
The arrows indicate signal path

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

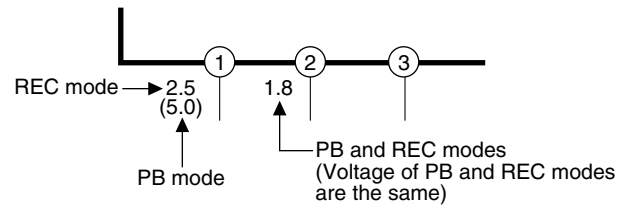
PB : REC then playback it

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

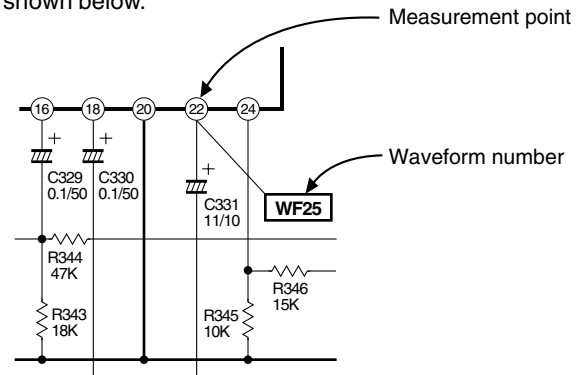
PB : REC then playback it

3) Movie Camera circuits

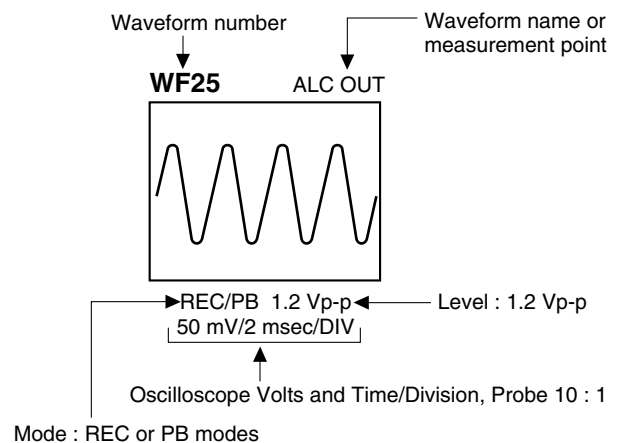
Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode

4) Indication on schematic diagram

Waveform indications on the schematic diagram are as shown below.

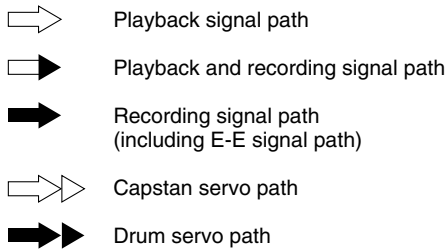


5) Waveform indications

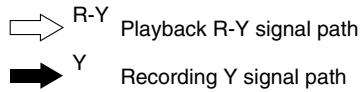


6. Signal path Symbols

The arrows indicate the signal path as follows.

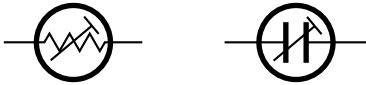


(Example)



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.



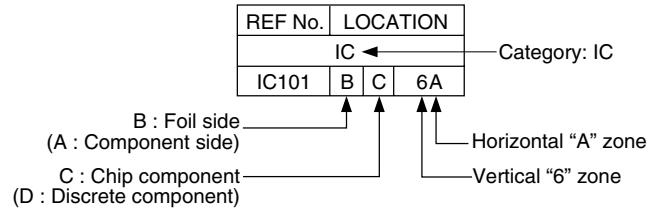
CIRCUIT BOARD NOTES

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

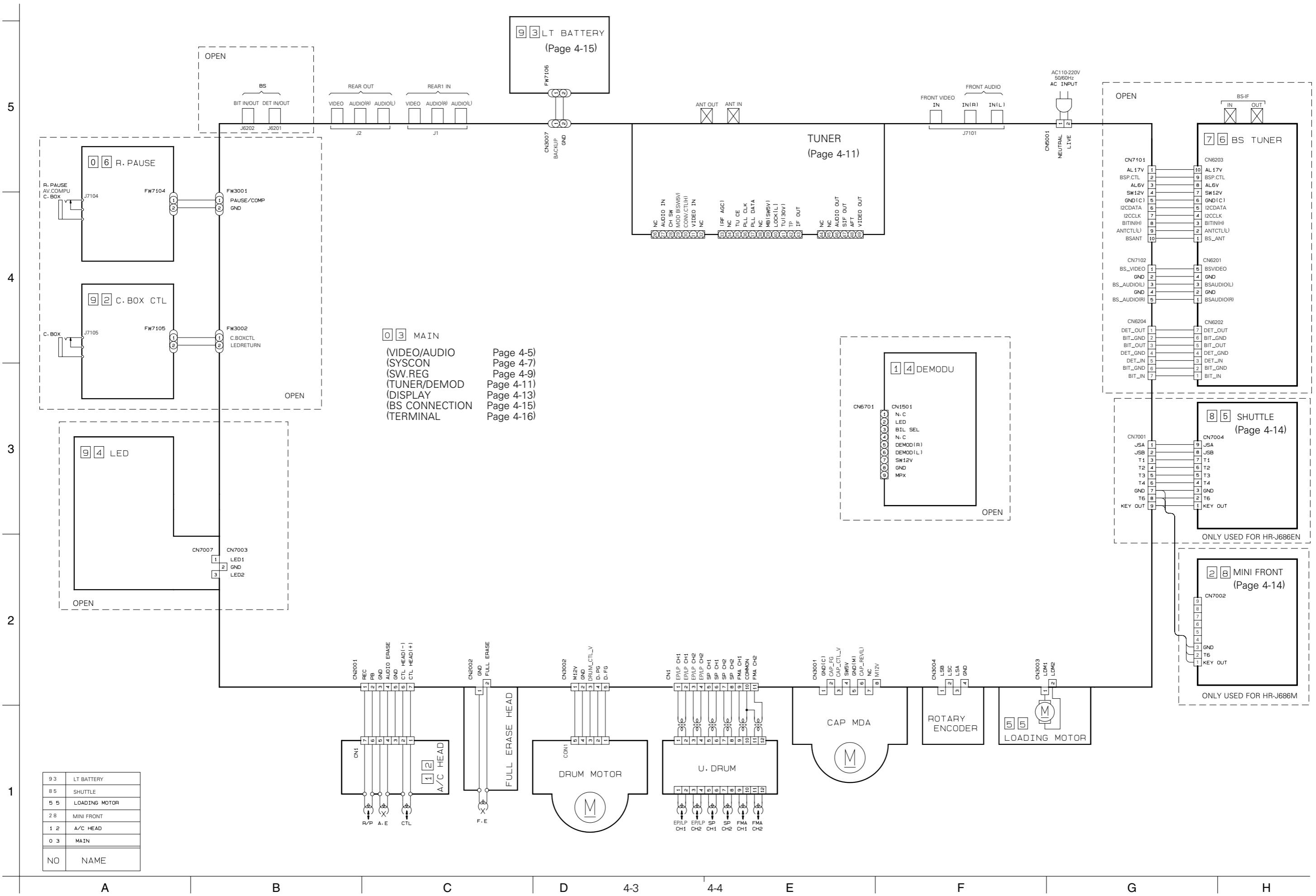
Parts location are indicated by guide scale on the circuit board.



Note:

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

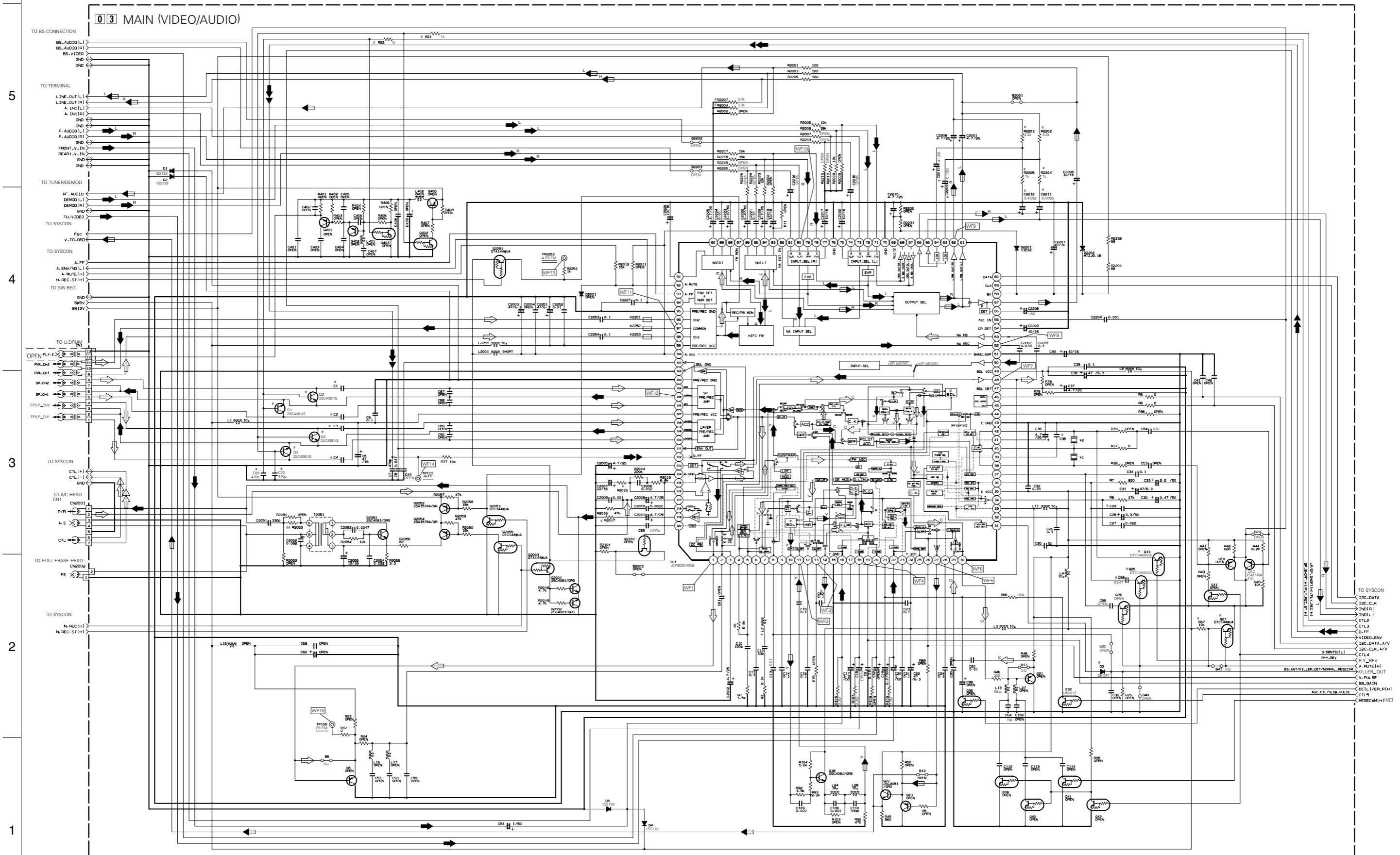
4.1 BOARD INTERCONNECTIONS



9 3	LT BATTERY
8 5	SHUTTLE
5 5	LOADING MOTOR
2 8	MINI FRONT
1 2	A/C HEAD
0 3	MAIN
NO	NAME

4.2 VIDEO/AUDIO SCHEMATIC DIAGRAM

NOTE : When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



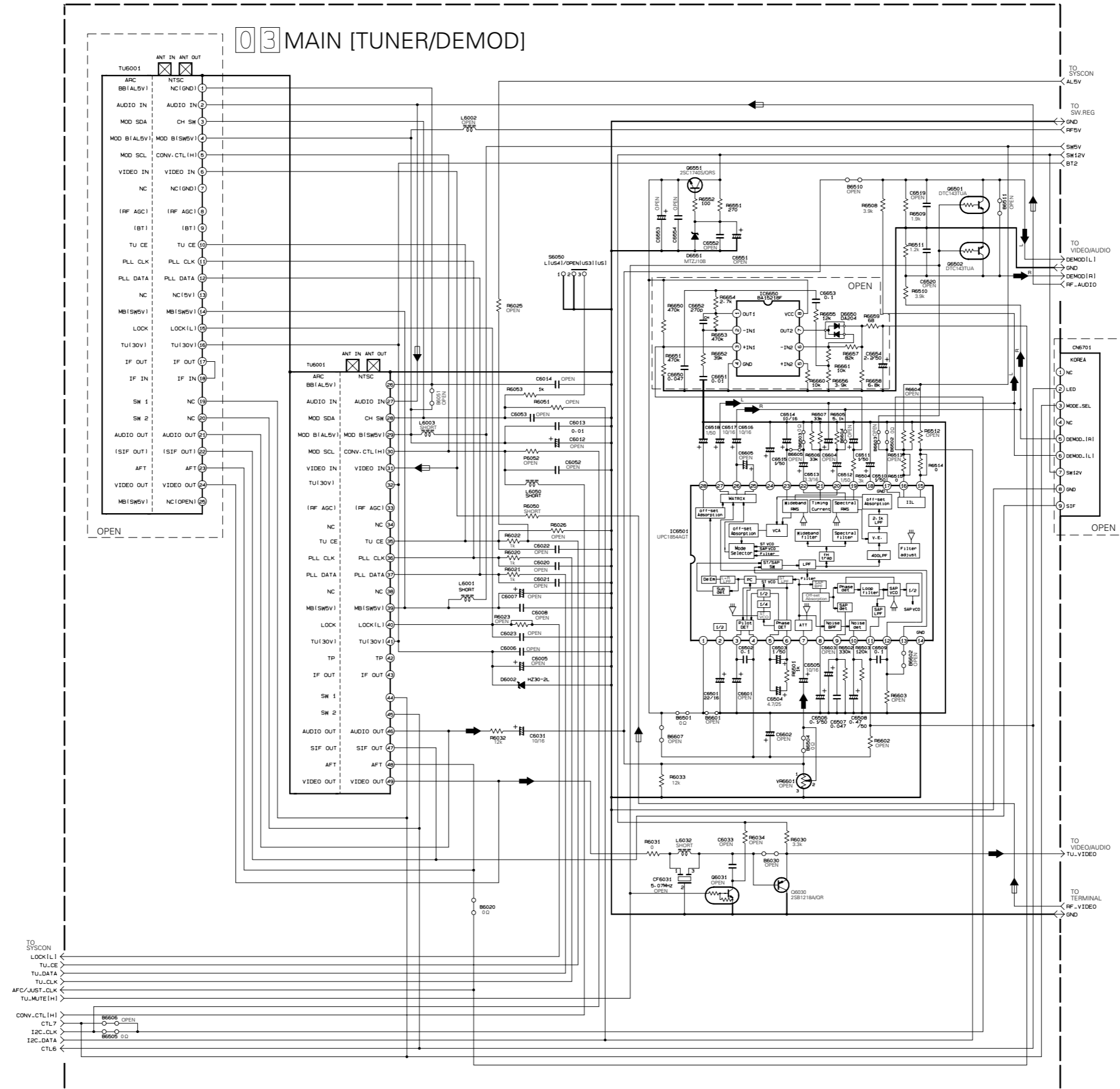
NOTES : 1. For VIDEO/AUDIO waveforms, please refer to page 4-20.
2. Comparison chart of models & marks#).

MODEL	REF.NO	R21,R22	R67,R2004	R2015	R2017	R2053	R2202~R2205	R2207	C1-C4	C29	C35	C55	C69,C70,C2209-C2212	L2	Q1~Q4	Q13,Q25,Q27	D3
HR-J686M		NOT USED	USED	180	15k	4.7k	NOT USED	USED	1	0.068	0.01	USED	NOT USED	SHORT	NOT USED	USED	USED
HR-J686EN		USED	NOT USED	120	22k	6.8k	USED	NOT USED	0.01	0.1	0.033	NOT USED	USED	100 μ	USED	NOT USED	NOT USED

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

4.5 TUNER/DEMOD SCHEMATIC DIAGRAM

NOTE : When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



5

4

3

2

1

A

B

C

D

4-11

4-12

E

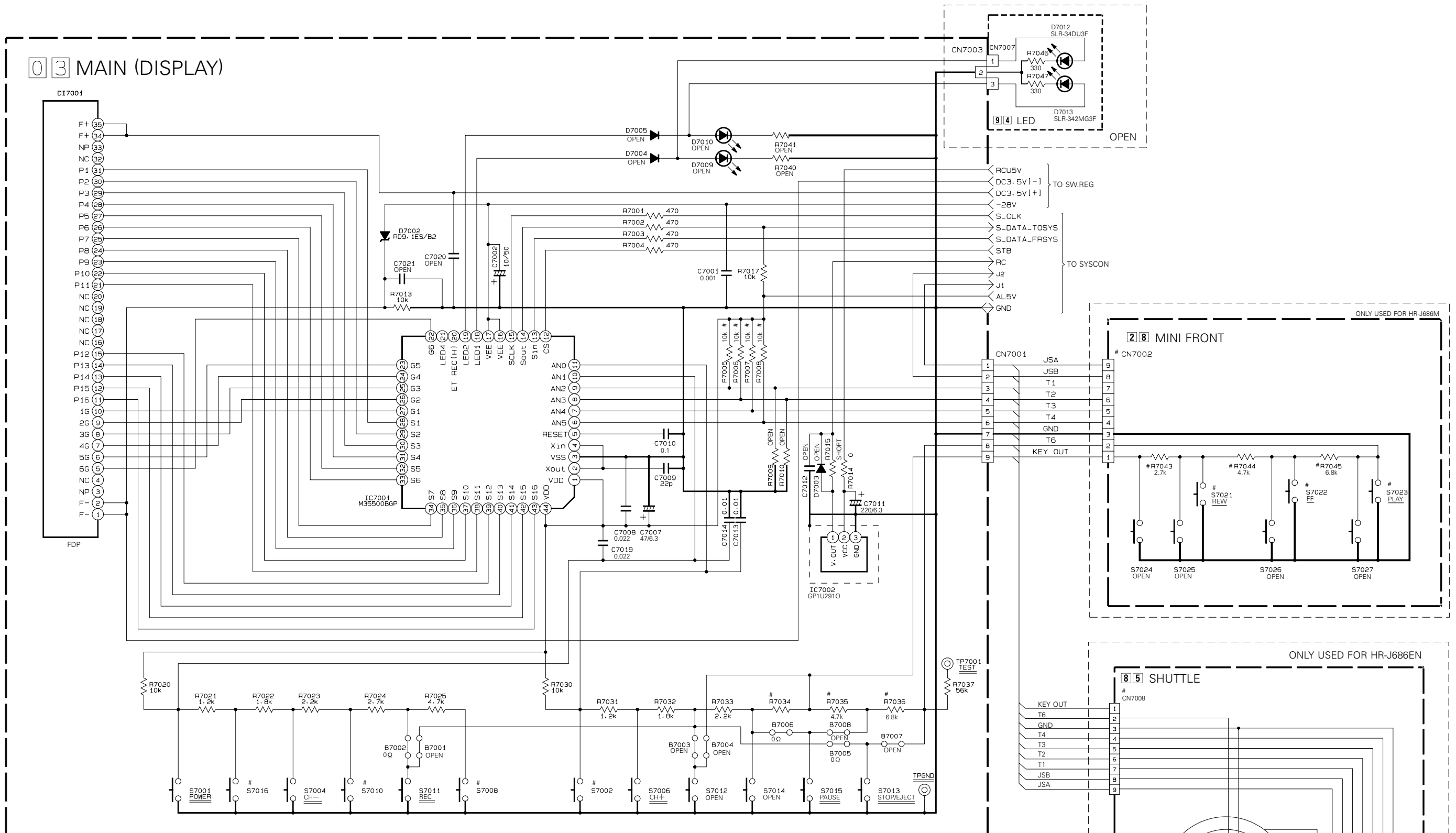
F

G

H

4.6 DISPLAY, MINI FRONT AND SHUTTLE SCHEMATIC DIAGRAMS

NOTE : When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



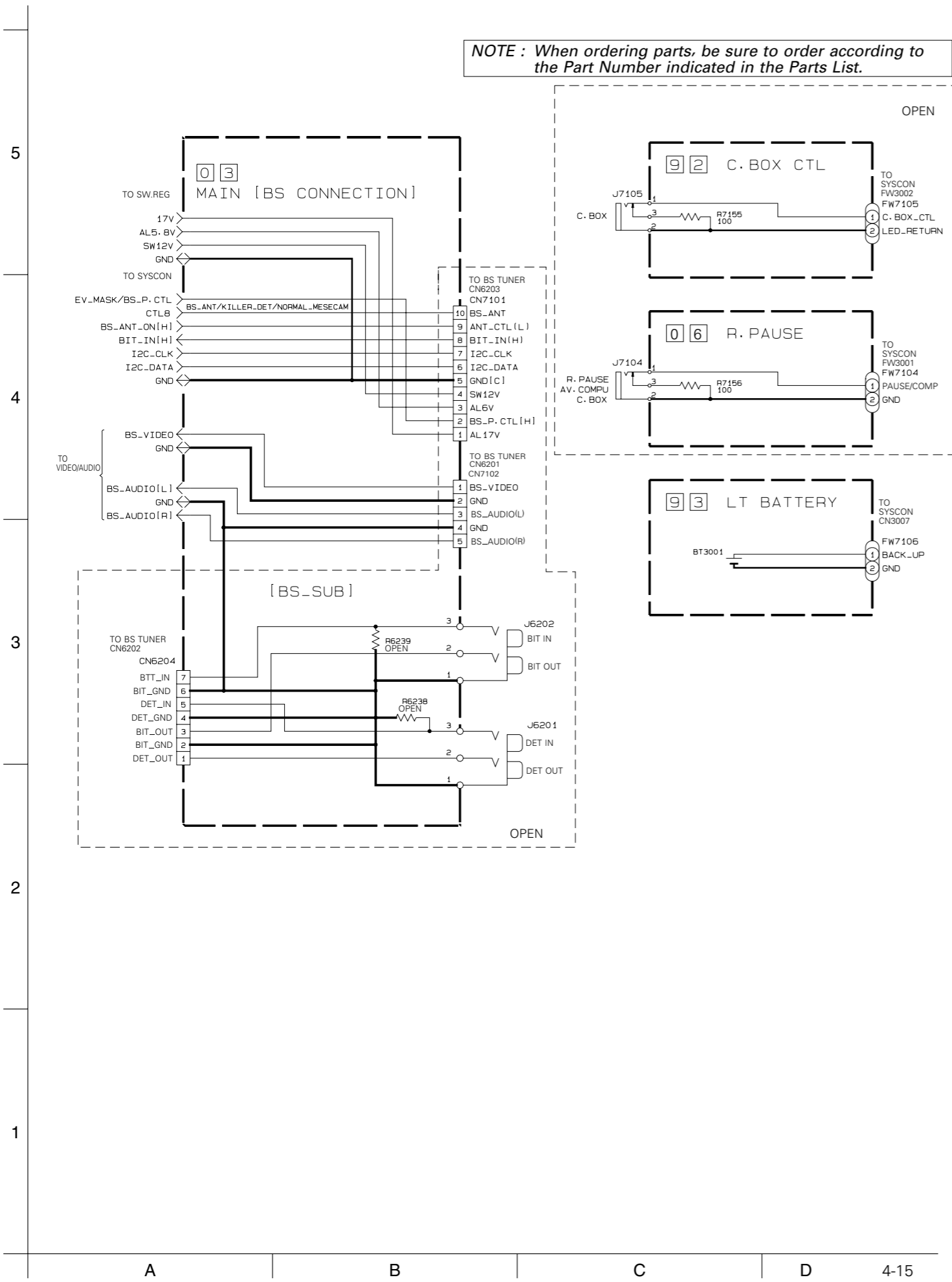
NOTR : Comparison chart of models & marks#).

	REFNO	R7005-R7008 R7035,R7036	R7034	R7043-R7045	S7002	S7008	S7010	S7016	S7012-S7023	CN7002	CN7008	UN7001
M O D E L	HR-J686M	NOT USED	0	USED	P.JOG+	MENU	OK	P.JOG-	USED	USED	NOT USED	NOT USED
	HR-J686EN	USED	2.7k	NOT USED	MENU	PLAY	SP/EP	OK	NOT USED	NOT USED	USED	USED

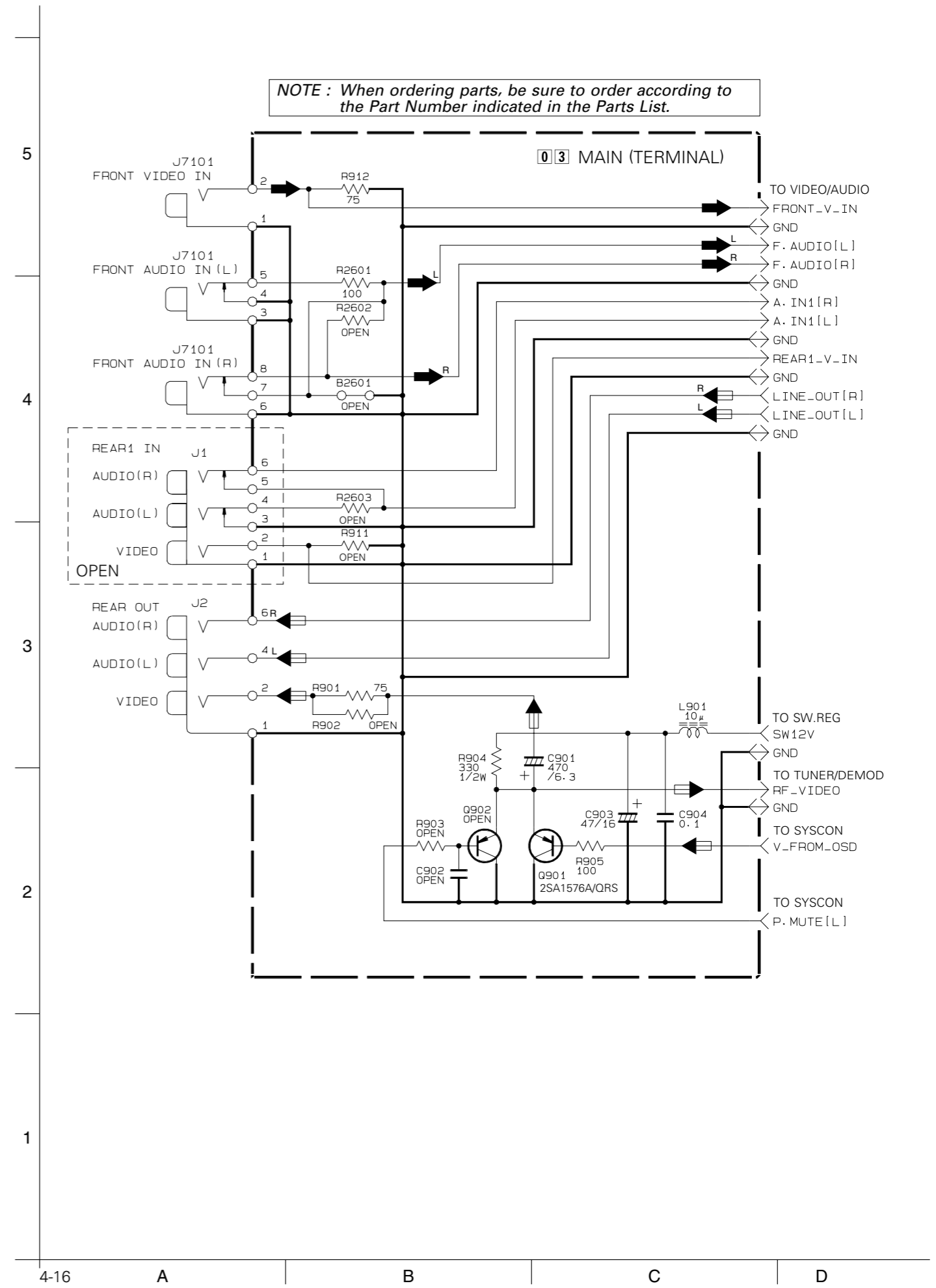
5
4
3
2
1

A B C D 4-13 4-14 E F G H

4.7 BS CONNECTION AND LITHIUM BATTERY SCHEMATIC DIAGRAMS



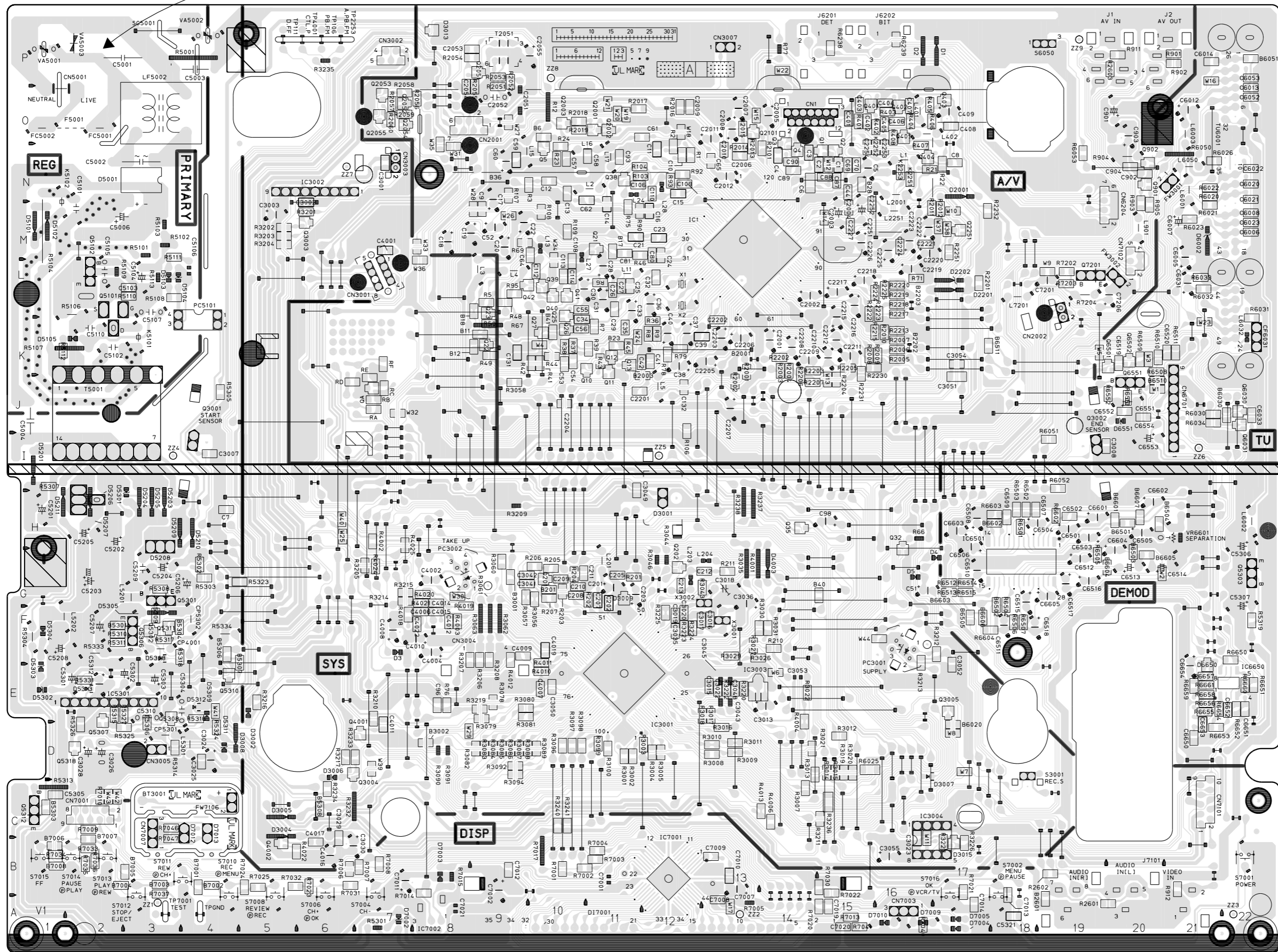
4.8 TERMINAL SCHEMATIC DIAGRAM



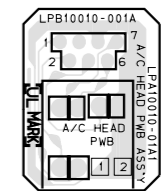
4.9 MAIN, A/C HEAD, MINIFRONT, SHUTTLE AND LOADING MOTOR CIRCUIT BOARDS

<03>MAIN
LPB10088-001E

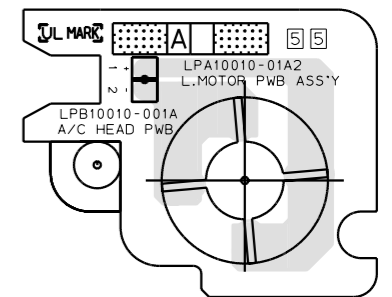
DANGEROUS VOLTAGE



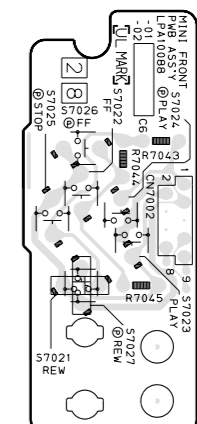
<12>A/C HEAD
LPB10010-001A



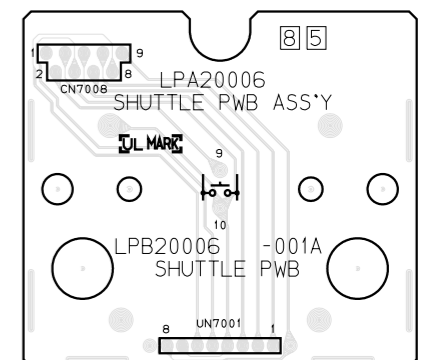
<55>LOADING MOTOR
LPB10010-001A



<28>MINI FRONT [HR-J686M]
LPB10088-001E



<85>SHUTTLE [HR-J686EN]
LPB20006-001A



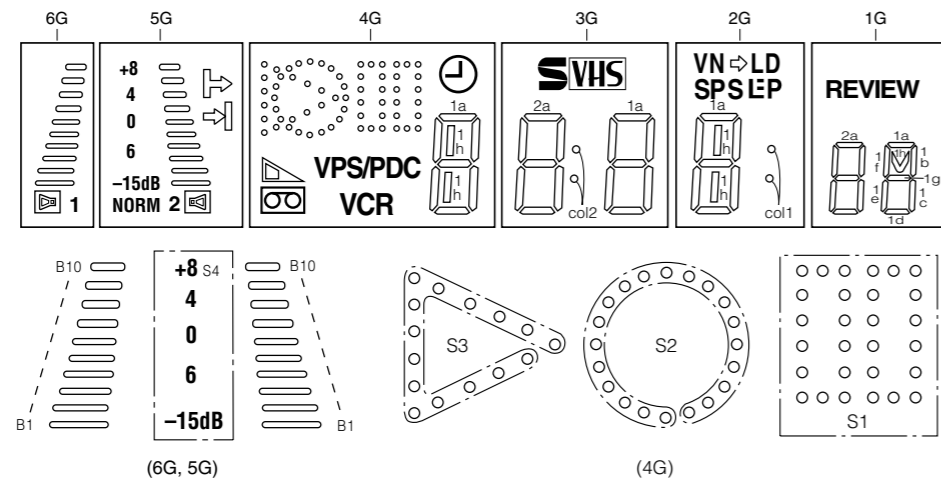
COMPONENT PARTS LOCATION GUIDE <MAIN>

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															
C1	B C	C2012	A D	C5307	A D	05203	A D	Q2051	B C	9P	R2010	B C	16K	R3211	B C
C2	B C	C2051	A D	C5310	A D	05204	A D	Q2052	B C	7O	R2011	B C	16M	R3212	B C
C3	B C	C2052	A D	C5312	A D	05205	A D	Q2053	B C	7O	R2012	B C	17M	R3213	B C
C4	B C	C2053	A D	C5321	B C	05206	A D	Q2054	B C	7O	R2013	B C	13N	R3214	B C
C5	A D	C2054	B C	C8005	A D	05207	A D	Q2055	B C	7O	R2014	B C	13N	R3215	B C
C6	A D	C2055	B C	C8006	B C	05208	A D	Q2101	B C	13O	R2015	B C	13O	R3216	B C
C7	B C	C2201	B C	C8007	A D	05209	A D	Q2251	B C	17M	R2016	B C	12O	R3217	B C
C8	B C	C2202	B C	C8008	B C	05210	A D	Q3001	A D	4I	R2017	B C	11O	R3218	B C
C9	B C	C2203	A D	C8012	A D	05211	A D	Q3002	A D	19I	R2018	B C	10O	R3219	B C
C10	B C	C2204	B C	C8013	B C	05212	A D	Q3003	B C	6M	R2019	B C	10O	R3222	B C
C11	B C	C2205	A D	C8014	B C	05302	A D	Q3004	B C	6D	R2051	B C	9O	R3223	B C
C12	B C	C2206	A D	C8020	B C	05303	A D	Q3005	B C	17E	R2052	B C	9P	R3224	B C
C13	B C	C2207	A D	C8021	B C	05304	A D	Q4001	B C	7D	R2053	B C	9P	R3225	B C
C14	B C	C2208	A D	C8022	B C	05305	A D	Q4002	B C	5B	R2054	B C	9P	R3226	B C
C15	B C	C2209	A D	C8023	B C	05308	B C	Q5101	A D	2L	R2055	B C	9O	R3227	B C
C16	B C	C2210	A D	C8031	A D	05309	A D	Q5102	A D	4D	R2056	B C	8O	R3232	A D
C17	A D	C2211	A D	C8033	B C	05311	A D	Q5301	A D	3G	R2057	B C	7O	R3233	B C
C18	A D	C2212	A D	C8052	B C	05312	B C	Q5302	A D	3F	R2058	B C	7O	R3234	B C
C19	A D	C2215	A D	C8053	B C	05313	B C	Q5303	A D	22G	R2059	B C	7O	R3235	A D
C20	A D	C2216	A D	C8501	A D	06002	A D	Q5306	A D	3F	R2060	B C	7O	R3236	B C
C21	B C	C2217	A D	C8503	A D	06551	A D	Q5307	B C	2E	R2101	B C	14N	R3237	A D
C22	A D	C2218	A D	C8503	A D	06650	B C	Q5308	B C	3E	R2201	B C	17L	R3238	A D
C23	B C	C2219	A D	C6504	A D	D7002	A D	Q5310	B C	4E	R2202	B C	14K	R3240	B C
C24	B C	C2220	A D	C6505	A D	D7003	A D	Q5311	B C	3F	R2203	B C	14K	R3241	B C
C25	B C	C2221	B C	C6506	A D	D7004	A D	Q5312	A D	1C	R2204	B C	15J	R4001	A D
C26	B C	C2222	A D	C6507	B C	D7005	A D	Q5318	B C	2D	R2205	B C	15K	R4002	B C
C27	B C	C2223	A D	C6508	A D	D7009	A D	Q6030	B C	22J	R2206	B C	14J	R4003	B C
C28	A D	C2224	B C	C6509	B C	D7010	A D	Q6031	B C	22J	R2207	B C	14J	R4004	B C
C29	B C	C2225	A D	C6510	A D	D7017	A D	Q6501	B C	20K	R2213	B C	16K	R4006	B C
C30	A D	C2226	A D	C6511	A D	D7018	A D	Q6502	B C	20K	R2215	B C	16K	R4010	B C
C31	A D	C2227	B C	C6512	A D	D7019	A D	Q6551	A D	20J	R2217	B C	16L	R4011	B C
C32	B C	C2252	B C	C6513	A D	D7020	A D	Q7201	A D	19L	R2218	B C	16L	R4012	B C
C33	A D	C2253	B C	C6514	A D	D7021	A D	QA	B C	7J	R2219	B C	16L	R4013	B C
C34	B C	C2254	B C	C6515	A D	D7022	A D	QA	B C	7J	R2220	B C	16L	R4018	B C
C35	B C	C3001	B C	C6516	A D	D7023	A D	IC	B C	13E	R2221	B C	15L	R4019	B C
C36	A D	C3002	B C	C6517	A D	D7024	A D	R1	B C	12N	R2222	B C	15L	R4019	B C
C37	A D	C3003	A D	C6519	B C	D7025	A D	R2	B C	12N	R2223	B C	16L	R4020	B C
C38	A D	C3007	B C	C6520	B C	D7026	A D	R3	B C	10N	R2224	B C	16L	R4021	B C
C39	B C	C3008	B C	C6521	A D	D7027	A D	R4	B C	9L	R2225	B C	16L	R4022	B C
C40	A D	C3013	A D	C6522	B C	D7028	A D	R5	B C	11L	R2230	B C	15K	R4024	B C
C41	B C	C3015	B C	C6523	A D	D7029	A D	R6	B C	11K	R2231	B C	15K	R4025	B C
C42	B C	C3016	B C	C6524	A D	D7030	A D	R7	B C	11K	R2232	B C	17M	R5001	A D
C43	B C	C3017	B C	C6525	A D	D7031	A D	R8	B C	12K	R2251	B C	17M	R5101	A D
C44	B C	C3018	A D	C6526	B C	D7032	A D	R9	B C	12K	R2601	B C	20A	R5102	A D
C45	A D	C3019	B C	C6527	B C	D7033	A D	R10	B C	10O	R2602	B C	19B	R5103	A D
C46	A D	C3020	B C	C6528	B C	D7034	A D	R11	B C	16N	R2603	B C	20P	R5104	A D
C47	A D	C3021	B C	C6529	B C	D7035	A D	R12	B C	17N	R3001	B C	11D	R5106	A D
C48	B C	C3022	B C	C6530	A D	D7036	A D	R13	B C	10N	R3002	B C	11D	R5107	A D
C49	B C	C3023	B C	C6531	A D	D7037	A D	R14	B C	10N	R3003	B C	12D	R5108	B C
C50	B C	C3024	A D	C6532	B C	D7038	A D	R15	B C	12K	R3004	B C	12D	R5109	A D
C51	B C	C3025	A D	C6533	B C	D7039	A D	R16	B C	10K	R3005	B C	12D	R5110	B C
C52	B C	C3026	A D	C6534	B C	D7040	A D	R17	B C	11K	R3007	B C	14C	R5111	B C
C53	B C	C3027	A D	C6535	B C	D7041	A D	R18	B C	10K	R3008	B C	13D	R5112	B C
C54	B C	C3028	A D	C6536	B C	D7042	A D	R19	B C	10K	R3009	B C	13D	R5113	A D
C55	B C	C3029	B C	C6537	B C	D7043	A D	R20	B C	10K	R3010	B C	13D	R5301	A D
C56	B C	C3030	A D	C6538	B C	D7044	A D	R21	B C	11K	R3011	B C	13D	R5302	B C
C57	B C	C3031	A D	C6539	B C	D7045	A D	R22	B C	10K	R3012	B C	15D	R5303	B C
C58	B C	C3032	A D	C6540	B C	D7046	A D	R23	B C	11K	R3013	B C	14D	R5304	A D
C59	B C	C3033	A D	C6541	B C	D7047	A D	R24	B C	11M	R3014	B C	15D	R5305	B C
C60	A D	C3034	A D	C6542	B C	D7048	A D	R25	B C	9L	R3015	B C	15D	R5306	B C
C61	B C	C3035	B C	C6543	A D	D7049	A D	R26	B C	9K	R3016	B C	13D	R5307	B C
C62	B C	C3036	A D	C6544	B C	D7050	A D	R27	B C	9K	R3017	B C	13E	R5308	B C
C63	B C	C3037	A D	C6545	B C	D7051	A D	R28	B C	16H	R3018	B C	13E	R5309	B C
C64	B C	C3038	A D	C6546	B C	D7052	A D	R29	B C	8K	R3019	B C	15D	R5310	B C
C65	B C	C3039	A D	C6547	B C	D7053	A D	R30	B C	9M	R3020	B C	15D	R5311	B C
C66	B C	C3040	A D	C6548	B C	D7054	A D	R31	B C	16L	R3021	B C	14D	R5313	A D
C67	B C	C3041	A D	C6549	B C	D7055	A D	R32	B C	11M	R3022	B C	14E	R5314	A D
C68	B C	C3042	A D	C6550	B C	D7056	A D	R33	B C	8E	R3026	B C	13F	R5315	B C
C69	B C	C3043	A D	C6551	B C	D7057	A D	R34	B C	14P	R3027	B C	13F	R5316	B C
C70	B C	C3044	A D	C6552	B C	D7058	A D	R35	B C	12K	R3029	B C	13F	R5317	B C
C71	B C	C3045	A D	C6553	B C	D7059	A D	R36	B C	12K	R3030	B C	14F	R5318	B C
C72	B C	C3046	A D	C6554	B C	D7060	A D	R37	B C	11M	R3031	B C	14F	R5319	B C
C73	B C	C3047	A D	C6555	B C	D7061	A D	R38	B C	12N	R3035	A D	13H	R5323	B C
C74	B C	C3048	A D	C6556	B C	D7062	A D	R39	B C	12N	R3043	B C	13G	R5324	B C
C75	B C	C3049	A D	C6557	B C	D7063	A D	R40	B C	11N	R3044	A D	12G	R5325	B C
C76	B C	C3050	A D	C6558	B C	D7064	A D	R41	B C	11N	R3046	A D	12G	R5326	B C
C77	B C	C3051	A D	C6559	B C	D7065	A D	R42	B C	11N	R3056	B C	10G	R5327	B C
C78	B C	C3052	A D	C6560	B C	D7066	A D	R43	B C	12J	R3057	B C	9G	R5331	B C
C79	B C	C3053	A D	C6561	B C	D7067	A D	R44	B C	9N	R3058	B C	9J	R5333	A D
C80	B C	C3054	A D	C6562	B C	D7068	A D	R45	B C	10M	R3060	B C	9G	R5334	A D
C81	B C	C3055	A D	C6563	B C	D7069	A D	R46	B C	10M	R3061	A D	9G	R6020	B C
C82	B C	C3056	A D	C6564	B C	D7070	A D	R47	B C	11G	R3062	A D	9G	R6021	B C
C83	B C	C3057	A D	C6565	B C	D7071	A D	R48	B C	11G	R3063	A D	9G	R6022	B C
C84	B C	C3058	A D	C6566	B C	D7072	A D	R49	B C	10G	R3078	B C	9E	R6023	B C
C85	B C	C3059	A D	C6567	B C	D7073	A D	R50	B C	10G	R3079	B C	9E	R6025	B C
C86	B C	C3060	A D	C6568	B C	D7074	A D	R51	B C	10G	R3080	B C	9E	R6026	B C
C87	B C	C3061	A D	C6569	B C	D									

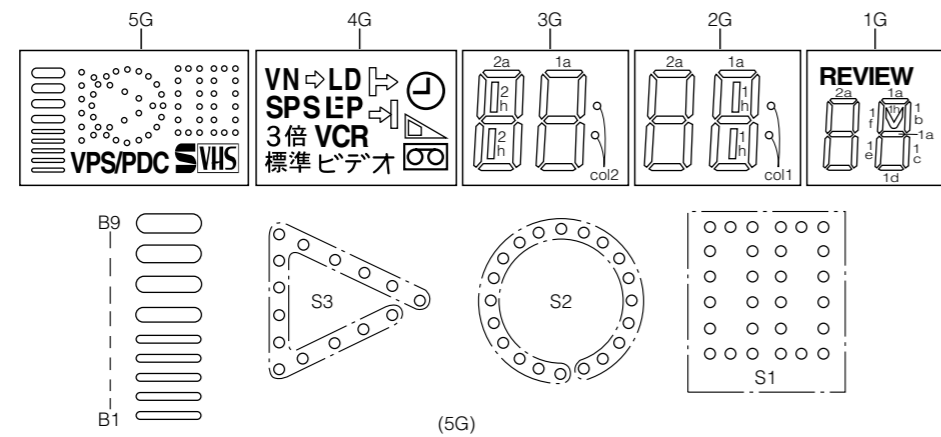
4.10 FDP GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

[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

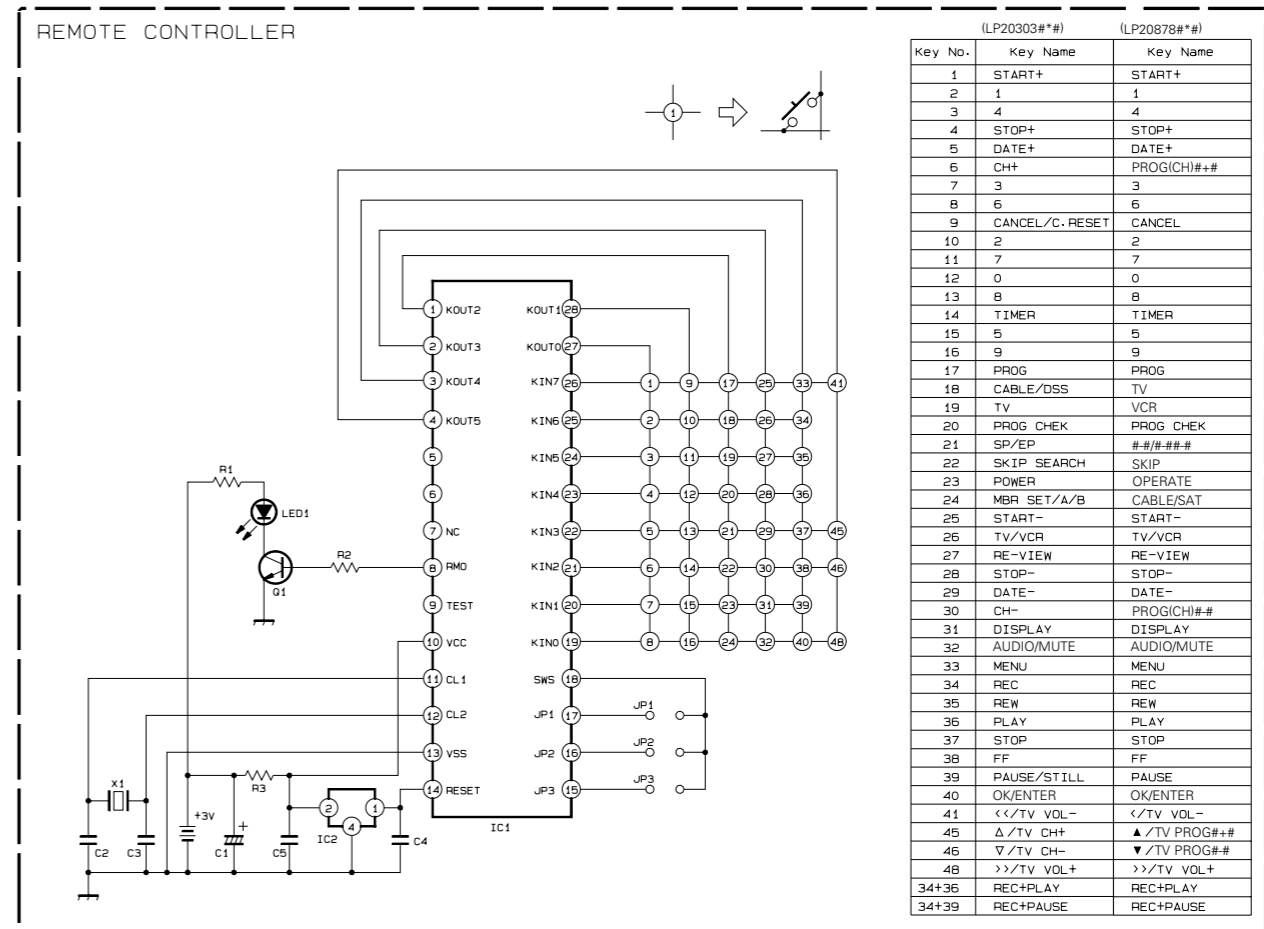
ANODE CONNECTION

[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

4.11 FDP GRID ASSIGNMENT AND ANODE CONNECTION

- 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.



4.12 VOLTAGE CHARTS

<VIDEO/AUDIO>

MODE PIN NO.	REC	PLAY
IC1		
1	1.4	2.1
2	2.9	2.9
3	2.5	2.5
4	1.9	1.4
5	1.9	1.5
6	2.4	2.1
7	1.5	0.8
8	0	0
9	2.6	3.0
10	2.7	2.7
11	3.0	3.0
12	2.8	2.5
13	3.0	3.3
14	2.3	2.3
15	0	0
16	2.8	2.8
17	1.5	1.5
18	2.8	2.8
19	0	2.4
20	2.8	2.8
21	2.0	2.0
22	2.8	2.8
23	2.8	2.8
24	5.0	5.0
25	0.4	0.4
26	0	0
27	2.3	2.3
28	2.3	2.3
29	1.9	1.9
30	2.1	2.1
31	0	0
32	2.7	2.7
33	5.0	5.0
34	2.7	2.2
35	5.0	5.0
36	2.7	2.7
37	2.3	2.3
38	0.3	0.3
39	1.2	1.2
40	-	-
41	2.5	2.5
42	-	-
43	0	0
44	2.2	2.2
45	4.4	4.6
46	4.9	4.7
47	2.7	2.7
48	2.5	2.5
49	5.0	5.0
50	2.5	2.5
51	2.8	2.8
52	2.3	2.3
53	2.3	2.3
54	2.4	2.4
55	2.1	2.1
56	0.4	0.4
57	2.3	2.3

MODE PIN NO.	REC	PLAY
58	8.7	8.7
59	4.5	4.5
60	4.5	4.5
61	4.4	4.4
62	4.3	4.3
63	2.3	2.3
64	2.3	2.3
65	1.7	1.7
66	2.3	2.3
67	4.4	4.4
68	4.4	4.4
69	2.3	2.3
70	0	0
71	0.3	0.3
72	0.2	0.2
73	0.2	0.2
74	2.3	2.3
75	2.5	2.5
76	0	0
77	2.5	2.5
78	0.3	0.3
79	0.2	0.2
80	0.2	0.2
81	2.3	2.3
82	0.7	0.7
83	0	0
84	2.3	2.3
85	2.3	2.3
86	2.2	2.2
87	1.6	1.8
88	2.3	2.3
89	2.3	2.3
90	2.3	2.3
91	0	0
92	0	0
93	0	2.4
94	0	1.7
95	0	0
96	2.4	2.4
97	2.7	2.3
98	2.5	2.3
99	4.9	4.9
100	5.0	5.0
101	0	0
102	0	0
103	0	0
104	2.3	2.3
105	2.3	2.3
106	2.3	2.3
107	4.9	4.9
108	0	0
109	0	0
110	0	0
111	0	3.5
112	2.5	2.5
113	0.5	1.0
114	0	0
115	2.5	2.5

MODE PIN NO.	REC	PLAY
116	2.5	2.5
117	2.5	2.5
118	0	0
119	2.5	2.5
120	0	0
Q1 - Q4 [HR-J686EN]		
E	-	-
C	-	-
B	-	-
Q12		
E	-	-
C	0	0
B	-	-
Q13 [HR-J686M]		
E	0	0
C	-	-
B	-	-
Q22		
E	1.7	1.7
C	5.0	5.0
B	2.3	2.3
Q25 [HR-J686M]		
E	0	0
C	-	-
B	-	-
Q27 [HR-J686M]		
E	0	0
C	-	-
B	-	-
Q32		
E	0	0
C	2.0	2.0
B	0	0
Q38		
E	2.3	2.3
C	5.0	5.0
B	3.0	3.0
Q2001		
E	-10.8	0
C	0	0
B	-17.3	0.7
Q2002		
E	-10.8	0
C	0	0
B	-17.0	0.7
Q2003		
E	5.0	5.0
C	-17.0	4.9
B	4.9	0
Q2051		
E	0	0
C	7.5	0.3
B	0.5	0.3
Q2052		
E	10.8	10.9
C	10.7	0.4
B	10.1	10.9
Q2053		

MODE PIN NO.	REC	PLAY
E	0	0
C	0	10.8
B	4.9	0
Q2054		
E	10.7	0.4
C	10.5	0.2
B	9.9	0.4
Q2055		
E	0	0
C	0	0.5
B	4.9	0
Q2251		
E	4.9	4.9
C	1.6	1.8
B	4.9	4.9
CN1		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.2	2.3
6	2.2	2.3
7	2.2	2.3
8	2.2	2.3
9	2.7	2.3
10	2.7	2.3
11	2.7	2.3
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	2.3	2.4
7	2.5	2.4
CN2002		
1	0	0
2	0	0

<SYSTEM CONTROL>

MODE PIN NO.	REC	PLAY
IC3001		
1	-	-
2	-	-
3	0.6	0.6
4	0	0
5	5.1	5.1
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	5.0
13	5.0	5.0

MODE PIN NO.	REC	PLAY
14	0	0
15	0	5.0
16	4.8	4.8
17	4.7	4.7
18	4.6	4.6
19	0	0
20	0	0
21	0	2.4
22	4.9	4.9
23	2.4	2.4
24	0	0
25	-	-
26	0	2.4
27	5.0	0
28	0	0
29	0	0
30	4.9	4.9
31	4.9	4.9
32	0	0
33	2.6	2.6
34	1.1	1.3
35	0	0
36	4.9	4.9
37	-	-
38	-	-
39	0	0
40	-	-
41	-	-
42	4.9	4.9
43	5.0	5.0
44	0	0
45	5.0	5.0
46	5.0	5.0
47	1.6	1.6
48	0	0
49	1.6	1.6
50	2.4	2.4
51	5.0	5.0
52	2.4	2.4
53	2.5	2.5
54	0	0
55	0	0
56	-	-
57	-	-
58	0	0
59	0	0
60	0	0
61	0	0
62	4.9	4.9
63	4.9	4.9
64	0	0
65	2.6	2.6
66	0.4	0.4
67	2.3	2.3
68	2.3	2.3
69	2.3	2.3
70	2.3	2.3
71	0	0

MODE PIN NO.	REC	PLAY
72	2.3	2.3
73	4.8	4.8
74	2.8	2.3
75	1.9	2.3
76	2.3	2.3
77	0	0
78	0	0
79	4.4	4.6
80	0	0
81	4.9	4.9
82	0	0
83	0	3.4
84	0	1.8
85	4.8	4.5
86	4.1	4.1
87	0	0
88	0	0
89	0	0
90	0	0
91	0	0
92	4.9	0
93	0	0
94	4.3	4.3
95	-	-
96	-	-
97	-	-
98	5.0	5.0
99	5.0	5.0
100	5.0	5.0
IC3002		
1	11.4	11.4
2	0	0
3	0	0
4	0.2	0.2
5	11.6	11.6
6	11.6	11.6
7	0	0
8	0	0
9	0	0
IC3003		
1	4.9	4.9
2	4.9	4.9
3	0	0
IC3004		
1	0	0
2	0	0
3	0	0
4	0	0
5	-	-
6	-	-
7	0	0
8	4.9	4.9
Q3001		
E	0	0
C	4.6	4.2
Q3002		
E	0	0
C	4.5	4.7

MODE PIN NO.	REC	PLAY
Q3003		
E	0	0
C	11.4	11.4
B	0.6	0.6
Q3004		
E	0	0
C	0	0
B	0.7	0.7
Q4001		
E	0	0
C	0	0
B	4.4	4.4
Q4002		
E	4.8	4.8
C	5.8	5.8
B	5.5	5.5
CN3001		
1	0	0
2	2.5	2.5
3	2.5	2.5
4	5.0	5.0
5	0	0
6	4.9	4.9
7	-	-
8	11.7	11.7
CN3002		
1	11.7	11.7
2	0	0
3	1.4	1.4
4	0.4	0.4
5	2.6	2.6
CN3003		
1	0.2	0.2
2	0.3	0.3
CN3004		
1	4.9	4.9
2	4.9	4.9
3	0	0
4	0	0
CN3007		
1	-	-
2	0	0

<SW.REG>

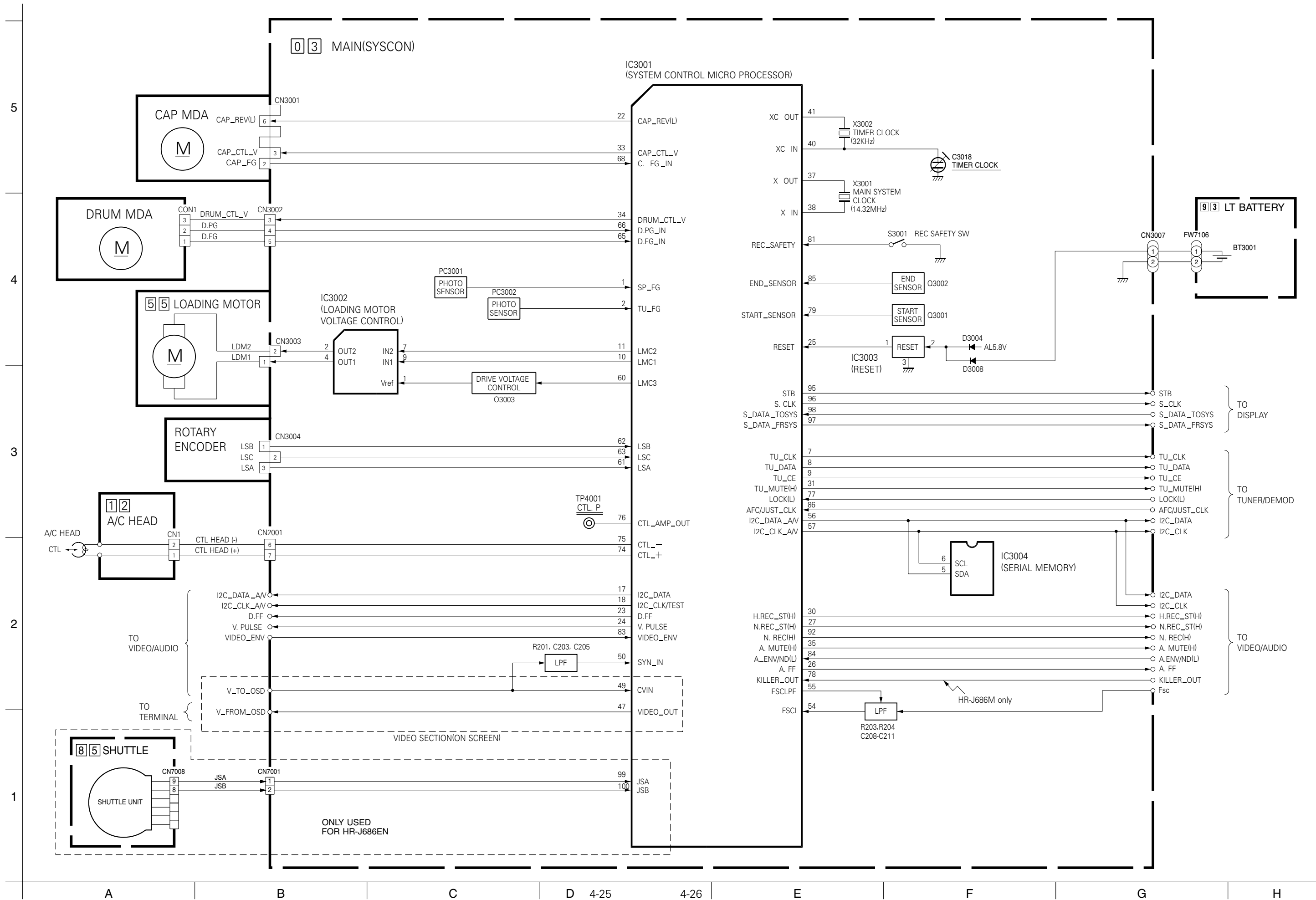
MODE PIN NO.	REC	PLAY
IC5301		
1	5.7	5.7
2	5.1	5.1
3	4.8	4.8
4	0	0
5	11.5	11.5
6	10.9	10.9
7	11.6	11.6
8	5.7	5.7

MODE PIN NO.	REC	PLAY
9	1.3	1.3
10	4.4	4.4
Q5101		
D	87.5	85.7
S	-	-
G	-	-
Q5102		
E	0	0
C	-	-
B	-	-

<TUNER/DEMOD>

MODE PIN NO.	REC	PLAY
IC6501		
1	8.9	8.9
2	4.4	4.4
3	4.4	4.4
4	4.4	4.4
5	4.4	4.4
6	4.4	4.4
7	4.4	4.4
8	4.3	4.3
9	5.5	5.5
10	3.0	3.0
11	3.2	3.2
12	4.4	4.4
13	4.4	4.4
14	0	0
15	-	-
16	-	-
17	0	0
18	4.4	4.4
19	4.5	4.5
20	4.5	4.5
21	1.2	1.2
22	5.1	5.1
23	5.1	5.1
24	4.4	4.4
25	4.4	4.4
26	4.4	4.4
27	4.4	4.4
28	3.5	3.5
Q6030		
E	-	-
C	-	-
B	-	-
Q6501		
E	0	0
C	0	0
B	3.5	3.5
Q6502</		

4.13 SYSTEM CONTROL BLOCK DIAGRAM



4.15 AUDIO BLOCK DIAGRAM

