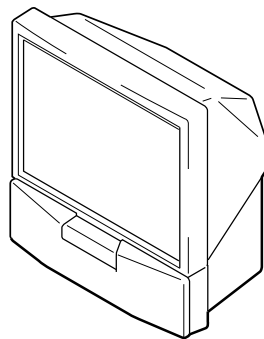


SERVICE MANUAL

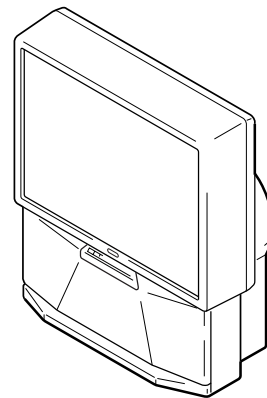
RG-2 CHASSIS

<i>MODEL</i>	<i>COMMANDER</i>	<i>DEST.</i>	<i>CHASSIS NO.</i>
KP-EF41HK	RM-871	HK	SCC-N71A-A
KP-EF41ME	RM-871	ME	SCC-N72A-A
KP-EF41MN	RM-871	GE	SCC-N69A-A
KP-EF41SN	RM-871	AUS	SCC-N73A-A
KP-EF48HK	RM-871	HK	SCC-N71C-A
KP-EF48ME	RM-871	ME	SCC-N72C-A
KP-EF48MN	RM-871	GE	SCC-N69C-A
KP-EF48SN	RM-871	AUS	SCC-N73C-A

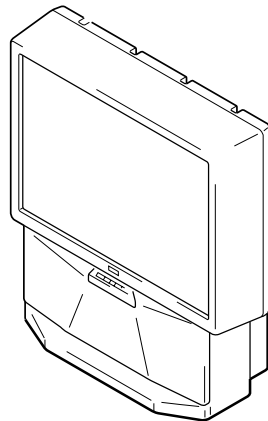
<i>MODEL</i>	<i>COMMANDER</i>	<i>DEST.</i>	<i>CHASSIS NO.</i>
KP-EF53HK	RM-871	HK	SCC-N71B-A
KP-EF53ME	RM-871	ME	SCC-N72B-A
KP-EF53MN	RM-871	GE	SCC-N69B-A
KP-EF53SN	RM-871	AUS	SCC-N73B-A
KP-EF61HK	RM-871	HK	SCC-N71D-A
KP-EF61ME	RM-871	ME	SCC-N72D-A
KP-EF61MN	RM-871	GE	SCC-N69D-A
KP-EF61SN	RM-871	AUS	SCC-N73D-A



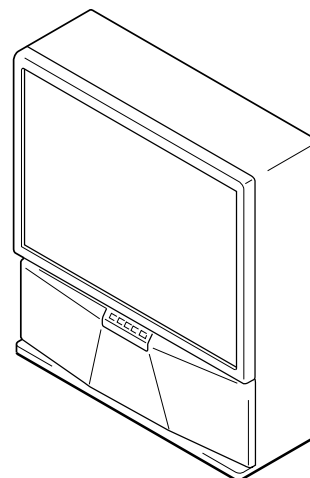
KP-EF41HK/EF41ME/
EF41MN/EF41SN



KP-EF48HK/EF48ME/
EF48MN/EF48SN



KP-EF53HK/EF53ME/
EF53MN/EF53SN



KP-EF61HK/EF61ME/
EF61MN/EF61SN



* Please file according to model size. ...

41

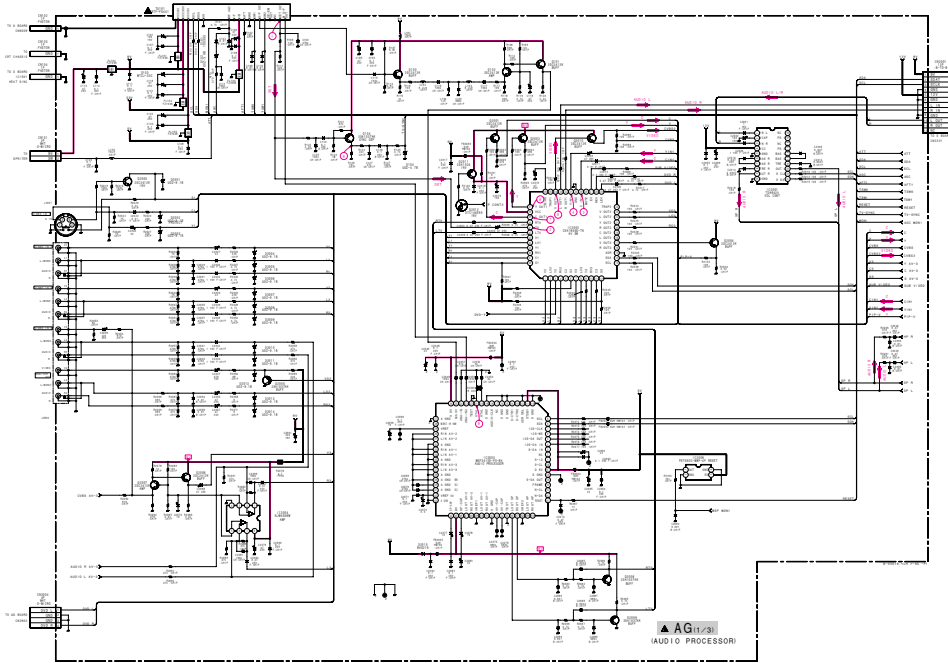
48

53

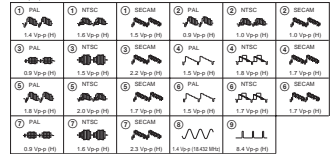
61

PROJECTION TV
SONY®

(1) Schematic Diagram of AG (1/2) Board



• AG (1/2) BOARD WAVEFORMS

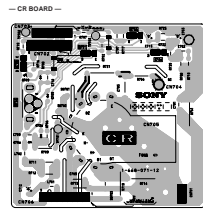
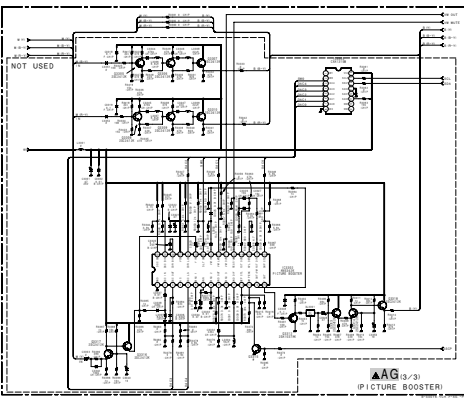
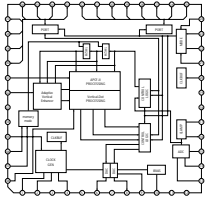


• AG (1/2) BOARD VOLTAGE LIST

POINT	NO.	VOLTS	RES.	WATTAGE	TEST POINT	TEST POINT	TEST POINT	TEST POINT
VCC	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VDD	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(3) Schematic Diagrams of AG (3D), CR, CG and CB Boards

• AG (3D) BOARD IC401 MC146297T

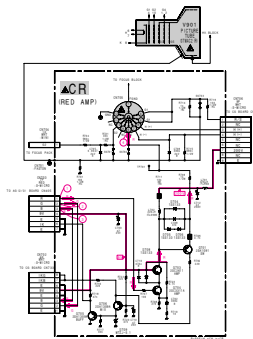


• CR BOARD WAVEFORMS

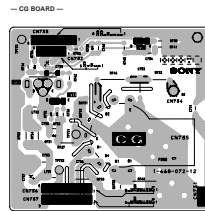
① PULSECAM	① NTSC
3.5 Vp-p (PS)	4.4 Vp-p (PS)
② PULSECAM	② NTSC
3.5 Vp-p (PS)	3.8 Vp-p (PS)
③ PULSECAM	③ NTSC
3.5 Vp-p (PS)	3.8 Vp-p (PS)
④ PULSECAM	④ NTSC
94.0 Vp-p (PS)	117 Vp-p (PS)

• CR BOARD VOLTAGE LIST

POINT	V _{DC}	V _{AC} (RMS)
CRP1	0	100
CRP2	0	100
CRP3	0	100
CRP4	0	100
CRP5	0	100
CRP6	0	100
CRP7	0	100
CRP8	0	100
CRP9	0	100
CRP10	0	100
CRP11	0	100
CRP12	0	100
CRP13	0	100
CRP14	0	100
CRP15	0	100
CRP16	0	100
CRP17	0	100
CRP18	0	100
CRP19	0	100
CRP20	0	100
CRP21	0	100
CRP22	0	100
CRP23	0	100
CRP24	0	100
CRP25	0	100
CRP26	0	100
CRP27	0	100
CRP28	0	100
CRP29	0	100
CRP30	0	100
CRP31	0	100
CRP32	0	100
CRP33	0	100
CRP34	0	100
CRP35	0	100
CRP36	0	100
CRP37	0	100
CRP38	0	100
CRP39	0	100
CRP40	0	100
CRP41	0	100
CRP42	0	100
CRP43	0	100
CRP44	0	100
CRP45	0	100
CRP46	0	100
CRP47	0	100
CRP48	0	100
CRP49	0	100
CRP50	0	100
CRP51	0	100
CRP52	0	100
CRP53	0	100
CRP54	0	100
CRP55	0	100
CRP56	0	100
CRP57	0	100
CRP58	0	100
CRP59	0	100
CRP60	0	100
CRP61	0	100
CRP62	0	100
CRP63	0	100
CRP64	0	100
CRP65	0	100
CRP66	0	100
CRP67	0	100
CRP68	0	100
CRP69	0	100
CRP70	0	100
CRP71	0	100
CRP72	0	100
CRP73	0	100
CRP74	0	100
CRP75	0	100
CRP76	0	100
CRP77	0	100
CRP78	0	100
CRP79	0	100
CRP80	0	100
CRP81	0	100
CRP82	0	100
CRP83	0	100
CRP84	0	100
CRP85	0	100
CRP86	0	100
CRP87	0	100
CRP88	0	100
CRP89	0	100
CRP90	0	100
CRP91	0	100
CRP92	0	100
CRP93	0	100
CRP94	0	100
CRP95	0	100
CRP96	0	100
CRP97	0	100
CRP98	0	100
CRP99	0	100
CRP100	0	100



CR [RED AMP] CG [GREEN AMP]

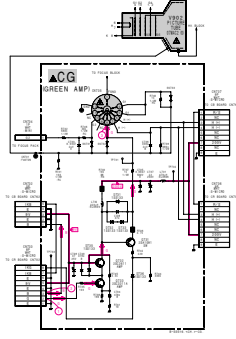


• CG BOARD WAVEFORMS

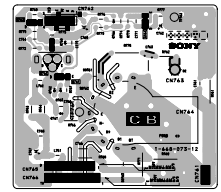
① PULSECAM	① NTSC
3.5 Vp-p (PS)	3.5 Vp-p (PS)
② PULSECAM	② NTSC
3.5 Vp-p (PS)	3.8 Vp-p (PS)
③ PULSECAM	③ NTSC
124 Vp-p (PS)	133 Vp-p (PS)

• CG BOARD VOLTAGE LIST

POINT	V _{DC}	V _{AC} (RMS)
CGP1	0	100
CGP2	0	100
CGP3	0	100
CGP4	0	100
CGP5	0	100
CGP6	0	100
CGP7	0	100
CGP8	0	100
CGP9	0	100
CGP10	0	100
CGP11	0	100
CGP12	0	100
CGP13	0	100
CGP14	0	100
CGP15	0	100
CGP16	0	100
CGP17	0	100
CGP18	0	100
CGP19	0	100
CGP20	0	100
CGP21	0	100
CGP22	0	100
CGP23	0	100
CGP24	0	100
CGP25	0	100
CGP26	0	100
CGP27	0	100
CGP28	0	100
CGP29	0	100
CGP30	0	100
CGP31	0	100
CGP32	0	100
CGP33	0	100
CGP34	0	100
CGP35	0	100
CGP36	0	100
CGP37	0	100
CGP38	0	100
CGP39	0	100
CGP40	0	100
CGP41	0	100
CGP42	0	100
CGP43	0	100
CGP44	0	100
CGP45	0	100
CGP46	0	100
CGP47	0	100
CGP48	0	100
CGP49	0	100
CGP50	0	100
CGP51	0	100
CGP52	0	100
CGP53	0	100
CGP54	0	100
CGP55	0	100
CGP56	0	100
CGP57	0	100
CGP58	0	100
CGP59	0	100
CGP60	0	100
CGP61	0	100
CGP62	0	100
CGP63	0	100
CGP64	0	100
CGP65	0	100
CGP66	0	100
CGP67	0	100
CGP68	0	100
CGP69	0	100
CGP70	0	100
CGP71	0	100
CGP72	0	100
CGP73	0	100
CGP74	0	100
CGP75	0	100
CGP76	0	100
CGP77	0	100
CGP78	0	100
CGP79	0	100
CGP80	0	100
CGP81	0	100
CGP82	0	100
CGP83	0	100
CGP84	0	100
CGP85	0	100
CGP86	0	100
CGP87	0	100
CGP88	0	100
CGP89	0	100
CGP90	0	100
CGP91	0	100
CGP92	0	100
CGP93	0	100
CGP94	0	100
CGP95	0	100
CGP96	0	100
CGP97	0	100
CGP98	0	100
CGP99	0	100
CGP100	0	100



CB [BLUE AMP]

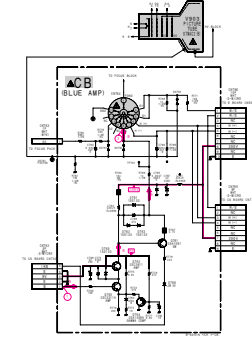


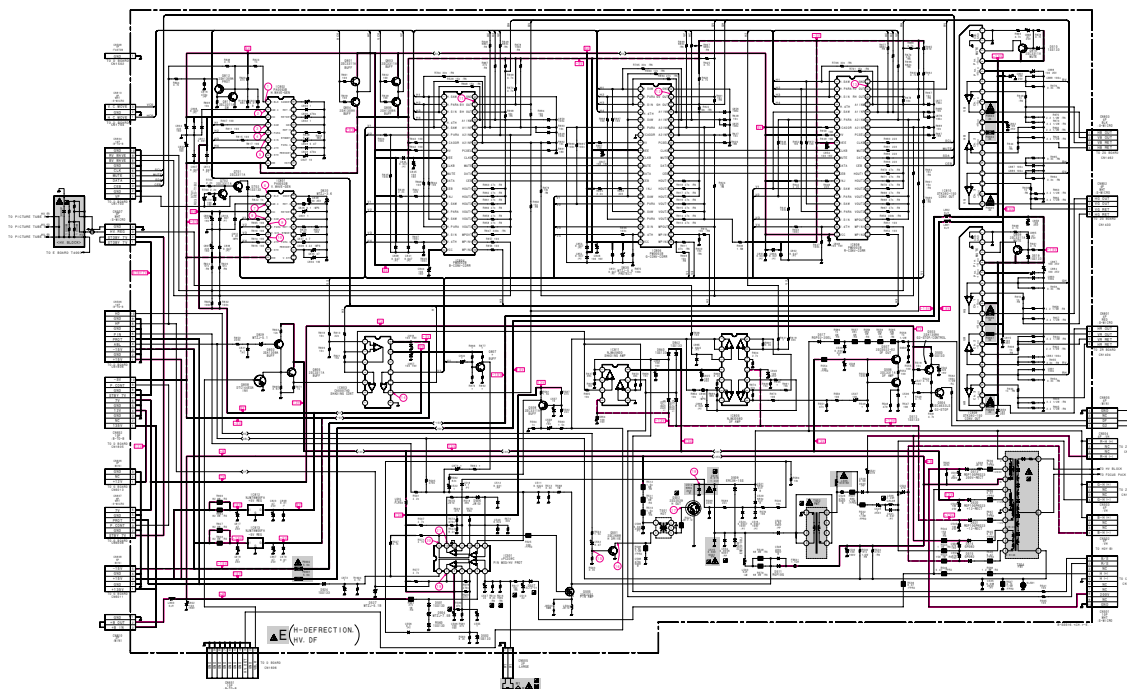
• CB BOARD WAVEFORMS

① PULSECAM	① NTSC
3.5 Vp-p (PS)	3.7 Vp-p (PS)
② PULSECAM	② NTSC
117 Vp-p (PS)	125 Vp-p (PS)

• CB BOARD VOLTAGE LIST

POINT	V _{DC}	V _{AC} (RMS)
CBP1	0	100
CBP2	0	100
CBP3	0	100
CBP4	0	100
CBP5	0	100
CBP6	0	100
CBP7	0	100
CBP8	0	100
CBP9	0	100
CBP10	0	100
CBP11	0	100
CBP12	0	100
CBP13	0	100
CBP14	0	100
CBP15	0	100
CBP16	0	100
CBP17	0	100
CBP18	0	100
CBP19	0	100
CBP20	0	100
CBP21	0	100
CBP22	0	100
CBP23	0	100
CBP24	0	100
CBP25	0	100
CBP26	0	100
CBP27	0	100
CBP28	0	100
CBP29	0	100
CBP30	0	100
CBP31	0	100
CBP32	0	100
CBP33	0	100
CBP34	0	100
CBP35	0	100
CBP36	0	100
CBP37	0	100
CBP38	0	100
CBP39	0	100
CBP40	0	100
CBP41	0	100
CBP42	0	100
CBP43	0	100
CBP44	0	100
CBP45	0	100
CBP46	0	100
CBP47	0	100
CBP48	0	100
CBP49	0	100
CBP50	0	100
CBP51	0	100
CBP52	0	100
CBP53	0	100
CBP54	0	100
CBP55	0	100
CBP56	0	100
CBP57	0	100
CBP58	0	100
CBP59	0	100
CBP60	0	100
CBP61	0	100
CBP62	0	100
CBP63	0	100
CBP64	0	100
CBP65	0	100
CBP66	0	100
CBP67	0	100
CBP68	0	100
CBP69	0	100
CBP70	0	100
CBP71	0	100
CBP72	0	100
CBP73	0	100
CBP74	0	100
CBP75	0	100
CBP76	0	100
CBP77	0	100
CBP78	0	100
CBP79	0	100
CBP80	0	100
CBP81	0	100
CBP82	0	100
CBP83	0	100
CBP84	0	100
CBP85	0	100
CBP86	0	100
CBP87	0	100
CBP88	0	100
CBP89	0	100
CBP90	0	100
CBP91	0	100
CBP92	0	100
CBP93	0	100
CBP94	0	100
CBP95	0	100
CBP96	0	100
CBP97	0	100
CBP98	0	100
CBP99	0	100
CBP100	0	100



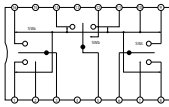


• E BOARD VOLTAGE LIST

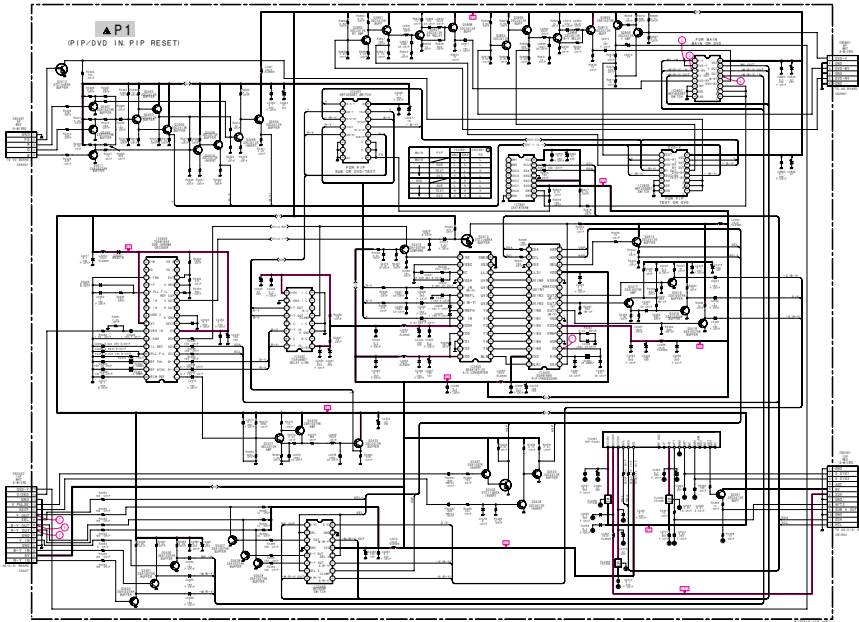
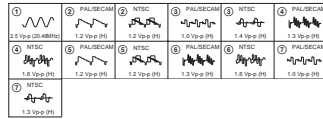
Pin No.	Symbol	Component	Value	Unit	Pin No.	Symbol	Component	Value	Unit
1	V ₁	5V	0.01	F	10	V ₁₀	5V	0.01	F
2	V ₂	5V	0.01	F	11	V ₁₁	5V	0.01	F
3	V ₃	5V	0.01	F	12	V ₁₂	5V	0.01	F
4	V ₄	5V	0.01	F	13	V ₁₃	5V	0.01	F
5	V ₅	5V	0.01	F	14	V ₁₄	5V	0.01	F
6	V ₆	5V	0.01	F	15	V ₁₅	5V	0.01	F
7	V ₇	5V	0.01	F	16	V ₁₆	5V	0.01	F
8	V ₈	5V	0.01	F	17	V ₁₇	5V	0.01	F
9	V ₉	5V	0.01	F	18	V ₁₈	5V	0.01	F
10	V ₁₀	5V	0.01	F	19	V ₁₉	5V	0.01	F
11	V ₁₁	5V	0.01	F	20	V ₂₀	5V	0.01	F
12	V ₁₂	5V	0.01	F	21	V ₂₁	5V	0.01	F
13	V ₁₃	5V	0.01	F	22	V ₂₂	5V	0.01	F
14	V ₁₄	5V	0.01	F	23	V ₂₃	5V	0.01	F
15	V ₁₅	5V	0.01	F	24	V ₂₄	5V	0.01	F
16	V ₁₆	5V	0.01	F	25	V ₂₅	5V	0.01	F
17	V ₁₇	5V	0.01	F	26	V ₂₆	5V	0.01	F
18	V ₁₈	5V	0.01	F	27	V ₂₇	5V	0.01	F
19	V ₁₉	5V	0.01	F	28	V ₂₈	5V	0.01	F
20	V ₂₀	5V	0.01	F	29	V ₂₉	5V	0.01	F
21	V ₂₁	5V	0.01	F	30	V ₃₀	5V	0.01	F
22	V ₂₂	5V	0.01	F	31	V ₃₁	5V	0.01	F
23	V ₂₃	5V	0.01	F	32	V ₃₂	5V	0.01	F
24	V ₂₄	5V	0.01	F	33	V ₃₃	5V	0.01	F
25	V ₂₅	5V	0.01	F	34	V ₃₄	5V	0.01	F
26	V ₂₆	5V	0.01	F	35	V ₃₅	5V	0.01	F
27	V ₂₇	5V	0.01	F	36	V ₃₆	5V	0.01	F
28	V ₂₈	5V	0.01	F	37	V ₃₇	5V	0.01	F
29	V ₂₉	5V	0.01	F	38	V ₃₈	5V	0.01	F
30	V ₃₀	5V	0.01	F	39	V ₃₉	5V	0.01	F
31	V ₃₁	5V	0.01	F	40	V ₄₀	5V	0.01	F
32	V ₃₂	5V	0.01	F	41	V ₄₁	5V	0.01	F
33	V ₃₃	5V	0.01	F	42	V ₄₂	5V	0.01	F
34	V ₃₄	5V	0.01	F	43	V ₄₃	5V	0.01	F
35	V ₃₅	5V	0.01	F	44	V ₄₄	5V	0.01	F
36	V ₃₆	5V	0.01	F	45	V ₄₅	5V	0.01	F
37	V ₃₇	5V	0.01	F	46	V ₄₆	5V	0.01	F
38	V ₃₈	5V	0.01	F	47	V ₄₇	5V	0.01	F
39	V ₃₉	5V	0.01	F	48	V ₄₈	5V	0.01	F
40	V ₄₀	5V	0.01	F	49	V ₄₉	5V	0.01	F
41	V ₄₁	5V	0.01	F	50	V ₅₀	5V	0.01	F
42	V ₄₂	5V	0.01	F	51	V ₅₁	5V	0.01	F
43	V ₄₃	5V	0.01	F	52	V ₅₂	5V	0.01	F
44	V ₄₄	5V	0.01	F	53	V ₅₃	5V	0.01	F
45	V ₄₅	5V	0.01	F	54	V ₅₄	5V	0.01	F
46	V ₄₆	5V	0.01	F	55	V ₅₅	5V	0.01	F
47	V ₄₇	5V	0.01	F	56	V ₅₆	5V	0.01	F
48	V ₄₈	5V	0.01	F	57	V ₅₇	5V	0.01	F
49	V ₄₉	5V	0.01	F	58	V ₅₈	5V	0.01	F
50	V ₅₀	5V	0.01	F	59	V ₅₉	5V	0.01	F
51	V ₅₁	5V	0.01	F	60	V ₆₀	5V	0.01	F
52	V ₅₂	5V	0.01	F	61	V ₆₁	5V	0.01	F
53	V ₅₃	5V	0.01	F	62	V ₆₂	5V	0.01	F
54	V ₅₄	5V	0.01	F	63	V ₆₃	5V	0.01	F
55	V ₅₅	5V	0.01	F	64	V ₆₄	5V	0.01	F
56	V ₅₆	5V	0.01	F	65	V ₆₅	5V	0.01	F
57	V ₅₇	5V	0.01	F	66	V ₆₆	5V	0.01	F
58	V ₅₈	5V	0.01	F	67	V ₆₇	5V	0.01	F
59	V ₅₉	5V	0.01	F	68	V ₆₈	5V	0.01	F
60	V ₆₀	5V	0.01	F	69	V ₆₉	5V	0.01	F
61	V ₆₁	5V	0.01	F	70	V ₇₀	5V	0.01	F
62	V ₆₂	5V	0.01	F	71	V ₇₁	5V	0.01	F
63	V ₆₃	5V	0.01	F	72	V ₇₂	5V	0.01	F
64	V ₆₄	5V	0.01	F	73	V ₇₃	5V	0.01	F
65	V ₆₅	5V	0.01	F	74	V ₇₄	5V	0.01	F
66	V ₆₆	5V	0.01	F	75	V ₇₅	5V	0.01	F
67	V ₆₇	5V	0.01	F	76	V ₇₆	5V	0.01	F
68	V ₆₈	5V	0.01	F	77	V ₇₇	5V	0.01	F
69	V ₆₉	5V	0.01	F	78	V ₇₈	5V	0.01	F
70	V ₇₀	5V	0.01	F	79	V ₇₉	5V	0.01	F
71	V ₇₁	5V	0.01	F	80	V ₈₀	5V	0.01	F
72	V ₇₂	5V	0.01	F	81	V ₈₁	5V	0.01	F
73	V ₇₃	5V	0.01	F	82	V ₈₂	5V	0.01	F
74	V ₇₄	5V	0.01	F	83	V ₈₃	5V	0.01	F
75	V ₇₅	5V	0.01	F	84	V ₈₄	5V	0.01	F
76	V ₇₆	5V	0.01	F	85	V ₈₅	5V	0.01	F
77	V ₇₇	5V	0.01	F	86	V ₈₆	5V	0.01	F
78	V ₇₈	5V	0.01	F	87	V ₈₇	5V	0.01	F
79	V ₇₉	5V	0.01	F	88	V ₈₈	5V	0.01	F
80	V ₈₀	5V	0.01	F	89	V ₈₉	5V	0.01	F
81	V ₈₁	5V	0.01	F	90	V ₉₀	5V	0.01	F
82	V ₈₂	5V	0.01	F	91	V ₉₁	5V	0.01	F
83	V ₈₃	5V	0.01	F	92	V ₉₂	5V	0.01	F
84	V ₈₄	5V	0.01	F	93	V ₉₃	5V	0.01	F
85	V ₈₅	5V	0.01	F	94	V ₉₄	5V	0.01	F
86	V ₈₆	5V	0.01	F	95	V ₉₅	5V	0.01	F
87	V ₈₇	5V	0.01	F	96	V ₉₆	5V	0.01	F
88	V ₈₈	5V	0.01	F	97	V ₉₇	5V	0.01	F
89	V ₈₉	5V	0.01	F	98	V ₉₈	5V	0.01	F
90	V ₉₀	5V	0.01	F	99	V ₉₉	5V	0.01	F
91	V ₉₁	5V	0.01	F	100	V ₁₀₀	5V	0.01	F

Pin No.	Symbol	Component	Value	Unit
1	V ₁	5V	0.01	F
2	V ₂	5V	0.01	F
3	V ₃	5V	0.01	F
4	V ₄	5V	0.01	F
5	V ₅	5V	0.01	F
6	V ₆	5V	0.01	F
7	V ₇	5V	0.01	F
8	V ₈	5V	0.01	F
9	V ₉	5V	0.01	F
10	V ₁₀	5V	0.01	F
11	V ₁₁	5V	0.01	F
12	V ₁₂	5V	0.01	F
13	V ₁₃	5V	0.01	F
14	V ₁₄	5V	0.01	F
15	V ₁₅	5V	0.01	F
16	V ₁₆	5V	0.01	F
17	V ₁₇	5V	0.01	F
18	V ₁₈	5V	0.01	F
19	V ₁₉	5V	0.01	F
20	V ₂₀	5V	0.01	F
21	V ₂₁	5V	0.01	F
22	V ₂₂	5V	0.01	F
23	V ₂₃	5V	0.01	F
24	V ₂₄	5V	0.01	F
25	V ₂₅	5V	0.01	F
26	V ₂₆	5V	0.01	F
27	V ₂₇	5V	0.01	F
28	V ₂₈	5V	0.01	F
29	V ₂₉	5V	0.01	F
30	V ₃₀	5V	0.01	F
31	V ₃₁	5V	0.01	F
32	V ₃₂	5V	0.01	F
33	V ₃₃	5V	0.01	F
34	V ₃₄	5V	0.01	F
35	V ₃₅	5V	0.01	F
36	V ₃₆	5V	0.01	F
37	V ₃₇	5V	0.01	F
38	V ₃₈	5V	0.01	F
39	V ₃₉	5V	0.01	F
40	V ₄₀	5V	0.01	F
41	V ₄₁	5V	0.01	F
42	V ₄₂	5V	0.01	F
43	V ₄₃	5V	0.01	F
44	V ₄₄	5V	0.01	F
45	V ₄₅	5V	0.01	F
46	V ₄₆	5V	0.01	F
47	V ₄₇	5V	0.01	F
48	V ₄₈	5V	0.01	F
49	V ₄₉	5V	0.01	F
50	V ₅₀	5V	0.01	F
51	V ₅₁	5V	0.01	F
52	V ₅₂	5V	0.01	F
53	V ₅₃	5V	0.01	F
54	V ₅₄	5V	0.01	F
55	V ₅₅	5V	0.01	F
56	V ₅₆	5V	0.01	F
57	V ₅₇	5V	0.01	F
58	V ₅₈	5V	0.01	F
59	V ₅₉	5V	0.01	F
60	V ₆₀	5V	0.01	F

• P1 BOARD (C4466 BA7096F)



• P1 BOARD WAVEFORMS



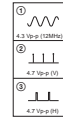
Schematic diagram
→ P1 board

Schematic diagrams
→ V2 board

• P1 BOARD VOLTAGE LIST

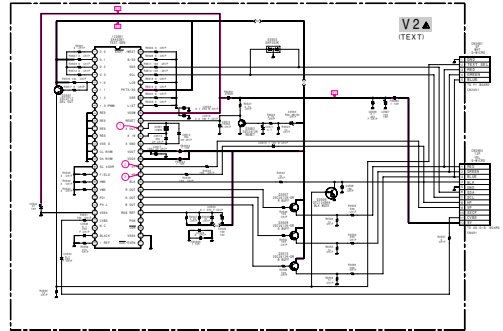
Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.4	16	4.4	31	0.0	46	0.0
2	4.4	17	4.4	32	0.0	47	0.0
3	4.4	18	4.4	33	0.0	48	0.0
4	4.4	19	4.4	34	0.0	49	0.0
5	4.4	20	4.4	35	0.0	50	0.0
6	4.4	21	4.4	36	0.0	51	0.0
7	4.4	22	4.4	37	0.0	52	0.0
8	4.4	23	4.4	38	0.0	53	0.0
9	4.4	24	4.4	39	0.0	54	0.0
10	4.4	25	4.4	40	0.0	55	0.0
11	4.4	26	4.4	41	0.0	56	0.0
12	4.4	27	4.4	42	0.0	57	0.0
13	4.4	28	4.4	43	0.0	58	0.0
14	4.4	29	4.4	44	0.0	59	0.0
15	4.4	30	4.4	45	0.0	60	0.0
16	4.4	31	0.0	46	0.0	61	0.0
17	4.4	32	0.0	47	0.0	62	0.0
18	4.4	33	0.0	48	0.0	63	0.0
19	4.4	34	0.0	49	0.0	64	0.0
20	4.4	35	0.0	50	0.0	65	0.0
21	4.4	36	0.0	51	0.0	66	0.0
22	4.4	37	0.0	52	0.0	67	0.0
23	4.4	38	0.0	53	0.0	68	0.0
24	4.4	39	0.0	54	0.0	69	0.0
25	4.4	40	0.0	55	0.0	70	0.0
26	4.4	41	0.0	56	0.0	71	0.0
27	4.4	42	0.0	57	0.0	72	0.0
28	4.4	43	0.0	58	0.0	73	0.0
29	4.4	44	0.0	59	0.0	74	0.0
30	4.4	45	0.0	60	0.0	75	0.0
31	0.0	46	0.0	61	0.0	76	0.0
32	0.0	47	0.0	62	0.0	77	0.0
33	0.0	48	0.0	63	0.0	78	0.0
34	0.0	49	0.0	64	0.0	79	0.0
35	0.0	50	0.0	65	0.0	80	0.0
36	0.0	51	0.0	66	0.0	81	0.0
37	0.0	52	0.0	67	0.0	82	0.0
38	0.0	53	0.0	68	0.0	83	0.0
39	0.0	54	0.0	69	0.0	84	0.0
40	0.0	55	0.0	70	0.0	85	0.0
41	0.0	56	0.0	71	0.0	86	0.0
42	0.0	57	0.0	72	0.0	87	0.0
43	0.0	58	0.0	73	0.0	88	0.0
44	0.0	59	0.0	74	0.0	89	0.0
45	0.0	60	0.0	75	0.0	90	0.0
46	0.0	61	0.0	76	0.0	91	0.0
47	0.0	62	0.0	77	0.0	92	0.0
48	0.0	63	0.0	78	0.0	93	0.0
49	0.0	64	0.0	79	0.0	94	0.0
50	0.0	65	0.0	80	0.0	95	0.0
51	0.0	66	0.0	81	0.0	96	0.0
52	0.0	67	0.0	82	0.0	97	0.0
53	0.0	68	0.0	83	0.0	98	0.0
54	0.0	69	0.0	84	0.0	99	0.0
55	0.0	70	0.0	85	0.0	100	0.0

• V2 BOARD WAVEFORMS

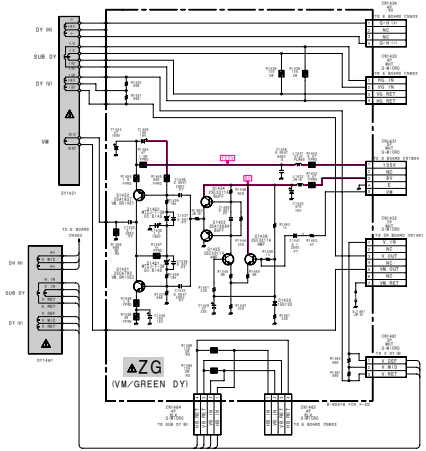


• V2 BOARD VOLTAGE LIST

Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.3	16	4.3	31	0.0	46	0.0
2	4.3	17	4.3	32	0.0	47	0.0
3	4.3	18	4.3	33	0.0	48	0.0
4	4.3	19	4.3	34	0.0	49	0.0
5	4.3	20	4.3	35	0.0	50	0.0
6	4.3	21	4.3	36	0.0	51	0.0
7	4.3	22	4.3	37	0.0	52	0.0
8	4.3	23	4.3	38	0.0	53	0.0
9	4.3	24	4.3	39	0.0	54	0.0
10	4.3	25	4.3	40	0.0	55	0.0
11	4.3	26	4.3	41	0.0	56	0.0
12	4.3	27	4.3	42	0.0	57	0.0
13	4.3	28	4.3	43	0.0	58	0.0
14	4.3	29	4.3	44	0.0	59	0.0
15	4.3	30	4.3	45	0.0	60	0.0
16	4.3	31	0.0	46	0.0	61	0.0
17	4.3	32	0.0	47	0.0	62	0.0
18	4.3	33	0.0	48	0.0	63	0.0
19	4.3	34	0.0	49	0.0	64	0.0
20	4.3	35	0.0	50	0.0	65	0.0
21	4.3	36	0.0	51	0.0	66	0.0
22	4.3	37	0.0	52	0.0	67	0.0
23	4.3	38	0.0	53	0.0	68	0.0
24	4.3	39	0.0	54	0.0	69	0.0
25	4.3	40	0.0	55	0.0	70	0.0
26	4.3	41	0.0	56	0.0	71	0.0
27	4.3	42	0.0	57	0.0	72	0.0
28	4.3	43	0.0	58	0.0	73	0.0
29	4.3	44	0.0	59	0.0	74	0.0
30	4.3	45	0.0	60	0.0	75	0.0
31	0.0	46	0.0	61	0.0	76	0.0
32	0.0	47	0.0	62	0.0	77	0.0
33	0.0	48	0.0	63	0.0	78	0.0
34	0.0	49	0.0	64	0.0	79	0.0
35	0.0	50	0.0	65	0.0	80	0.0
36	0.0	51	0.0	66	0.0	81	0.0
37	0.0	52	0.0	67	0.0	82	0.0
38	0.0	53	0.0	68	0.0	83	0.0
39	0.0	54	0.0	69	0.0	84	0.0
40	0.0	55	0.0	70	0.0	85	0.0
41	0.0	56	0.0	71	0.0	86	0.0
42	0.0	57	0.0	72	0.0	87	0.0
43	0.0	58	0.0	73	0.0	88	0.0
44	0.0	59	0.0	74	0.0	89	0.0
45	0.0	60	0.0	75	0.0	90	0.0
46	0.0	61	0.0	76	0.0	91	0.0
47	0.0	62	0.0	77	0.0	92	0.0
48	0.0	63	0.0	78	0.0	93	0.0
49	0.0	64	0.0	79	0.0	94	0.0
50	0.0	65	0.0	80	0.0	95	0.0
51	0.0	66	0.0	81	0.0	96	0.0
52	0.0	67	0.0	82	0.0	97	0.0
53	0.0	68	0.0	83	0.0	98	0.0
54	0.0	69	0.0	84	0.0	99	0.0
55	0.0	70	0.0	85	0.0	100	0.0



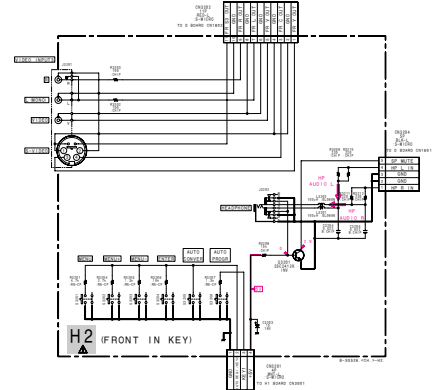
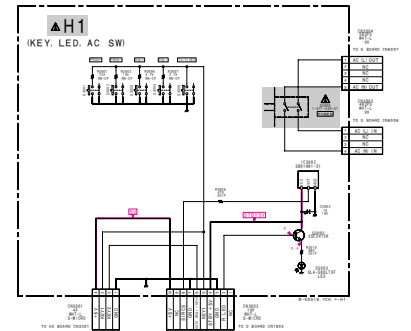
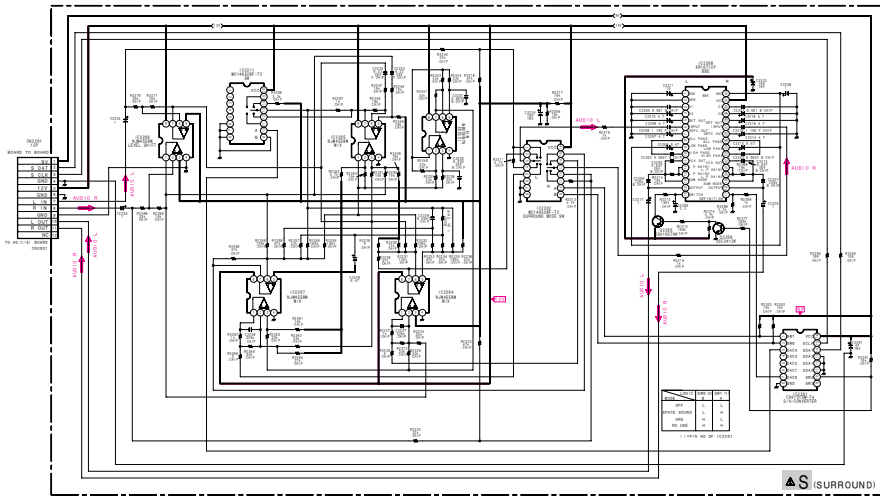
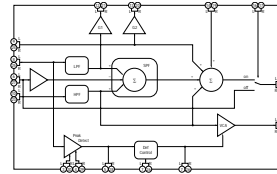
(7) Schematic Diagrams of H1, H2, S, ZG and ZR Boards



• ZG BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
Q1431	B	1.0	Q1433	B	6.1	Q1436	B	2.3
	C	70.1		E	6.4		C	6.1
	E	0.5	Q1434	B	6.8	Q1438	B	2.3
				C	6.4		C	6.1
Q1432	B	138					B	2.3
	C	70.1					C	6.1
	E	139					E	1.6

• S BOARD IC2208 XR1071CP



• S BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC2201	1	0		16	12.5		6	6.2		6	6.2
	2	0		1	6.2		7	6.2		5	6.0
	3	6.5	IC2203	1	6.2		8	12.5		6	6.0
	7	6.5		2	6.2	IC2206	1	6.2		7	5.9
	10	6.1		3	6.3		2	6.2		6	6.0
	14	4.9		5	6.2		3	6.2		9	5.9
	15	4.7		6	6.2		5	6.2		10	5.8
	16	6.9		7	6.2		6	6.2		11	6.0
				8	12.5		7	6.2		12	6.0
							8	12.5		13	6.0
							9	6.2	IC2211	1	6.2
							10	6.2		14	6.0
							11	6.2		15	0
							12	6.2		16	6.2
							13	6.2		17	6.2
							14	6.2		18	5.9
							15	6.2		19	5.9
							16	6.2		20	6.0
							17	6.2		21	6.0
							18	6.2		22	6.0
							19	6.2		23	6.0
							20	6.2		24	6.0
							21	6.2			
							22	6.2			
							23	6.2			
							24	6.2			

Schematic diagrams

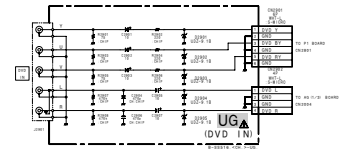
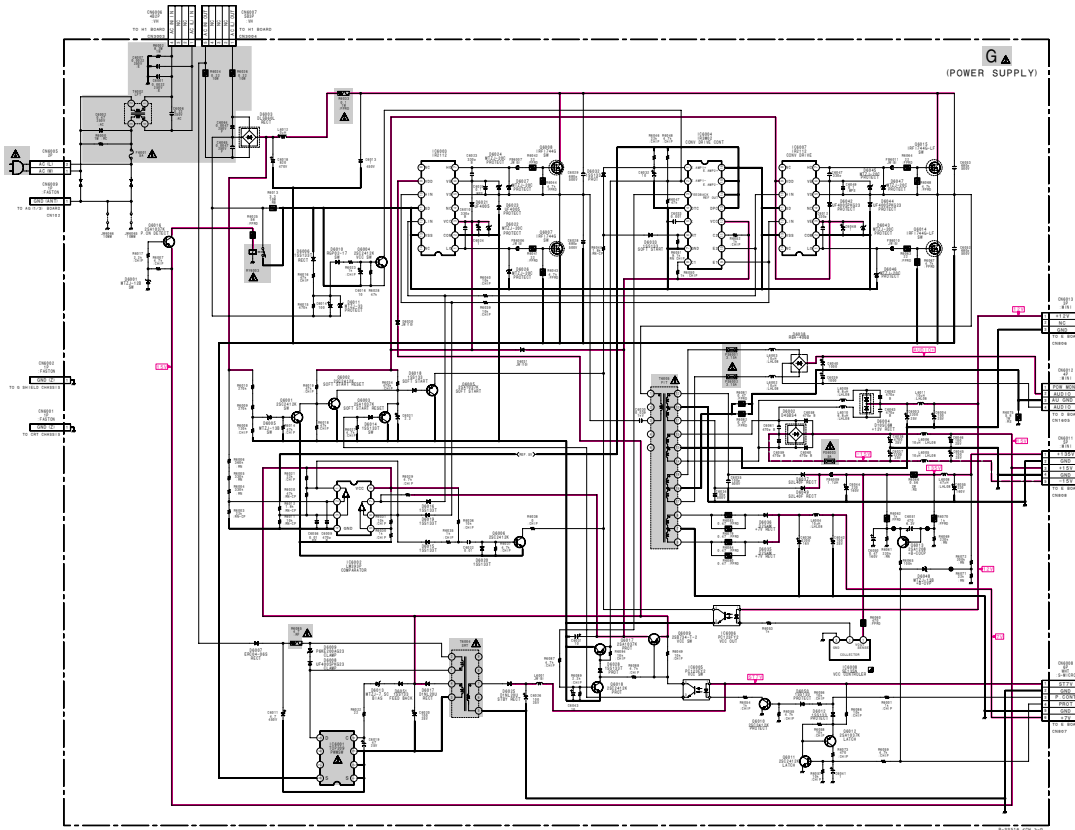
← (H) (H2) S boards

(ZG) (ZR) boards

Schematic diagrams

(G) (V) boards →

(8) Schematic Diagrams of G and UG Boards



• G BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]			
IC8001	4	5.0	IC8007	3	13.8	IC8007	B	14.3			
	5	286		4	13.8		C	0.4			
	2	6.3		2	11.9		D	0.4			
IC8002	1	0.2	IC8008	1	0.0	IC8008	B	0.4			
	2	6.3		2	11.9		D	292			
	3	6.4		4	3.0		C	0.4			
	5	1.4		1	0.2		IC8009	B	13.8		
	6	0.2		2	0			C	14.5		
	7	12.1		2	0		IC8011	B	0		
	8	14.5		3	14.5			C	14.5		
	IC8003	1		14.4	IC8005		1	138	IC8012	B	7.3
3		14.4	2	11.8		C	0				
5		0.4	IC8009	1		0.0	IC8013	B		138	
6		0.4		2		4.8		C		0	
7		0.4	IC8001	B		0.0	IC8013	E		138	
8		0.4		C		0		IC8014		B	16.1
9		0.4	IC8002	B		0	IC8014			C	147
10		0.4		C		13.8		IC8015		B	138
11		0.4	IC8003	B		0	IC8015			D	292
12		0.4		C		13.8		IC8017		B	7.3
IC8004		1	3.0	IC8005		B	0			IC8017	E
		3	0			IC8005	B	0			IC8018
	5	7.3	C		3.1		IC8018	C	13.8		
	6	3.0	IC8004		B	0		IC8018	E		4.8
	8	14.1			IC8003	B	0		IC8018		E
	9	3.0	C			3.1	IC8018	E			4.8
10	0.4	IC8004	B	0	IC8018	E		4.8			
11	14.4		IC8005	B		0	IC8018	E	4.8		
12	14.5	C		3.1	IC8018	E		4.8			
IC8005	1	5.0	IC8005	B		0	IC8018	E	4.8		
	2	5.0		IC8005	B	0		IC8018	E	4.8	
	3	6.1			C	3.1			IC8018	E	4.8
IC8006	1	7.3	IC8005	C	3.1	IC8018	E	4.8			
	2	6.1		IC8005	C		3.1	IC8018	E	4.8	

