

[CONTENTS]

○ SECTION 1. GENERAL

- ESD PRECAUTIONS 1-2
- SPECIFICATIONS 1-3
- IDENTIFICATION OF CONTROLS 1-4

○ SECTION 2. ELECTRICAL

- ADJUSTMENTS 2-1
- TROUBLESHOOTING GUIDIE 2-2
- WAVEFORMS OF MAJOR CHECK POINT 2-6
- INTERNAL BLOCK DIAGRAM OF IC's 2-13
- VOLTAGE SHEET 2-19
- BLOCK DIAGRAM 2-21
- SCHEMATIC DIAGRAM 2-23
- PRINTED CIRCUIT DIAGRAMS 2-31
- WIRING DIAGRAM 2-37

○ SECTION 3. EXPLODED VIEWS 3-1

○ SECTION 4. SPEAKER SECTION 4-1

○ SECTION 5. REPLACEMENT PARTS LIST 5-1

SECTION 1. GENERAL

□ ESD PRECAUTIONS

Electrostatically Sensitive Devices (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
6. Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
7. Immediately before removing the protective material from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : BE SURE NO POWER IS APPLIED TO THE CHASSIS OR CIRCUIT, AND OBSERVE ALL OTHER SAFETY PRECAUTIONS.

8. Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

CAUTION. GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SPECIFICATIONS

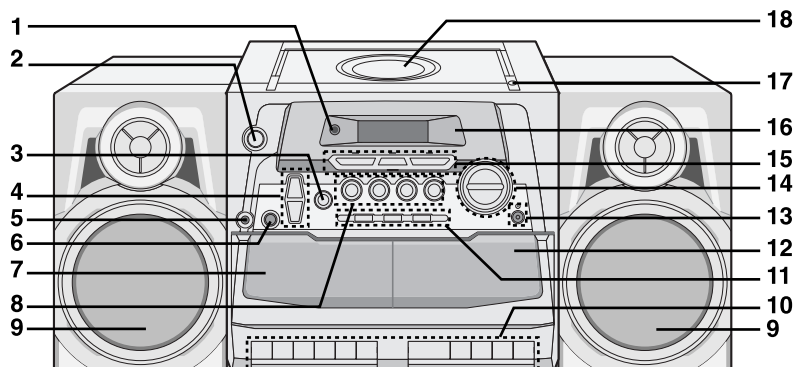
SECTION		MODEL	LPX-M930A/S, LPX-M935A/S	LPX-M930X, LPX-M935X
[General]	Power supply		Refer to the back panel of the unit.	
	Power consumption		30 W	
	Mass		approx. 5.6 kg	
	External dimensions(W x H x D)		approx. 283.2 x 231.6 x 247.8 mm	
	Output Power		5W X 2	
	Speakers		3.2Ω X 2	
	Battery Operation		DC 12V, eight "D"(R20) batteries (not supplied)	
[CD]	Frequency response		100 - 18000 Hz	
	Signal-to-noise ratio		60 dB	
	T.H.D		0.7 %	
[Tuner]	FM	Tuning Range	87.5 - 108 MHz	65 - 108 MHz
		Intermediate Frequency	10.7 MHz	
		Antenna	Telescopic antenna	
	AM (MW)	Tuning Range	522 - 1611 kHz or 530 - 1610 kHz	
		Intermediate Frequency	450 kHz	
		Antenna	Ferrite bar antenna	
	SW (OPTIONAL)	Tuning Range	5800 - 18000 kHz	
		Intermediate Frequency	450 kHz	
		Antenna	Telescopic antenna	
[TAPE]	Recording System		4 Tracks 2 channel stereo	
	Frequency Response		125 - 8000 Hz	
	Signal to Noise Ratio		40/45 dB (REC/PLAY)	

* Designs and specifications are subject to change without notice.

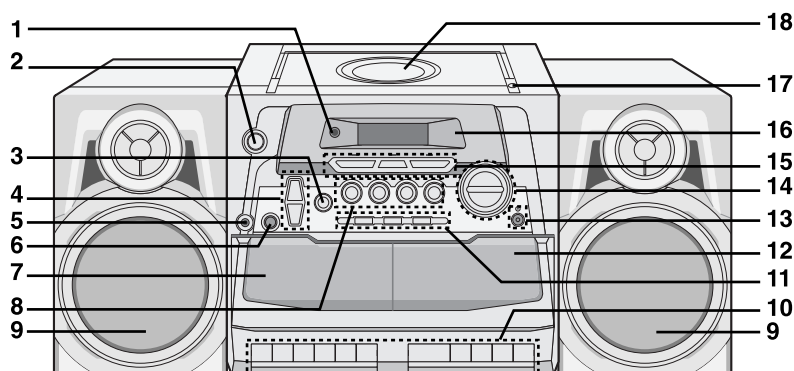
IDENTIFICATION OF CONTROLS

Front Panel

LPX-M930A/X/S Model



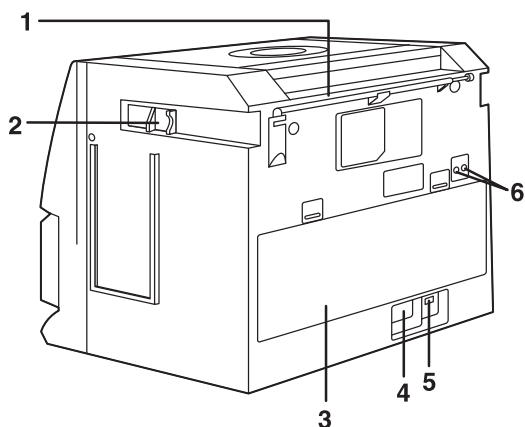
LPX-M935A/X/S Model



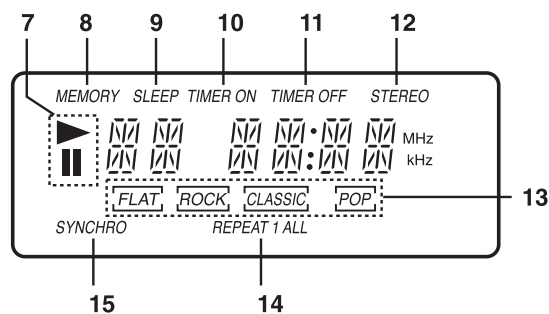
1. REMOTE SENSOR
2. POWER(STANDBY/ON) button
3. MEMORY button
PROG./SET button
4. PRESET(▼/▲) button
TIME(▼/▲) button
5. MICROPHONE(MIC) SOCKET (ø3.5 mm)
6. HI-DUBBING (■ ON/ ■ OFF) button
7. TAPE DOOR(TAPE A DECK)
8. CD PLAY/PAUSE(▶||) button
CD STOP(■) button
TUNING(-/+) buttons
CD SKIP/SEARCH(◀◀◀/▶▶▶) buttons
9. LEFT/RIGHT SPEAKER
10. RECORD(REC●) button
TAPE PLAY(▶PLAY) button
PLAY MODE(■ ↺ / ■ ↻) button
(LPX-935A/X/S model)
TAPE PLAY(◀PLAY▶) button
(LPX-935A/X/S model)

- REWIND(◀◀ REW) button
- FAST FORWARD(▶▶ F.FWD) button
- TAPE STOP(■ ST)/TAPE DOOR OPEN
(▲ EJ) button
- TAPE PAUSE(PAUSE) button
- PLAY DIRECTION(DIR) button
(LPX-935A/X/S model)
11. MODE/RIF/REPEAT button
TIMER button
CLOCK button
12. TAPE DOOR(TAPE B DECK)
13. UBB button or indicator
14. VOLUME(▼/▲) button
15. FUNCTION SELECT(TUNER/BAND, CD, TAPE)
button or indicator
16. DISPLAY WINDOW
17. CD DOOR OPEN(▲) button
18. CD DOOR

Rear Panel/Display Window

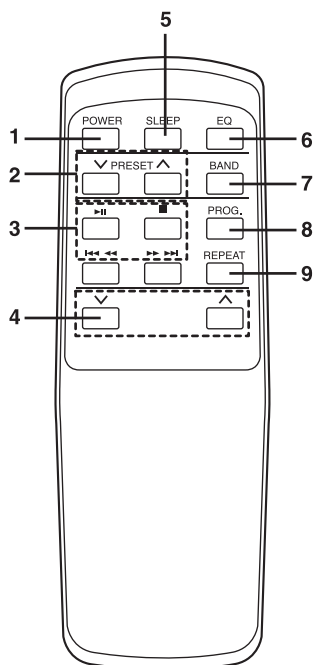


- 1. FM ANTENNA
- 2. SPEAKER RELEASE LEVER
- 3. BATTERY COMPARTMENT
- 4. AC POWER INPUT SOCKET
- 5. VOLTAGE SELECTOR(OPTIONAL)
- 6. SPEAKER INPUT SOCKET(R/L)



- 9. SLEEP indicator
- 10. TIMER ON indicator
- 11. TIMER OFF indicator
- 12. STEREO indicator
- 13. EQUALIZER PATTERN
(FLAT, ROCK, CLASSIC, POP) indicator
- 14. REPEAT indicator
- 15. CD SYNCHRO RECORDING indicator

Remote control



- 1. POWER button
- 2. PRESET(^/∨) button
- 3. CD FUNCTION buttons
CD PLAY/PAUSE(►/||) button
CD STOP(■) button
CD SKIP/SEARCH(◀◀◀/▶▶▶) button
- 4. VOLUME(^/∨) button
- 5. SLEEP button
- 6. EQUALIZER(EQ) button
- 7. BAND button
- 8. PROG. button
- 9. CD REPEAT button

MEMO

SECTION 2. ELECTRICAL

□ ADJUSTMENTS

1. TUNER (COVER RANGE)

NO.	MODE	ITEM	MEASUREMENT POINT	ADJUSTMET POINT	SPECIFICATION	FREQUENCY
1	FM	LOW	C144	L102	2.0V	87.5MHz
		HIGH			5.4±0.2V	108.0MHz
	FM(AX)	LOW	C144	L102	1.7V	65.0MHz
		HIGH			5.8±0.2V	108.0MHz
2	SW	LOW	C144	L182	1.1V	5800kHz
		HIGH			5.6±0.5V	18000kHz
3	MW	LOW	C144	L172	1.0V	522kHz
		HIGH			4.8±0.2V	1611kHz
4	LW	LOW	C144	L182	1.3V	153kHz
		HIGH			4.3±0.2V	281kHz

2. TUNER (TRACKING)

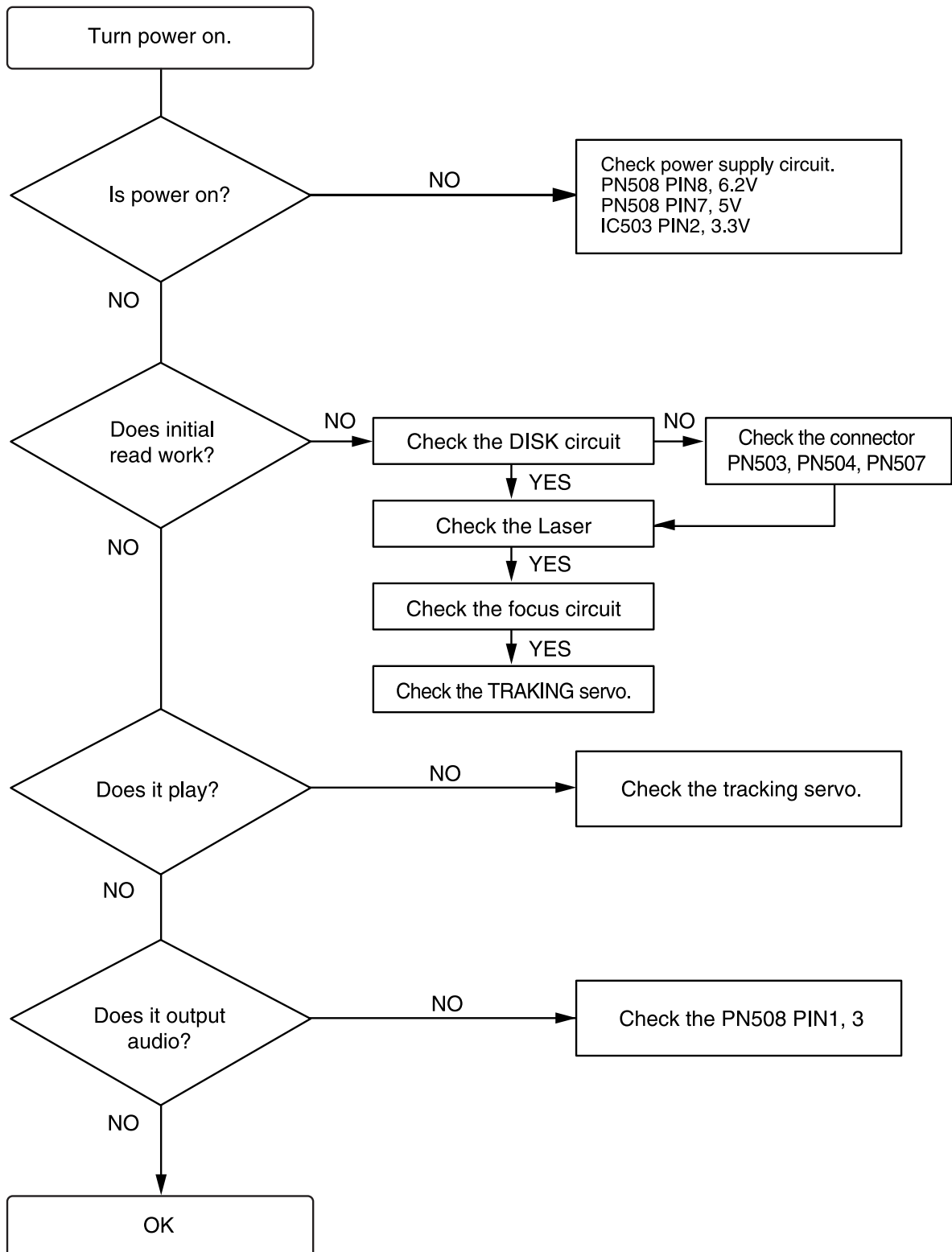
NO.	MODE	ITEM	MEASUREMENT POINT	ADJUSTMET POINT	FREQUENCY
1	FM	LOW	SPK OUT	L101	90.0MHz
		HIGH	SPK OUT	TC101	106.0MHz
	FM(AX)	LOW	SPK OUT	L101	67.0MHz
		HIGH	SPK OUT	TC101	106.0MHz
2	SW	LOW	SPK OUT	L181	6500kHz
		HIGH	SPK OUT		16000kHz
3	MW	LOW	SPK OUT	L171	603kHz
		HIGH	SPK OUT	TC171	1404kHz
4	LW	LOW	SPK OUT	L171	164kHz
		HIGH	SPK OUT	TC181	254kHz

3. DECK

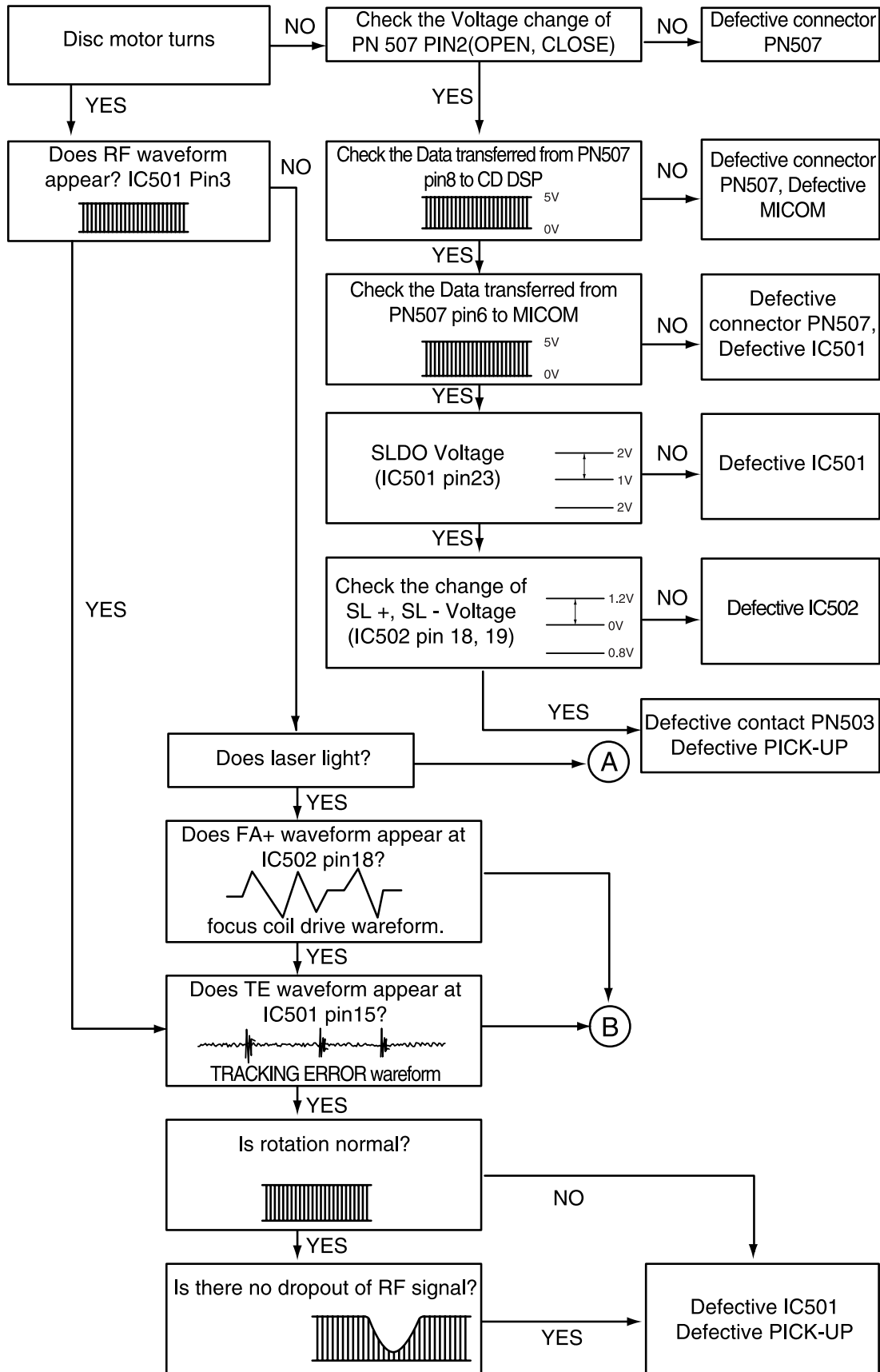
NO.	ITEM		TEST TAPE	MEASUREMENT POINT	ADJUSTMET POINT	FREQUENCY
1	AZIMUTH		MTT-114	SPK OUT	DECK ADJ. HOLE	MAX
2	SPEED	NOR	MTT-111N	SPK OUT	VR250	3000±90Hz
		HIGH	MTT-111N	SPK OUT	(5400~6200Hz)	
3	REC BIAS		MTT-5511	PN201	L200	70kHz±500Hz

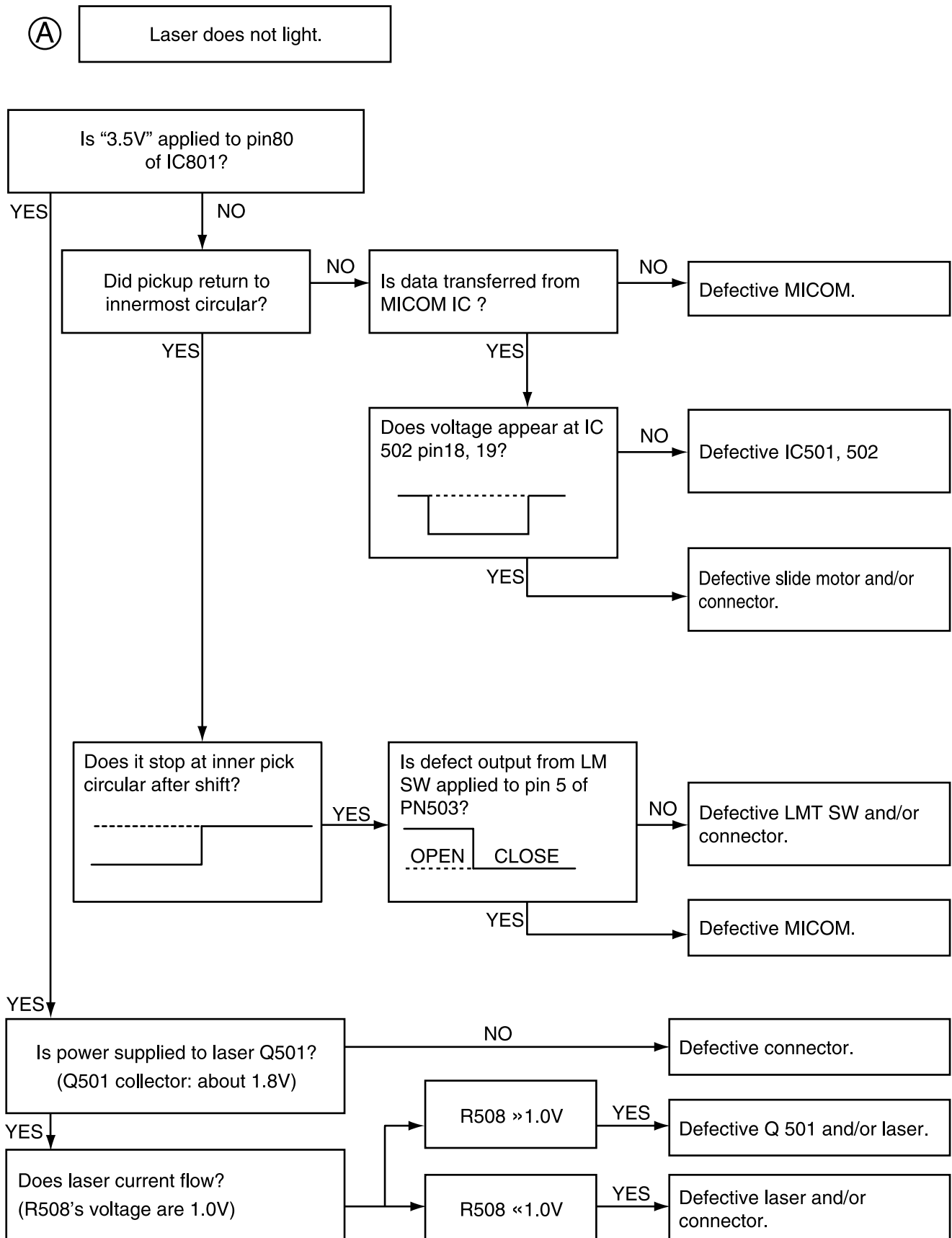
❑ TROUBLESHOOTING

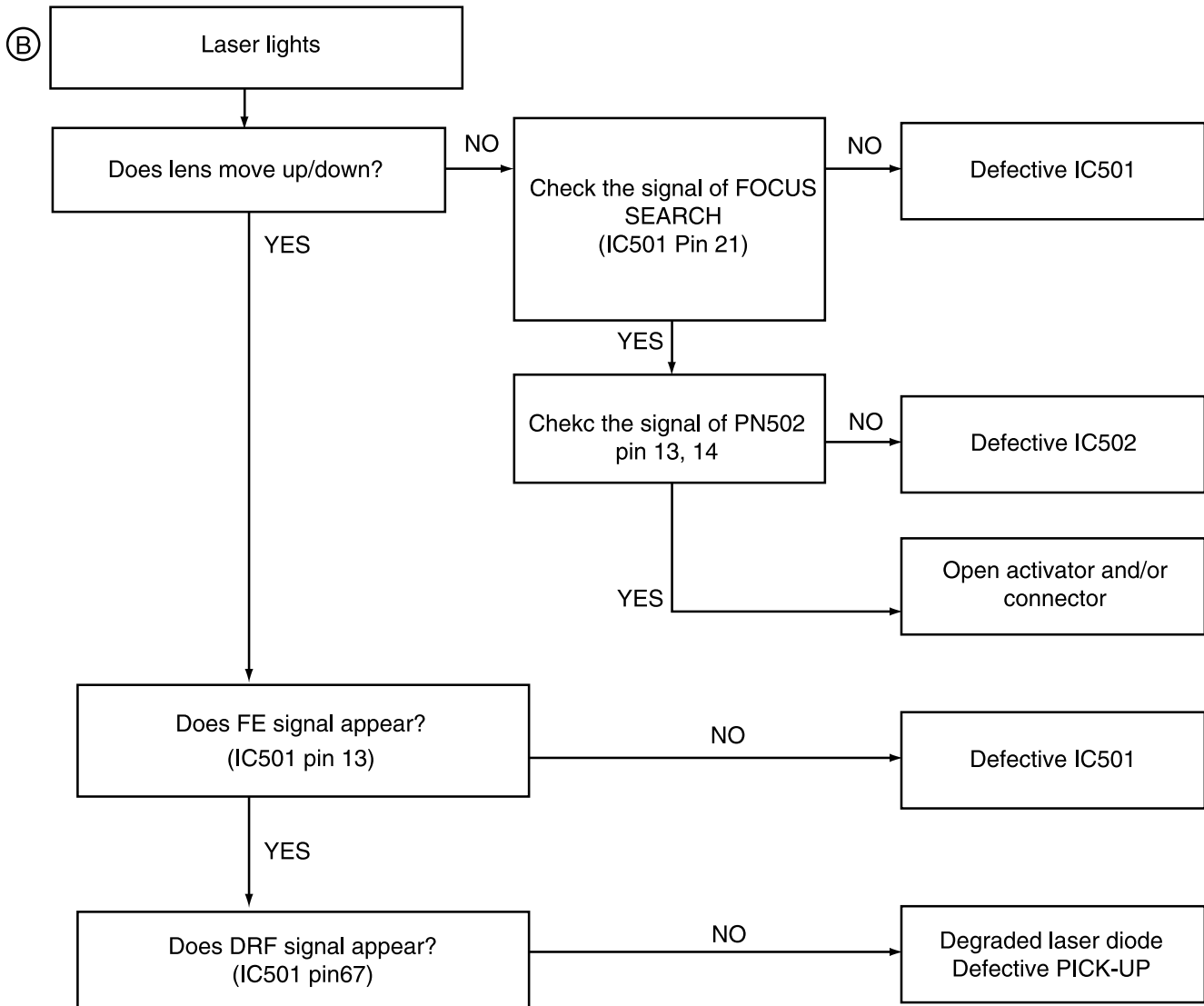
1. CD



FAILS TO INITIAL READ

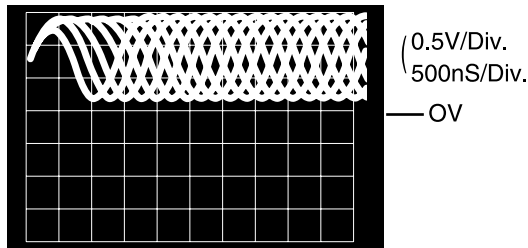




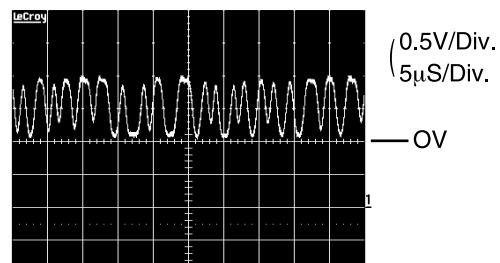


WAVEFORMS OF MAJOR CHECK POINT

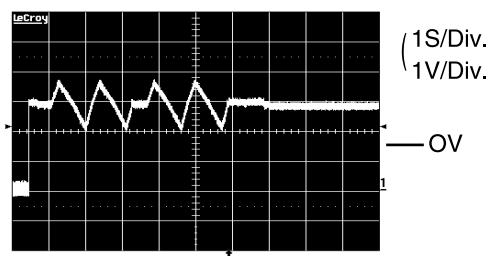
1. HF signal (RF signal) waveform (IC501 pin4) during normal play



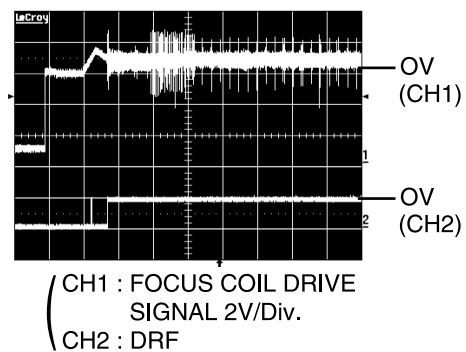
2. EFM signal (IC501 pin 3) waveform during Normal Play



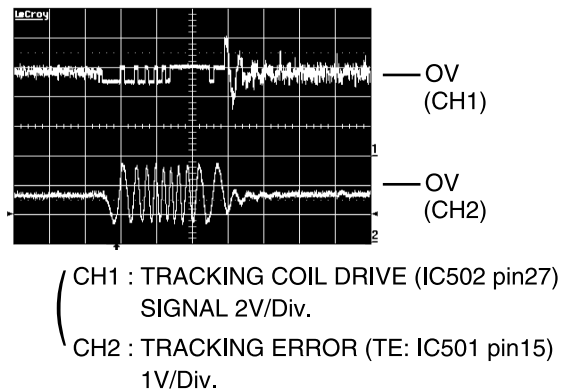
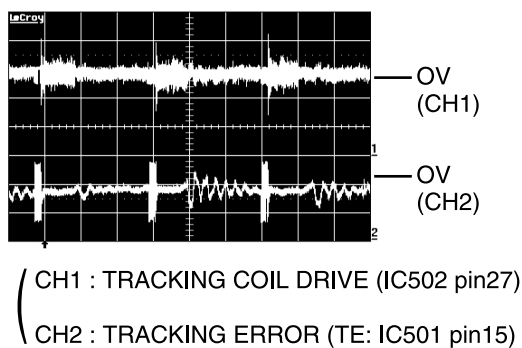
3. Focus coil drive waveform(IC502 pin13)
 - When focus search failed or there is no disc on the tray



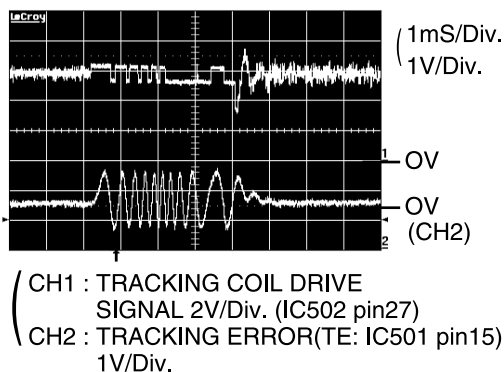
- Focus coil drive waveform(FDO: IC501 pin21) and DRF(IC501 pin67) when focus search is accomplished



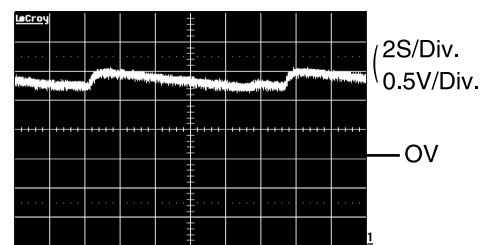
4. Tracking coil drive waveform and TE during track traverse
 - (1) When time division is 20mS/Div.1V/Div.



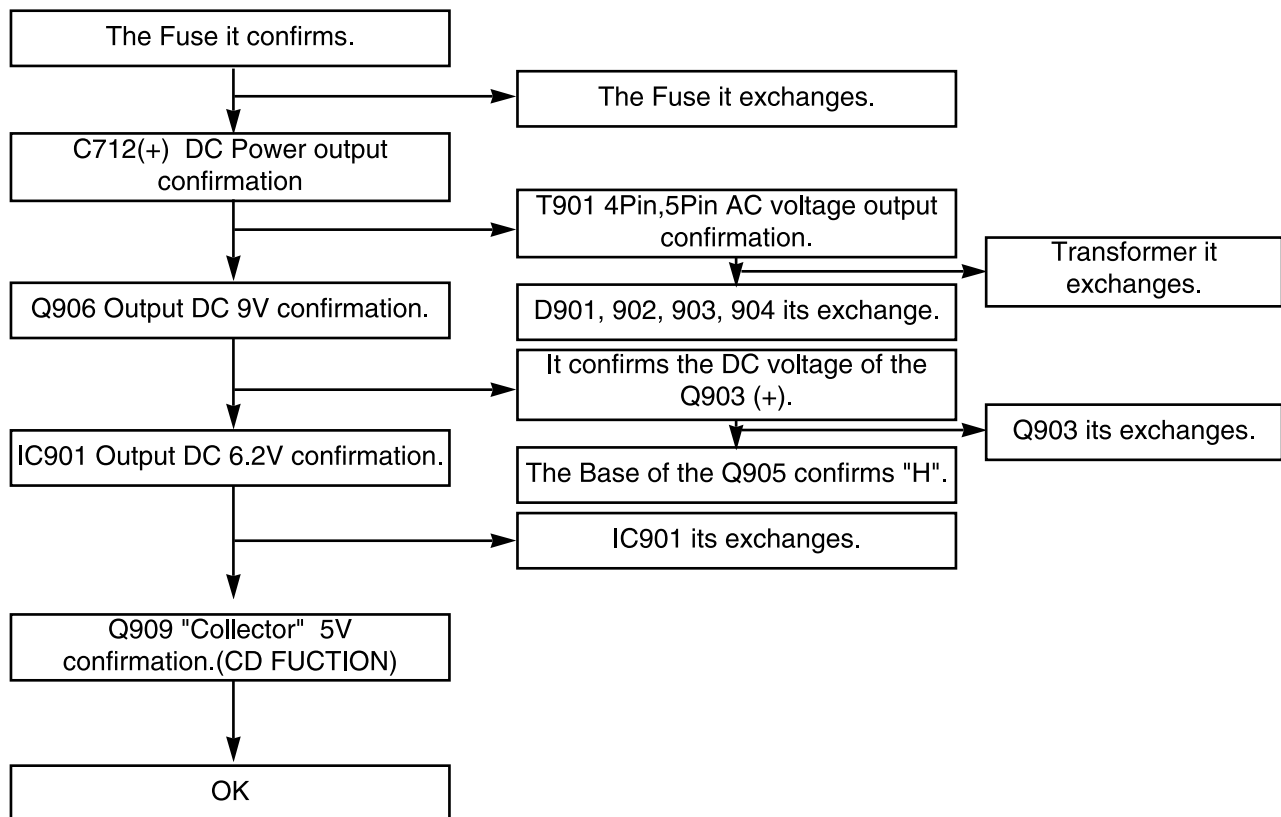
- (3) When time division is 0.5nS/div. (During backward Track Traverse)



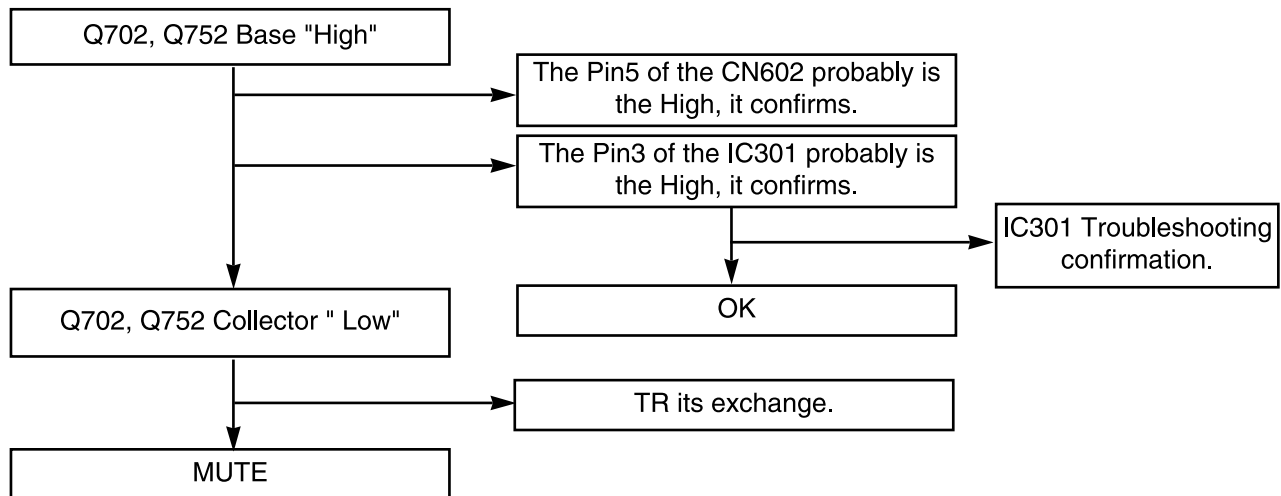
5. Feed motor drive waveform(IC 502 pin18) During normal play



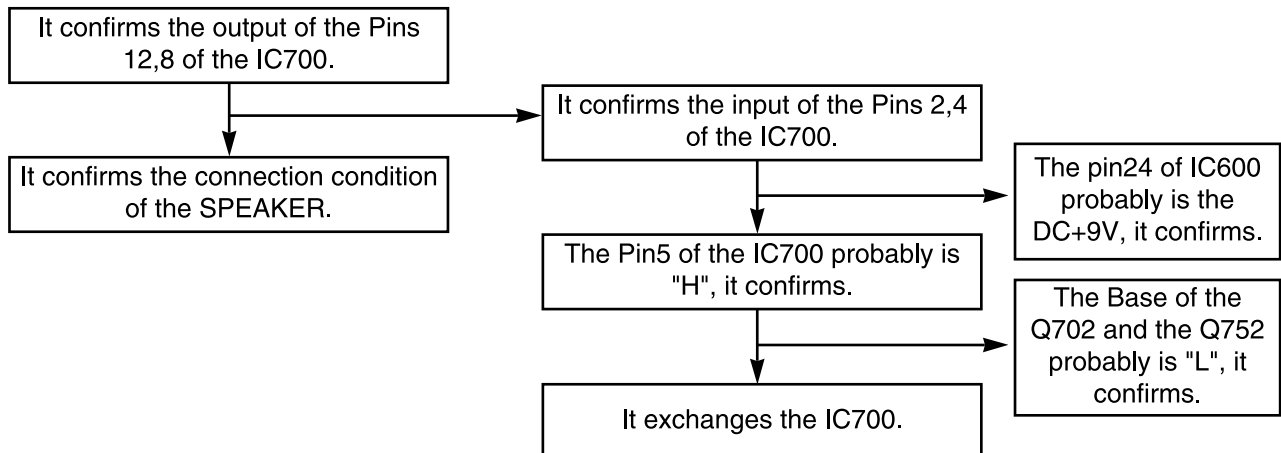
2. POWER



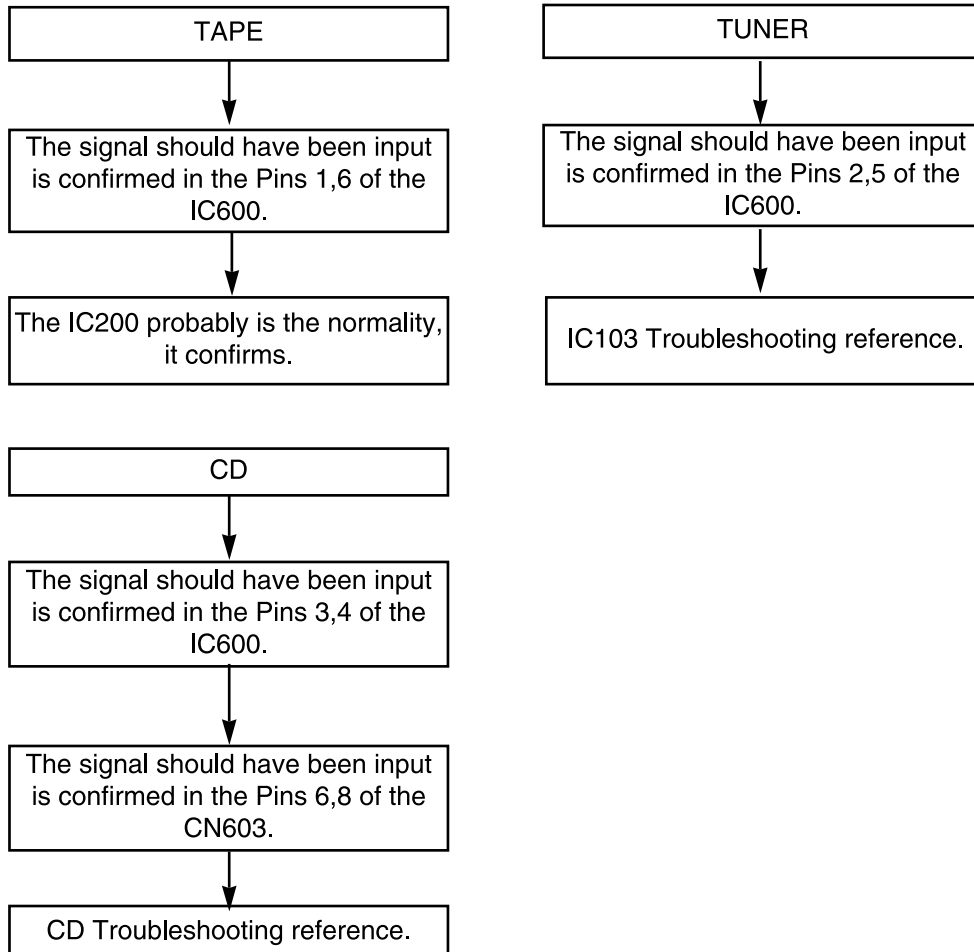
3. MUITING(MUTE CONDITION)



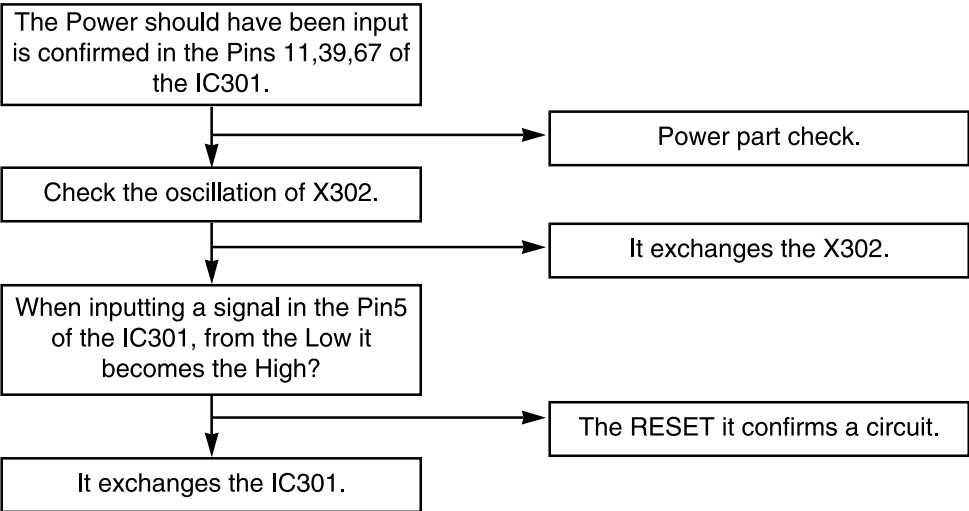
4. IC700(VOICE NOTHING)



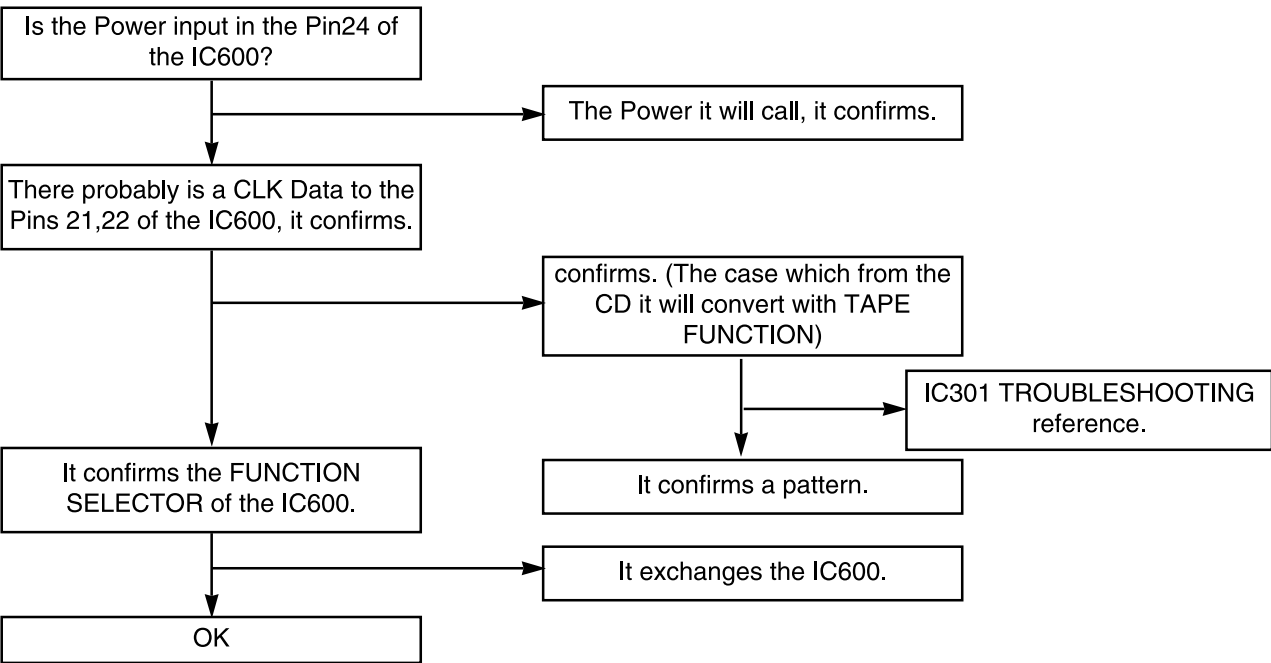
5. FUNCTION MODE AUDIO ABNORMAL



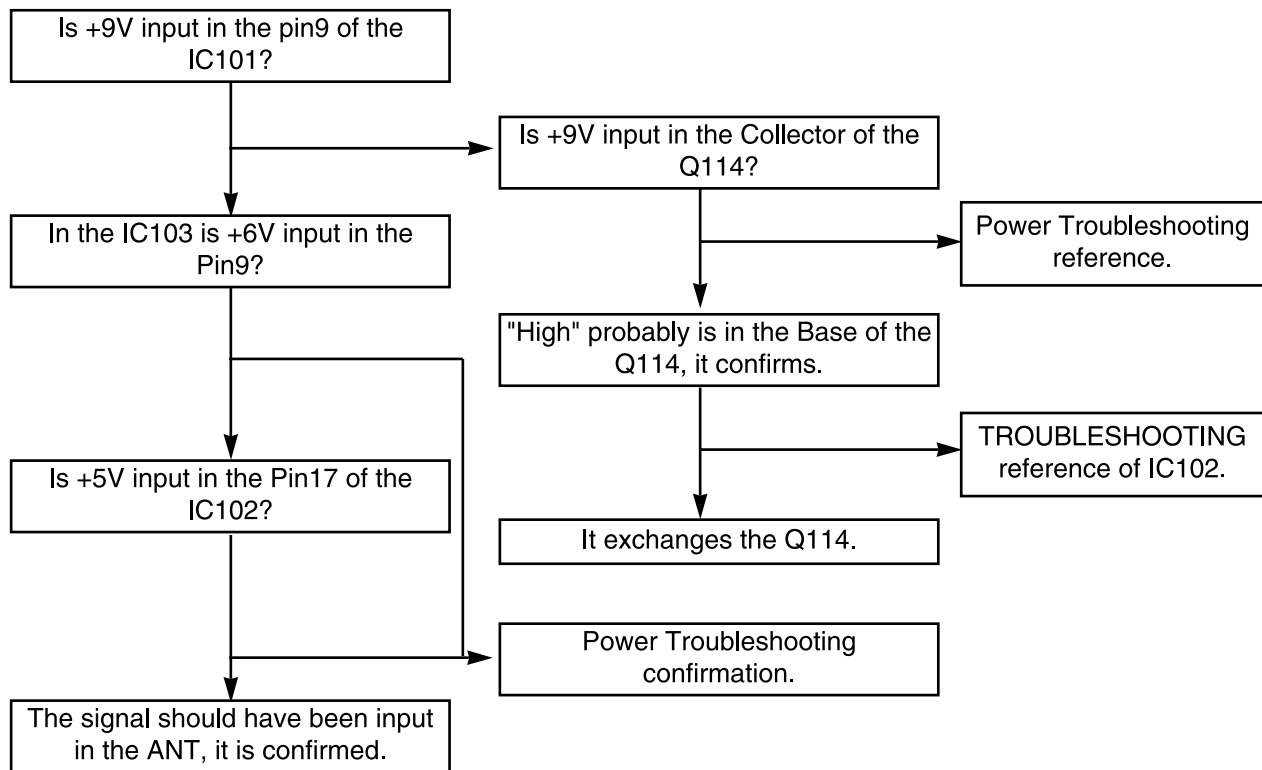
6. IC301 Troubleshooting



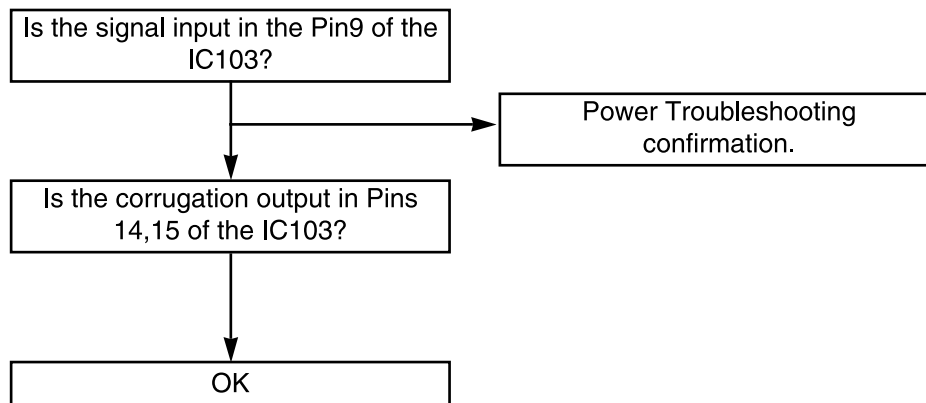
7. IC600 Troubleshooting



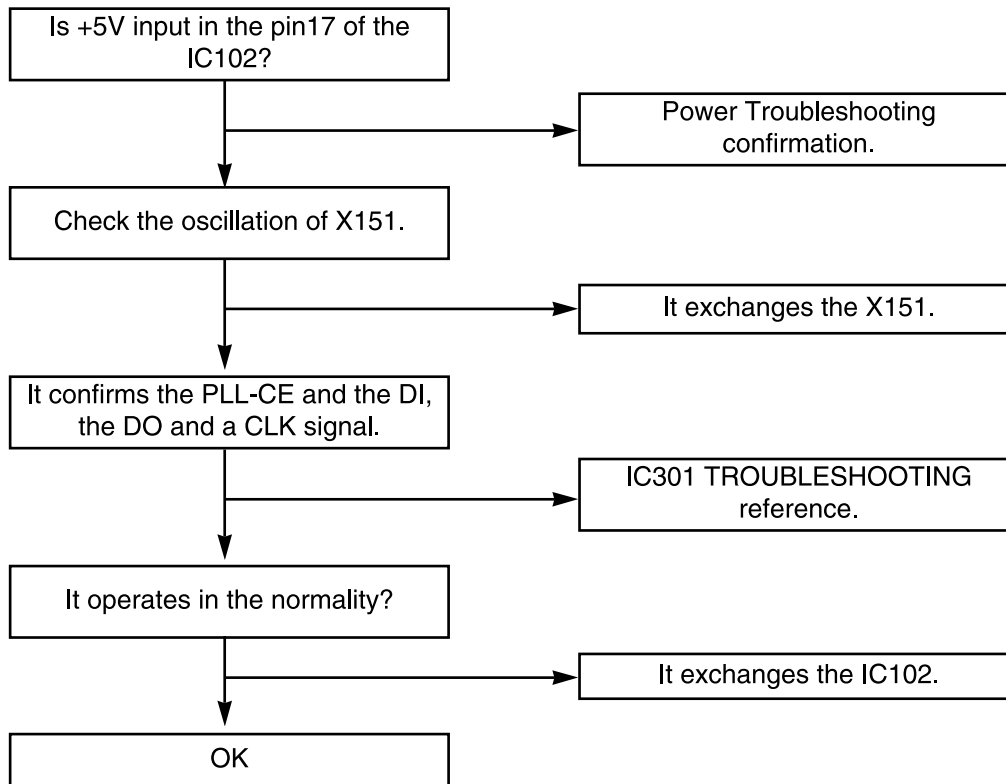
8. TUNER



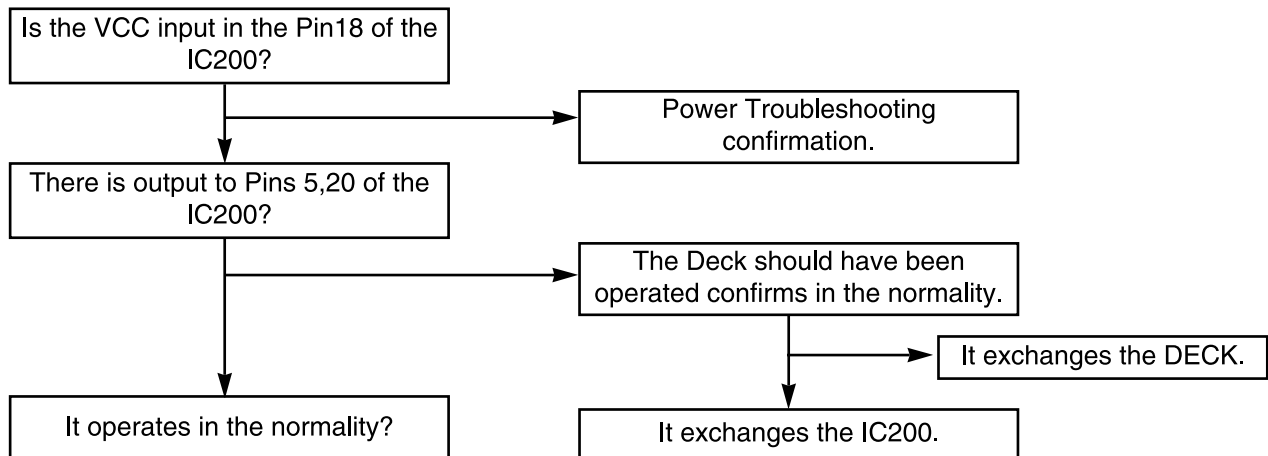
9. IC103 Troubleshooting



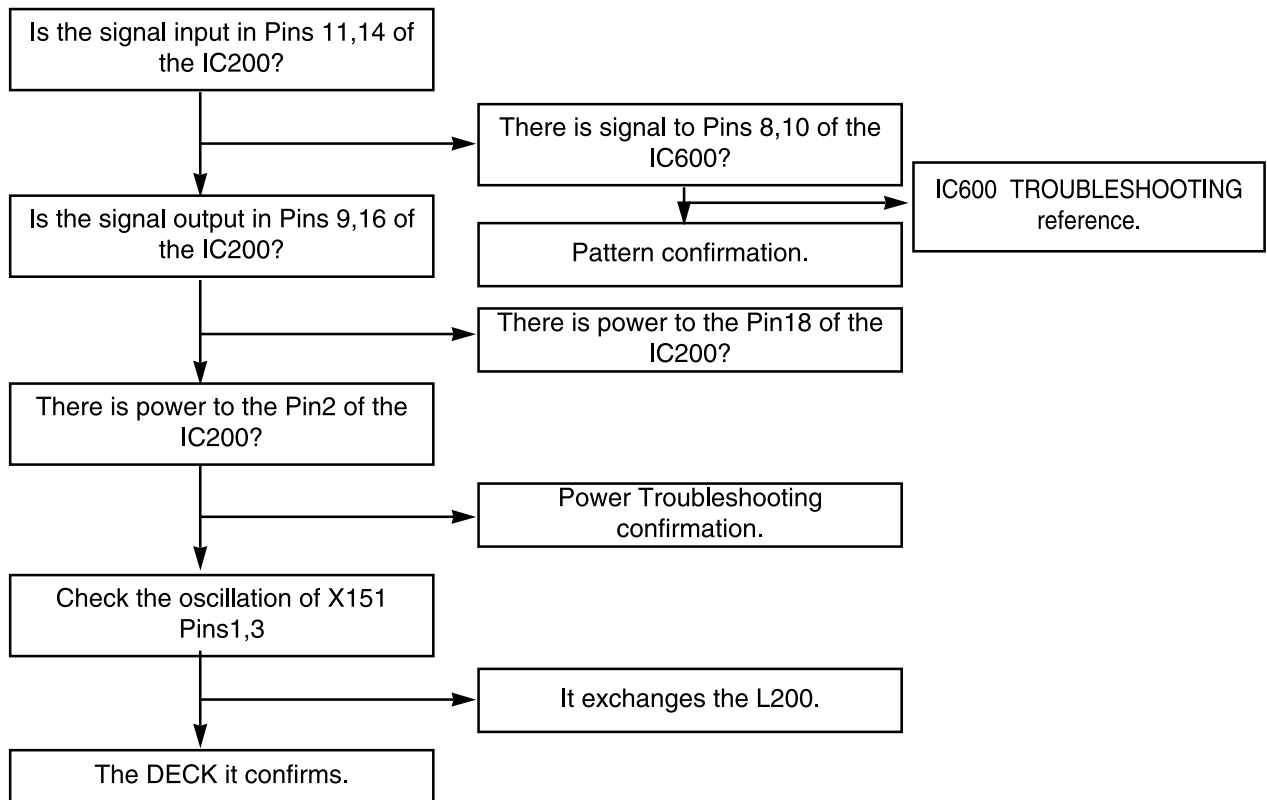
10. IC102 Troubleshooting



11. PLAYBACK



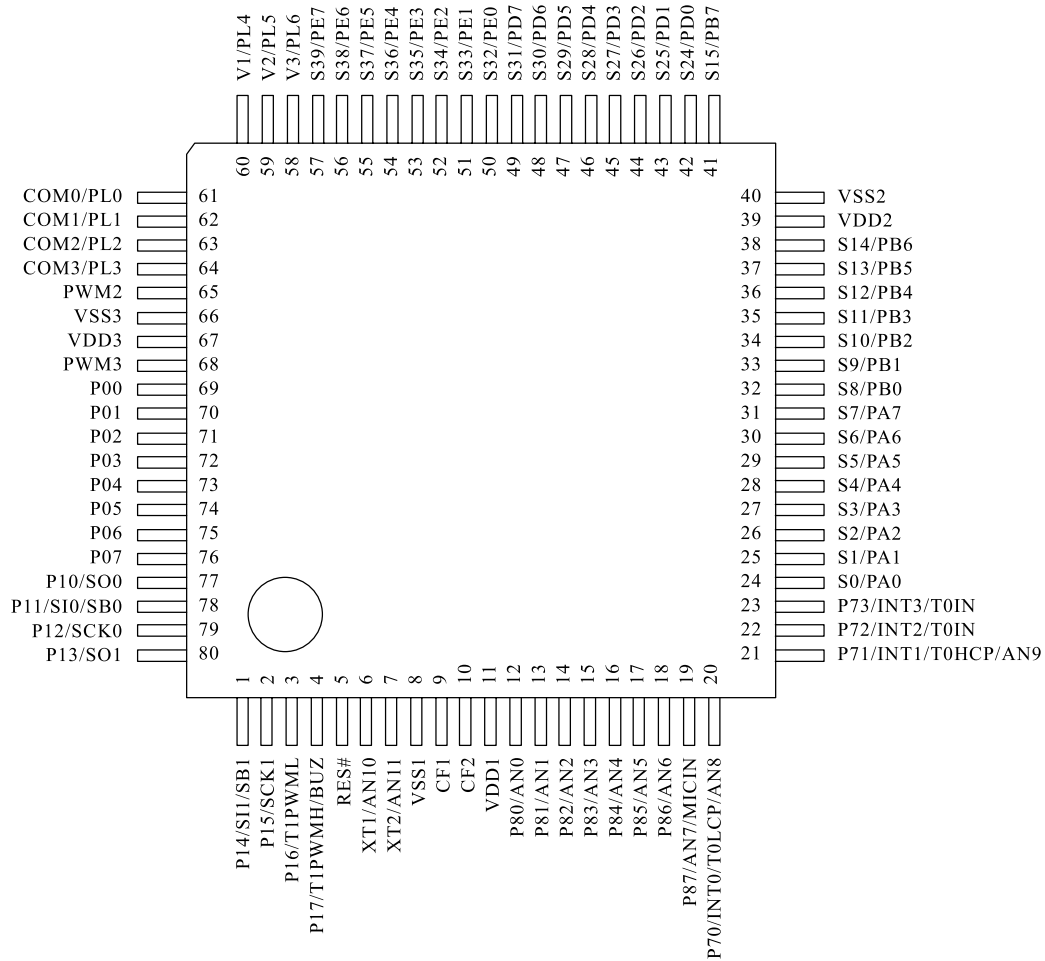
12. REC



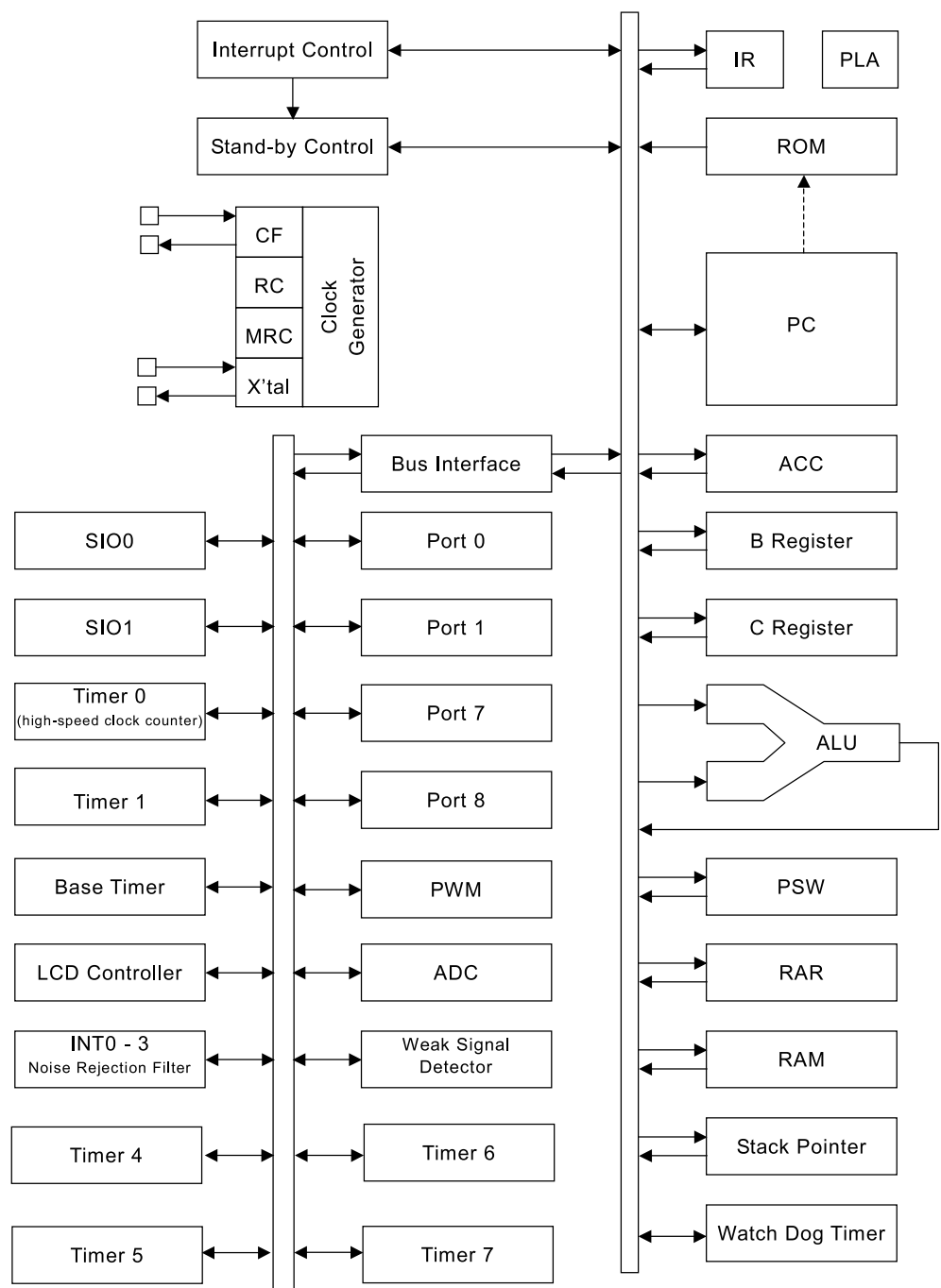
INTERNAL BLOCK DIAGRAM OF ICs

IC301 LC877132A

• Pin Assignment



• **System Block Diagram**



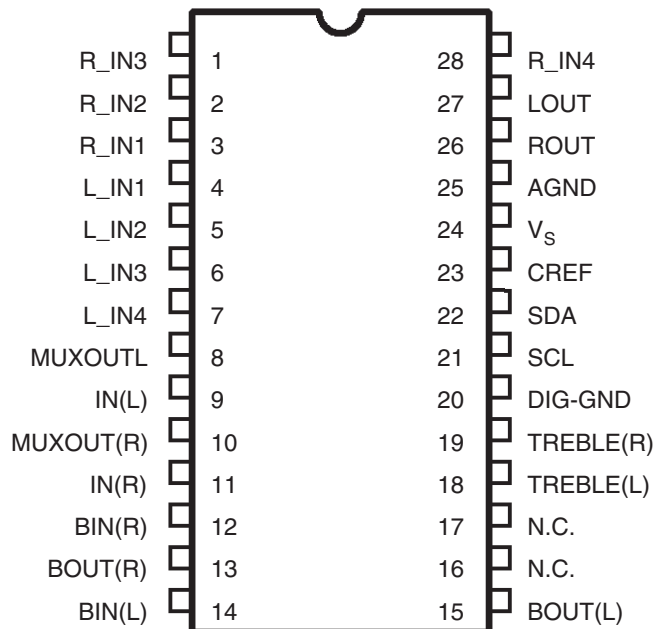
• Pin Assignment

Pin name	I/O	Function	Option																														
VSS1, VSS2,VSS3	-	•Power supply (-)	No																														
VDD1, VDD2 VDD3	-	•Power supply (+)	No																														
PORT0 P00 to P07	I/O	•8bit input/output port •Data direction programmable in nibble units •Use of pull-up resistor can be specified in nibble units •Input for HOLD release •Input for port 0 interrupt •Other pin functions P05:System clock output P06:Timer 6 toggle output P07:Timer 7 toggle output	Yes																														
PORT1 P10 to P17	I/O	•8bit input/output port •Data direction programmable for each bit •Use of pull-up resistor can be specified for each bit individually •Other pin functions P10 SIO0data output P11 SIO0data input or bus input/output P12 SIO0clock input/output P13 SIO1data output P14 SIO1data input or bus input/output P15 SIO1clock input/output P16:Timer 1 PWML output P17:Timer 1 PMWHoutput/Buzzer output	Yes																														
PORT7 P70 to P73	I/O	•4bit Input/output port •Data direction can be specified for each bit •Use of pull-up resistor can be specified for each bit individually •Other functions P70:INT0input/HOLDrelease input/Timer0L capture input/output for watchdog timer P71:INT1input/HOLDrelease input/Timer0H capture input P72:INT2 input/HOLDrelease input/timer 0 event input/Timer0L capture input P73:INT3 input(noise rejection filter attached)/timer 0 event input/Timer0H capture input AD input port: AN8(P70) ,AN9(P71) •Interrupt detection selection <table><tr><td></td><td>Rising</td><td>Falling</td><td>Rising and falling</td><td>H level</td><td>L level</td></tr><tr><td>INT0</td><td>Yes</td><td>Yes</td><td>No</td><td>Yes</td><td>Yes</td></tr><tr><td>INT1</td><td>Yes</td><td>Yes</td><td>No</td><td>Yes</td><td>Yes</td></tr><tr><td>INT2</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td><td>No</td></tr><tr><td>INT3</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td><td>No</td></tr></table>		Rising	Falling	Rising and falling	H level	L level	INT0	Yes	Yes	No	Yes	Yes	INT1	Yes	Yes	No	Yes	Yes	INT2	Yes	Yes	Yes	No	No	INT3	Yes	Yes	Yes	No	No	No
	Rising	Falling	Rising and falling	H level	L level																												
INT0	Yes	Yes	No	Yes	Yes																												
INT1	Yes	Yes	No	Yes	Yes																												
INT2	Yes	Yes	Yes	No	No																												
INT3	Yes	Yes	Yes	No	No																												

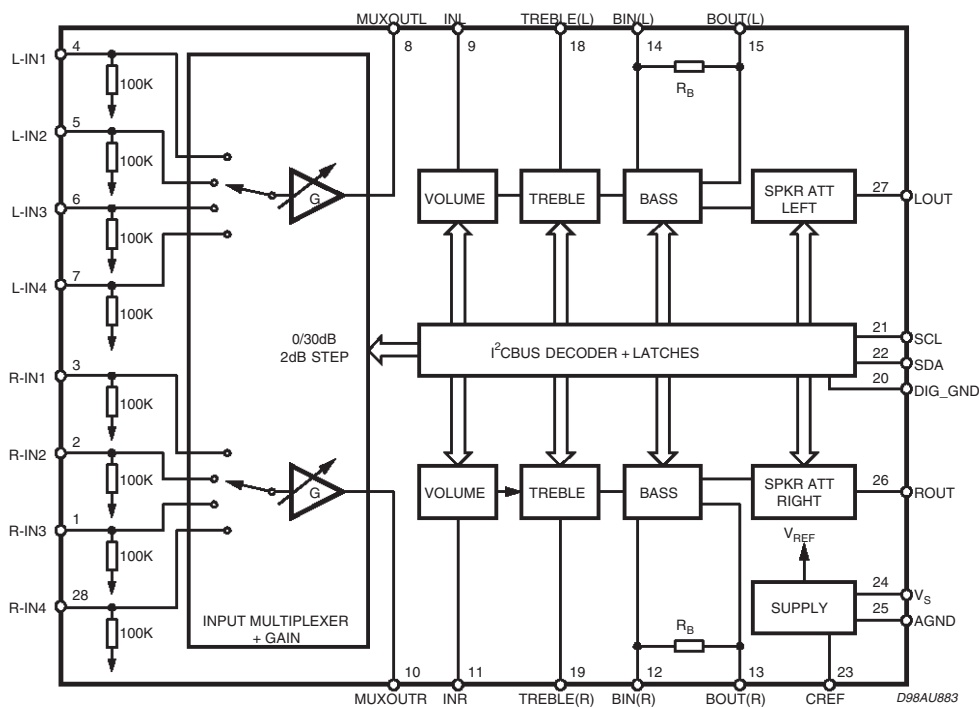
Pin name	I/O	Function description	Option
PORT8 P80 to P87	I/O	<ul style="list-style-type: none"> • 8bit Input/output port • Input/output can be specified for each bit individually • Other functions: AD input port: AN0 to AN7 Small signal detector input port: MICIN (P87) 	No
S0/PA0 to S7/PA7	I/O	<ul style="list-style-type: none"> • Segment output for LCD • Can be used as general purpose input/output port(PA) 	No
S8/PB0 to S15/PB7	I/O	<ul style="list-style-type: none"> • Segment output for LCD • Can be used as general purpose input/output port(PB) 	No
S24 /PD0to S31/PD7	I/O	<ul style="list-style-type: none"> • Segment output for LCD • Can be used as general purpose input/output port(PD) 	No
S32/PE0 to S39/PE7	I/O	<ul style="list-style-type: none"> • Segment output for LCD • Can be used as general purpose input/output port(PE) 	No
COM0/PL0 to COM3/PL3	I/O	<ul style="list-style-type: none"> • Common output for LCD • Can be used as general purpose input port(PL) 	No
V1/PL4 to V3/PL6	I/O	<ul style="list-style-type: none"> • LCD output bias power supply • Can be used as general purpose input port(PL) 	No
PMW2	O	• PMW2 output	No
PMW3	O	• PMW3 output	No
RES	I	Reset terminal	No
XT1	I	<ul style="list-style-type: none"> • Input for 32.768kHz crystal oscillation • Other functions: General purpose input port AD input port: AN10 • When not in use, connect to VDD1 	No
XT2	I/O	<ul style="list-style-type: none"> • Output for 32.768kHz crystal oscillation • Other functions: General purpose input port AD input port: AN11 • When not in use, set to oscillation mode and leave open 	No
CF1	I	Input terminal for ceramic oscillator	No
CF2	O	Output terminal for ceramic oscillator	No

■ IC601 TD7440D

• Pin Assignment

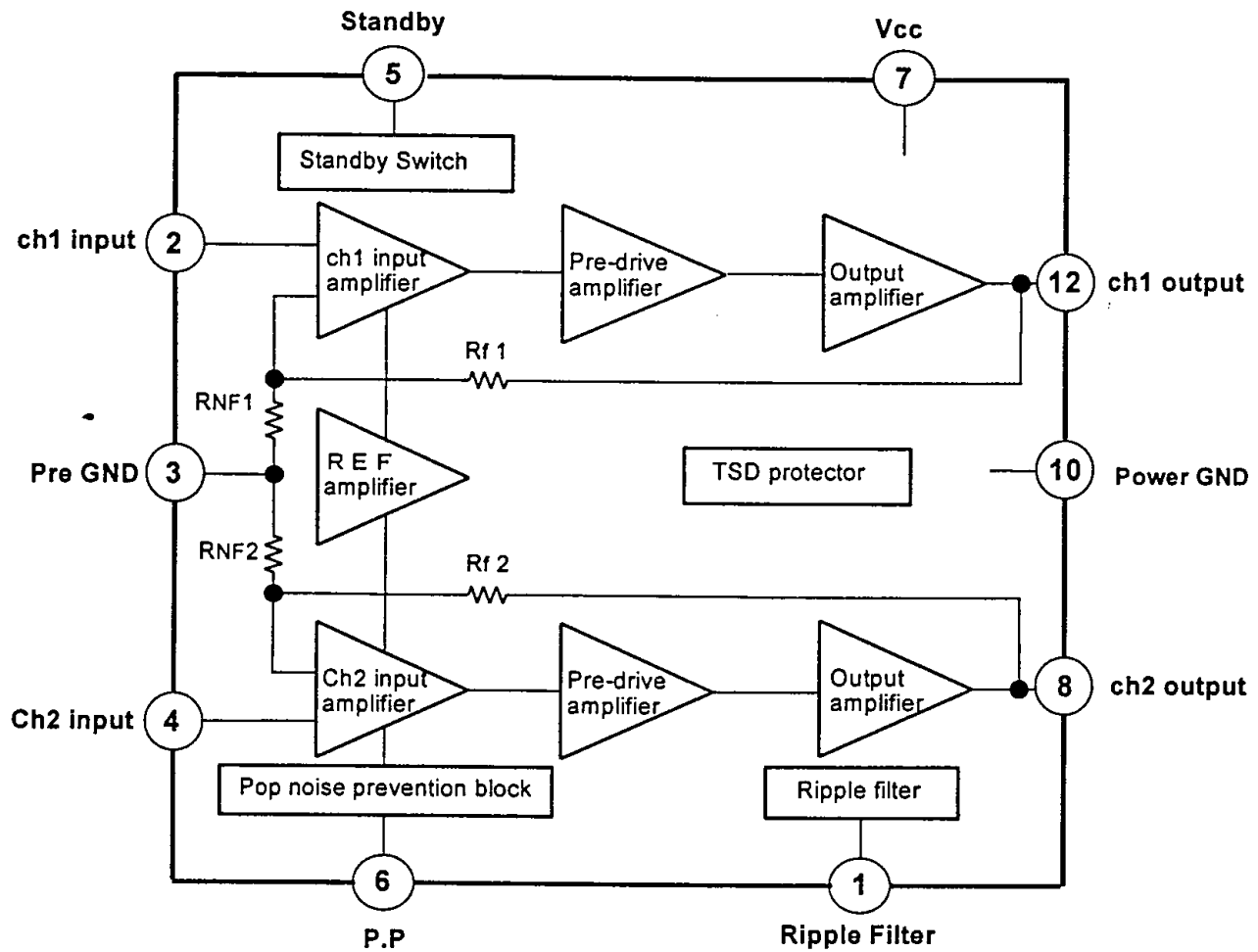


• Block Diagram



■ IC700 LA4631

• Block Diagram



□ VOLTAGE SHEET

• SYSTEM CONTROL PART

1. LC87F67C8A

Pin NO.	Volt	Pin NO.	Volt
1	4.47	41	0
2	4.84	42	2.4
3	4.89	43	2.4
4	0	44	2.4
5	4.94	45	2.4
6	1.69	46	2.4
7	2.58	47	2.4
8	0	48	0
9	2.46	49	0
10	2.55	50	2.4
11	4.95	51	0
12	4.96	52	2.4
13	4.97	53	2.4
14	2.35	54	2.4
15	0.27	55	2.4
16	4.76	56	0
17	0	57	0
18	0.2	58	0
19		59	0
20	0.43	60	0
21	4.94	61	2.5
22	4.46	62	2.5
23	4.82	63	2.5
24	4.93	64	2.5
25	4.81	65	0
26	0	66	0
27	0	67	4.4
28	0	68	0
29	0	69	5
30	5	70	5
31	0	71	0
32	5	72	0
33	0	73	4.93
34	0	74	4.93
35	0	75	4.3
36	2.4	76	0
37	0	77	4.36
38	0	78	0
39	2.4	79	0
40	5	80	0

2. FUNCTION IC TDA7440

Pin NO.	Volt
1	4.06
2	4.06
3	4.06
4	4.06
5	4.06
6	4.06
7	4.09
8	4.08
9	4.09
10	4.09
11	4.09
12	4.09
13	4.09
14	4.09
15	4.09
16	0
17	0
18	4.08
19	4.08
20	0
21	5
22	5
23	4.07
24	8018
25	0
26	3.37
27	3.37
28	0

• DECK PART.

3. PB/RP SWITCH IC KIA6289N

Pin NO.	Volt
1	0
2	0
3	1.25
4	1.32
5	1.32
6	2.5
7	0
8	0
9	2
10	1.26
11	0
12	0
13	0.84
14	0
15	1.26
16	2
17	1.43
18	7.35
19	1.43
20	1.32
21	1.32
22	1.25
23	0
24	0
24	0

4. MAIN POWER IC LA4631

Pin NO.	Volt
1	8.36
2	1.53
3	0
4	1.53
5	2.35
6	11.33
7	16.85
8	8.3
9	0

5. FM FRONT END IC KIA6058S

Pin NO.	Volt
1	0.9
2	1.66
3	5.84
4	1.63
5	0
6	5.83
7	5.2
8	5.85
9	5.93

6. AM/FM PLL FOR TUNER IC LC72131D

Pin NO.	Volt	Pin NO.	Volt
1		1 2	0
2	0	13	1.2
3	0	14	0
4	0	15	2.52
5	0	16	2.52
6	5.24	17	5.2
7	3	18	0
8	0	19	0
9	0	20	0
10	0	21	0
11	5.81	22	

• CD PART

7. AM/FM MPX IC LA1831

Pin NO.	Volt
1	2.13
2	6.3
3	2.13
4	2.13
5	0
6	5.82
7	5.5
8	3.97
9	5.82
10	0
11	4.54
12	4.56
13	4.74
14	1
15	1
16	2.1
17	2.7
18	1.74
19	1.5
20	1.6
21	2.1
22	2.1
23	6.3
24	4.3

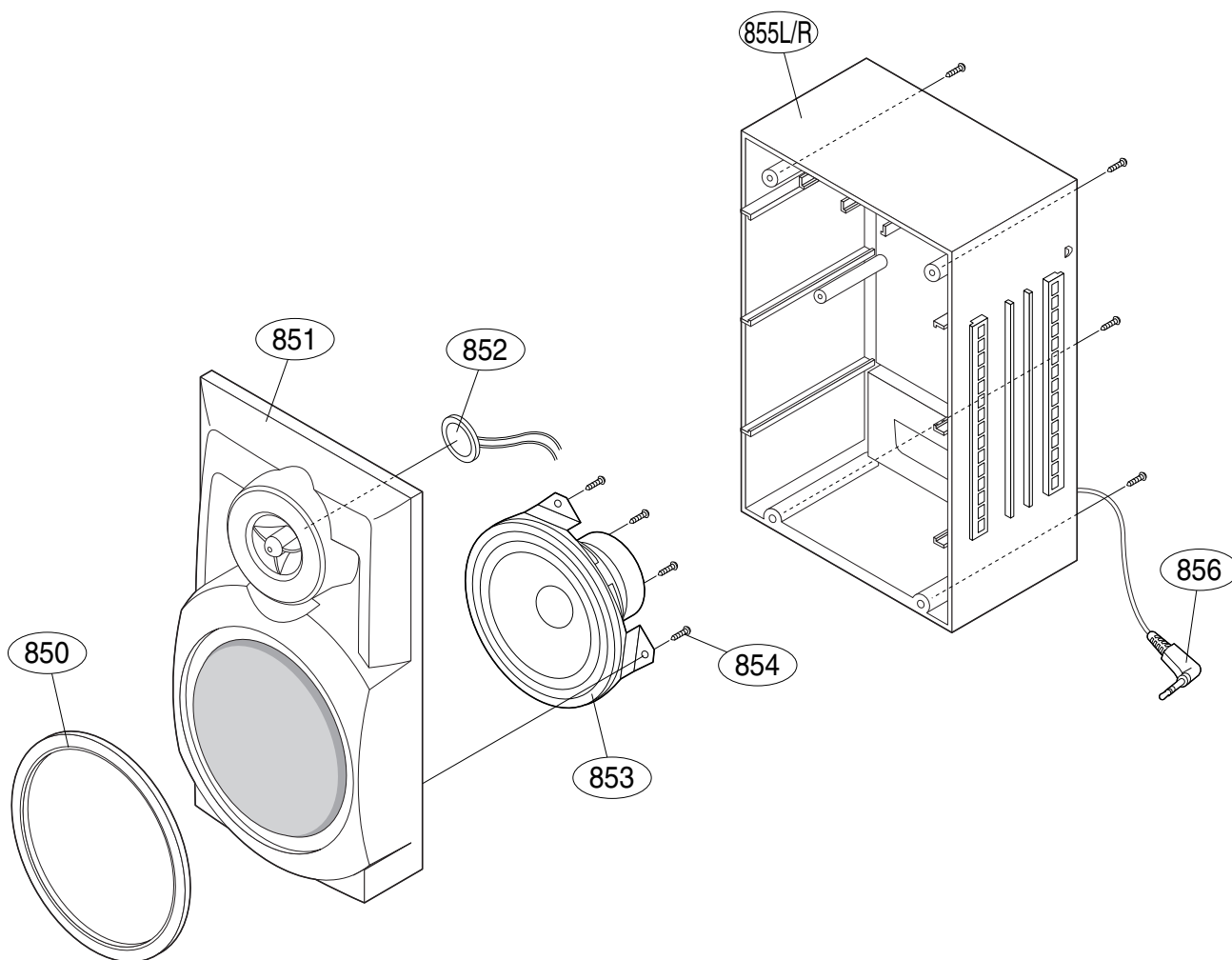
8. LC78646E CD DSP

Pin NO.	Volt	Pin NO.	Volt
1	1.62	41	3.3
2	1.04	42	1.65
3	1.63	43	0
4	1.65	44	0
5	3.31	45	1.65
6	0	46	3.3
7	1.75	47	3.3
8	1.75	48	1.37
9	1.69	49	1.6
10	1.69	50	1.66
11	1.67	51	0
12	1.65	52	0
13	1.63	53	0
14	1.6	54	0
15	1.6	55	0
16	1.26	56	0
17	1.23	57	0
18	3.3	58	1.65
19	0	59	1.69
20	1.64	60	1.11
21	1.42	61	0.4
22	1.83	62	4.85
23	1.73	63	4.85
24	1.65	64	4.3
25	3.3	65	4.26
26	0	66	4.87
27	0	67	4.33
28	0	68	4.33
29	0	69	0
30	3.3	70	0
31	0	71	0
32	0	72	0
33	0	73	1.38
34	0	74	1.38
35	1.65	75	0
36	1.75	76	1
37	0	77	3.3
38	3.3	78	2.55
39	1.67	79	0.2
40	0	80	2.25

9. FAN8039BD DRIVER IC

Pin NO.	Volt
1	2.65
2	3.15
3	1.67
4	0.3
5	0
6	0.3
7	0
8	0
9	1.69
	0
11	0
12	1.46
13	2.25
14	3.3
15	0
16	2.75
17	2.92
18	2.82
19	2.82
20	1.69
21	6.15
22	3.14
23	1.67
24	6.15
25	1.67
26	2.86
27	2.89
28	0

SECTION 4. SPEAKER SECTION



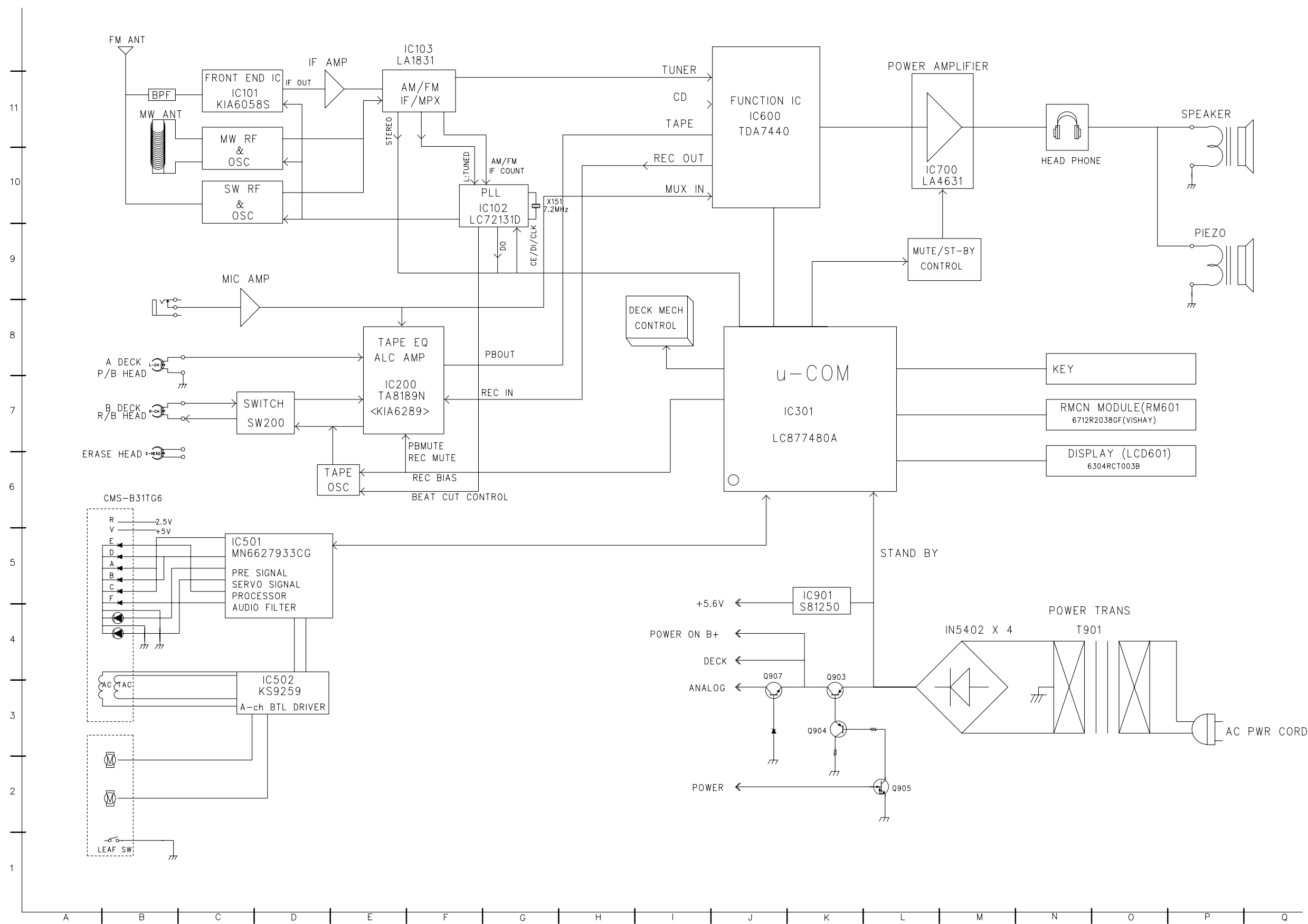
NSP : Non SVC Parts

RUN DATE : 27- MAY - 04

LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
A800	3111RCC164A	CASE ASSEMBLY	LPX-930 SPK ASSY L	LEFT
A801	3111RCC166B	CASE ASSEMBLY	LPX-930 SPK ASSY R	RIGHT
850	3508RCC003B	DECORATION	LPX-930 MOLD SPK FRONT(CR)	NSP
851	3110RCC009B	CASE	LPX-930 MOLD SPK FRONT(964)	NSP
852	541-186E	SPEAKER,TWEETER	PIEZO 20(Y) FLAT,WIRE 150MM SA	
852	541-186E	SPEAKER,TWEETER	PIEZO 20(Y) FLAT,WIRE 150MM SA	
853	6400SCSE01J	SPEAKER,FULLRANGE	CW-40SB07L-1 SAMMI FULL-RANGE	
853	6400SCSE01J	SPEAKER,FULLRANGE	CW-40SB07L-1 SAMMI FULL-RANGE	
854	353-025K	SCREW,DRAWING	TAPTITE 3X12 FZMY	NSP
855L	3110SCM045Z	CASE	Audio SPK REAR L (CD-964) GRAY	
855R	3110SCM045Y	CASE	Audio SPK REAR R (CD-964) GRAY	
856	6852SCK001A	CORD,A/V	SPEAKER, EHD-1-0107 HITACHI SH	
856	6852SCK001A	CORD,A/V	SPEAKER, EHD-1-0107 HITACHI SH	

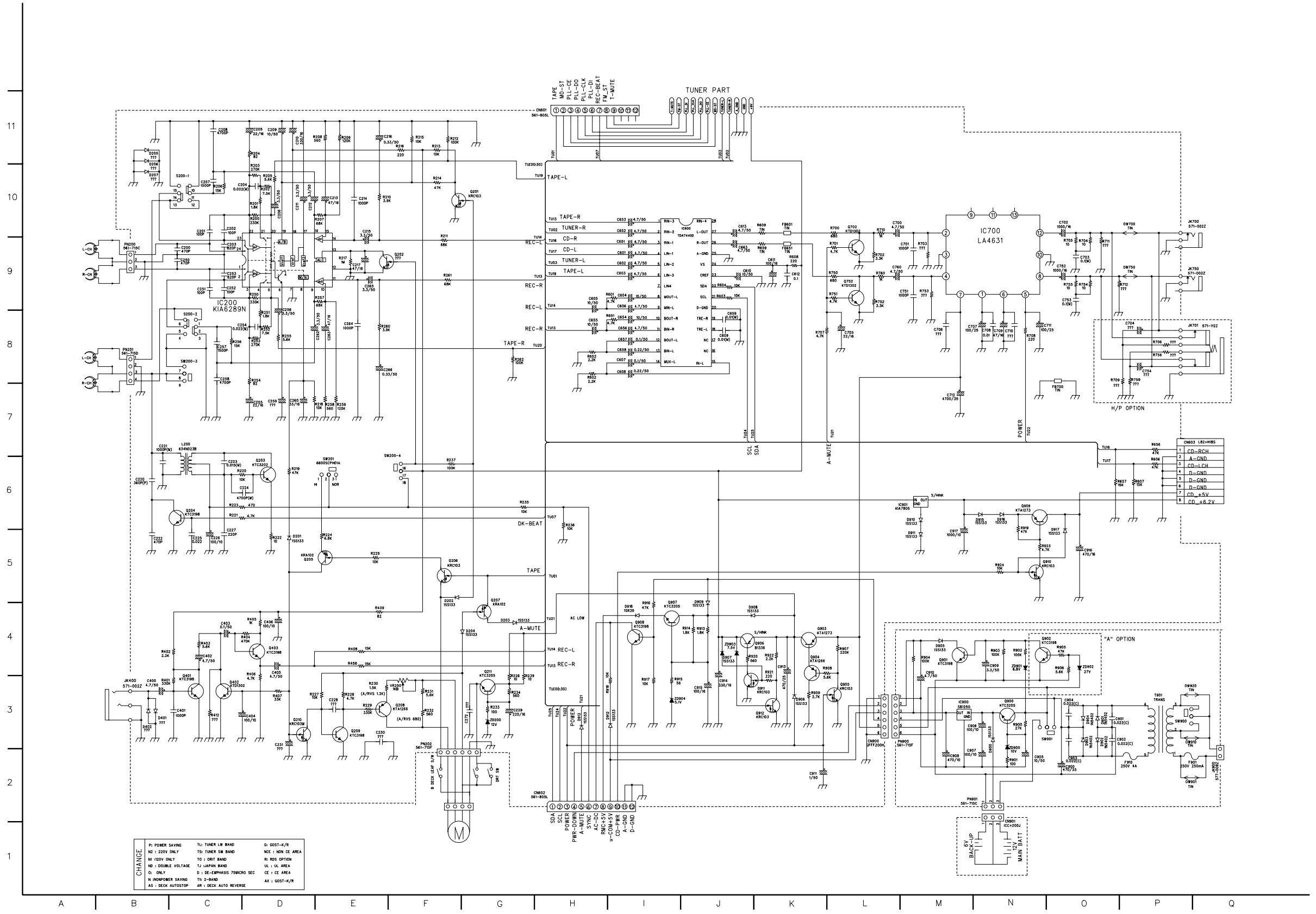
MEMO

BLOCK DIAGRAM

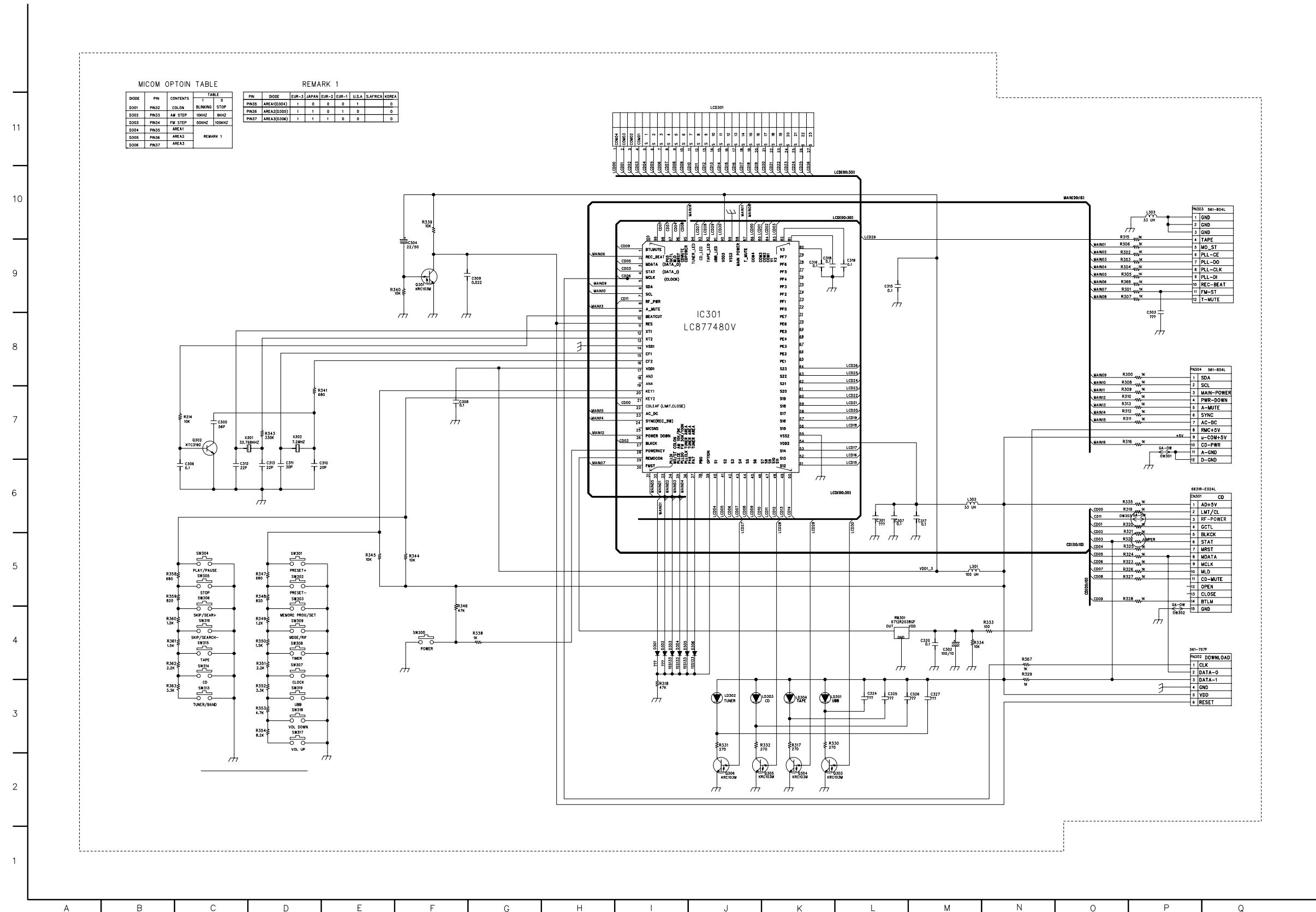


SCHEMATIC DIAGRAMS

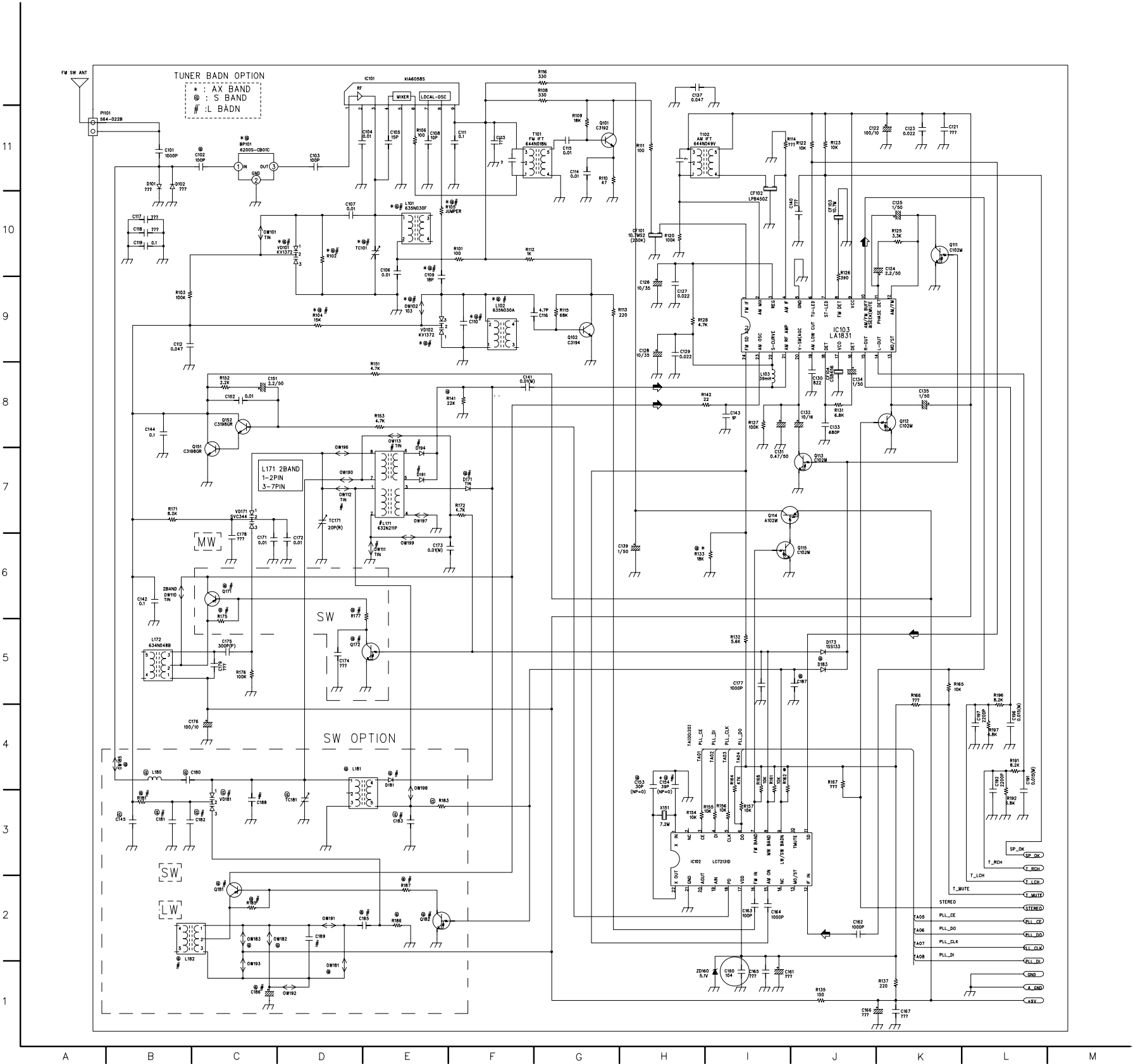
1. MAIN SCHEMATIC DIAGRAM



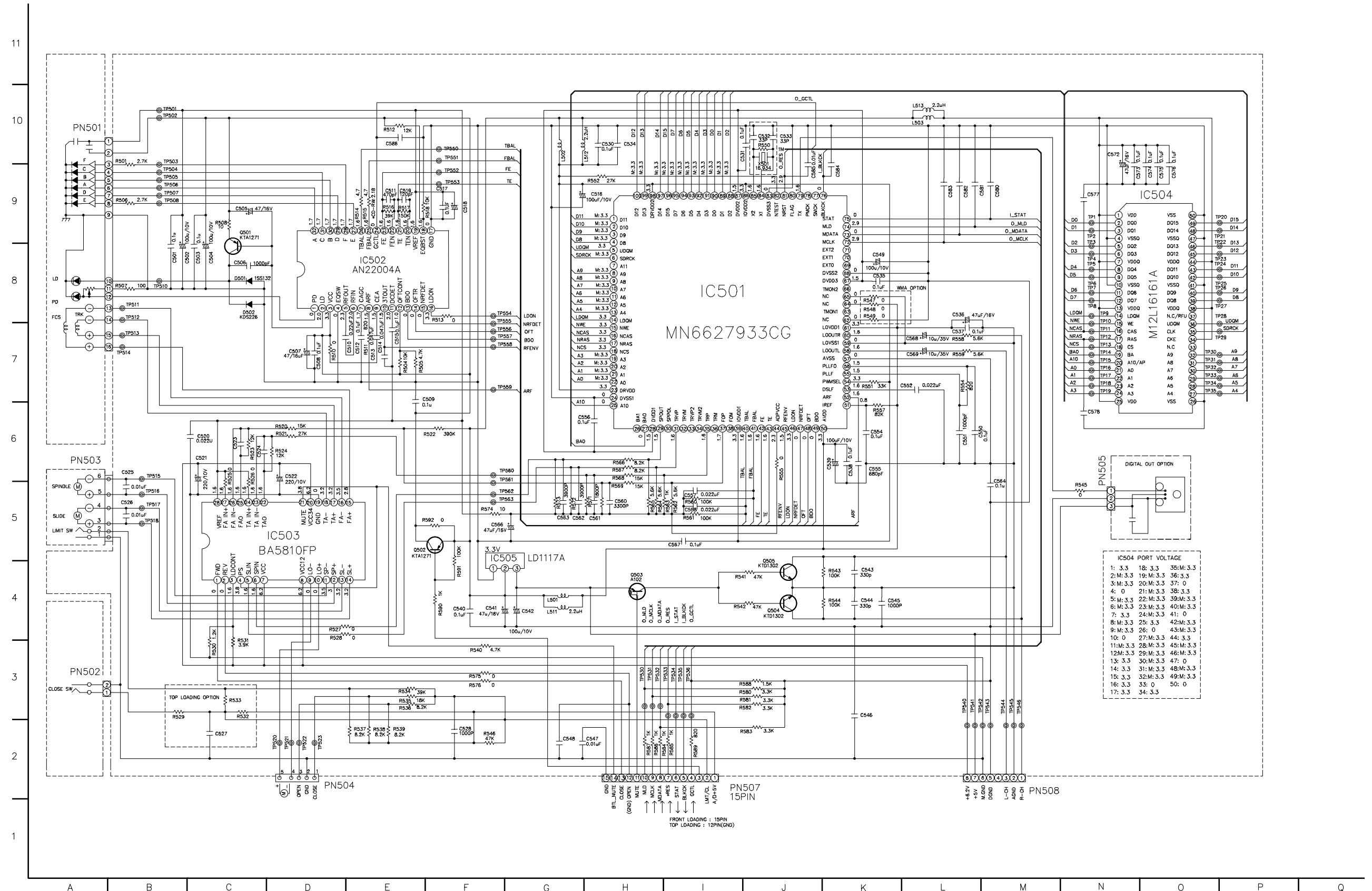
2. FRONT/MICOM SCHEMATIC DIAGRAM



3. TUNER SCHEMATIC DIAGRAM

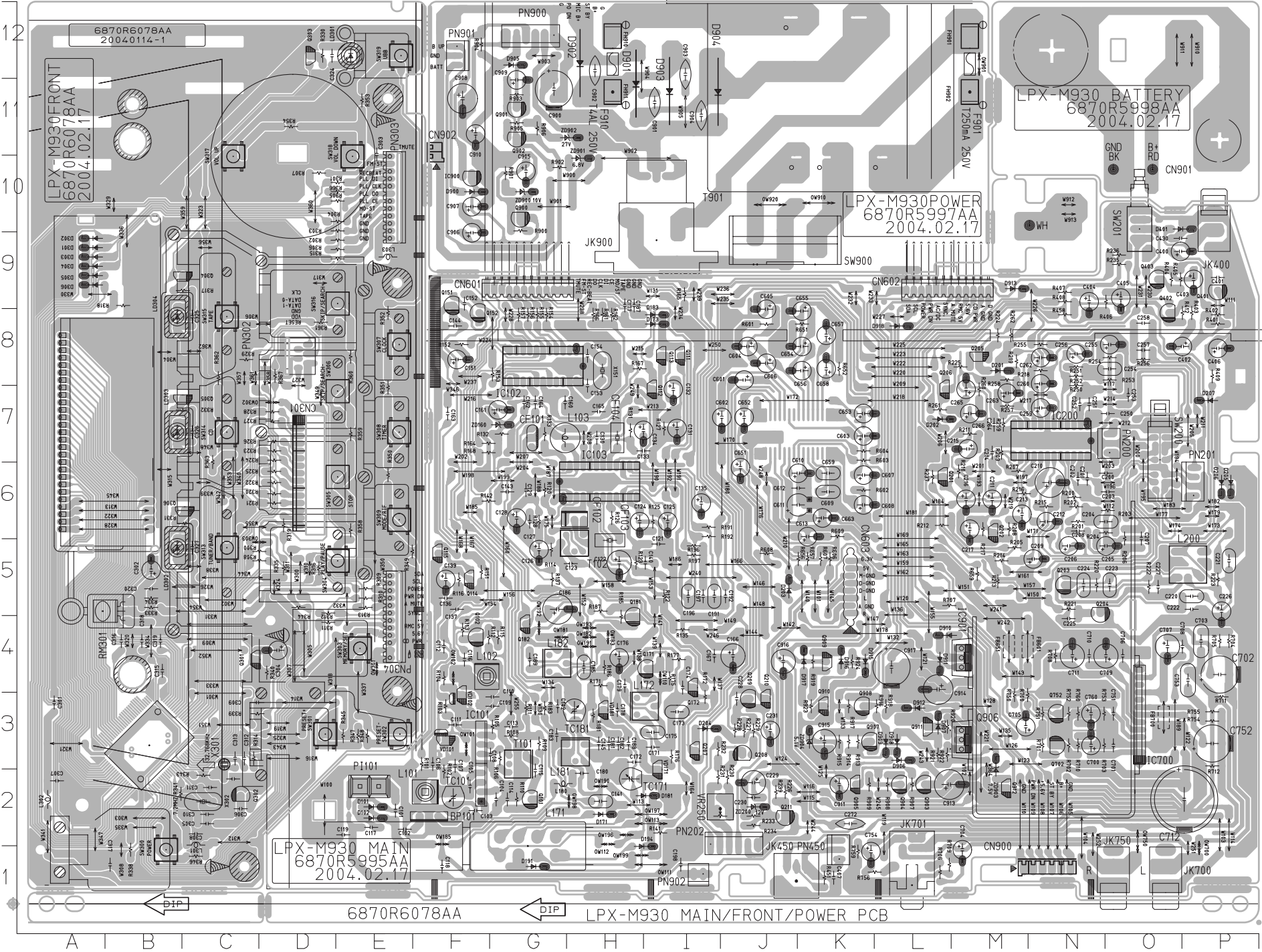


4. CDP SCHEMATIC DIAGRAM



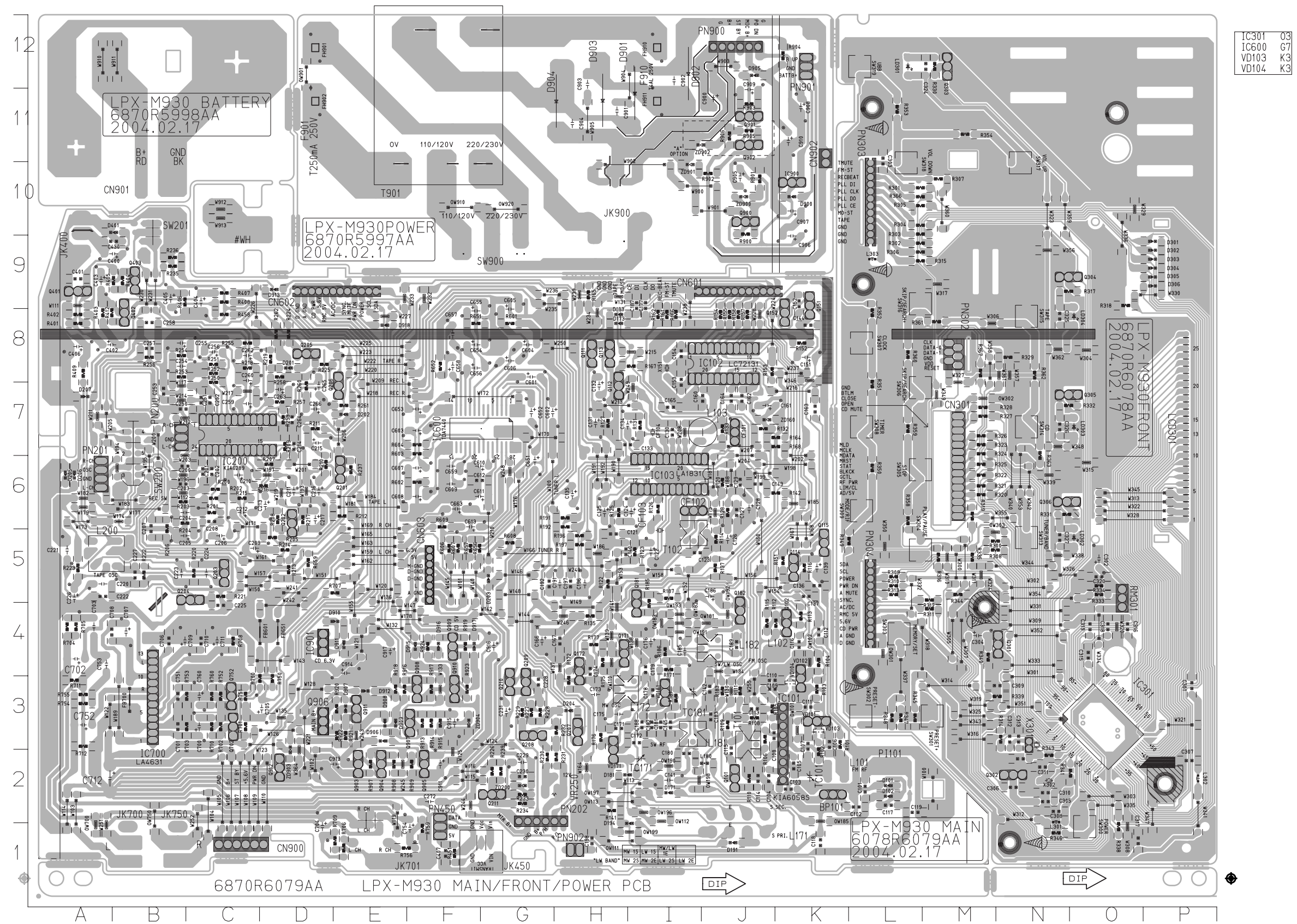
PRINTED CIRCUIT DIAGRAM

1. MAIN P.C. DIAGRAM (COMPONENT SIDE)

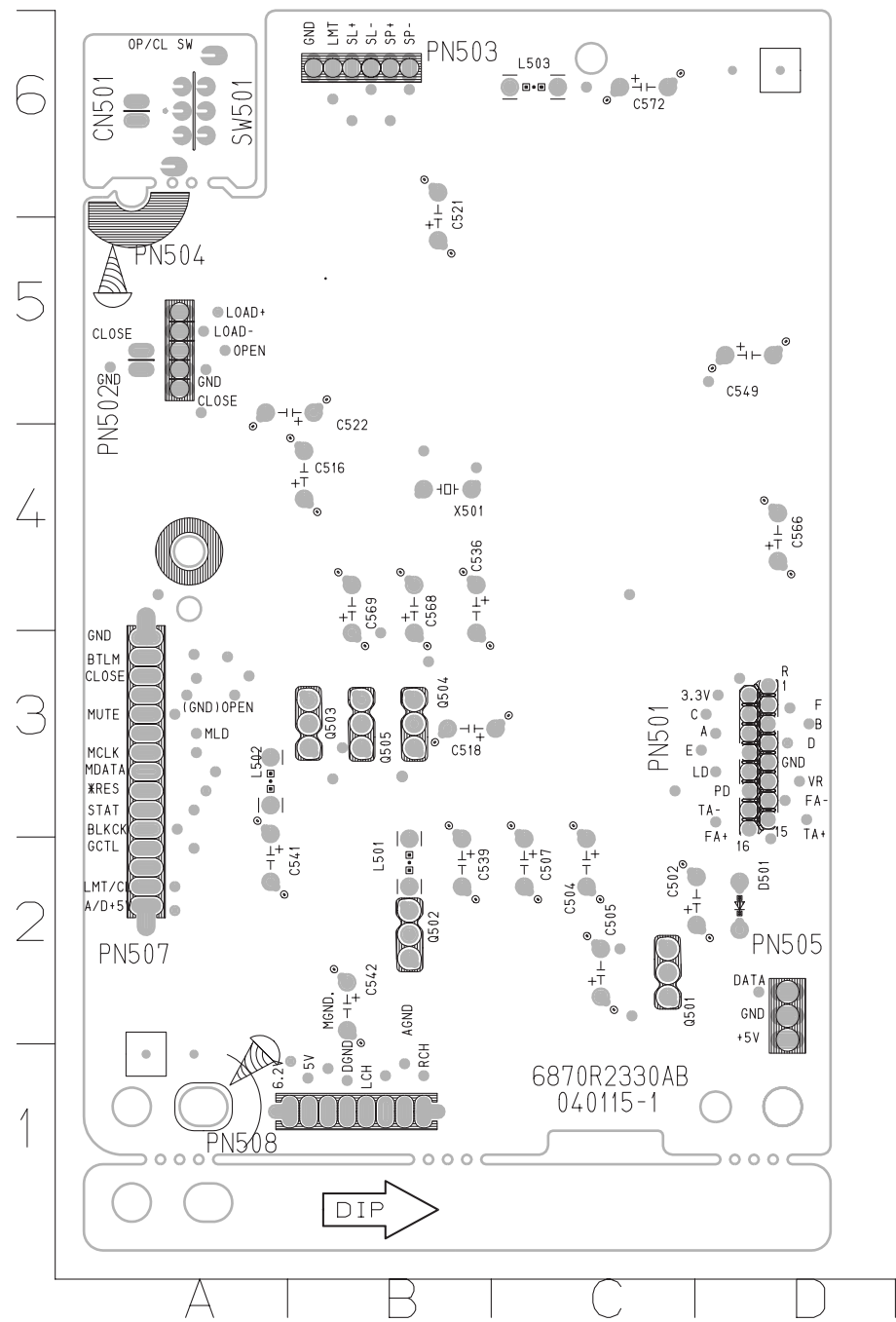


BP101	F2	C192	J5	C401	P9	D101	E2	LD302	B5	Q900	G10	R205	M5	R328	D7	R755	P3
C101	E2	C196	I5	C402	P8	D102	E2	LD303	B7	Q901	G11	R206	O5	R329	C8	R756	L1
C102	E2	C197	I5	C403	P9	D171	H2	LD304	B8	Q902	G11	R207	M6	R330	D12	R759	K1
C103	F2	C198	I1	C404	N9	D173	I9	OW101	F3	Q903	L2	R208	M6	R331	C6	R760	N3
C104	F2	C200	O6	C405	O9	D181	I2	OW102	F4	Q904	L2	R209	M7	R332	C7	R900	G10
C105	F2	C201	N6	C406	P8	D183	I8	OW110	I4	Q905	K2	R210	M6	R333	B5	R901	G10
C106	F3	C202	N6	C407	K1	D191	G1	OW111	I1	Q906	M3	R211	M7	R334	B5	R902	G10
C107	F3	C203	O6	C601	J8	D194	H1	OW112	H2	Q907	K3	R212	L6	R335	D5	R903	G11
C108	G3	C204	O6	C602	J7	D201	M8	OW113	I2	Q908	K3	R213	M5	R338	B1	R904	F12
C109	G3	C205	O5	C603	K7	D202	L7	OW181	G4	Q909	K4	R214	M5	R339	C3	R905	G11
C110	G3	C206	N5	C604	J8	D203	J5	OW182	H4	Q910	K3	R215	N6	R340	D4	R906	G11
C111	F3	C207	O5	C605	J8	D204	I3	OW183	H4	Q911	L3	R216	M6	R341	B2	R907	L2
C112	F4	C208	N6	C606	J8	D205	P6	OW185	F2	Q912	M2	R217	M6	R343	C2	R908	L2
C113	G3	C209	N5	C607	K6	D206	P6	OW190	H2	R101	F3	R218	N8	R344	D5	R909	K2
C114	G2	C210	N6	C608	K6	D207	P7	OW191	H4	R102	F2	R219	N8	R345	E3	R913	K3
C115	G2	C211	N6	C609	K6	D301	A9	OW192	G4	R103	F3	R220	N5	R346	C1	R914	K3
C116	F4	C212	N6	C610	K6	D302	A9	OW193	H4	R104	F4	R221	N5	R347	E3	R915	K3
C117	E2	C213	M6	C611	K6	D303	A9	OW196	H2	R105	G3	R222	O5	R348	E3	R916	L3
C118	F1	C214	M7	C612	K6	D304	A9	OW197	I2	R106	G3	R223	P5	R349	E5	R917	K3
C119	E2	C215	M7	C613	K6	D305	A9	OW198	H2	R108	G3	R224	M8	R350	E6	R918	L3
C121	I5	C216	M6	C651	J6	D306	A9	OW199	H1	R109	G3	R225	M8	R351	E7	R919	K4
C122	H5	C217	M6	C652	J7	D401	O10	OW301	E4	R110	G2	R226	J2	R352	E8	R920	L3
C123	H5	C220	P5	C653	K7	D402	O9	OW302	D7	R111	G3	R227	J3	R353	E11	R921	L3
C124	H6	C221	P5	C654	K8	D900	F10	OW303	D5	R112	F4	R228	J3	R354	D11	R922	L3
C125	I6	C222	P5	C655	K8	D901	H11	OW700	P1	R113	F4	R229	J3	R358	E6	R923	K3
C126	G5	C223	O5	C656	K8	D902	H12	OW750	O2	R114	G5	R230	J2	R359	E7	R924	K4
C127	G6	C224	N5	C657	K8	D903	I11	OW901	M12	R115	G4	R231	I2	R360	E8	RM301	A5
C128	G6	C225	N4	C658	K8	D904	I11	OW910	K10	R116	F5	R232	I3	R361	D8	SW200	O7
C129	G6	C226	P5	C659	K6	D905	G12	OW920	J10	R120	G6	R233	J2	R362	C6	SW201	O10
C130	H7	C227	O5	C663	K6	D906	L3	P1101	E2	R122	I5	R234	J2	R363	C6	SW300	B1
C131	I7	C228	J3	C700	N3	D907	L3	PN200	O7	R123	H5	R235	O9	R366	E10	SW301	D3
C132	I7	C229	J2	C701	O3	D908	L3	PN201	P6	R125	I6	R236	O9	R367	D8	SW302	E3
C133	I7	C230	J2	C702	P4	D909	L3	PN202	I2	R126	H6	R237	L6	R401	P8	SW303	E4
C134	I7	C231	J3	C703	P4	D910	L4	PN302	D8	R127	I7	R239	J2	R402	P8	SW304	E5
C135	I6	C250	O7	C704	M1	D911	L4	PN303	E10	R128	G6	R250	N7	R403	P8	SW305	E6
C136	F5	C251	N7	C705	M3	D912	L3	PN304	E5	R131	H7	R251	N8	R404	O9	SW306	E7
C137	F5	C252	N7	C706	O4	D913	M9	PN450	K1	R132	G7	R252	N8	R405	O9	SW307	E8
C139	F5	C253	O7	C707	O4	D915	K4	PN900	G12	R133	G7	R253	O8	R406	O9	SW308	E7
C140	I5	C254	O8	C708	P4	D916	K4	PN901	F12	R135	I4	R254	O8	R407	N9	SW309	E6
C141	H2	C255	O8	C709	O4	D917	K4	PN902	I1	R137	G5	R255	N8	R408	N9	SW313	C5
C142	G3	C256	N8	C710	N4	D918	L8	Q101	G2	R141	I2	R256	O8	R409	P8	SW314	C7
C143	G6	C257	O8	C711	N4	FB601	M4	Q102	F4	R142	F6	R257	M7	R412	P8	SW315	C8
C144	F8	C258	O8	C712	P2	FB651	M4	Q111	I8	R151	F5	R258	M8	R451	K1	SW316	E9
C145	H3	C259	N7	C751	O3	FB700	O3	Q112	I7	R152	F8	R259	M7	R458	N8	SW317	C10
C151	F8	C260	N8	C752	P3	FB901	M12	Q113	I8	R153	G8	R260	M7	R601	J8	SW318	E10
C152	F9	C262	N8	C753	P4	FB902	M11	Q114	F5	R154	G8	R261	L7	R602	K6	SW319	E12
C153	H7	C263	M7	C754	K1	FB910	H12	Q115	F5	R155	G8	R262	M8	R603	K7	SW900	J9
C154	H8	C264	M7	C760	N3	FB911	H11	Q151	F9	R156	G8	R300	D5	R604	K7	T101	G3
C160	G7	C265	M7	C900	G1	IC101	F2	Q152	F8	R157	G8	R301	E10	R606	K5	T102	H5
C161	G7	C266	M7	C901	I11	IC102	H8	Q171	I4	R161	H8	R302	E9	R607	K5	T901	K11
C162	G7	C272	K2	C902	H12	IC103	G6	Q172	I4	R162	H8	R303	E10	R608	J5	TC101	F2
C163	F7	C301	A3	C903	I12	IC200	N7	Q181	H4	R164	F7	R304	E10	R609	K6	TC171	H2
C164	G7	C302	B5	C904	I11	IC700	O3	Q182	G4	R165	I9	R305	E10	R651	K8	TC181	H3
C165	H7	C303	E1	C905	G10	IC900	F10	Q201	L6	R166	H8	R306	E9	R652	K8	VD101	F3
C166	J4	C304	D4	C906	F9	IC901	M4	Q202	M6	R167	H8	R307	D10	R656	K5	VD102	F3
C167	I4	C305	C2	C907	F10	JK400	P10	Q203	N5	R168	F7	R308	D5	R657	K5	VD171	I2
C171	I3	C306	C2	C908	F11	JK450	J1	Q204	N5	R171	H4	R309	E5	R659	M5	VD181	H3
C172	H3	C307	A2	C909	G11	JK700	O1	Q205	M8	R172	I3	R310	E5	R700	M3	VR250	I2
C173	I3	C308	C2	C910	F11	JK701	L1	Q206	L7	R175	I4	R311	D4	R701	N3	X151	H8
C174	I4	C309	C3	C911	K2	JK750	O1	Q207	I3	R176	I3	R312	D5	R702	N3	X301	C3
C175	I3	C310	C2	C913	L2	JK900	I9	Q208	J3	R177	I4	R313	E5	R703	N3	X302	C2
C176	H4	C311	C2	C914	L4	L101	F2	Q209	J3	R181	H3	R314	C3	R704	P4	ZD160	G7
C177	H9	C312	C3	C915	K3	L102	F4	Q210	J3	R183	G3	R315	E9	R705	P4	ZD200	J2
C178	H3	C313	C3	C916	J4	L103	G7	Q211	J2	R185	H4	R316	D5	R706	L1	ZD900	G10
C179	H4	C315	B4	C917	L4	L171	G1	Q301	C4	R186	H4	R317	C9	R707	L5	ZD901	H10
C180	H2	C316	B4	CF101	G7	L172	I3	Q302	C2	R197	H5	R318	B9	R708	N4	ZD902	H11
C181	H3	C317	B1	CF102	H6	L180	G2	Q303	D12	R191	I6	R319	D6	R709	L1	ZD903	M2
C182	H3	C318	B4	CF103	H5	L181	H3	Q304	C9	R192	I6	R320	D6	R710	N3	ZD904	K3
C183	G3	C319	B4	CF104	H7	L182	G4	Q305	C7	R196	I5	R321	D6	R711	P3		
C185	H4	C320	B5	CN301	D7	L200	P5	Q306	C6	R197	I5	R322	D6	R712	P3		
C186	G5	C324	D12	CN601	F9	L301	C2	Q401	P9	R200	N6	R323	D7	R750	M3		
C187	H9	C325	C8	CN602	L9	L302	A2	Q402	O8	R201	N6	R324	D7	R751	N3		
C188	H3	C326	C7	CN603	K5	L303	E9	Q403	O9	R202	N6	R325	D6	R752	N3		
C189	G4	C327	C5	CN900	M1	LCD301	A7	Q702	N3	R203	O6	R326	D7	R753	N3		
C191	I5	C400	O9	CN902	F10	LD301	E12	Q752	N3	R204	O6	R327	D7	R754	P3		

1. MAIN P.C. DIAGRAM (SOLDER SIDE)

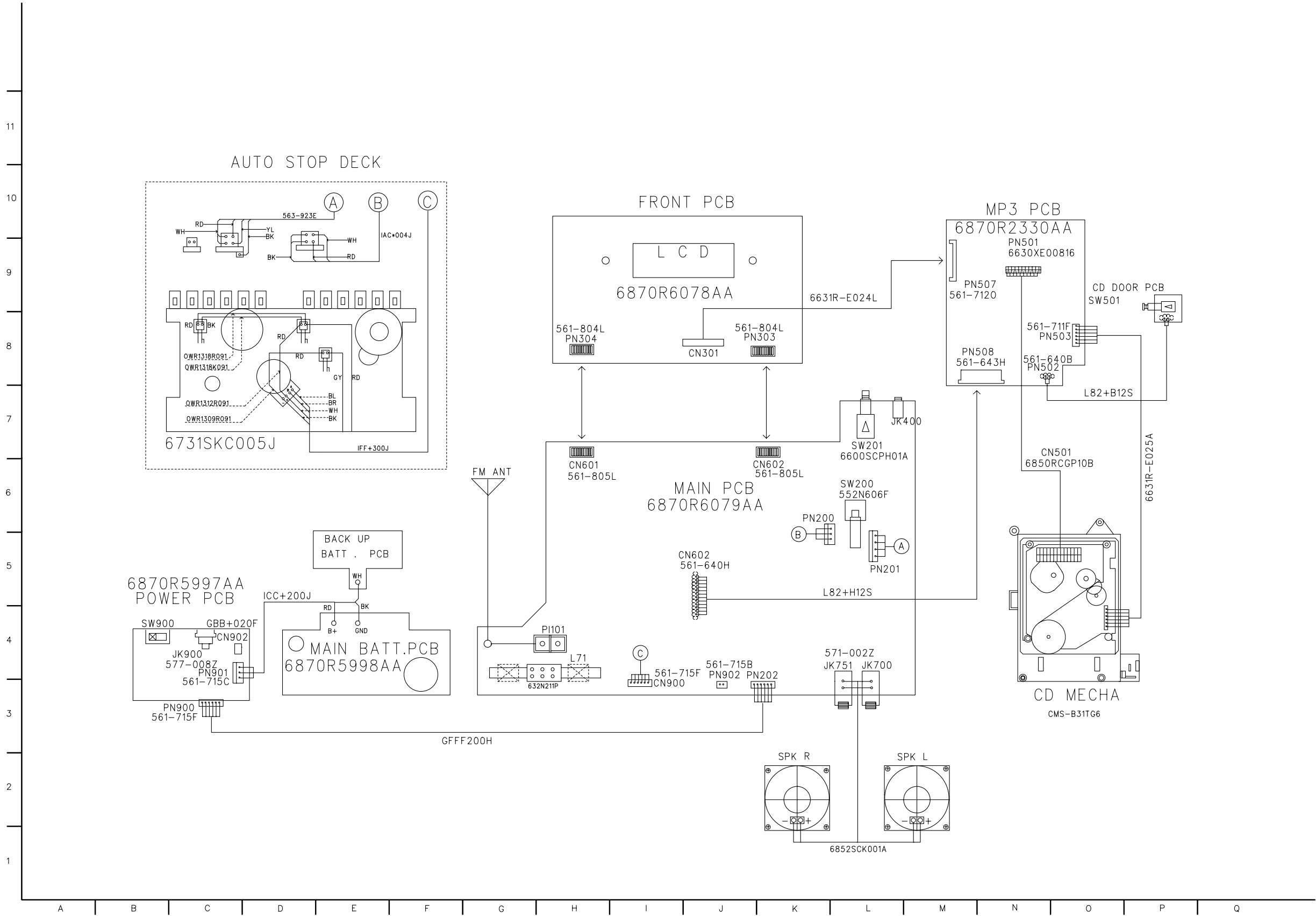


2. CD P.C. DIAGRAM



C501	C2	C541	A2	C586	A2	R517	C3	R559	B3	TP18	D6	TP520	A5
C502	D2	C542	B2	D501	D2	R518	C3	R560	D4	TP19	D6	TP521	A5
C503	D3	C543	B3	D502	D2	R520	B5	R561	D4	TP2	B6	TP522	A5
C504	C2	C544	B3	IC501	C4	R521	B5	R562	D4	TP20	C5	TP523	A5
C505	C2	C545	D4	IC502	C3	R522	B5	R563	D4	TP21	C5	TP530	A3
C506	C2	C546	A2	IC503	B5	R523	B5	R564	D4	TP22	C5	TP531	A4
C507	C2	C547	A4	IC504	C6	R524	B5	R565	D5	TP23	C5	TP532	A4
C508	C3	C548	A3	IC505	B2	R525	B5	R566	D5	TP24	C5	TP533	A4
C509	C3	C549	D5	L501	B2	R526	B5	R567	D5	TP25	C5	TP534	A4
C510	C3	C550	C4	L502	A3	R527	A5	R568	D4	TP26	C5	TP535	C4
C511	C3	C551	C4	L503	C6	R528	A5	R569	D4	TP27	C5	TP536	C3
C512	C3	C552	C4	L511	B2	R529	A4	R571	D4	TP28	C5	TP540	B2
C513	C3	C554	C4	L512	A3	R530	A5	R572	D5	TP29	C5	TP541	B2
C514	C3	C555	C4	L513	C6	R531	A5	R573	D5	TP3	C6	TP542	A2
C515	C3	C556	D5	PN501	D3	R532	A4	R574	D4	TP30	C5	TP543	B1
C516	B4	C557	D4	PN502	A5	R533	A4	R575	A3	TP31	C5	TP544	B1
C517	D3	C558	D4	PN503	B6	R534	A4	R576	A3	TP32	C5	TP545	B2
C518	B3	C560	D4	PN504	A5	R535	A4	R580	A3	TP33	C5	TP546	B2
C519	C3	C561	D4	PN505	D2	R536	A4	R581	A3	TP34	C5	TP550	D4
C520	B5	C562	D4	PN507	A2	R537	A4	R582	A3	TP35	C5	TP551	D3
C521	B6	C563	D5	PN508	B1	R538	A4	R583	A3	TP4	B6	TP552	C3
C522	B5	C564	C4	Q501	C2	R539	A4	R584	A3	TP5	C6	TP553	C3
C523	B5	C566	D4	Q502	B2	R540	A3	R585	A3	TP501	D4	TP554	D4
C524	B5	C567	C3	Q503	B3	R541	B3	R586	A3	TP502	C3	TP555	C3
C525	B6	C568	B4	Q504	B3	R542	B3	R587	A3	TP503	C3	TP556	C3
C526	B6	C569	B4	Q505	B3	R543	B3	R588	A2	TP504	C3	TP557	D4
C527	A4	C572	C6	R501	D2	R544	B3	R589	A2	TP505	C3	TP558	C3
C528	A4	C573	C6	R504	C3	R545	B4	R590	A2	TP506	C2	TP559	C3
C530	B4	C574	C6	R505	C3	R546	A4	R591	B2	TP507	C2	TP560	B5
C531	B4	C575	D6	R506	D3	R547	C4	R592	B2	TP508	D2	TP561	B5
C532	B4	C576	C6	R507	D2	R548	C4	TP1	C6	TP510	D2	TP562	A5
C533	B4	C577	C6	R508	C2	R549	C4	TP10	C5	TP511	B6	TP563	A5
C534	C5	C578	C6	R510	C3	R550	B4	TP11	C5	TP512	B3	TP6	C5
C535	C4	C580	C4	R511	C3	R551	C4	TP12	D5	TP513	D5	TP7	C5
C536	B4	C581	C4	R512	C3	R552	B4	TP13	D6	TP514	B6	TP8	C5
C537	C3	C582	C4	R513	C3	R554	C4	TP14	C6	TP515	B6	TP9	C5
C538	D4	C583	C4	R514	C3	R555	D4	TP15	C6	TP516	A5	X501	B4
C539	B2	C584	B4	R515	C3	R557	C4	TP16	D6	TP517	A6		
C540	B2	C585	B4	R516	C3	R558	B3	TP17	D6	TP518	B6		

❑ WIRING DIAGRAM



SECTION 3. EXPLODED VIEWS

CABINET, MAIN FRAME AND AUDIO DECK SECTION

NOTE) Refer to "SECTION 5 REPLACEMENT PARTS LIST" in order to look for the part number of each part.

