

SERVICE

MANUAL

S T E R E O
TUNER

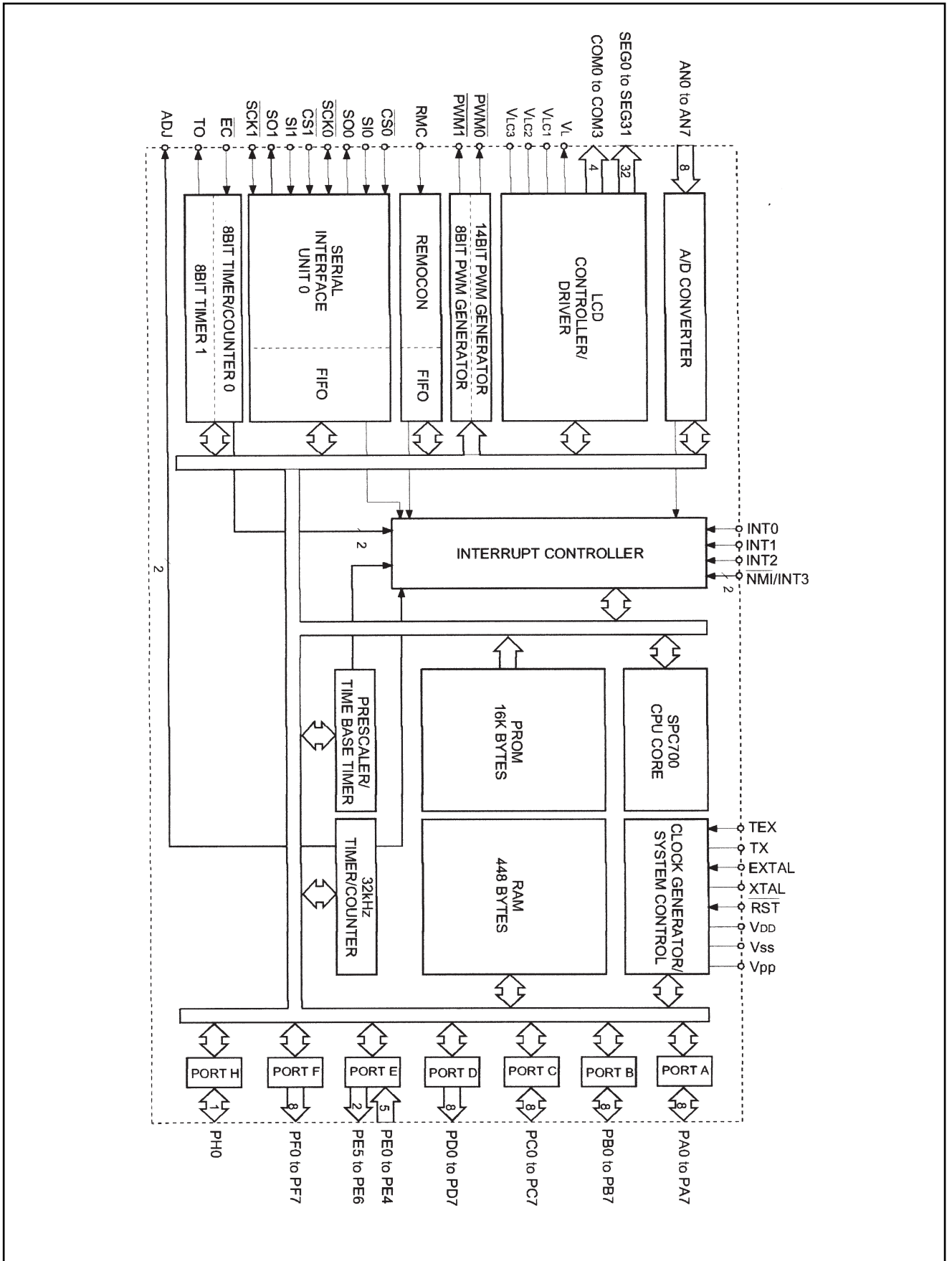
PT-9107S

interM

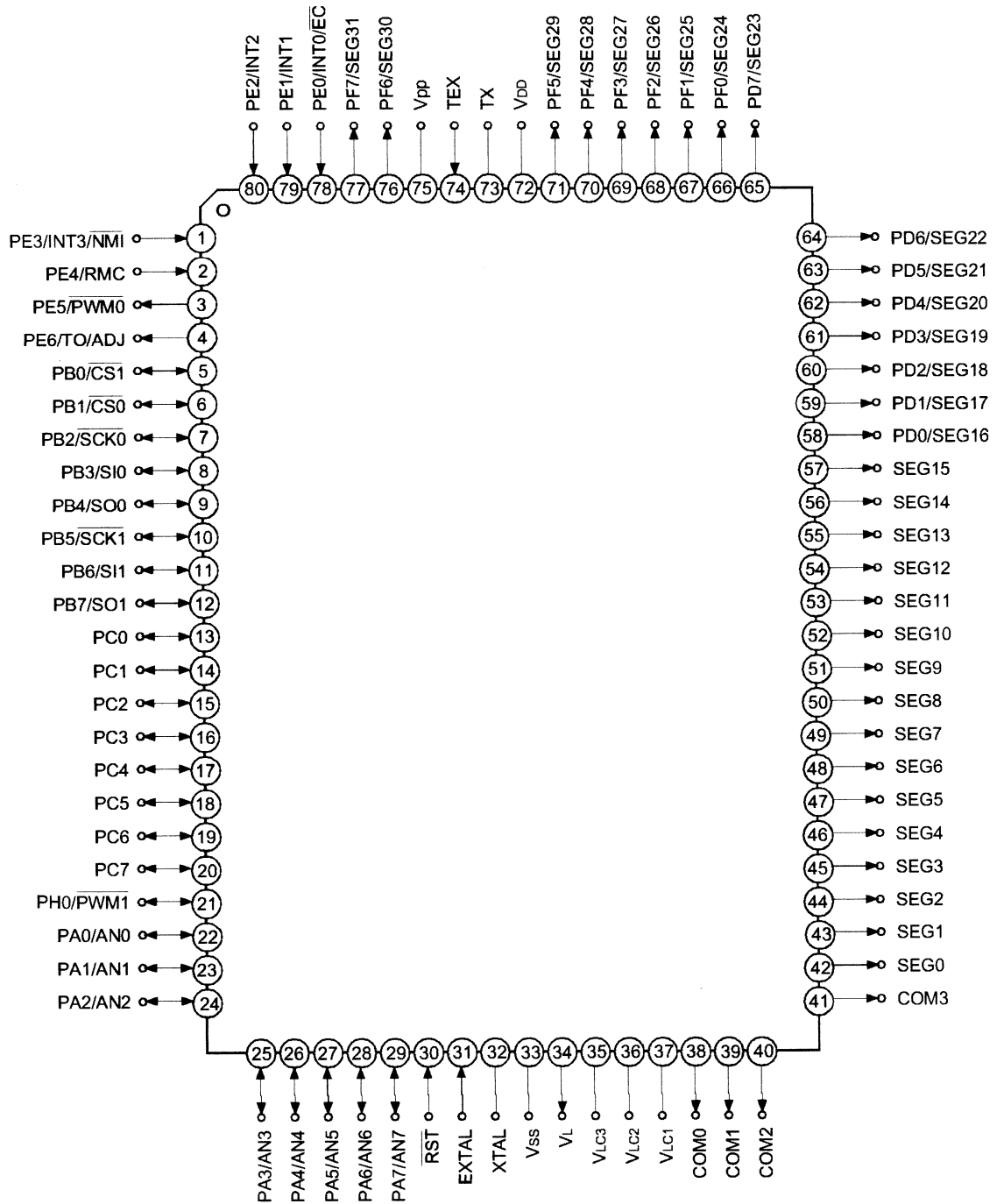
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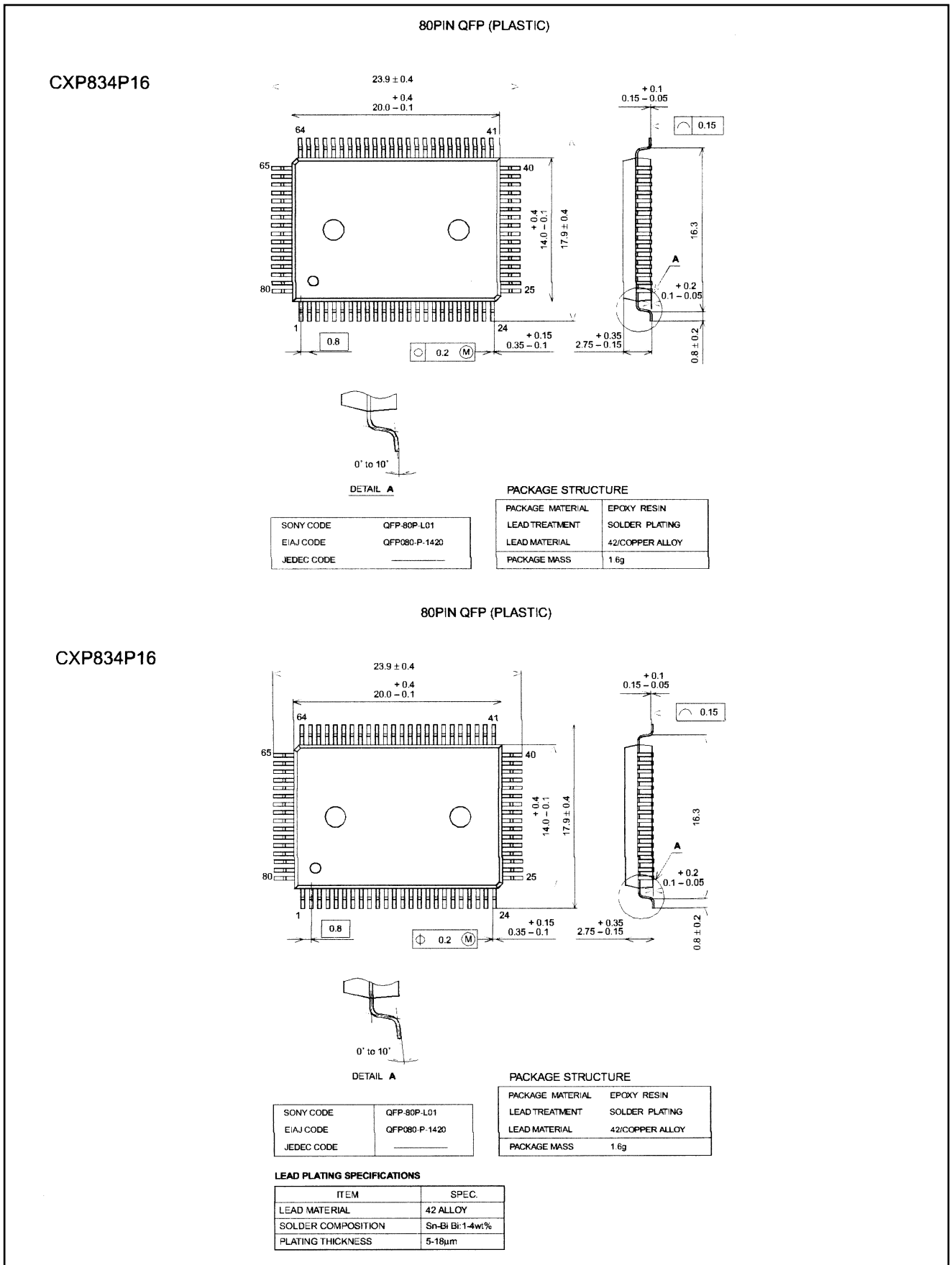
■ BLOCK DIAGRAM



■ PIN ASSIGNMENT (Top View) CXP834P16 (QXP Package)



■ PACKAGE OUTLINE (Unit: mm)



■ VERSION OPTION

PIN 079	PIN 080	VERSION
GND (JUMPER)	GND (JUMPER)	KOREA
GND (JUMPER)	PULL UP 100 K	EUROPE
PULL UP 100 K	GND (JUMPER)	USA
PULL UP 100 K	PULL UP 100 K	JAPAN

SPECIFICATIONS

■ ELECTRICAL

- Tuning Range.....FM: 87.5MHz~108MHz
AM: 522kHz~1611kHz
AM: 530kHz~1720kHz (UL/CSA only)
- SensitivityFM: Less than 3uV
AM: Less than 100uV
- S/NFM: Better than 65dB
AM: Better than 40dB
- T.H.DFM: 0.3%
AM: 1%
- Output Level
FM.....Mono Balance: 1V (modul. 75kHz)
Stereo: 500mV (modul. 75kHz)
AMMono Balance: 240mV (modul. 30%)
- Antenna InputFM: 75Ω

■ GENERAL

- Power Source.....AC 100V–240V, DC 24V, 50/60Hz
- Power Consumption11W
- Weight3.5kg
- Dimensions.....482(W) × 44(H) × 280(D)mm

*Specifications and design subject to change without notice for improvements.

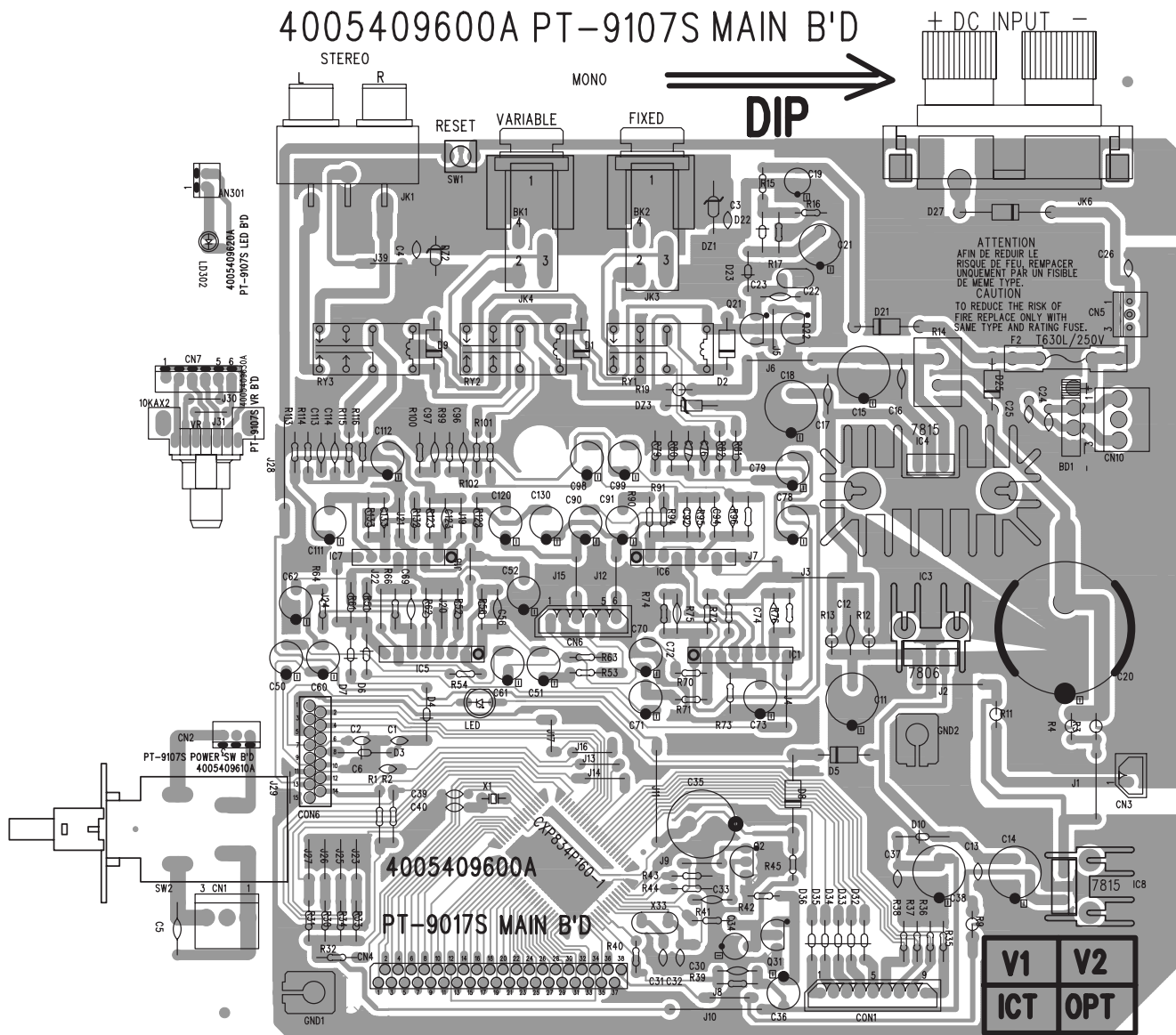
ELECTRICAL PARTS LIST

Ref No.	Part No.	Description	Value
MAIN B'D (4005409600)			
C6	3509103530-T	CAP CE F 0.01UF 50V Z	0.01/50
C1-4 C12-13	3509104530-T	CAP CE F 0.1UF 50V Z	0.1/50
C16-17			
C37 C24-26			
C76-77 C96-97	3509102231-A	CAP CE YB 1000PF 50V K AXIAL	1000P
C113-114			
C23	3509221231-A	CAP CE B 220PF 50V K AXIAL	220P
C39-40	3509220130-T	CAP CE SL 22PF 50V J	22P
C30 C33	3529330311-A	CAP CE SL 33PF 50V J AXIAL	33P
C32 C31	3509330130-T	CAP CE SL 33PF 50V J	33P
C56 C69 C72	3529470311-A	CAP CE SL 47PF 50V J AXIAL	47P
C74 C92 C94			
C123 C133			
C35	3419510401	CAP AF 0.1UF 5.5V (EECF5R5U104)	0.1/5.5
C50 C60 C120	3409210971-T	CAP AF RSG 1UF 50V 5 P	1/50
C130			
C19	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50
C21	3409210149-T	CAP RG 100UF 25V 105C	100/25
C34	3409233971-T	CAP AF RSG 3.3UF 50V 5 P	3.3/50
C36	3409247971-T	CAP AF RSG 4.7UF 50V 5 P	4.7/50
C51 C61	3409247071-T	CAP AF RSG 47UF 50V 6 P	47/50
C52 C62 C73			
C70-71 C78-79			
C90-91 C98-99			
C111-112			
C11 C14 C18 C38	3409247147-T	CAP SD 470UF 25V 10P	470/25
C15	3419547177	CAP E SD 470UF 50V (10P)	470/50
C20	3409247261	CAP AF HC 4700UF 35V 22 P LUG	4700/35
C22	3609103120-T	CAP MA 0.01UF 100V	0.01(M)
CN4	4428528138	WAFER 38FE-ST-VK-N	WAFER 38P
CON6	4428528115	WAFER 15FE-BT-VK-N	WAFER 15P
CN5	4428598303	CONNECTOR WAFER LW-0640-3P	WAFER 3P
CN10	4355923803	CONNECTOR WAFER 03P(J.ST)	WAFER 3P
CN3	4428595002	LW5267/LWB0640/2.5MM-02P	2.5MM-02P
CON1	4428595009	LW5267/LWB0640/2.5MM-09P	2.5MM-09P
CN6	4428595006	LW5267/LWB0640/2.5MM-06P	2.5MM-06P
BD1	2058100976	DIODE BRIDGE KBP202G/KBP203G	BP202G
DZ1-2	2058502056	DIODE ZENER UZ-5.6BM(1N5232B)	5.6BM
DZ3	2058502120	DIODE ZENER UZ-12BM(1N5242B)	12BM
D1-2 D5 D9 D21	2058100996	DIODE RECTIFIER LT1N4006(4007)	1N 4006
D25 D27			
D3-4 D6-8 D10	2058304100	DIODE IN4148M	1N 4148
D22-23 D32-36			
F21	5508411934	FUSE TS 20MM 630MA/250V U/C/S	630MA/250V
F2A F2B	4458999110	FUSE CLIP 5*20	FUSE CLIP
HS1	7505299340	HEAT SINK EQ-131	HEAT SINK
HS2	7505299230	TR HEAT SINK PT9107, DIV9123,CA	HEAT SINK
IC3	2168640984	IC 7806 SAMSUNG	7806
IC4 IC8	2128610900	IC KA7815 COMMON	7815
IC1 IC6-7	2168220987	IC NJM 5532L JRC	5532L
IC5	2168220989	IC NJM 2068L JRC	2068L
U2	S21210802101	IC CXP834P 160-1 SONY	CXP834P160-1
JK3-4	4438097310	JACK PHONE 4P	PHONE 4P
JK1	4438193410	JACK RCA 2P(JK0200500N)	RCA 2P
JK6	4438094610	DC TERMINAL 2P	TERMINAL 2P
J23 J25-27	1508400501	JUMP WIRE(0.5/52M/M)	JUMPER
LED	2300032105	LED LTL-16KG-021A LITEON	GRN
Q2	2008406942-T	KTC3192-Y-AT	C3192Y
Q21-22 Q31	2008606104-T	KTC3198-Y-AT	C3198Y
R11	3039332575-T	RES MO 3.3K 2W J RADIAL	3.3K 2W
R9	3039479575-T	RES MO 4.7 2W J RADIAL	4.7 2W
R3-4 R19	3039271575-T	RES MO 270 2W J RADIAL	270 2W
R12-13	3039471575-T	RES MO 470 2W J RADIAL	470 2W
R14	3059100776	RES CE 10 5W R PS-A152	10/5W
R39-40	3009102973	RES CF 1K 1/5W J N	1K
R1-2	3009103973	RES CF 10K 1/5W J N	10K
R122-123			
R132-133			
R51 R52 R61-62	3009104973	RES CF 100K 1/5W J N	100K
R30-38 R43-44			
R72-73			
R74-76 R94-96	3009132973	RES CF 1.3K 1/5W J N	1.3K
R91 R90	3009272973	RES CF 2.7K 1/5W J N	2.7K
R70-71	3009332973	RES CF 3.3K 1/5W J N	3.3K

Ref No.	Part No.	Description	Value
R41 R42 R45	3009472973	RES CF 4.7K 1/5W J N	4.7K
R15	3009562973	RES CF 5.6K 1/5W J N	5.6K
R56 R66	3009303973	RES CF 30K 1/5W J N	30K
R54 R64	3009393973	RES CF 39K 1/5W J N	39K
R17 R79-80	3009473973	RES CF 47K 1/5W J N	47K
R99-100			
R113-114			
R81-82	3009151973	RES CF 150 1/5W J N	150
R101-102			
R115-116			
R63 R53	3009331973	RES CF 330 1/5W J N	330
R16	3009561973	RES CF 560 1/5W J N	560
RY1-3	5528009960	RELAY RZ-12 RY-12W	RY-12W
SW1	4658099110	SW TACT THVH472GAA	TACT SW
X1	3908101990	X-TAL 32.768KHZ GT-2190C	32.768KHZ
X33	3908101080	CRYSTAL 4.19MHZ	4.19M
GND1 GND2	4235007210	GND TERMINAL (POWER B' D)	GND
BK1 BK2	6505954910	BRACKET JACK	BRACKET
POWER SW B'D (4005409610)			
C310	3549103107	CAP DE2F3KH103MA4B	0.01/500
CN1	4355923803	CONNECTOR WAFER 03P(J.ST)	WAFER 3P
CN2(SW)	4355912312	CON ASS'Y 3P	ASS'Y 3P
SW2	4628988610	SW POWER SDDF3PATL011 (SP278)	POWER SW
LED B'D (4005409620)			
AN301	4355916112	CON ASS'Y 2P	ASS'Y 2P
LD302	2300050101	LED LTL-307E-012A	RED
VR B'D (4005409630)			
VR	3228078410	VR RK14122010613A	10KA*2
CN7	4355801014	CON ASS'Y 6P	ASS'Y 6P
FRONT B'D (4005409500)			
CN2	4428528238	CON WAFER 38FE-BT-VK-N	WAFER 38P
CON202	4355780210	CON ASS'Y 9P	ASS'Y 9P
LCD1	2338170387	KXN35091DAB	LCD
D201-206	2301052001	LED SLM1510BNHTAC S.YOUNG GRN	GRN
D211-216			
D221-226			
SW201-218	4628985710	TACT (5MM) THVV501BAA (KBW89)	TACT SW
ASS'Y			
CABLE	4115198310	FLEXIBLE FLAT CABLE 15P	FLAT CABLE
	4115198320	FLEXIBLE FLAT CABLE 38P	FLAT CABLE
TUNER	3928209810	MODULE AM/FM ALPS TFCEIU101A	KOREA/USA
	3928209820	MODULE AM/FM ALPS TFCEIE301A	EUROPE
	3928209830	MODULE AM/FM ALPS TFCEIL501A	UK
	3928209840	MODULE AM/FM ALPS TFCEIJ101A	JAPAN
AC INLET	4448996710	AC INLET (6200,2300) SYS-6004	AC INLET
GND	4355795508	CON ASS'Y 1P Y-G #18 250-RING	GND TERMINAL
FUSE	5508410834	FUSE 50T 20MM 125MA/250V U/C/S	220V/230V/240V
	5508411434	FUSE TS 20MM 315MA/250V U/C/S	100V/120V
TRANS	2828057600	TRANS POWER 220V PT-9107S	220V
	2828057610	TRANS POWER 100V PT-9107S(J)	100V
	2828057620	TRANS POWER 120V PT-9107S(E)	120V
	2828057630	TRANS POWER 230V PT-9107S	230V
	2828057640	TRANS POWER 240V PT-9107S	240V

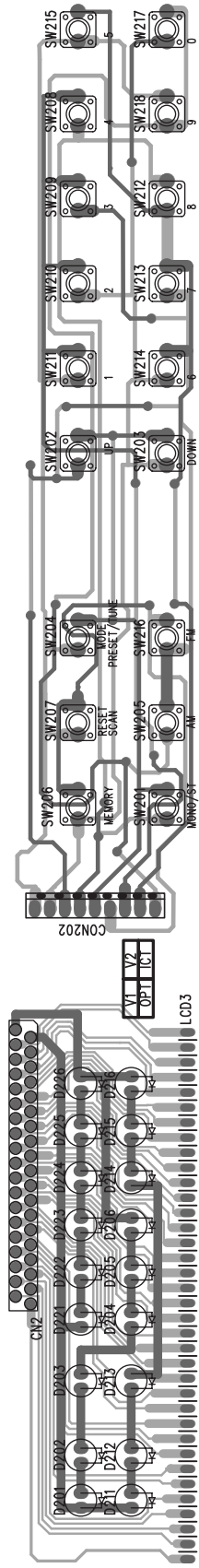
TOP AND BOTTOM VIEW OF P.C. BOARD

4005409600A PT-9107S MAIN B'D

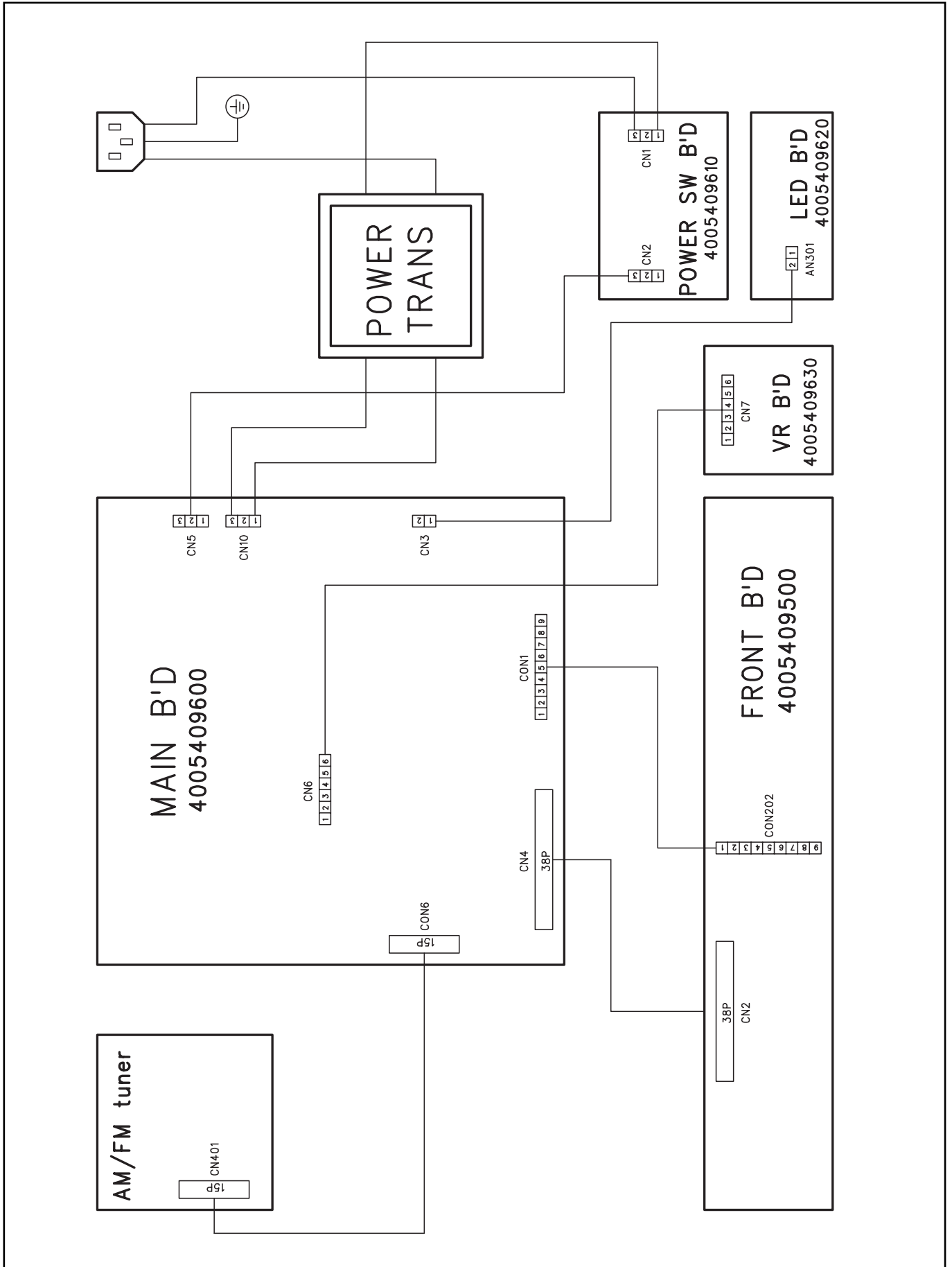


4005409500A PT-9107S FRONT B'D

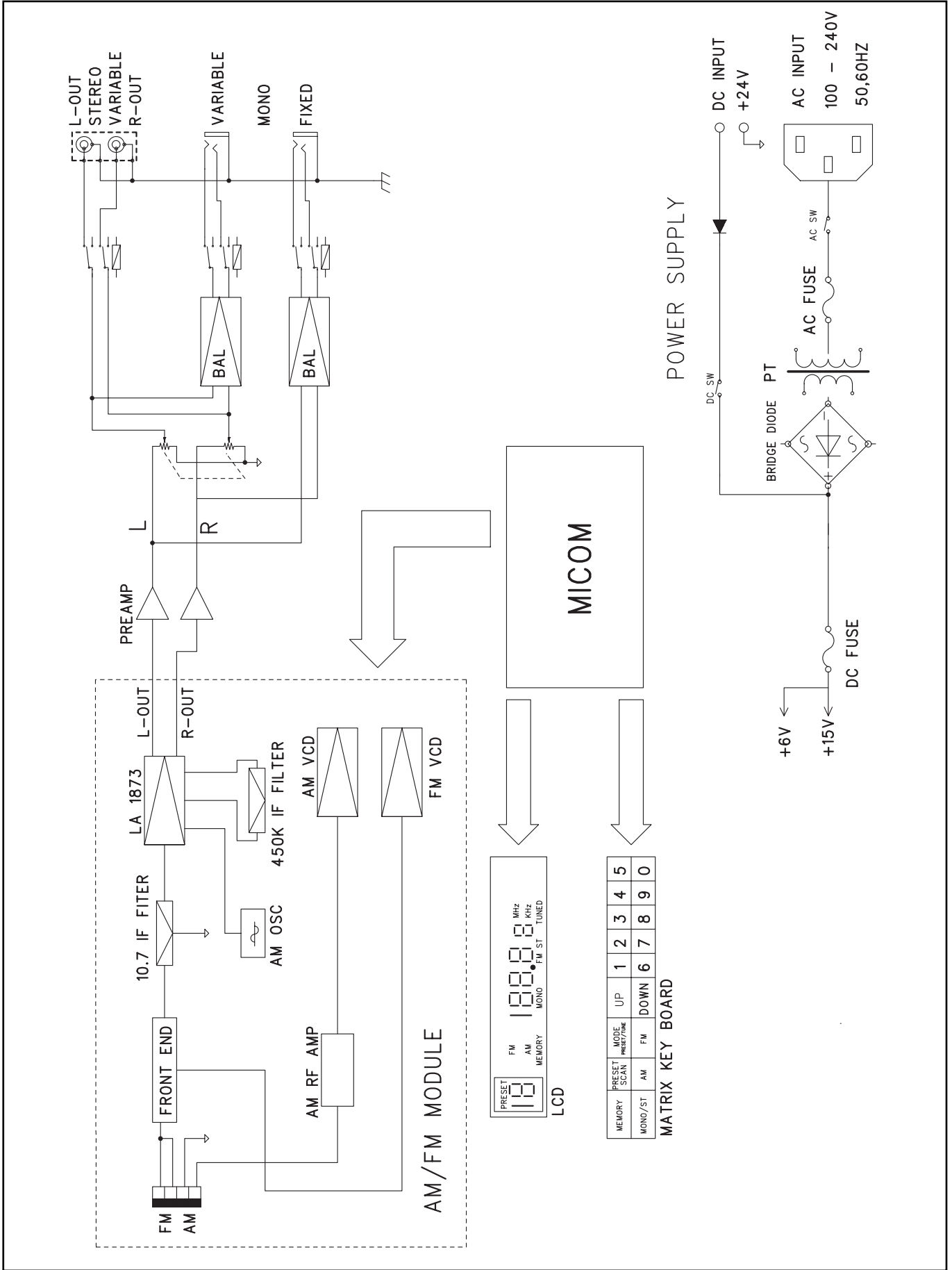
DIP ⇄



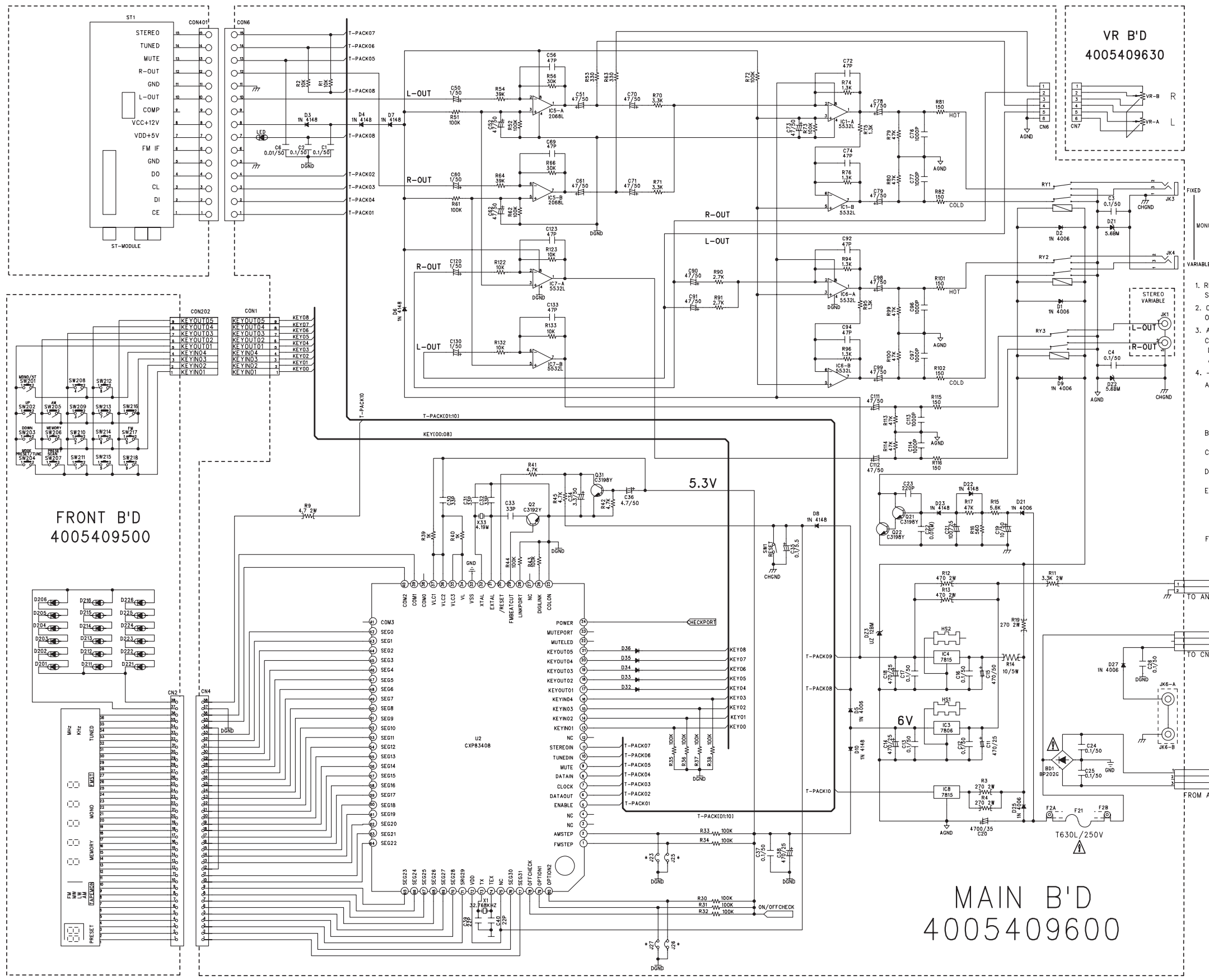
WIRING DIAGRAM



BLOCK DIAGRAM



SCHEMATIC DIAGRAM



• Selected methods of tuning range in the region.

LOCATION	J27	J26
DOMESTIC	JUMPER	JUMPER
EUROPE	JUMPER	NOT USED
UL/CSA	NOT USED	JUMPER
JAPAN	NOT USED	NOT USED

• Selected methods of FREQUENCY STEP

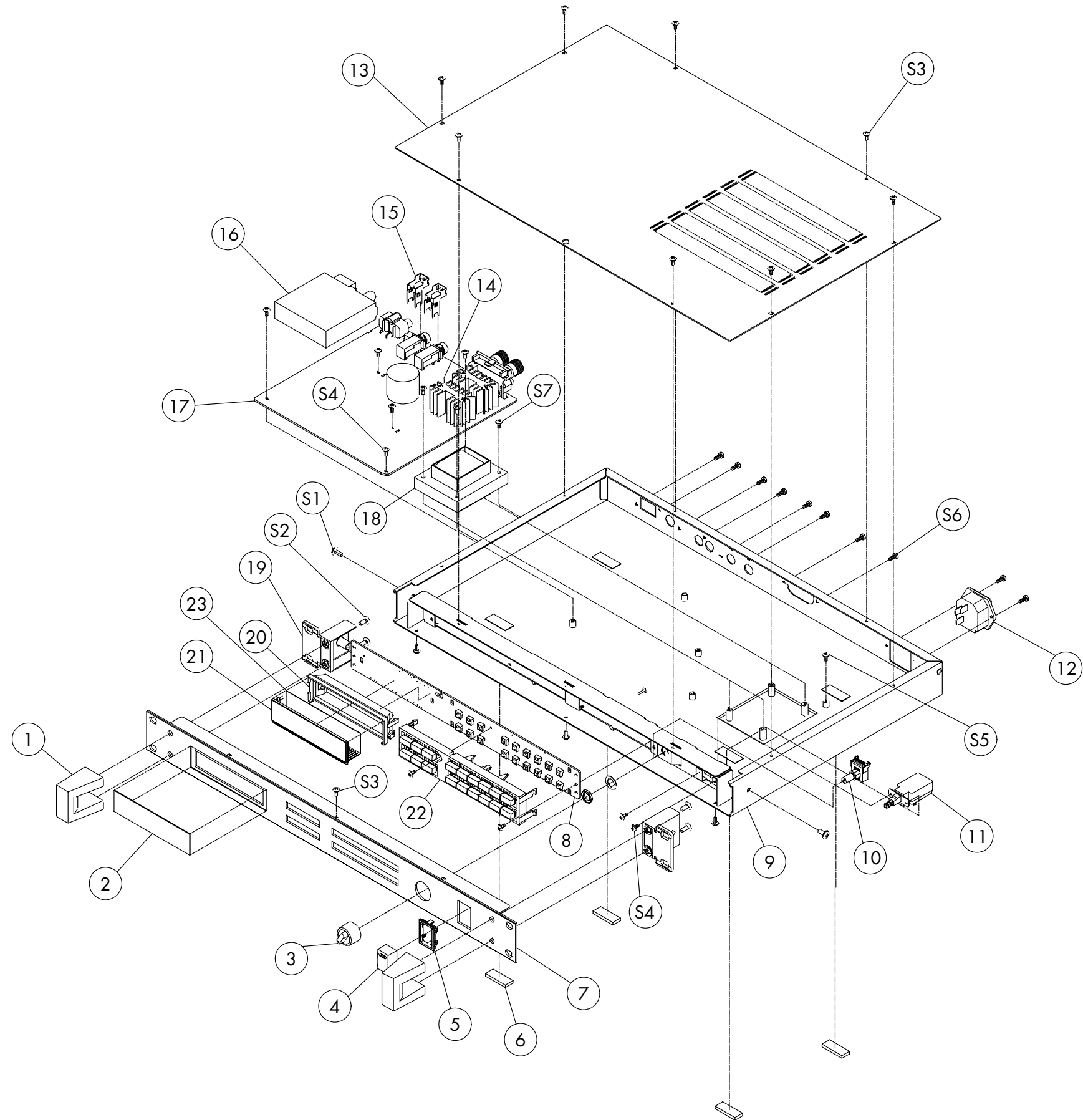
STEP	J25(FM STEP)	J23(AM STEP)
FM 50KHz	NOT USED	
FM 100KHz	USED	
AM 9KHz		USED
AM 10KHz		NOT USED

SERVICE INFORMATION

- RESISTANCE VALUES ARE INDICATED IN OHMS UNLESS OTHERWISE SPECIFIED.(K=1,000 . M=1,000,000)
- CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED.(P=MICRO-MICROFARADS)
- ALL VOLTAGES ARE REFERRED TO GROUND UNDER THE FOLLOWING CONDITIONS.
DC : NO SIGNAL EXCEPT WHERE INDICATED.
AC : RMS
- PRECAUTION-
 - ALL COMPONENTS MARKED WITH A TRIANGLE MUST BE REPLACED ONLY WITH ORIGINAL TYPE SPECIFIED BY THE MANUFACTURER. INTER M CORPORATION AND INSTALLED AS THE ORIGINAL SPACE AND POSITIONED AWAY FROM ADJACENT COMPONENTS WHERE APPLICABLE. POSITIONED AWAY FROM
 - ALL SOLDERING MUST BE DONE IN A PROFESSIONAL MANNER USING SOLDER WHITE RESINE CORE ONLY.
 - ALL COVERS, SHIELD AND INSULATING SPACERS MUST BE REPLACED BEFORE RETURNING APPLIANCE TO CUSTOMER.
 - A DAMAGE POWER SUPPLY CORD MUST BE REPLACED BEFORE RETURNING APPLIANCE CUSTOMER.
 - DIELECTRIC TEST CONSISTING OF 120V AC 60HZ IS TO BE APPLIED BETWEEN BOTH BALDES OF THE POWER SUPPLY CORD ATTACHMENT PLUG THE EXPOSE CONDUCTIVE SURFACE OF THE APPLIANCE FOR A PERIOD OF NOT LESS THAN ONE SECOND BEFORE RETURNING APPLIANCE TO CUSTOMER.
 - THE 3W MARKED RESISTORS ARE MOUNTED THE P.C.B ON SLEEVES.

F1	JAPAN	T315L/250V
	UL/CSA	T315L/250V
	DOMESTIC	T125L/250V
	EUROPE	T125L/250V

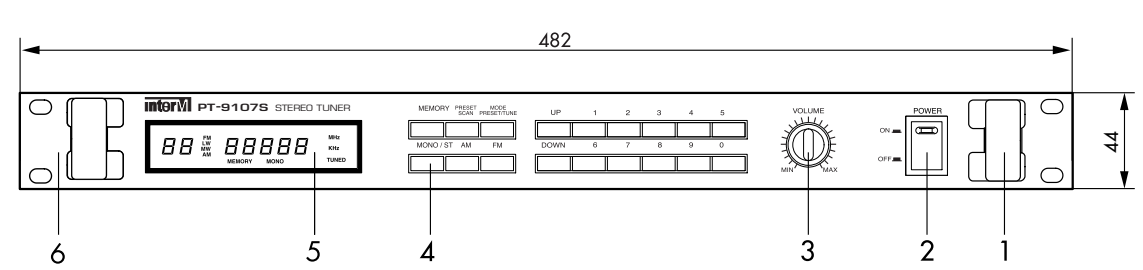
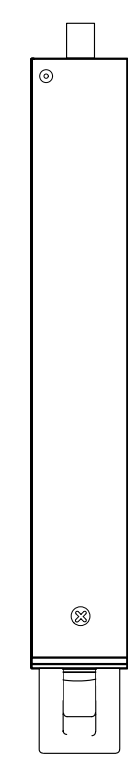
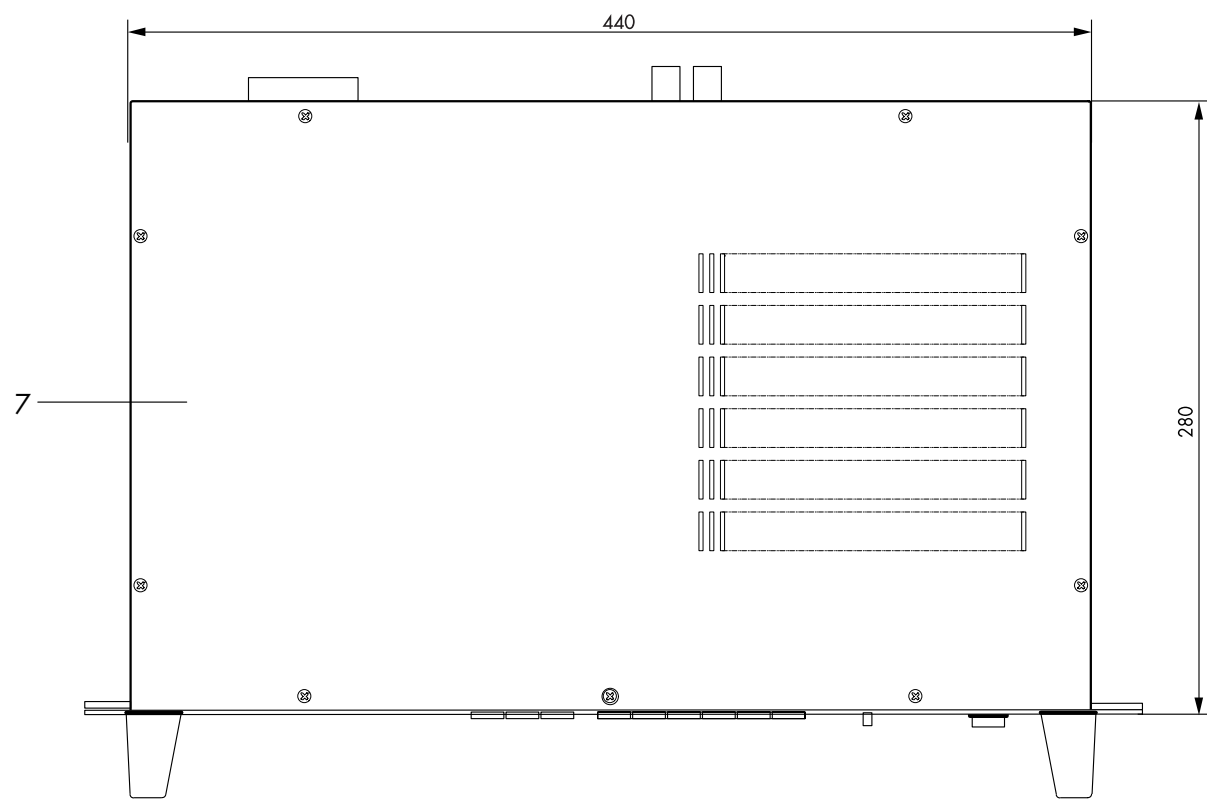
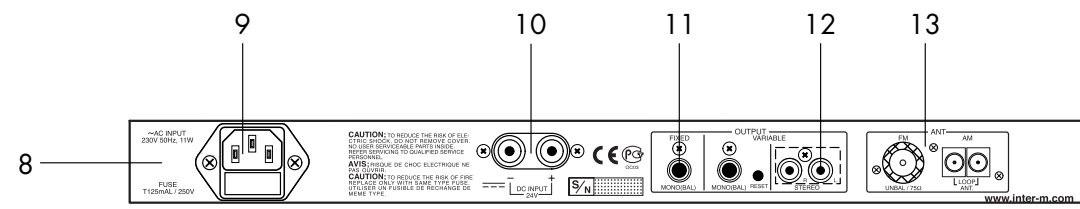
EXPLODED VIEW OF CABINET & CHASSIS/MECHANICAL PARTS LIST



NO	PART NAME	PART NUMBER	Q'TY	REMARK
S7	WPM 3x18Y	806913 0181	4	
S6	2BTC 3x8B	810922 0083	11	
S5	A'SSY PM 4x8B	809599 6910	1	
S4	BM 3x6B	800913 0063	6	
S3	3BTC 3x6B	810933 0063	17	
S2	3BTC 4x18Y	810934 0181	4	
S1	2BTC 4x12B	810924 0123	2	

NO	PART NAME	PART NUMBER	Q'TY	REMARK
23	FILTER	853502 7210	1	
22	TACT KNOB	854399 2210	1	
21	LCD	233817 0392	1	
20	LCD HOUSING	854398 9610	1	
19	GUIDE HANDLE	854399 4210	2	
18	POWER TRANS	282806 5200	1	
17	MAIN PCB	401540 9600	1	
16	TUNER PACK	392820 9960	1	
15	BRACKET P/J	650595 4910	2	
14	TR HEAT SINK	750529 9230	2	
13	TOP COVER	612369 4710	1	
12	AC INLET	444899 6710	1	
11	POWER S/W	462898 8610	1	
10	CONTROL V/R	322807 8410	1	
9	MAIN CHASSIS	612268 9510	1	
8	DISPLAY PCB	400540 9500	1	
7	FRONT PANEL	860298 2120	1	
6	FOOT	673599 1210	2	
5	BEZEL PUSH	852399 5510	1	
4	KNOB PUSH	854398 7210	1	
3	KNOB CONTROL	854399 4110	1	
2	LED INLAY	853599 5010	1	
1	HANDLE	854399 4210	2	

ASS'Y DRAWING



No.	Description	Part No	Q'ty	Remark
1	HANDLE	048603995210	2	
2	KNOB PUSH	8543987210	1	
3	KNOB CONTROL	048543994110	1	
4	TACK KNOB	048543992210	1	
5	LCD WINDOW	048535995021	1	
6	FRONT PANEL	048602982121	1	
7	TOP COVER	046123694710	1	
8	MAIN CHASSIS	046122689511	1	DOM
		046122689512	1	R, C
		046122689513	1	E
		046122689514	1	D
		046122689515	1	J
9	AC INLET	4448996710	1	
10	DC TERMINAL 2P	4438094610	1	
11	JACK PHONE	4438097310	2	
12	JACK RCA 2P	4438193410	1	
13	ANTENNA TERMINAL	3928209810	1	

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