

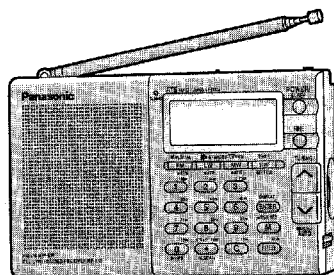
Service Manual

FM-LW-MW-SW 1~13 16-Band Receiver

Radio
RF-B55

Colour

(K).....Black



Area

Suffix for Model No.	Area	Colour
[EG]	Europe	(K)

■ SPECIFICATIONS

Frequency range:

FM;	87.50-108.00MHz
LW;	153-513kHz
MW;	522-1,710kHz (at 9 kHz step) 520-1,710kHz (at 10 kHz step)
SW;	1.711-29.999MHz
SW1 (120m)	2.30-2.495MHz
SW2 (90m)	3.20-3.400MHz
SW3 (75m)	3.90-4.000MHz
SW4 (60m)	4.75-5.060MHz
SW5 (49m)	5.90-6.200MHz
SW6 (41m)	7.10-7.350MHz
SW7 (31m)	9.40-9.990MHz
SW8 (25m)	11.60-12.100MHz
SW9 (21m)	13.57-13.870MHz
SW10 (19m)	15.10-15.800MHz
SW11(16m)	17.48-17.900MHz
SW12 (13m)	21.45-21.750MHz
SW13 (11m)	25.60-26.100MHz

Intermediate Frequency:

FM:10.7MHz
MW:450kHz

Dimensions 150(W)x92.5(H)x33(D)mm

Weight: 334 g (without batteries)

Sensitivity:

FM;	6.3 μ V/ 50 mW SP output (30dB)
MW;	794 μ V/ 50 mW SP output (20dB)
LW;	1778 μ V/ 50 mW SP output (20dB)
SW1	100 μ V/ 50 mW SP output (20dB)
SW2	70.8 μ V/ 50 mW SP output (20dB)
SW3	63.1 μ V/ 50 mW SP output (20dB)
SW4	56.2 μ V/ 50 mW SP output (20dB)
SW5	44.6 μ V/ 50 mW SP output (20dB)
SW6	39.8 μ V/ 50 mW SP output (20dB)
SW7	28.1 μ V/ 50 mW SP output (20dB)
SW8	26.5 μ V/ 50 mW SP output (20dB)
SW9	22.3 μ V/ 50 mW SP output (20dB)
SW10	21.2 μ V/ 50 mW SP output (20dB)
SW11	19.9 μ V/ 50 mW SP output (20dB)
SW12	17.9 μ V/ 50 mW SP output (20dB)
SW13	25.8 μ V/ 50 mW SP output (20dB)

Power requirement:

Battery; 4.5 V (3 R6 / LR6, UM-3 batteries)
AC; DC IN 4.5 V with AC adaptor
(4.5 V / 250 mA center negative)

Speaker:

5 cm,6W

Power output:

240 mW,(RMS...max.)

Output jack:

PHONES ϕ 3.5 30 Ω
AM EXT ANT

Notes:

- Weights and dimensions shown are approximate.
- Design and specifications are subject to change without notice.

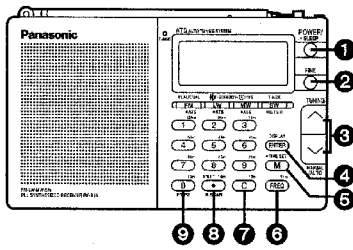
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

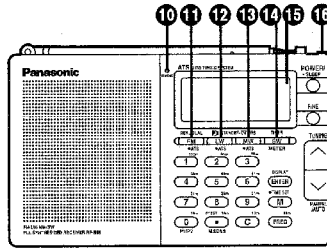
Panasonic[®]

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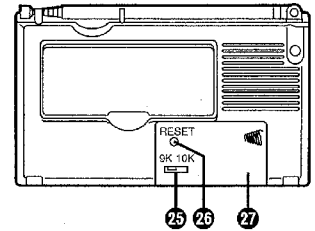
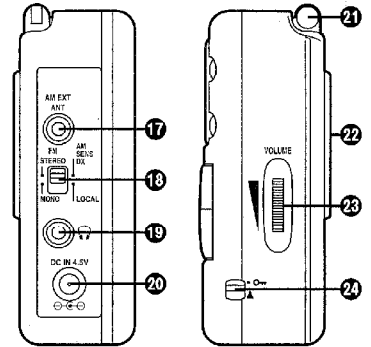
LOCATION OF CONTROLS



- 1 Power on/off and sleep button (POWER/ · SLEEP)
- 2 Fine tuning button (FINE)
- 3 Manual/auto scan tuning buttons (TUNING, MANUAL/AUTO)
- 4 Display/Enter command button for frequency and time (DISPLAY, ENTER)
- 5 Time set/Memory entry button (· TIME SET, M)
- 6 Frequency select button (FREQ)
- 7 Cancel button (C)
- 8 Dot/memory scan/zero second set button (·, M.SCAN, 0/SET)
- 9 Digit button for frequency, time, SW meter band/memory page 1 or 2 (0, P1/P2)



- 10 Tuning LED indicator (TUNING)
- 11 Multi functions for FM band knob/FM ATS/dual and real time (FM, · ATS, REAL/DUAL)
- 12 Multi functions for LW band knob/LW ATS/Standby by radio (LW, · ATS, (⏏) - STANDBY)
- 13 Multi functions for MW band knob/MW ATS/Standby by HWS buzzer (MW, · ATS, STANDBY - (HWS))
- 14 Multi functions for SW band knob/SW meter band/counting down timer (SW, METER, TIMER)
- 15 LCD display
- 16 Light button



DISASSEMBLY INSTRUCTIONS

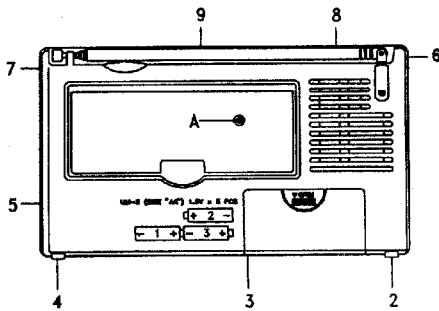


Fig.1

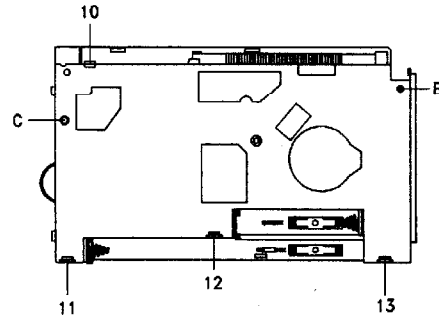


Fig.2

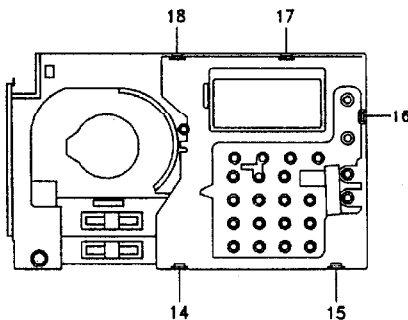


Fig.3

TO REMOVE BACK COVER (See Fig.1)

- a. Unscrew 1 PTP screw A.(2.6x24) & release back cover from hooks 2~9.
- b. Separate front and back cabinet.

TO REMOVE MAIN PCB (See Fig.2)

- a. Remove screw B & C.
- b. Release Main PCB from hooks 10~13 to remove it.

TO REMOVE CONTROL PCB (See Fig.3)

- a. Release Control PCB from hooks 14~18 to remove it.

■ Measurements and Adjustments

● ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT					
● Set power source voltage to 4.5 V DC.	● Set volume control to maximum.				
● Set operation switch to ON.	● Output of signal generator should be no higher than necessary to obtain an output reading.				
● Set band selector switch to FM,LW,MW or SW1-13.					

● FM ALIGNMENT

	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Refer to Fig.1 and Fig.2)	REMARKS
	CONNECTIONS	FREQUENCY				
PLL FREQUENCY						
(1)	NON	NON	108MHz	Frequency Counter	VC202 OSC Trimmer	Connect counter to TP7 .118.69975~118.70025 MHz.
FM-RF ALIGNMENT						
(2)	Connect to test point TP2 through FM dummy antenna. Negative side to test point TP3 .	108.0MHz	Tunig capacitor fully open.	Phones Jack (30 Ω) Fabricate the plug as shown in Fig.3 and then connect the lead wires of the plug to the measuring instrument.	T10 (FM OSC Coil)	Adjust for maximum output.
(3)	"	90MHz	Tune to signal.	"	T11,T13 (FM ANT Coil)	"
(4)	"	106.0MHz	"	"	VC1,VC2 (FM ANT Trimmer)	1.Adjust for maximum output. 2.Repeat steps (3)~(4)
(5)	"	97.975MHz ? 98.025MHz 60db	98MHz	"	SVR2 SENSITIVITY VR	LET Tuning LED indicating

● AM ALIGNMENT

	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Refer to Fig.1 and Fig.2)	REMARKS
	CONNECTIONS	FREQUENCY				
AM 2nd LOCAL OSC						
(6)	NON	NON	15.1MHz	Freg. Counter	T4 OSC Coil	Connect counter to TP8 . 55.39485~55.39515 MHz.
AM-IF ALIGNMENT						
(7)	Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	450kHz	Point of non-interference. (on/about 600kHz)	Phones Jack (30 Ω) Fabricate the plug as shown in Fig.3 and then connect the lead wires of the plug to the measuring instrument.	T5 (AM IFT)	Adjust for maximum output.
AM SENSITIVITY ALIGNMENT						
(8)	Connect to test point TP2 Negative side to test point TP7	15.1MHz	SW1 → DX 15.1MHz	"	T2,T3 (AM ANT Coil)	Adjust for maximum output.
LW 450kHz TRAP ALIGNMENT						
(9)	Fashion a loop of several turns of wire and radiate a signal into the loop ant of receiver.	450kHz	450kHz	"	T7 (450kHz TRAP Coil)	Adjust for minimum output.

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● ALIGNMENT POINTS

Please refer to the Circuit Board and Wiring Connection Diagram to locate test points.

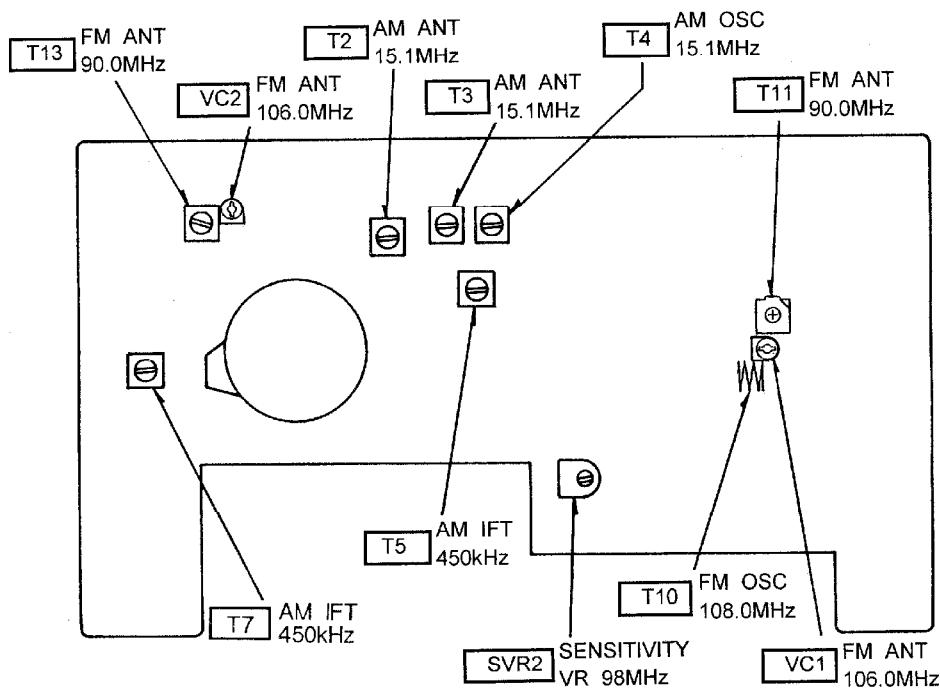


Fig.1

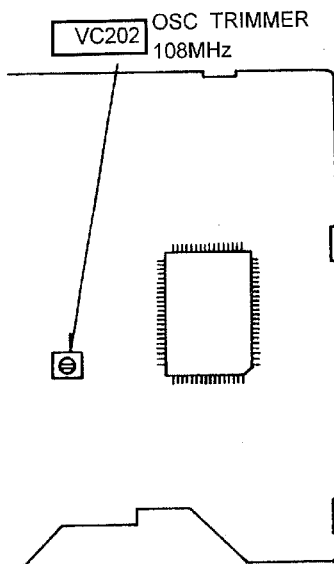


Fig.2

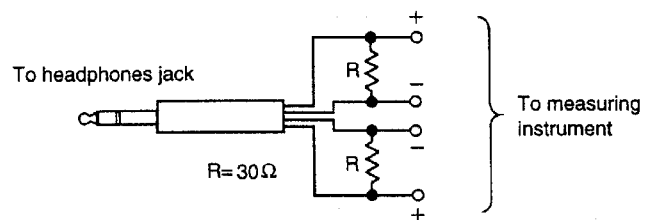
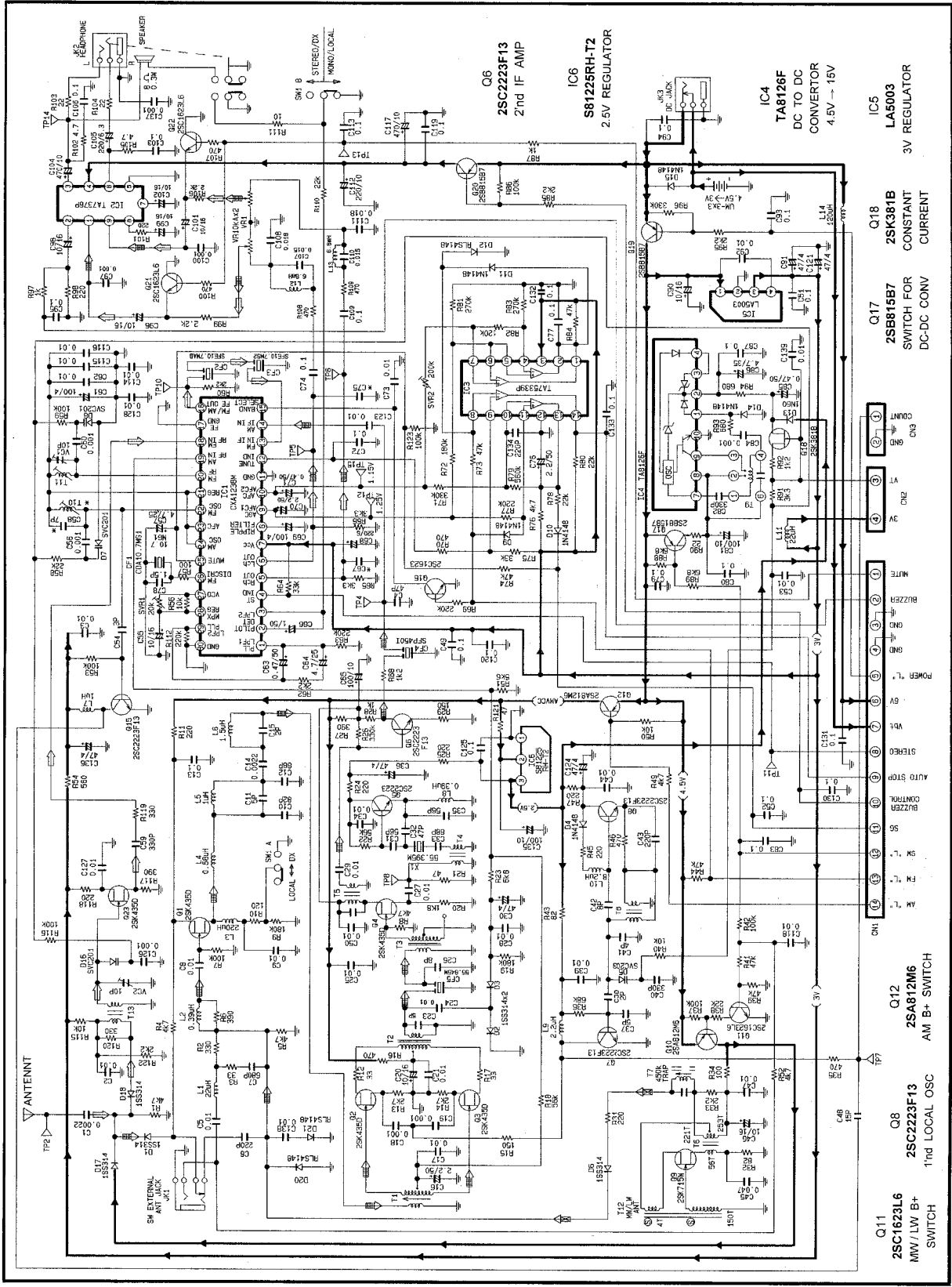


Fig.3

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SCHEMATIC DIAGRAM (Main Circuit)



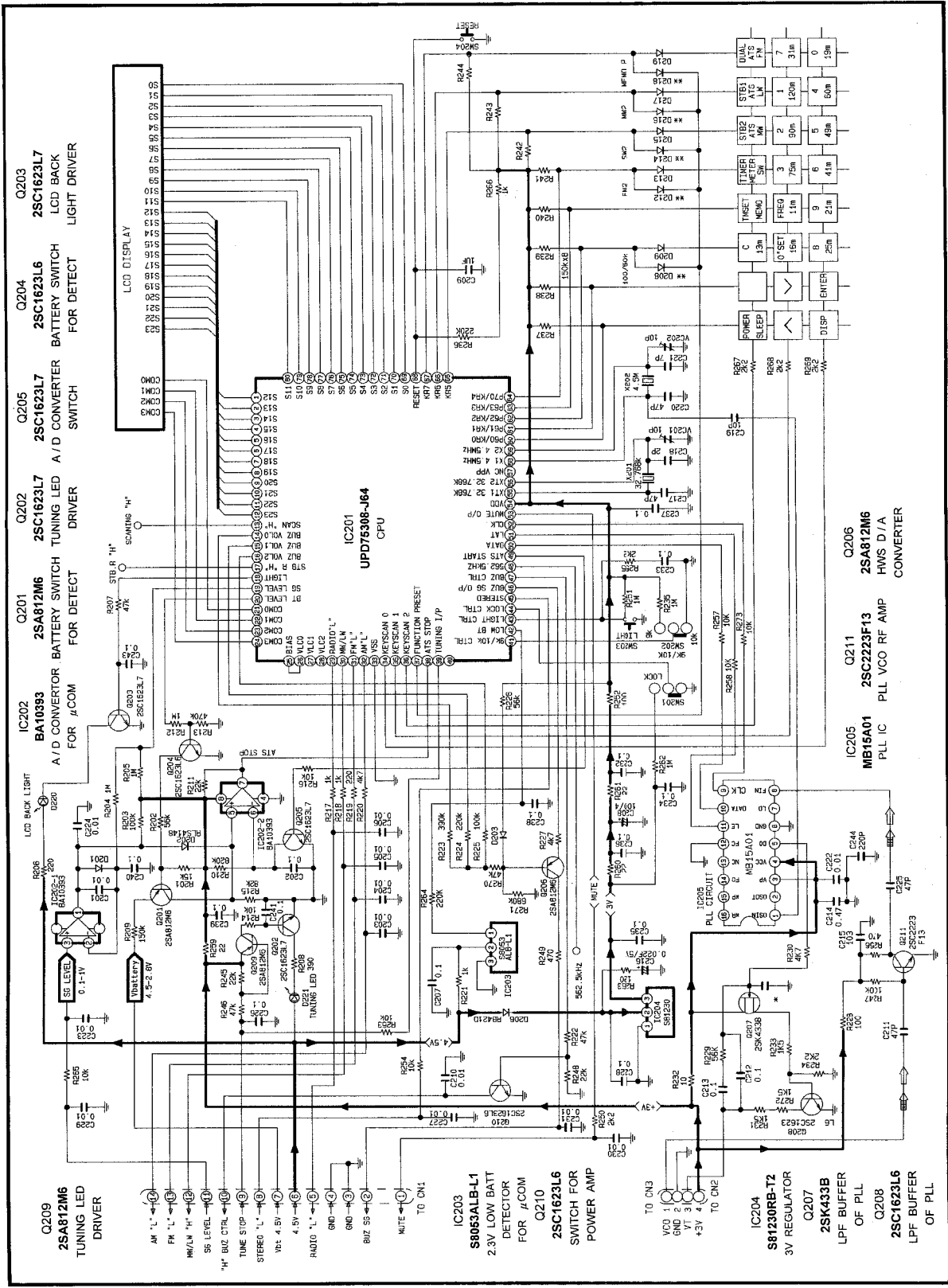
- IC2 TA7376P STEREO POWER AMP
- IC1 CXA1238M AM IF & DET FM RF & IF MPX
- Q21 2SC1623L6 MUTE-L-CH
- Q22 2SC1623L6 MUTE-R-CH
- Q20 2SB815B7 POWER SWITCH FOR POWER AMP
- IC3 TA75339P FM STATION DETECTOR & FM/AM SG LEVEL
- Q16 2SC1623L6 AM / FM BAND SWITCH
- Q19 2SB815B7 POWER SWITCH FOR RECEIVER

- Q23 2SK435D FM RF AMP
- Q15 2SC2223F13 FM LOCAL OSC BUFFER
- Q1 2SK435D AM FRONT-END AMP
- Q2,3 2SK435D AM DBM CIRCUIT
- Q4 2SK435D MIXER (1st IF 55.845MHz CONVERT TO 450kHz)
- Q5 2SC2223F13 2nd LOCAL OSC
- Q6 2SC2223F13 2nd IF AMP
- Q7 2SC2223F13 1st LOCAL OSC BUFFER AMP
- Q9 2SK715W MW/LW PRE-AMP
- Q10 2SA812M6 MW/LW B+ SWITCH

- Q11 2SC1623L6 MW/LW B+ SWITCH
- Q8 2SC2223F13 1st LOCAL OSC
- Q12 2SA812M6 AM B+ SWITCH
- Q17 2SB815B7 SWITCH FOR DC-DC CONV
- Q18 2SK381B CONSTANT CURRENT
- IC5 LA5003 3V REGULATOR
- IC4 TA8126F DC TO DC CONVERTOR 4.5V - 15V
- IC6 S81225RH-T2 2.5V REGULATOR
- Q6 2SC2223F13 2nd IF AMP

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SCHEMATIC DIAGRAM (PLL Circuit)



■ ICS' & TRANSISTOORS' VOLTAGE LIST

IC1 CXA1238M

PIN.NO	FM	AM
1	0.87	0.869
2	0.96	0.96
3	0.59	0.59
4	1.87	1.87
5	0.57	0.75
6	0.67	0.75
7	3.02	3.02
8	2.72	2.72
*9	1.31	1.14
*10	1.05	1.3
11	0	0
*12	0.06	0.09
13	1.31	0.03
14	0	0
15	1.31	0.03
16	0.55	0.22
17	0	0
18	0.33	0
19	1.25	1.25
20	1.25	1.25
21	1.25	1.25
22	1.25	1.25
23	1.25	1.25
24	1.25	1.25
*25	0.75	0.18
26	2.16	2.73
27	1.4	1.4
28	1.65	1.65
29	0.86	0.86
30	0	0

IC5 LA5003

PIN.NO	FM	AM
1	4.48	4.48
2	0	0
3	3.03	3.03
4	3.78	3.78

IC6 S81225AG

PIN.NO	FM	AM
1	0	0
2	0.02	4.155
3	0.5	2.47

IC201 UPD75308-J64

PIN.NO	FM	AM
1-12	LCD SEGMENT	
13	2.93	
14	2.91	2.91
15	2.91	2.91
16	2.91	2.91
17	2.93	2.93
18	2.63(LIGHT ON)	
19	0.01	0.01
20	0	0
21	1.5	1.5
22	1.5	1.5
23	1.5	1.5
24	1.5	1.5
25	2.93	2.93
26	2.93	2.93
27	1.9	1.9
28	1.0	1.0
29	0.05	0.05
30	0.045	4.14
31	0.006	1.628
32	4.48	0.018
33	0	0
34	0	0
35	0	0
36	0	0
37	2.67	2.67
38	0.015	0.015
39	0.46	0.46
41	2.66(9K STEP)	
42	3.51	3.51
43	2.66	2.66
44	2.66(LOCK OFF)	
45	2.8V(MONO)	
46	2.93	2.93
47	2.93	2.93
48	2.93	2.93
49	0	0
50	2.93	2.93
51	0	0
52	0	0
53	0	0
54	2.98	2.98
55	0.48	0.48
56	1.34	1.34
58	1.39	1.39
59	1.39	1.39
60-67	2.93	2.93
68	2.98	2.98
69-80	LCD SEG MENT	

IC202 BA10393

Pin No.	FM	AM
*1	0.6-1.6V	0.6-1.6V
*2	0.1-1	0.1-1
*3	0.1-1	0.1-1
4	0	0
*5	0.1-1	0.1-1
6	2.75	2.75
7	0.015	0.015
8	2.99	2.99

IC203 S8053ALB-L1

Pin No.	FM	AM
1	4.495	4.495
2	4.5	4.5
3	0	0

IC204 S81230RB-T2

Pin No.	FM	AM
1	0	0
2	4.36	4.36
3	2.99	2.99

IC205 MB15A01

Pin No.	FM	AM
1	1.24	1.24
2	1.37	1.39
3	3.03	3.03
4	3.03	3.03
5	0.75	0.75
6	0	0
7	3.03	3.03
8	2.01	2.01
9	0	0
10	0	0
11	0.18	0.18
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0

Transistors

Q	FM	AM
Q1	G	0
	S	0
	D	0
	G	0
Q2	S	0
	D	0
Q3	G	0
	S	0
Q4	S	0
	D	0
Q5	B	0
	C	0
Q6	B	0
	C	0
Q7	B	0
	C	0
Q8	B	0
	C	0
Q9	G	0
	S	0
Q10	B	0
	C	0
Q11	B	0
	C	0
Q12	B	0
	C	0
Q15	B	0
	C	0

Transistors

Q	FM	AM
Q16	B	0.02
	C	1.3
	E	0
Q17	B	3.77
	C	4.45
	E	4.46
Q18	D	14.5
	G	10.5
	S	10.7
Q19	B	3.78
	C	4.46
	E	4.5
Q20	B	3.79
	C	4.5
	E	4.5
Q21,22	B	0
	C	0
	E	0
Q23	G	0
	S	0.82
	D	2.56
Q201	B	2.98
	C	0.68
	E	3.48
Q202 (Tuning led on)	B	0.69
	C	0.05

Q	FM	AM
Q203 (Light led on)	B	0.69
	C	0.15
	E	0
Q204	B	0
	C	2.97
	E	0
Q205	B	0
	C	2.75
	E	0
Q206	D	2.59
	G	0
	S	1.93
Q207	B	0.69
	C	1.02
	E	2.91
Q208	B	0.60
	C	4.66
	E	0
Q209	B	2.4
	C	2.95
	E	3
Q210	B	0.65
	C	0.1
	E	0
Q211	B	0.72
	C	2.15
	E	0

*The voltage value is variable by reception of radio.

TESTING CONDITION:

1. NO input signal and volume is min.
2. Speaker is using.
3. Extension ANT. IS not using.
4. AM is received by 1710kHz.
5. FM is received by 98MHz and put on the stereo.
6. Load in main battery 4.5V DC.
7. Unit of voltage: V DC.

Notes:

- SW1-A: FM select switch in "LOCAL" position.
- SW1-B: FM mode switch in "MONO/LOCAL" position.
- SW201: LOCK switch in "OFF" position
- SW202: MW select switch in "10K" position.
- SW203: LIGHT switch in "OFF" position
- SW204: RESET switch in "OFF" position
- VR1: Volume control VR.
- SVR1: FM stereo adjustment VR.
- SVR2: Tuning sensitivity adjustment VR.

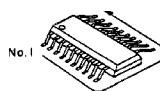
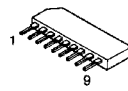
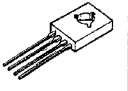

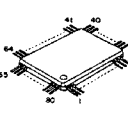
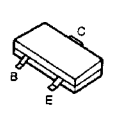
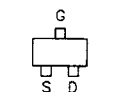


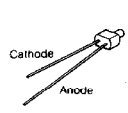
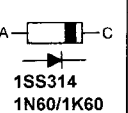
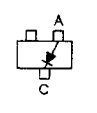
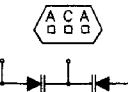
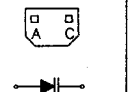

● Battery current:
 Vol. MAX AM.....146 mA, FM.....129mA
 Vol. MIN AM.....62 mA, FM.....46mA
 Measurement instruction
 (AM (MW / LW / SW): 74 dB / m, 30% Mod.)
 FM: 60 dB / , 30% Mod.)

- + B Voltage Line.
- FM Signal.
- AM Signal.
- MW & LW Signal.

● This schematic diagram may be modified at any time with the development of new technology.

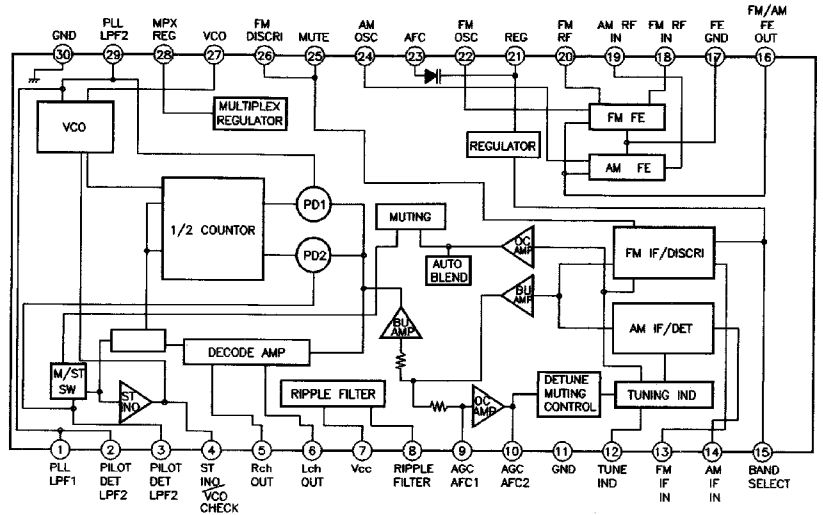
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■ Type Illustration of IC's, Transistors and Diodes

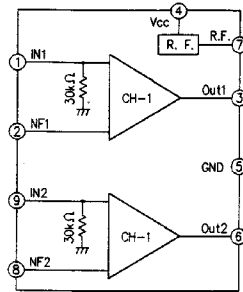
 <table border="1"> <tr><td>CXA1238M</td><td>30Pin</td></tr> <tr><td>TA75339F</td><td>14Pin</td></tr> <tr><td>TA8126F</td><td>10Pin</td></tr> <tr><td>BA10393F</td><td>8 Pin</td></tr> <tr><td>MB15A01PFV1</td><td>16Pin</td></tr> </table>			CXA1238M	30Pin	TA75339F	14Pin	TA8126F	10Pin	BA10393F	8 Pin	MB15A01PFV1	16Pin
CXA1238M	30Pin											
TA75339F	14Pin											
TA8126F	10Pin											
BA10393F	8 Pin											
MB15A01PFV1	16Pin											
 TA7376P	 LA5003	 S-81225AG S-8053ALB S-81230AG										
 UPD75312GF	 2SB815B7 2SC2223F13 2SA1162GR 2SC2712GR 2SC2712BL											
 2SK435D 2SK433BKB	 2SK715W	 2SK381B										
 LTL-709RP	 1SS314 1N60/1K60 1N4148 RLS4148	 RB421D										
 SVC203(AA3)	 SVC201SP	 RT3-534GUTS										

■ IC CIRCUIT BLOCK DIAGRAM

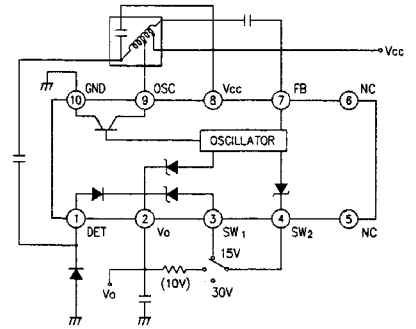
IC1 CXA1238M



IC2 TA7376P

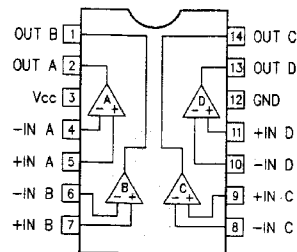


IC4 TA8126F

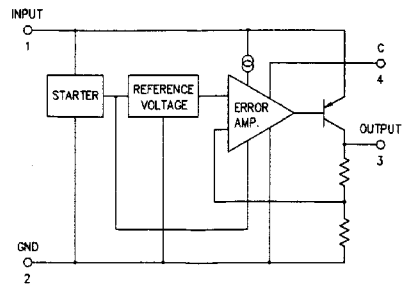


IC3 TA75339F

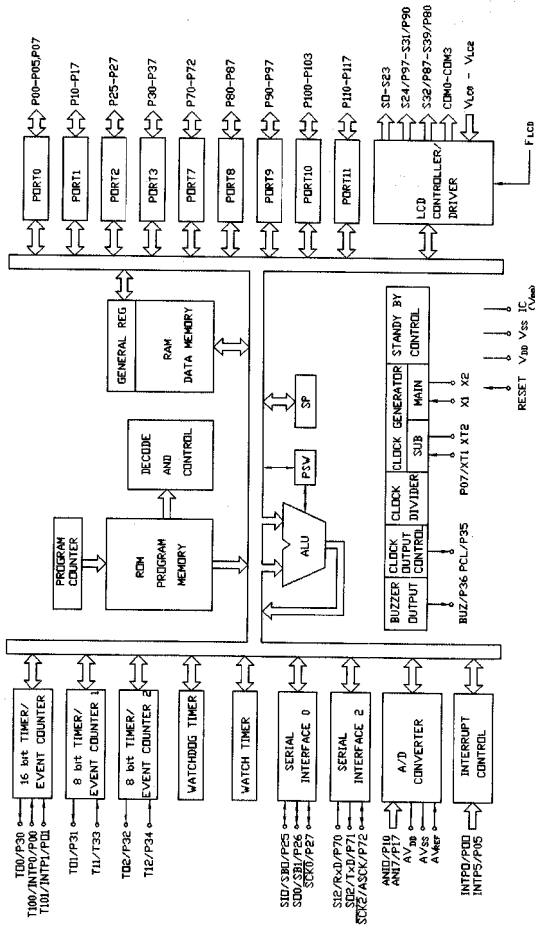
(TOP VIEW)



IC5 LA5003

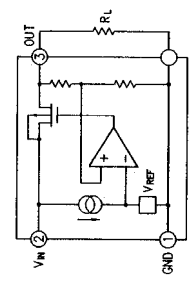


IC201 UPD75312GF

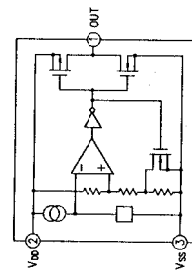


NOTE: 1. The internal ROM and RAM capacities depend on the product.
2. Pin connection in parentheses is intended for the uP79064.

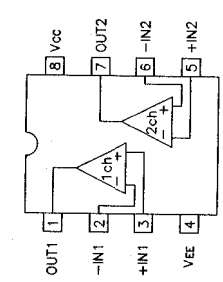
IC6 S-81225AG



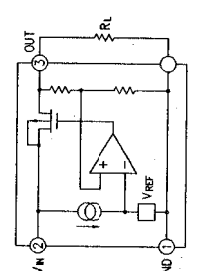
IC203 S-8053ALB



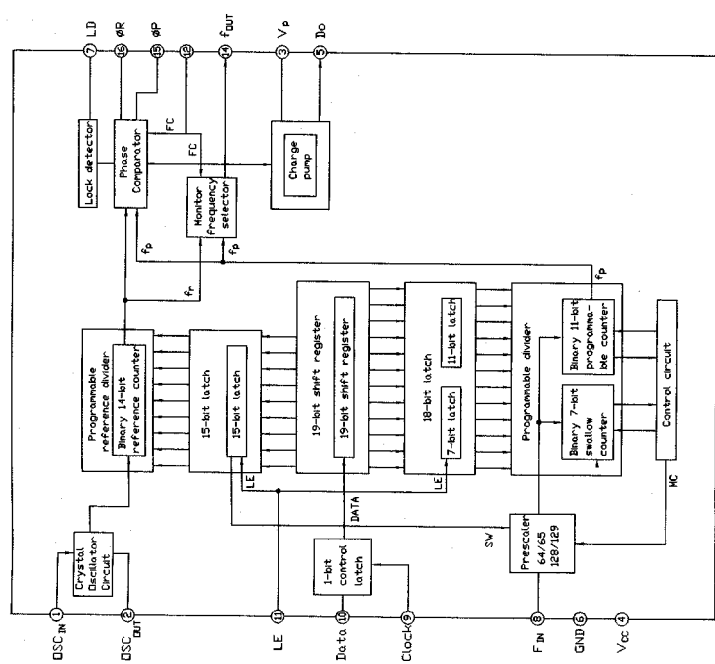
IC202 BA10393F



IC204 S-81230AG

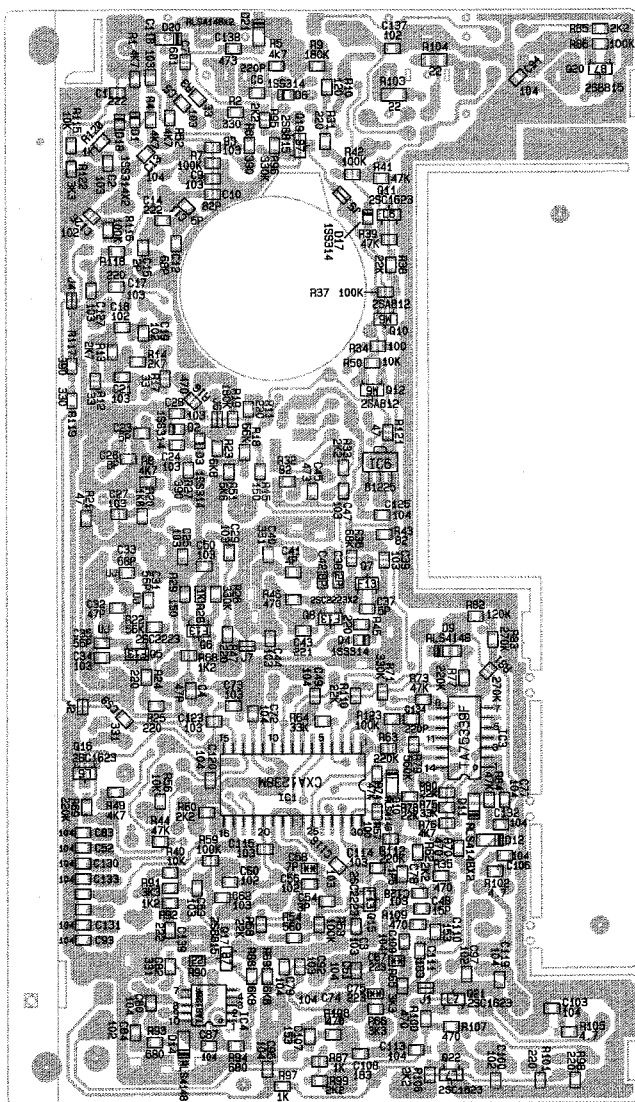


IC205 MB15A01PFV1

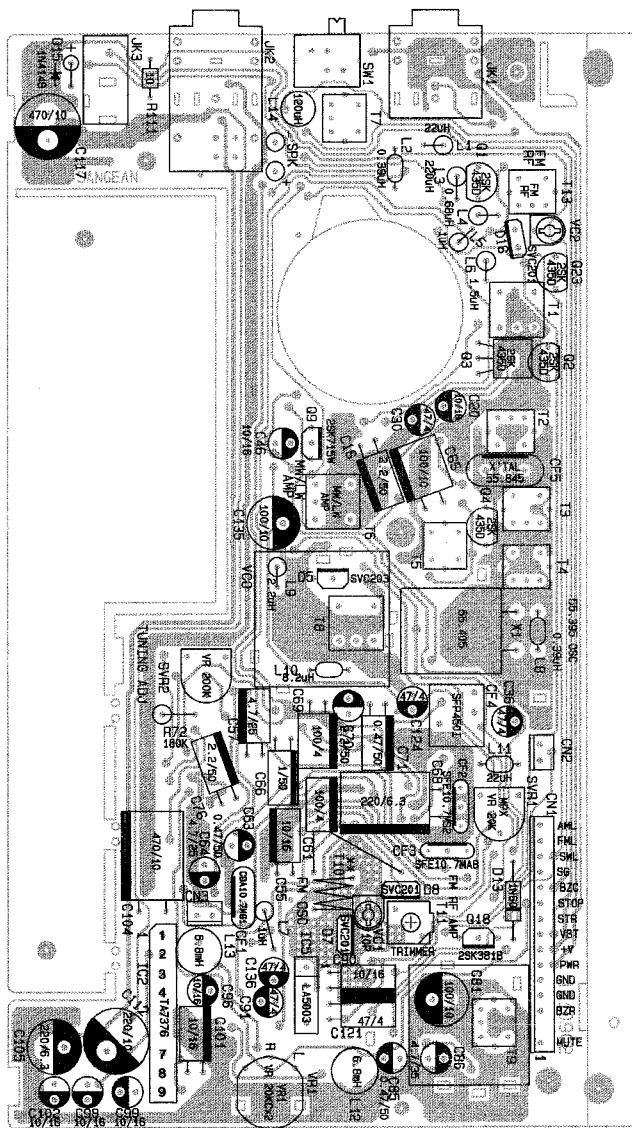


■ CIRCUIT BOARD CONNECTION DIAGRAM

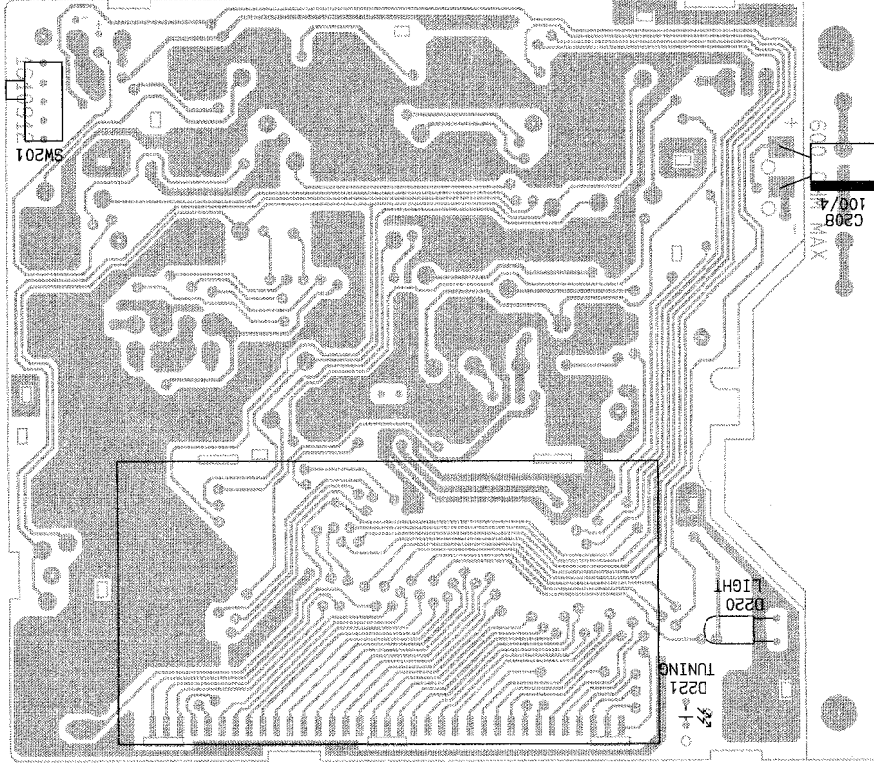
A MAIN P.C.B. (SIDE:A)



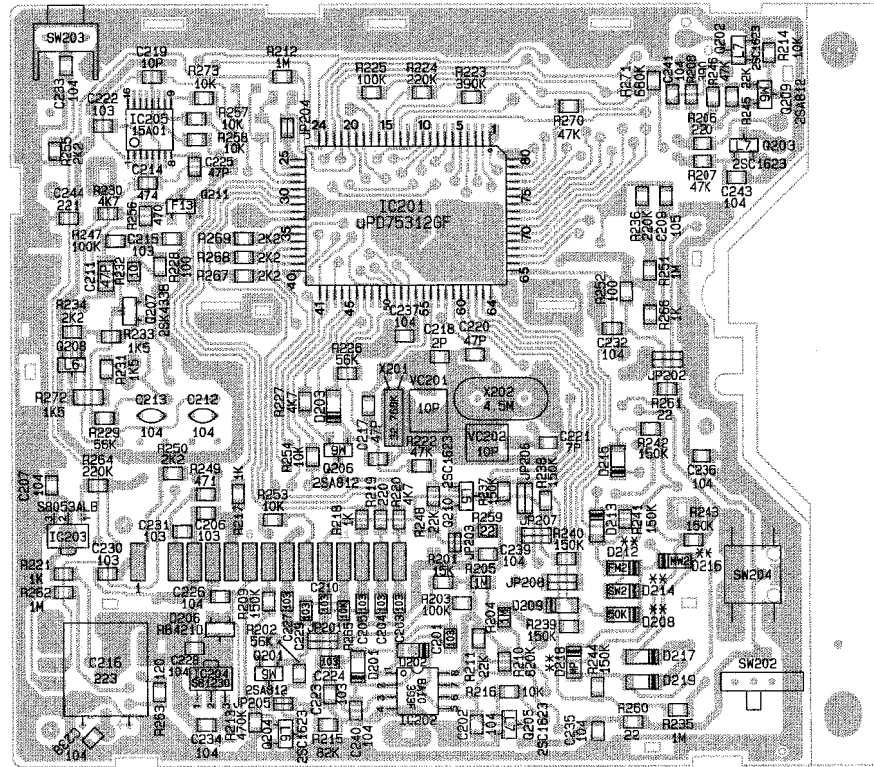
A MAIN P.C.B. (SIDE:B)



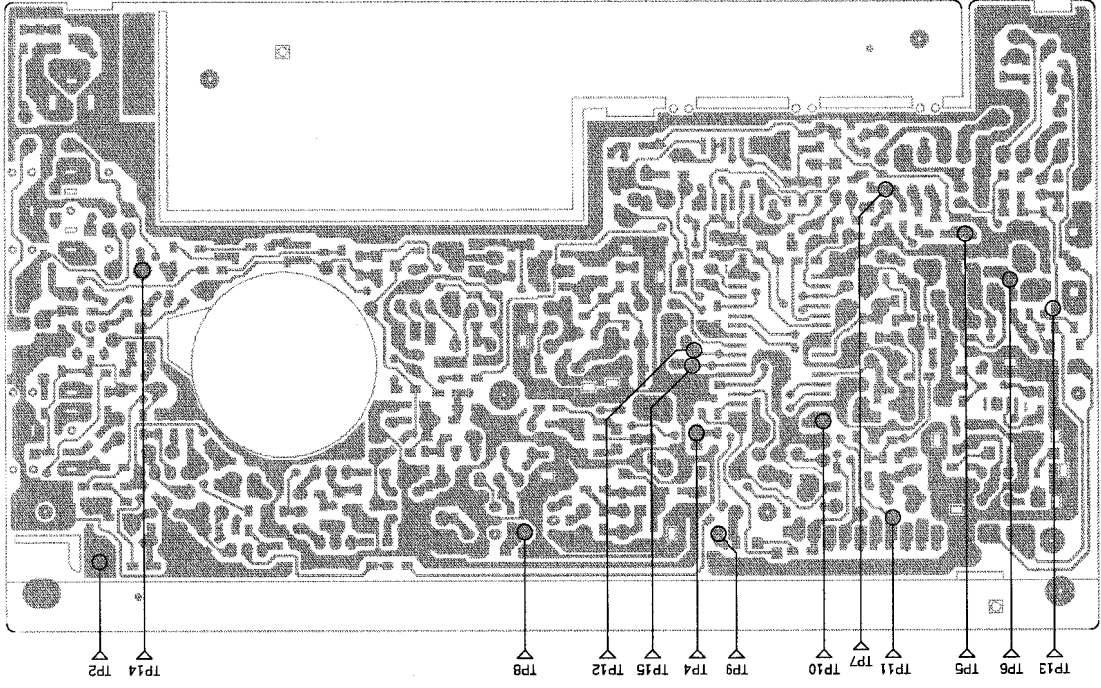
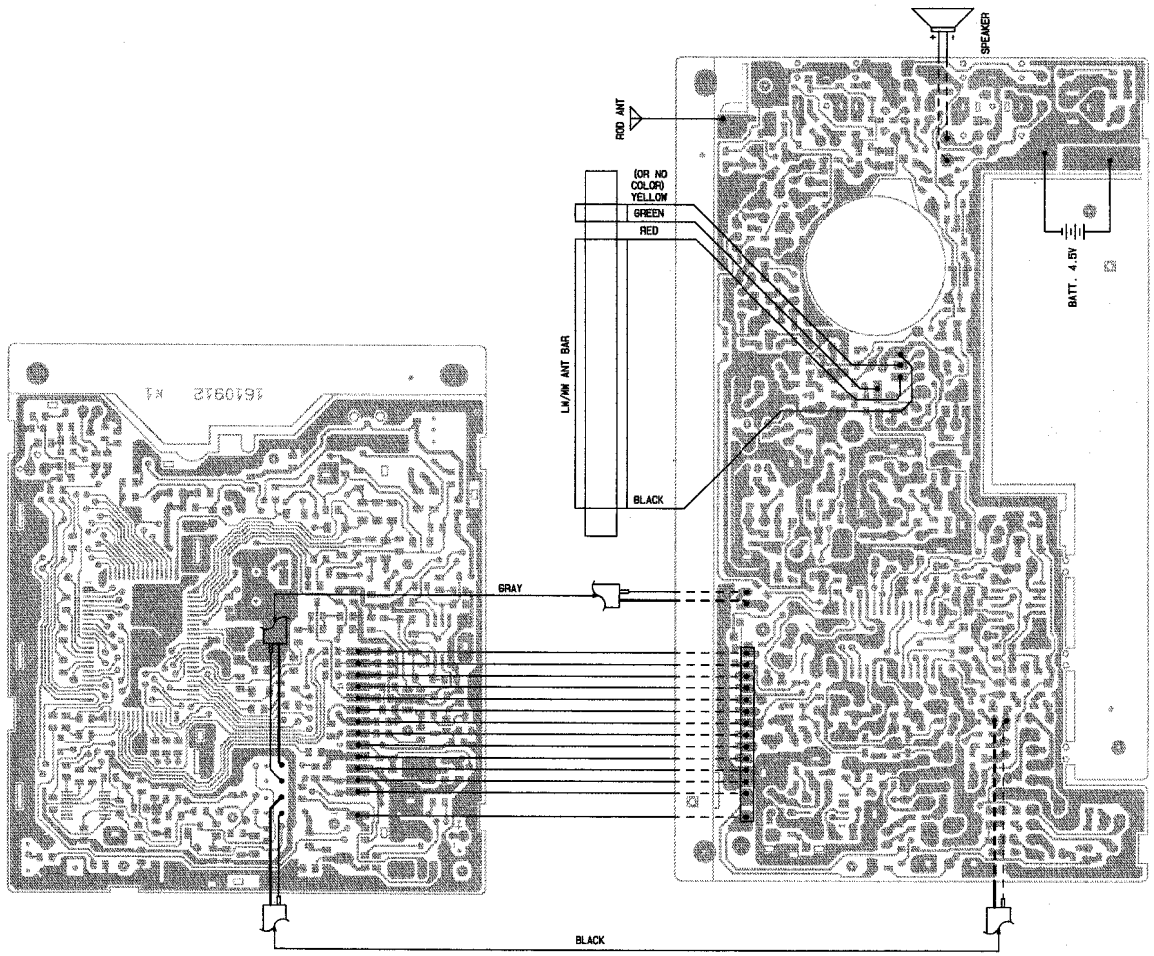
B PLL P.C.B. (SIDE:B)



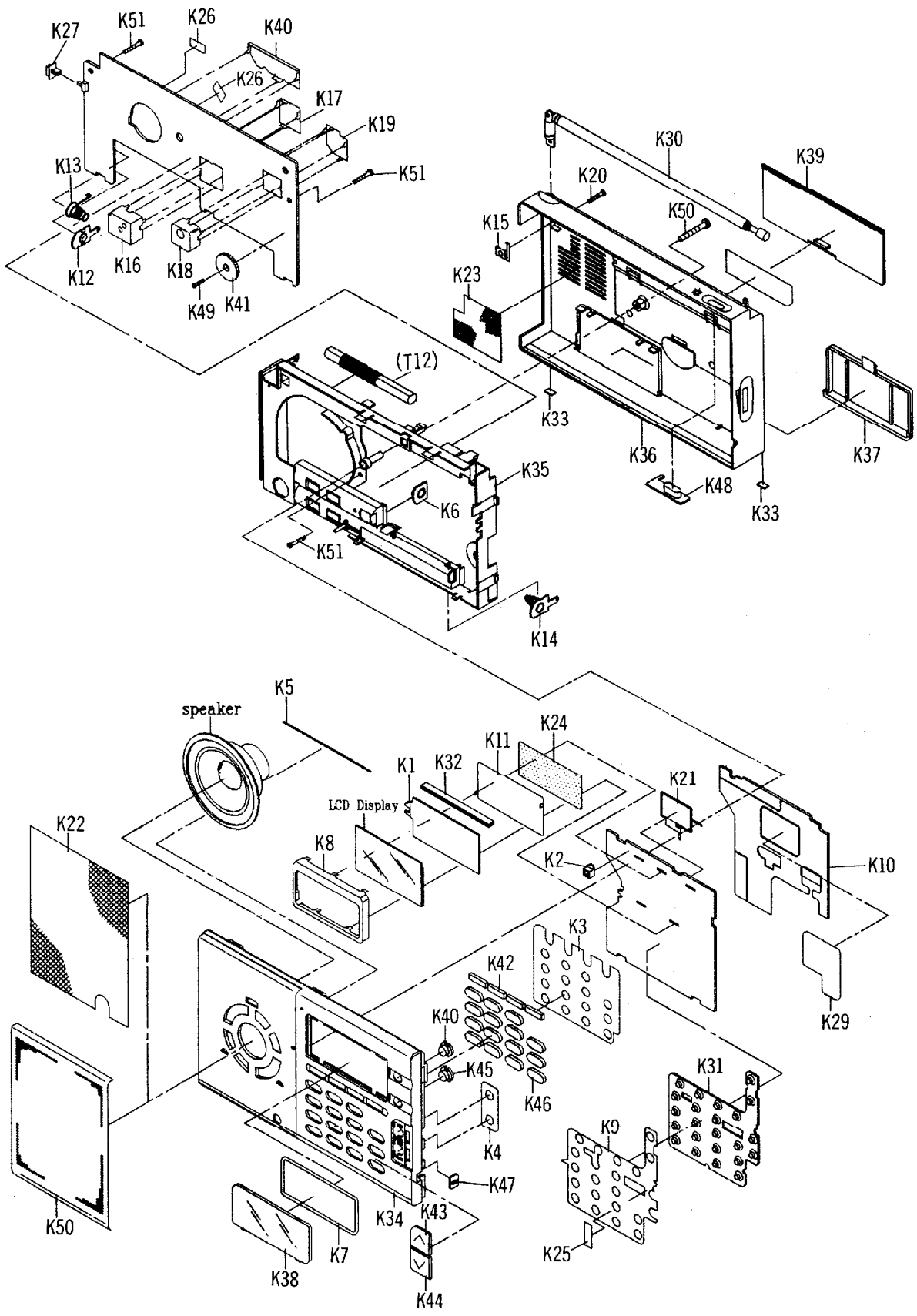
B PLL P.C.B. (SIDE:A)



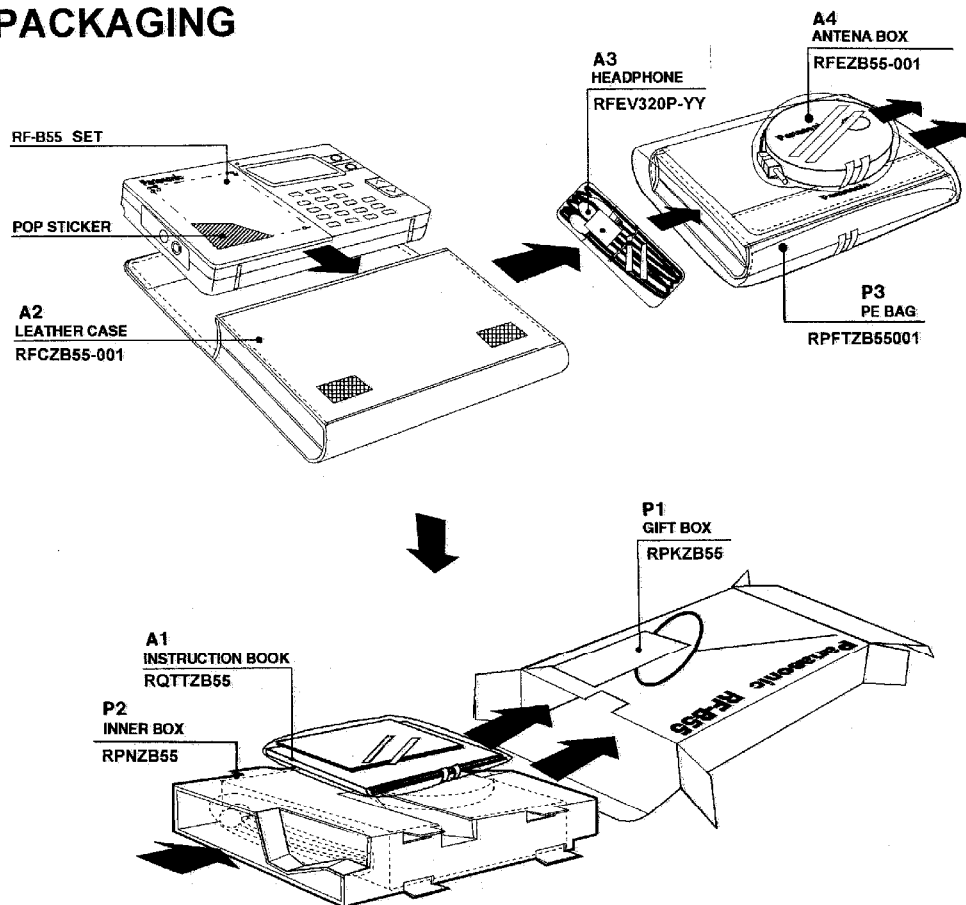
■ WIRING DIAGRAM



■ CABINET PARTS LOCATION



■ PACKAGING



■ REPLACEMENT PARTS LIST (CABINET, ACCESSORIES, PACKING)

Notes:

1. (T) Indicates parts that are supplied TAMACO
2. (M) Indicates parts that are supplied MESA

Ref No.	Parts No.	Parts Name & Description	Values & Remarks	Ref No.	Parts No.	Parts Name & Description	Values & Remarks
CABINET PARTS				K31	RSQZB55-001	KEYBOARD RUBBER	(T)
K1	RMRZB55-001	LCD LIGHT LENS	(T)	K32	RSQZB55-002	CONDUCT RUBBER	(T)
K2	RMNZB55-004	LED HOLDER	(T)	K33	RMGBZB55-001	PU FOOT	(T)
K3	RMXZB55-001	KEY SPACER (A)	(T)	K34	RFKGF55EG-K	FRONT CABINET	(T)
K4	RMXZB55-002	KEY SPACER (B)	(T)	K35	RFKJFB55-K	MIDDLE CHASSIS	(T)
K5	RMNZB55-003	SPEAKER FIXED BAR	(T)	K36	RFKHFB55EG-K	BACK COVER	(T)
K6	RJCBZB55-004	BATTERY CONTACT (+)	(T)	K37	RFKMF55-K	BATTERY COVER	(T)
K7	RMNZB55-002	LCD WINDOW PLATE	(T)	K38	RKWZB55-001	LCD WINDOW	(T)
K8	RMNZB55-001	LCD HOLDER	(T)	K39	RFKNFB55-K	BACK SUPPORTER	(T)
K9	RSCZB55-001	KEYBOARD SHIELD	(T)	K40	RGVZB55-001	POWER KNOB	(T)
K10	RSCZB55-002	CONTROL PCB SHIELD	(T)	K41	RGZB55-001	VOLUME KNOB	(T)
K11	RSCZB55-003	LCD SHIELD PLATE	(T)	K42	RGVZB55-002	BAND KNOB Ass'y	(T)
K12	RJCBZB55-001	BATTERY CONDUCT PLATE (+)	(T)	K43	RGVZB55-003	TUNING UP BUTTON	(T)
K13	RJCBZB55-003	BATTERY SPRING (-)	(T)	K44	RGVZB55-004	TUNING DOWN BUTTON	(T)
K14	RJCBZB55-002	BATTERY SPRING Ass'y (-)	(T)	K45	RGVZB55-005	FINE KNOB	(T)
K15	RJHZB55-001	ROD ANT TERMINAL	(T)	K46	RGVZB55-006	TEN KEY KNOB Ass'y	(T)
K16	RSCZB55-004	VCO SHIELD (UP)	(T)	K47	RGVZB55-007	LOCK KNOB	(T)
K17	RSCZB55-005	VCO SHIELD (DOWN)	(T)	K48	RGVZB55-008	LIGHT KNOB	(T)
K18	RSCZB55-006	DC/DC SHIELD (UP)	(T)	K49	XTNR14+5CFN	SCREW (VR KNOB)	(T)
K19	RSCZB55-007	DC/DC SHIELD (DOWN)	(T)	K50	XTNR2+6CFN	SCREW (CHASSIS)	(M)
K20	XTNR26+35CFZ	SCREW (ROD ANT)	(T)	K51	XTNR26+22CFZ	SCREW (CAB)	(T)
K21	RSCZB55-009	U-COM SHIELD COVER	(T)	PACKING MATERIALS			
K22	RKNZB55-001	HEAT BONDING NET	(T)	P1	RPKZB55	GIFT BOX	(T)
K23	RKNZB55-002	BACK SALON NET	(T)	P2	RPNZB55	INNER BOX	(T)
K24	RSCZB55-010	LCD SHIELD FIBER	(T)	P3	RPFTZB55001	PE BAG	(T)
K25	RHSZB55-002	HEMELON SPACER	(T)	ACCESSORIES			
K26	RHSZB55-001	HEMELON SHEET	(T)	A1	RQTTZB55	INSTRUCTION BOOK	(T)
K27	RGVZB55-009	STEREO/MONO KNOB	(T)	A2	RFCZB55-001	LEATHER CASE	(T)
K28	RGMZB55-001	SPEAKER GRILL	(T)	A3	RFEV320P-YY	INNERPHONES	(T)
K29	RSCZB55-011	U-COM SHIELD MYLAR	(T)	A4	RFEZB55-001	ANT BOX	(T)
K30	XEAZB55-001	ROD ANT	(T)				

REPLACEMENT PARTS LIST (ELECTRICAL)

Notes:

1. (T) Indicates parts that are supplied TAMACO
2. (M) Indicates parts that are supplied MESA

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES			
IC1	CXA1238M	I.C.	(M)
IC2	TA7376P	I.C.	(M)
IC3	TA75339F	I.C.	(T)
IC4	TA8126F	I.C.	(M)
IC5	LA5003	I.C.	(T)
IC6	S-81225AG	I.C.	(T)
IC201	UPD75312GF	I.C.	(T)
IC202	BA10393F	I.C.	(T)
IC203	S-8053ALB	I.C.	(T)
IC204	S-81230AG	I.C.	(T)
IC205	MB15A01PFV1	I.C.	(T)
Q1~4,23	2SK435D	Transistor	(T)
Q5~8,15	2SC2223F13	Transistor	(T)
211			
Q9	2SK715W	Transistor	(T)
Q10,12,201, 206,209	2SA1162GR	Transistor	(M)
Q11,16,204 208,210	2SC2712GR	Transistor	(T)
Q17,19,20	2SB815B7	Transistor	(T)
Q18	2SK381BTA	Transistor	(M)
Q21,22,202 203,205	2SC2712BL	Transistor	(T)
Q207	2SK433BKB	Diode	(T)
D1~4,6,17, 18	1SS314	Diode	(T)
D5	SVC203(AA3)	Diode	(T)
D7,8,16	SVC201SP	Diode	(T)
D9,10,11,12 14,20,21, 201,202, 203,209, 213,215, 217,219	RLS4148	Diode	(T)
D13	1N60/1K60	Diode	(T)
D15	1N4148	Diode	(M)
D206	RB421D	Diode	(T)
D220	RT3-534GUTS	Diode	(T)
D221	LTL-709RP	Diode	(T)
COILS AND TRANSFORMERS			
T1	RLIZB55001	TOROID COIL	(T)
T2,3	RLIZB55002	ADJ COIL	(T)
T4	RLIZB55003	ADJ COIL	(T)
T5	RLIZB55004	ADJ COIL	(T)
T6	RLIZB55005	FIXED COIL	(T)
T7	RLIZB55006	ADJ COIL	(T)
T8	RLQZB55007	ADJ COIL	(T)
T9	RLQZB55008	ADJ COIL	(T)
T10	RLQZB55009	SP COIL	(T)
T11	RLAZB55010	ADJ COIL	(T)
T12	RLVZB55011	BAR & COIL	(T)
T13	RLIZB55012	ADJ COIL	(T)
L1	RLQZB55013	COIL	(T)
L2,8	RLQZB55014	COIL	(T)
L3	RLQZB55015	COIL	(T)
L4	RLQZB55016	COIL	(T)
L5,7	RLQZB55017	COIL	(T)
L6	RLQZB55018	COIL	(T)
L9	RLQZB55019	COIL	(T)
L10	RLQZB55020	COIL	(T)
L11	RLQZB55021	COIL	(T)
L12,13	RLQZB55022	COIL	(T)
L14	RLQZB55023	COIL	(T)

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
TRIMMER CAPACITOR			
VC1,2	RCVZB55001	Trimmer CAP	(T)
VC201,202	RCVZB55002	Trimmer CAP	(T)
VARIABLE RESISTORS			
VR1	RRVZB55001	V.R. Volume	(T)
SVR1	RRNZB55001	S-VR	(T)
SVR2	RRNZB55002	S-VR	(T)
SPEAKER			
SP	RASZB55001	SPEAKER	(T)
SWITCHES			
SW1	RSSZB55001	Switch	(T)
SW201	RSSZB55002	Switch	(T)
SW202	RSSZB55003	Switch	(T)
SW203	RSSZB55004	Switch	(T)
SW204	RSSZB55005	Switch (Jack)	(T)
Jacks			
JK1	RJJZB55001	AM EXT ANT Jack	(T)
JK2	RJJZB55002	Headphones Jack	(T)
JK3	RJJZB55003	DC IN Jack	(T)
CERAMIC FILTERS AND CRYSTAL			
X1	RSXZB55001	Crystal	(T)
X201	RSXZB55002	Crystal	(T)
X202	RSXZB55003	Crystal	(T)
CF1	RLFZB55001	CERAMIC FILTERS	(T)
CF2	RLFZB55002	CERAMIC FILTERS	(T)
CF3	RLFZB55003	CERAMIC FILTERS	(T)
CF4	RLFZB55004	CERAMIC FILTERS	(T)
CF5	RLFZB55005	CERAMIC FILTERS	(T)
LCD			
LCD	RSLZB55001	L.C.D.	(T)
CONNECTORS			
CN1	RJPZB55001	CNT Wire Ass'y 15P	(T)
CN2	RJPZB55002	CNT Wire Ass'y 2P	(T)
CN3	RJPZB55003	CNT Wire Ass'y 2P	(T)

RESISTORS AND CAPACITORS

- Notes:
 1. (T) Indicates parts that are supplied TAMACO
 2. (M) Indicates parts that are supplied MESA

Ref No.	Parts No.	Values & Remarks
RESISTORS		
R1,4,5,8,49,52,76,220,227,230	ERJ6GEYJ472V	(M)
R2,119	ERJ6GEYJ331V	(M)
R3,12,17	ERJ6GEYJ330V	(M)
R6,27,117,208	ERJ6GEYJ391V	(M)
R7,37,42,53,59,86,116,123,203,225,247	ERJ6GEYJ104V	(M)
R9	ERJ6GEYJ184V	(M)
R10	ERJ6GEYJ121V	(M)
R11,24,25,31,45,47,98,101,118,206,219	ERJ6GEYJ221V	(M)
R13,14	ERJ6GEYJ272V	(M)
R15,29	ERJ6GEYJ151V	(M)
R16,35,46,70,100,107,108,109,249,256	ERJ6GEYJ471V	(M)
R18,22,202,226,229	ERJ6GEYJ563V	(T)
R20	ERJ6GEYJ182V	(T)
R21	ERJ6GEYJ470V	(M)
R23,88,89	ERJ6GEYJ682V	(M)
R26,71,96	ERJ6GEYJ334V	(M)
R28,87,97,120,217,218,221,226	ERJ6GEYJ102V	(M)
R32	ERJ6GEYJ820V	(M)
R33,60,62,85,95,99,106,234,250,255,267,268,269	ERJ6GEYJ222V	(M)
R34,57,228,252	ERJ6GEYJ101V	(M)
R36	ERJ6GEYJ683V	(M)
R38,58,78,80,110,211,245,248	ERJ6GEYJ223V	(M)
R39,41,44,73,74,84,207,222,246,270	ERJ6GEYJ473V	(M)
R40,50,56,115,214,216,253,254,257,258,265,273	ERJ6GEYJ103V	(M)
R61	ERJ6GEYJ562V	(M)
R54	ERJ6GEYJ561V	(M)
R63,69,77,112,224,236,264	ERJ6GEYJ224V	(M)
R64,75	ERJ6GEYJ333V	(M)
R65,66,91,122	ERJ6GEYJ332V	(M)
R68,92	ERJ6GEYJ122V	(M)
R72	ERDS2VJ184T	(T)
R79	ERJ6GEYJ564T	(T)
R81,83	ERJ6GEYJ274V	(M)
R82	ERJ6GEYJ124V	(M)
R90,259,260,261	ERJ6GEYJ220V	(M)
R93,94	ERJ6GEYJ681V	(M)
R102,105	ERJ6GEYJ477V	(M)
R103,104	ERJ8GEYJ220V	(M)
R111	ERDS2TJ100T	(M)
R201	ERJ6GEYJ153V	(M)
R204,205,212,235,251,262	ERJ6GEYJ105V	(M)
R209,237~244	ERJ6GEYJ154V	(M)
R210	ERJ6GEYJ824V	(M)
R213	ERJ6GEYJ474V	(M)
R215	ERJ6GEYJ823V	(M)
R223	ERJ6GEYJ394V	(M)
R231,233	ERJ6GEYJ152V	(M)
R232	ERJ6GEYJ100V	(M)
R271	ERJ6GEYJ684V	(M)
R272	ERJ8GEYJ152V	(T)
CHIP JUMPERS		
J1~7,203~205	ERJ6GEY0R00V	(M)
J201,202,206,207,208	ERJ8GEY0R00V	(M)

Ref No.	Parts No.	Values & Remarks
CAPACITORS		
C1,14,139	ECUV1H222KBN	(M)
C2,3,5,8,9,17,21,24,25,27,28,29,34,39,44,47,50,53,62,73,92,114,115,116,118,123,127,128,201,203,204,205,206,210,215,222,223,224,227,229,229,230,231	ECUV1E103KBN	(M)
C4,32,217,220,225	ECUV1H470JCN	(M)
C6,43,134,244	ECUV1H221JCN	(M)
C7	ECUV1H681JCN	(M)
C10	ECUV1H820JCN	(M)
C11,23,37	ECUV1H050CCN	(M)
C12	ECUV1H680JCN	(M)
C13,49,51,52,72,74,77,79,80,83,87,93,94,95,103,106,109,113,119,120,125,130,131,132,207,226,228,232~241,243	ECUV1E104ZBN	(T)
C15,38,218	ECUV1H020CCN	(M)
C16,70,76	ECEA1HKA2R2	(M)
C18,19,56,60,84,97,100,126,137	ECUV1H102KBN	(M)
C20,98,99,102	ECEA1CKS100	(M)
C26,42	ECUV1H080DCN	(M)
C30	ECEA0GKS470	(M)
C31,35	ECUV1H560JUN	(T)
C33	ECUV1H680JUN	(T)
C36,91,121,124,136	ECEA0GKA470	(T)
C40,59,82	ECUV1H331JCN	(M)
C41	ECUV1H040CCN	(T)
C45,138	ECUV1E473ZBN	(M)
C46,55,90,96,101	ECEA1CKA100	(M)
C48	ECUV1H150JCN	(M)
C54	ECUV1H030CCN	(M)
C57,64	ECEA1EKA4R7	(M)
C58	ECUV1H070DCN	(M)
C61,69,208	ECEA0GKA101	(T)
C63,71,85	ECEA1HKAR47	(T)
C65,81,135	ECEA1AKS101	(M)
C66	ECEA1HKA010	(M)
C67,75,108,111	ECUV1E183KBN	(M)
C68,105	ECEA0JKA221	(T)
C86	ECEA1VKS4R7	(M)
C104,117	ECEA1AU471	(M)
C107	ECUV1E153KBN	(T)
C112	ECEA1AKA221	(M)
C202	ECUV1E104KBN	(T)
C209	ECUV1C105ZBN	(T)
C211	ECUV1H470JCM	(T)
C212,213	RCUZB55001	(T)
C214	ECUV1C474ZBN	(T)
C216	ECCFBZ55001	(I)
C219	ECUV1H100DCN	(T)



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