

# SERVICE MANUAL

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RADIO RECEIVER

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This Service Manual is the "Revision Publishing" and replaces "Simple Manual"  
(S/M Code No.09-997-333-5T2).

## SPECIFICATIONS

Frequency range	FM: 87.5-108 MHz AM: 530-1,605 kHz
Maximum output	160 mV (EIAJ 4Ω)
Power source	DC 3 V using two R6 (size AA) batteries
Speaker	Diameter 57 mm, 4Ω
Maximum dimensions	115.5 (W) x 69 (H) x 30 (D) mm
Weight	Approx. 138 g. (excluding batteries)

- Design and specifications are subject to change without notice.

## ACCESSORIES LIST

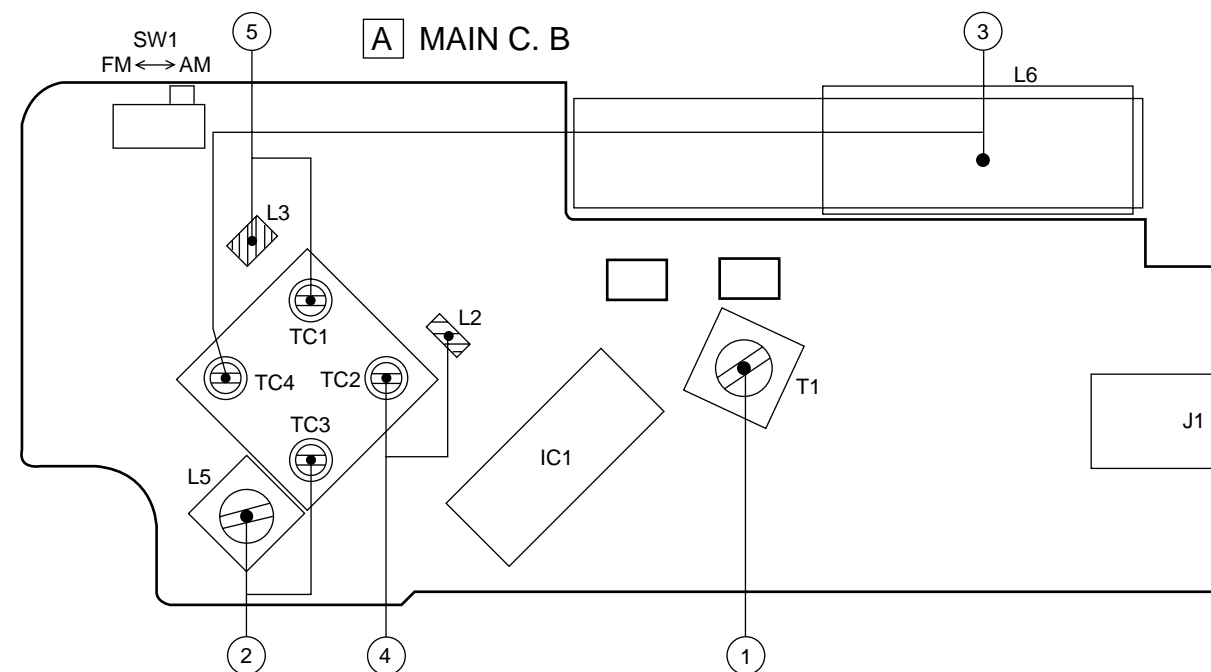
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S0-302-931-000		INSTRUCTION BOOK YH/YJ(ECC)<YJ<S>>
1	S0-302-932-000		INSTRUCTION BOOK(6L)<YZ<S>>
1	S0-302-933-000		INSTRUCTION BOOK(PHC)<YZ<S>>
2	S0-100-610-000		HAND STRAP,SP-422

# ELECTRICAL MAIN PARTS LIST

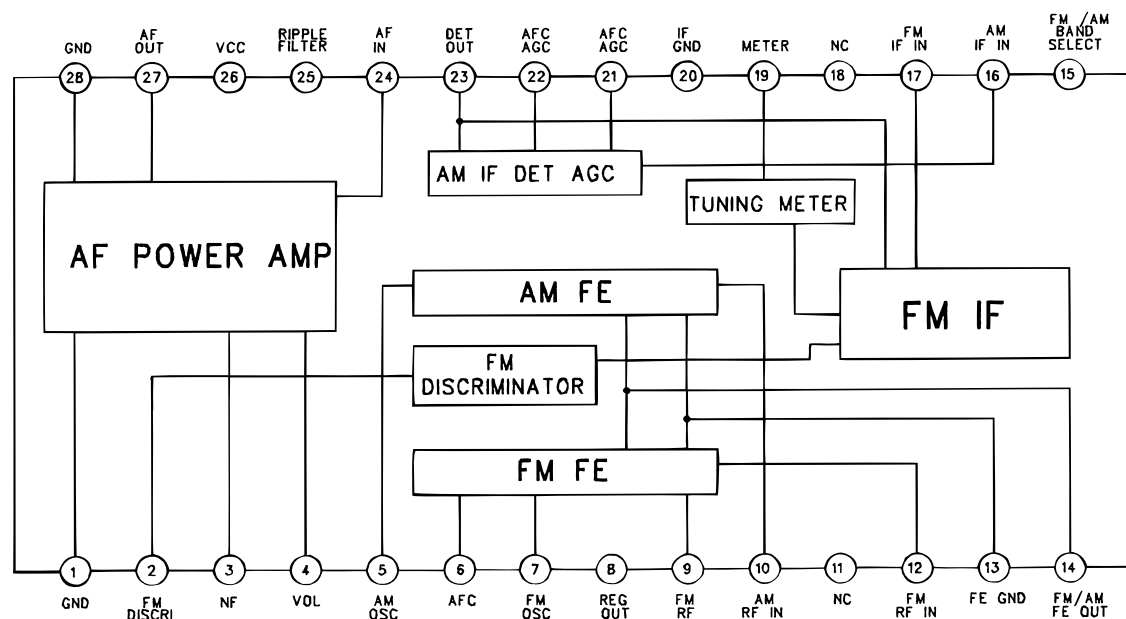
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				CF2	87-008-462-010		CER, FIL SFT10.7MS23H-A
	S4-316-190-000	IC, CXA1619AM		CF3	S2-310-010-100		DISCRMINATOR FILTER 10.7MHZ
DIODE				J1	S1-210-015-301		JACK, HP 3.5MM
	82-135-799-010	DIODE, 1N4148		L1	S1-110-013-900		COIL, AIR FM 3-5.5-0.5
MAIN C.B				L4	87-003-108-010		COIL, 0.68UH
				L5	S1-110-013-200		COIL, OSC AM 8441A 7Z0-93100
C5	87-016-299-080	CAP, E 10-10V		L6	S1-135-100-000		COIL, 1.5UH
C12	87-010-403-080	CAP, E 3.3-50V		L7	S1-010-012-400		AM BAR ANTENNA SET 10-50
C14	87-016-299-080	CAP, E 10-10V		LED1	S5-570-100-100		LED, 3.0MM (RED)
C15	87-010-404-080	CAP, E 4.7UF-50V		PVC1	S2-010-011-000		PVC 16.2-16.2-7.5
C16	87-016-299-080	CAP, E 10-10V		SW1	S3-101-001-100		SW, SLIDE SKA-12D01S-G2-NA
C18	87-010-400-080	CAP, E 0.47UF-50V		T1	S1-010-012-000		IFT, AM 7.5-7.5-12.5
C19	87-016-299-080	CAP, E 10-10V		VOL1	S2-110-010-202		VOL, ROTARY RV121S-10-012J-B50K
C21	87-010-221-080	CAP, E 470UF-10V					
C23	87-010-562-040	CAP, E 220UF-10V					
CF1	S1-910-010-300	CER, FIL 450K					



# IC BLOCK DIAGRAM

IC, CXA1619AM



# ADJUSTMENT

- AM IF Adjustment  
T1 ..... 450 kHz
- AM Freq. Range Adjustment  
L5 ..... 515 kHz  
TC3 ..... 1635 kHz
- AM Tracking Adjustment  
L6 ..... 600 kHz  
TC4 ..... 1400 kHz
- FM Freq. Range Adjustment  
L2 ..... 87 MHz  
TC2 ..... 109 MHz
- FM Tracking Adjustment  
L3 ..... 90 MHz  
TC1 ..... 108 MHz

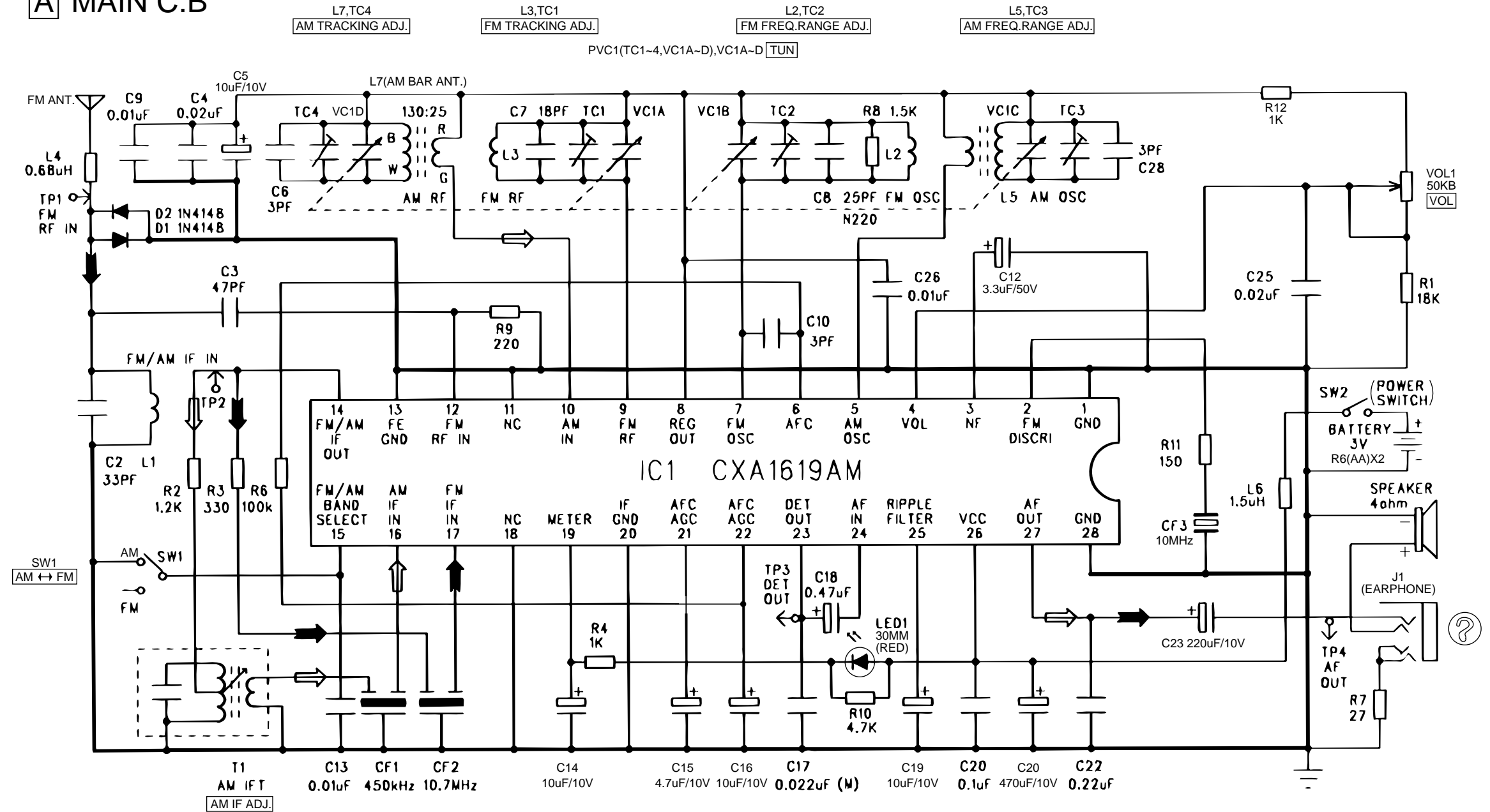
# PRACTICAL SERVICE FIGURE

Sensitivity:  
FM (IHF, THD 3%) ..... Less than 16 dB  
(at 88, 98, 108 MHz)

AM (S/N 10 dB) ..... Less than 51 dB (at 600 kHz)  
Less than 47 dB (at 1000 kHz)  
Less than 46 dB (at 1400 kHz)

Intermediate Frequency:  
FM: 10.7 MHz  
AM: 450 kHz

**A MAIN C.B**



IC1 CXA1619AM		PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PINS VOLTAGE	FM	0	2.18	1.50	0.76	1.22	1.42	1.22	1.22	1.22	1.22	0	0.32	0	0.4	
	AM	0	2.7	1.5	0.76	1.22	1.07	1.22	1.22	1.22	1.22	0	0	0	0.1	
VCC=3.0V	FM	1.28	0	1.27	0	0	0	0.82	1.43	1.61	0	2.7	3.0	1.52	0	
	AM	0	0	0	0	0	0	1.47	1.08	0.97	0	2.7	3.0	1.52	0	

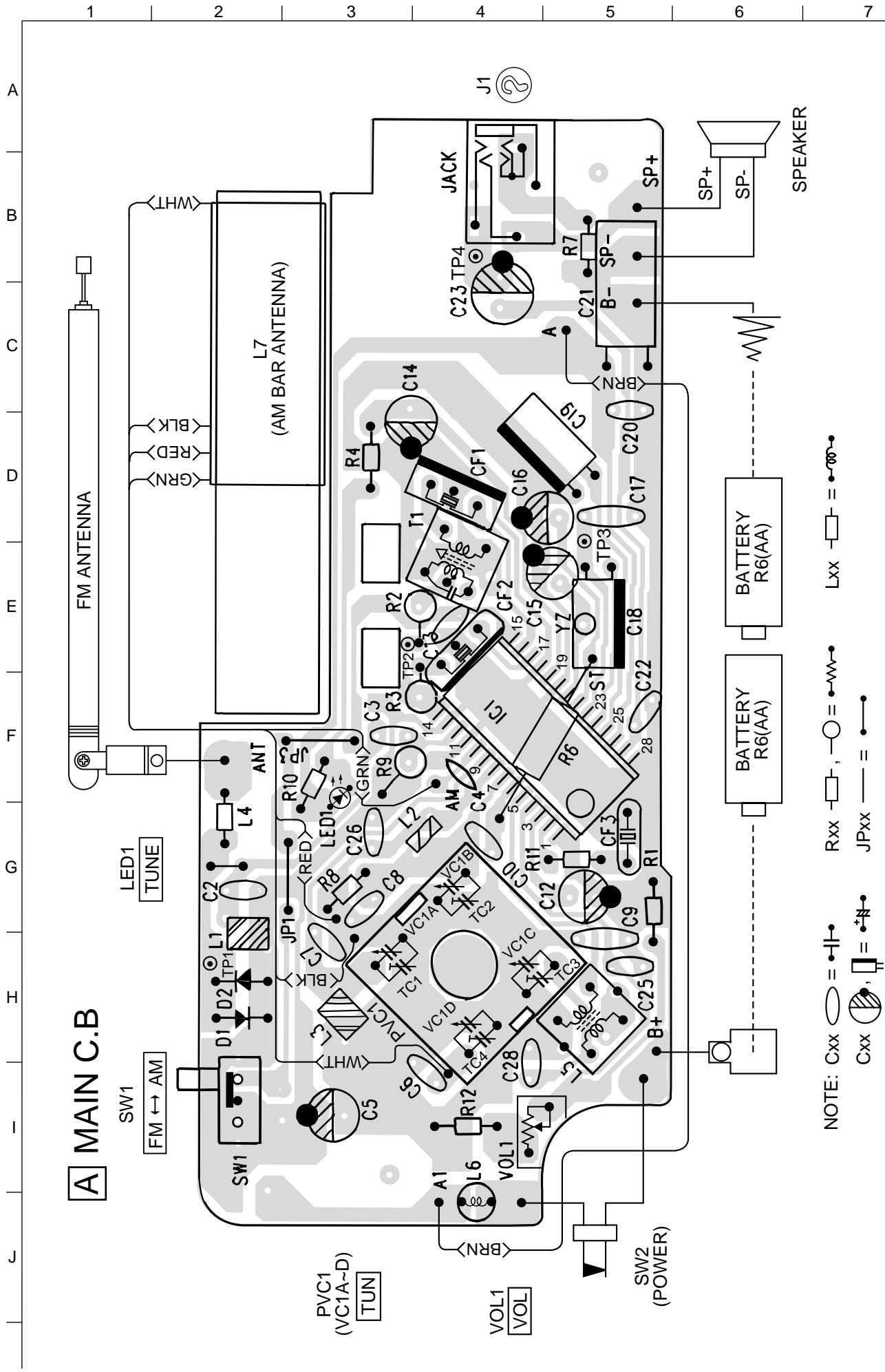
SIGNAL

MW	→	515+-5---1635+-20KHz
FM	→	87+-0.5---109+-0.5MHz

NOTE:

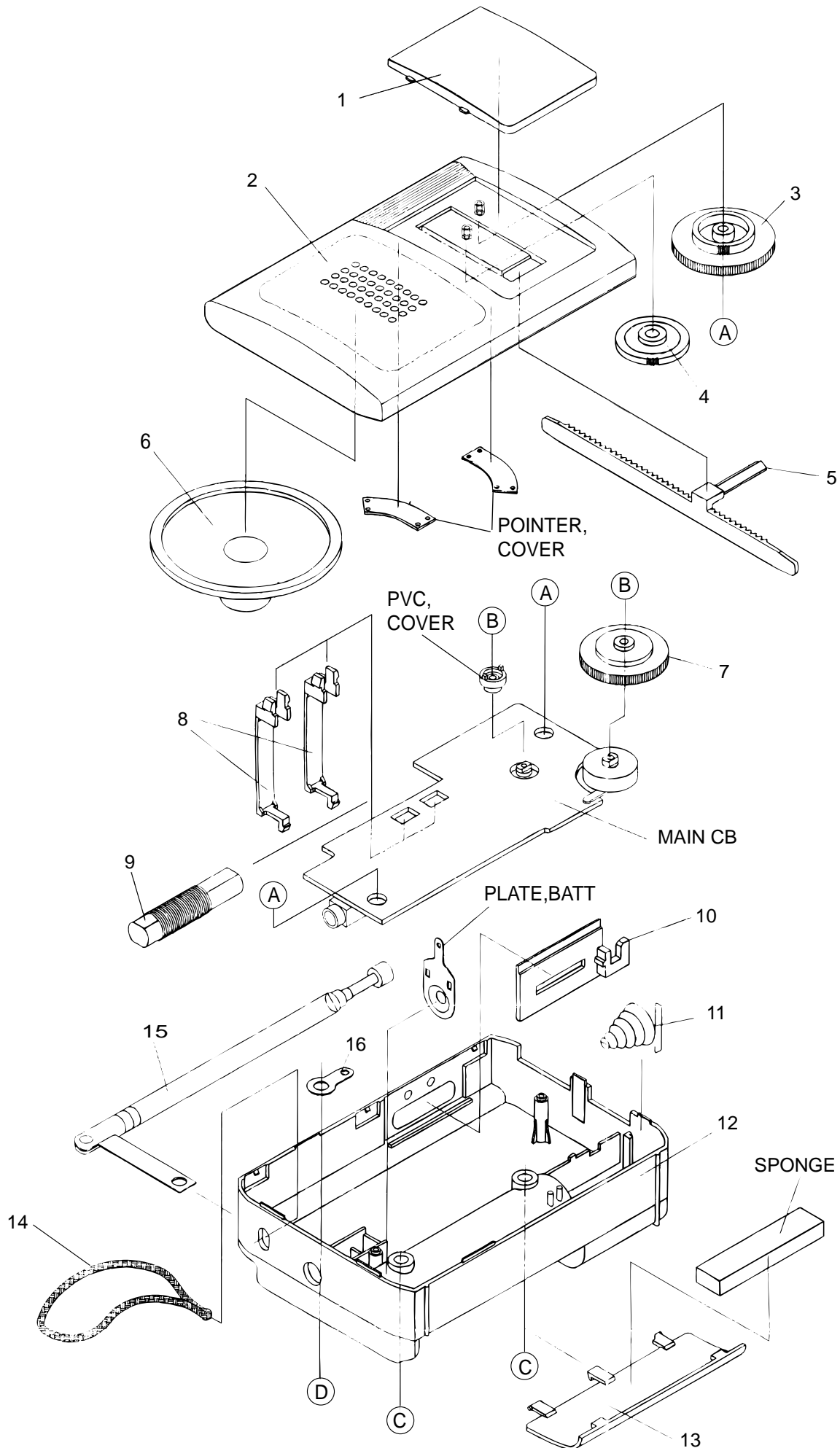
- Cxx  $\pm$  | | - =  $\pm$  | | -
- Rxx  $\square$  =  $\sim$
- Lxx  $\square$  =  $\sim$

# WIRING



NOTE: Cxx ○ = ●-| |  
 Cxx ○ = ●-| |  
 Rxx □ = □-| |  
 JPxx — = —| |

MECHANICAL EXPLODED VIEW 1/1



# MECHANICAL MAIN PARTS LIST 1/1

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S0-801-180-100		LENS,DIAL
2	S0-101-460-100		CAB,FRONT
3	S0-503-380-000		KNOB,RTRY TUN
4	S1-700-780-000		GEAR,TUNING ABS
5	S0-700-420-000		POINTER
6	S1-010-032-500		SPKR,SLIM MYLAR 57MM 0.2W 40HM
7	S0-503-360-000		KNOB,RTRY VOL
8	S0-901-160-000		HOLDER,BAR PE
9	S1-010-012-400		AM BAR ANTENNA SET 10-50
10	S0-503-370-000		KNOB,SL BAND
11	S0-201-870-000		BATT CONTACT(-)
12	S0-201-450-100		CAB,REAR
13	S0-301-440-000		DOOR,BATT
14	S0-100-610-000		HAND STRAP,SP-422
15	S2-010-012-301		FM ROD ANT 5 SECTION
16	S0-401-080-000		TERIMAL CONTACT
A	87-254-033-410		PAN-WASHER S-SCREW M2-4(T)
B	87-268-527-310		PAN M-SCREW M1.7-3
C	87-261-073-410		PAN S-SCREW(B) M2.6-6
D	87-265-071-210		PAN M-SCREW M2.6-4

## COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		



サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

**アイワ株式会社** 〒110 東京都台東区池之端1-2-11 ☎03 (3827) 3111 (代表)  
**AIWA CO.,LTD.** 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111