

TEAC

SERVICE MANUAL

R-1

AM/FM RECEIVER



NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [] mark can be used only with the version designated.
[T/C]: UL/CSA [E]: EUROPE [HK]: HONG KONG
[SIN]: SINGAPORE

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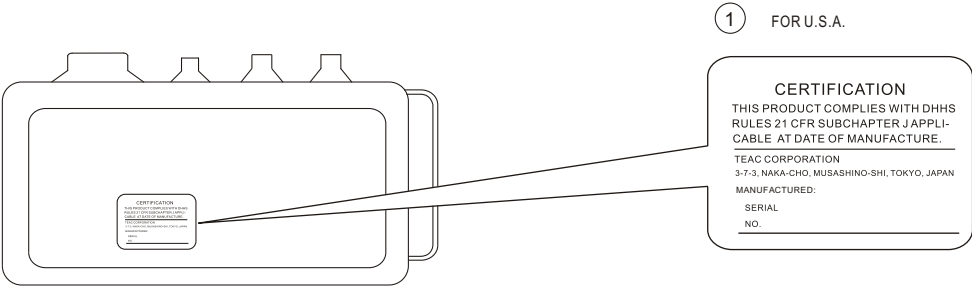
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1 SAFETY INFORMATION

SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations " title 21, CFR, chapter 1,subchapter J,based on The Radiation Control for Health and Safety Act of 1968"and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown ①.

• **CAUTION**
USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT REMOVE THE PROTECTIVE HOUSING USING SCREWDRIVER.
IF THIS PRODUCT DEVELOPS TROUBLE, MAKE A CONTACT WITH OUR SERICEMAN, AND DO NOT USE THE PRODUCT A TROUBLED STATE.



① FOR U.S.A.

CERTIFICATION
THIS PRODUCT COMPLIES WITH DHHS
RULES 21 CFR SUBCHAPTER J APPLI-
CABLE AT DATE OF MANUFACTURE.
TEAC CORPORATION
3-7-3, NAKA-CHO, MUSASHINO-SHI, TOKYO, JAPAN
MANUFACTURED:
SERIAL
NO.

2 SPECIFICATIONS

TUNER Section

Frequency Range (FM): 87.5MHz to 108.00 MHz (100kHz step) - USA
 87.5MHz to 108.00 MHz (50kHz step) - EUR

Frequency Range (AM): 520kHz to 1710 kHz (10kHz step) - USA
 522kHz to 1620 kHz (9kHz step) - EUR

SPEAKER Type

Type : 65 mm

Impedance : 4 ohms

Output Power : 1.5 W

GENERAL

Power Requirements (AC adaptor):
 120V , 60Hz (U.S.A./ Canada model)
 230V , 50Hz (Europe model)

Power Consumption: 15 W

Dimension (W x H x D): 238 x 127 x 134.5 mm
 9-3/8 x 5 x 5-5/16 (inches)

Weight: (net) 31-1/16 lbs (1.4 kg)

Standard Accessories: AC Adaptor x 1
 Stereo mini plug cable x1
 FM Lead-type Antenna x 1
 Owner's Manual x 1
 Warranty Card x 1

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.

3 ADJUSTMENTS AND CHECKS

3-1 TUNER SECTION

- Use a screwdriver with a plastic or ceramic grip for all adjustment.

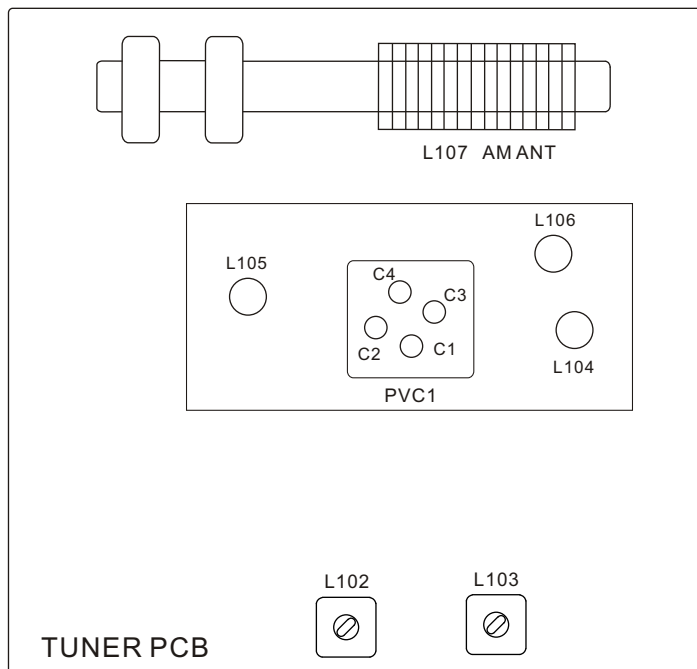
3-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on TUNER PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-2 Adjustment and Test Points

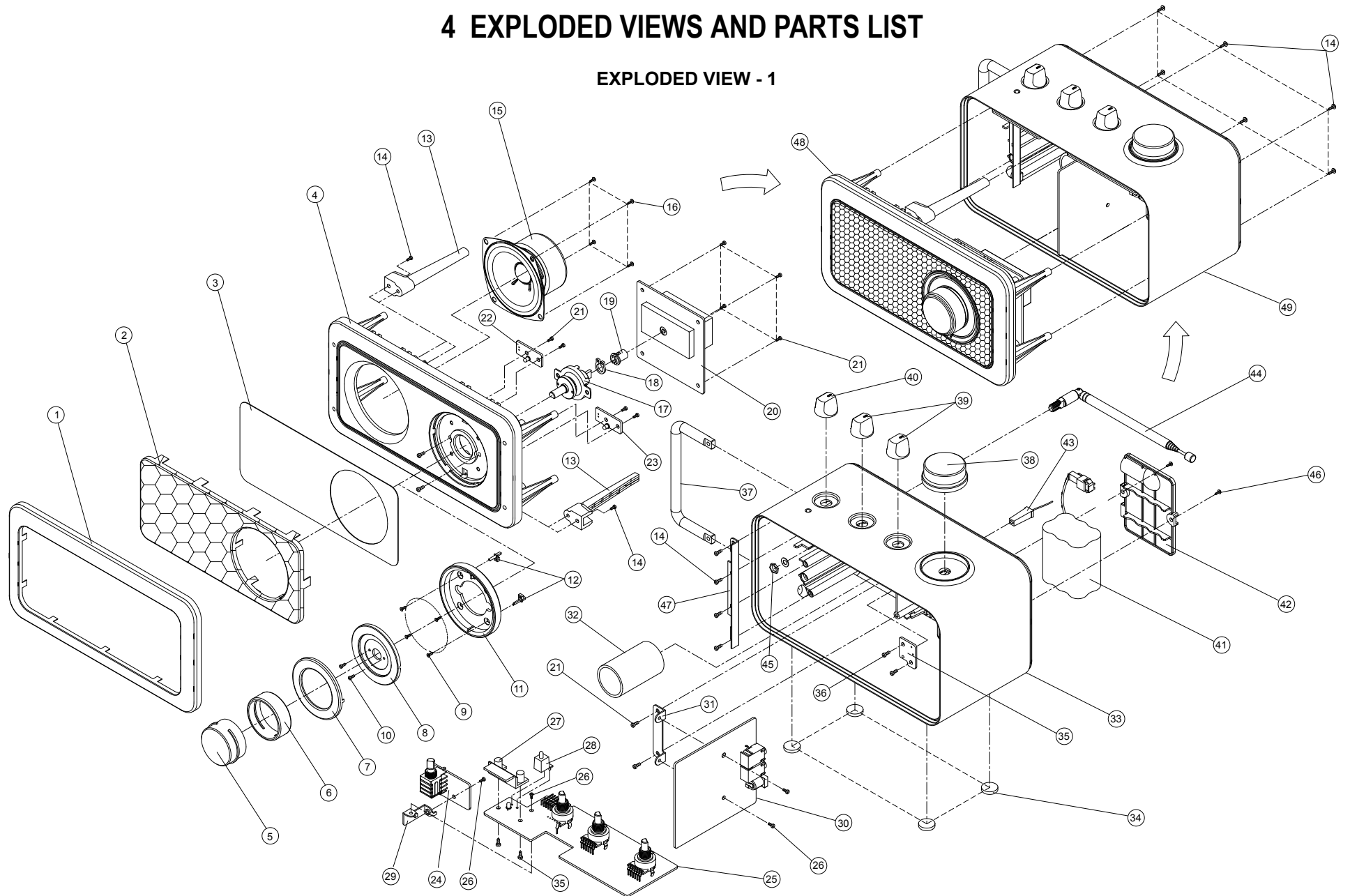


3-2-1 FM/AM alignment chart

ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L 105	Adjust for max. output
2. Tracking	108MHz 1kHz, +/-22.5kHz dev.	108MHz	PVC C1	Adjust for max. output
	90MHz 1kHz, +/-22.5kHz dev.	90MHz	L 104	Adjust for max. output
	104MHz 1kHz, +/-22.5kHz dev.	104MHz	PVC C2	Adjust for max. output and best waveform.
	Repeat step 2			
AM				
1. IF adjustment	455kHz 1kHz, 30% mod	600kHz (USA) 603kHz (EUR)	L 103	Adjust for 455kHz to middlle
			L 102	Adjust for max. output
2. AM band	520kHz 1kHz, 30% mod	520kHz (USA) 522kHz (EUR)	L 106	Adjust for max. output
	1710kHz 1kHz, 30% mod	1710kHz (USA) 1620kHz (EUR)	PVC C3	Adjust for max. output
3. Tracking	600kHz 1kHz, 30% mod	600kHz (USA) 603kHz (EUR)	AM ant coil (L107)	Adjust for max. output and best waveform.
	1400kHz 1kHz, 30% mod	1400kHz (USA) 1404kHz (EUR)	PVC C4	
	Repeat step 3			

4 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW - 1



EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-1	020-SR100300	ALUMI FRAME [T/C,SIN,HK]	
	020-R1EU0100	ALUMI FRAME [E]	
1-2	020-SR100500	SPEAKER METAL NET - BLACK	
	020-SR100501	SPEAKER METAL NET - SILVER	
1-3	051-SR100000	FRONT PANEL HIMERON	
1-4	001-SR100100	FRONT PANEL - BLACK	
	001-SR100101	FRONT PANEL - WHITE	
1-5	004-SR100100	TUNER KNOB	
1-6	037-SR100000	TUNER KNOB RUBBER	
1-7	020-SR100400	TUNER SCALE PLATE [T/C]	
	020-R1EU0200	TUNER SCALE PLATE [E,SIN,HK]	
1-8	010-SR100100	TUNER SCALE BASE	
1-9	023-33010031	SCREW KB 3X10MM	
1-10	022-22006031	SCREW BM 2X6MM	
1-11	010-SR100200	ANALOG TUNER RING	
1-12	007-SR100200	TUNER LED LENS	
1-13	010-SR100400	PANEL JOINT BAR	
1-14	023-23012033	SCREW BB 3X12MM (BLK)	
1-15	061-SR100400	SPEAKER 4 OHM 5-8W	
1-16	024-43008033	SCREW PWA 3X8MM (BLK)	
1-17		TUNER SHAFT ASSY	
1-18	029-06007013	SPRING RING	
1-19	010-SR100300	TUNER SHAFT CAP	
1-20	100-SR102020	TUNER PCB ASSY [T/C]	
	100-SR101020	TUNER PCB ASSY [E,SIN,HK]	
1-21	023-23010033	SCREW BB 3X10MM (BLK)	
1-22	100-SR102060	FM LED PCB ASSY	
1-23	100-SR102050	AM LED PCB ASSY	
1-24	100-SR102070	FUNCTION SWITCH PCB ASSY	
1-25	100-SR102030	EQ/VOLUME PCB ASSY [T/C]	
	100-SR101030	EQ/VOLUME PCB ASSY [E,SIN,HK]	
1-26	023-23008032	SCREW BB 3X8MM	
1-27	010-SR100500	EQ PCB HOLDER	
1-28	007-SR100100	POWER LED LENS	
1-29	011-SR100400	FUNCTION PCB BRACKET	
1-30	100-SR102010	MAIN PCB ASSY	
1-31	011-SR100100	MAIN PCB BRACKET	
1-32	044-SR100000	SPEAKER PAPER TUBE	
1-33	001-SR100200	REAR PANEL - BLACK [T/C]	
	001-SR100201	REAR PANEL - WHITE [T/C]	
	001-R1EB0200	REAR PANEL - BLACK [E]	
	001-R1EW0201	REAR PANEL - WHITE [E]	
	001-R1SB0200	REAR PANEL - BLACK [SIN,HK]	
	001-R1SW0201	REAR PANEL - WHITE [SIN,HK]	
1-34	037-SR100100	RUBBER FOOT	
1-35	100-SR102040	FM ANT PIN PCB ASSY	
1-36	023-23008032	SCREW BB 3X8MM	
1-37	011-SR100300	METAL HANDLE - BLACK	
	011-SR100301	METAL HANDLE - WHITE	

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EXPLODED VIEW-1

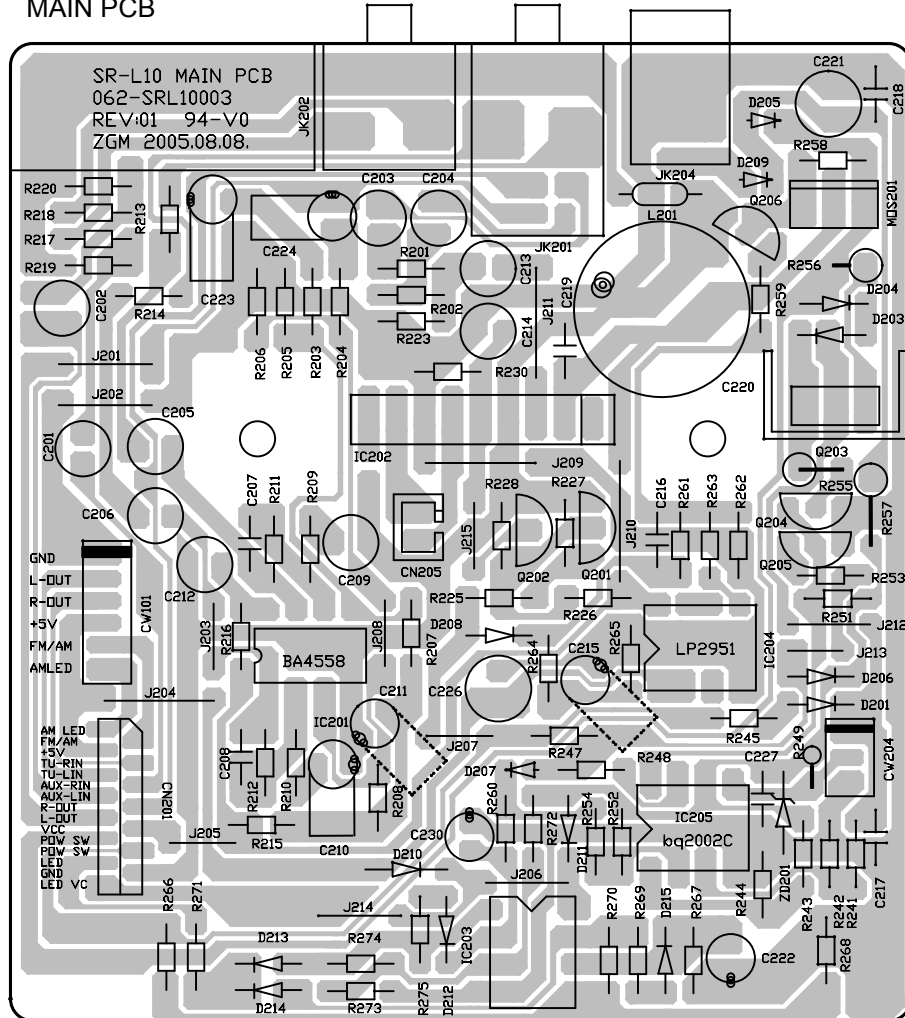
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-38	004-SR100200	VOLUME KNOB - BLACK	
	004-SR100201	VOLUME KNOB - SILVER	
1-39	004-SR100400	BASS/TREBLE KNOB - BLACK	
	004-SR100401	BASS/TREBLE KNOB - SILVER	
1-40	004-SR100300	FUNCTION KNOB - BLACK	
	004-SR100301	FUNCTION KNOB - SILVER	
1-41	099-45SRL101	AA SIZE NI-MH BATTERY	
1-42	003-SR100100	BATTERY COVER - BLACK [T/C]	
	003-SR100101	BATTERY COVER - WHITE [T/C]	
	003-R1YB0100	BATTERY COVER - BLACK - W/MADE IN CHINA [E]	
	003-R1NB0100	BATTERY COVER - BLACK - W/O/MADE IN CHINA [E,SIN,HK]	
	003-R1YW0101	BATTERY COVER - WHITE - W/MADE IN CHINA [E]	
	003-R1NW0101	BATTERY COVER - WHITE - WO/MADE IN CHINA [E,SIN.HK]	
1-43	009-00000016	FM ANTENNA L=1500MM (BLACK)	
	009-00000019	FM ANTENNA L=1500MM (WHITE)	
1-44	089-00000017	FM ROD ANTENNA	
1-45	013-60000101	HEXAGON NUT M6	
1-46	023-23012033	SCREW BB 3X12MM	
1-47	011-SR100200	METAL HANDLE BRACKET	
1-48		FRONT PANEL ASSY	
1-49		REAR PANEL ASSY	

5 PC BOARDS AND PARTS LIST

MAIN PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	100-SR102010	MAIN PCB ASSY	
	062-SRL10003	MAIN PCB	
C220	072-30330251	E.CAP 3300UF/25V	
CN201	082-21530300	FPC CONNECTOR 15P P=1MM	
CN205	082-10240100	CONNECTOR 2P P=2.5MM	
D201,203,204, D206-208,210-215	077-00414801	DIODE 1N4148	
D202	077-70SS1201	DIODE SS12	
D205,209	077-10400201	DIODE 1N4002	
IC201	075-JR458007	IC - JRC4580D	
IC202	075-07056B10	IC - TDA7056B	
IC203	075-0LM35803	IC - LM358	
IC204	075-LP295109	IC - LP2951	
IC205	075-BQ200209	IC - BQ2002C	
JK201	064-35020101	HEAD PHONE JACK #TE-03506S-11	
JK202	064-35020111	AUX JACK #TE-03506S-05	
JK204	064-20110102	DC JACK #TD0202-20	
L201	095-00220001	INDUCTOR 22UH	
MOS201	076-00295520	POWER MOSFET-MTP2955V	
Q201,202,204-206	076-00C94500	TR - 2SC945	
Q203	076-00B77200	TR - 2SB772	
Zd201	077-3005C20H	ZENER DIODE 5.2V	

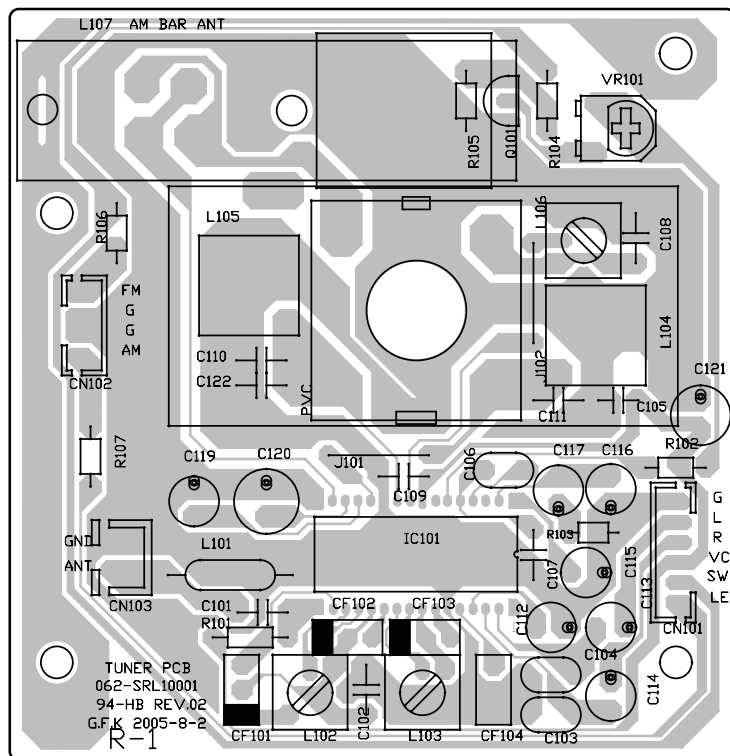
MAIN PCB



TUNER PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
CF101	100-SR102020	TUNER PCB ASSY [T/C]	
	100-SR101020	TUNER PCB ASSY [E,SIN,HK]	
	062-SRL10001	TUNER PCB	
	053-F300N000	PVC - HF443CAB02	
	081-04550000	AM CER.FILTER SFU455B	
CF102,103	081-31070001	FM CER.FILTER L10.7MA-5	
CF104	093-11070003	CER.FILTER 10.7MHZ	
CN101	082-10600100	CONNECTOR 6PIN P=2MM	
CN102	082-10400100	CONNECTOR 4PIN P=2MM	
CN103	082-10240100	CONNECTOR 2PIN P=2.5MM	
IC101	075-05711T20	IC - TEA5711T	
L101	095-00001001	INDUCTOR 0.1UH	
L102	079-SRL10414	AM COIL - 3A201	
L103	079-SRL10913	AM IF COIL - 3A202	
L104	079-SRL10C21	FM RF COIL	
L105	079-SRL10C22	FM OSC COIL	
L106	079-SRL10215	AM OSC COIL - 3M201	
L107	096-SRL10021	AM ANT COIL	
Q101	076-00C94500	TR - 2SC945	
VR01	092-34700100	VOLUME - 47KB	

TUNER PCB



EQ/VOLUME PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
CN402,403 IC401,402	100-SR102030	EQ/VOLUME PCB ASSY [T/C]	
	100-SR101030	EQ/VOLUME PCB ASSY [E,SIN,HK]	
	062-SRL10002	EQ/VOLUME PCB	
	058-41201001	CONNECTOR 2X6P P=2.5MM	
	075-JR458007	IC - JRC4580D	
LED401	094-06020501	LED - BLUE D3MM	
Q401-403	076-00C94500	TR - 2SC945	
VR401,402	069-SR102302	BASS/TREBLE VR.#B503X2	
VR403	069-SR102301	VOLUME #B503X2	
ZD401	077-3004A10H	ZENER DIODE 3.5V	

FM ANT PIN PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	100-SR102040	FM ANT PIN PCB ASSY	
	062-SRL10002	FM ANT PIN PCB	

AM LED PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
LED403	100-SR102050	AM LED PCB ASSY	
	062-SRL10002	AM LED PCB	
	094-06020501	LED - BLUE D3MM	

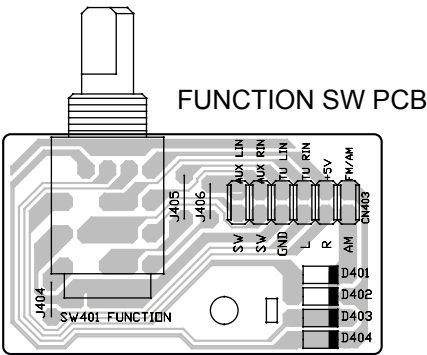
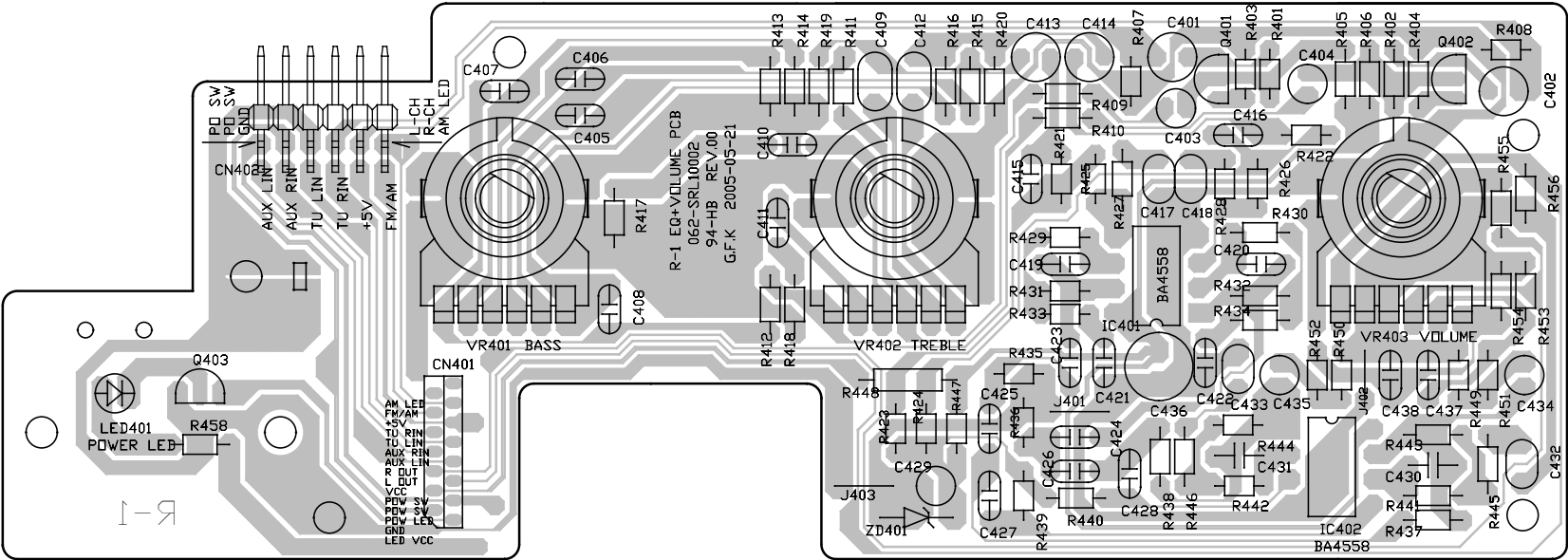
FM LED PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
LED402	100-SR102060	FM LED PCB ASSY	
	062-SRL10002	FM LED PCB	
	094-06020501	LED - BLUE D3MM	

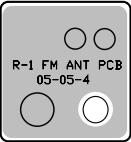
FUNCTION SW PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
SW401	100-SR102070	FUNCTION SW PCB ASSY	
	062-SRL10002	FUNCTION PCB	
	063-SRL10601	FUNCTION SWITCH	

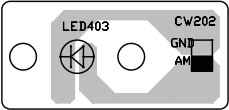
EQ/VOLUME PCB



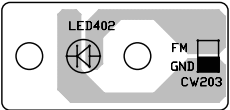
FM ANT PIN PCB



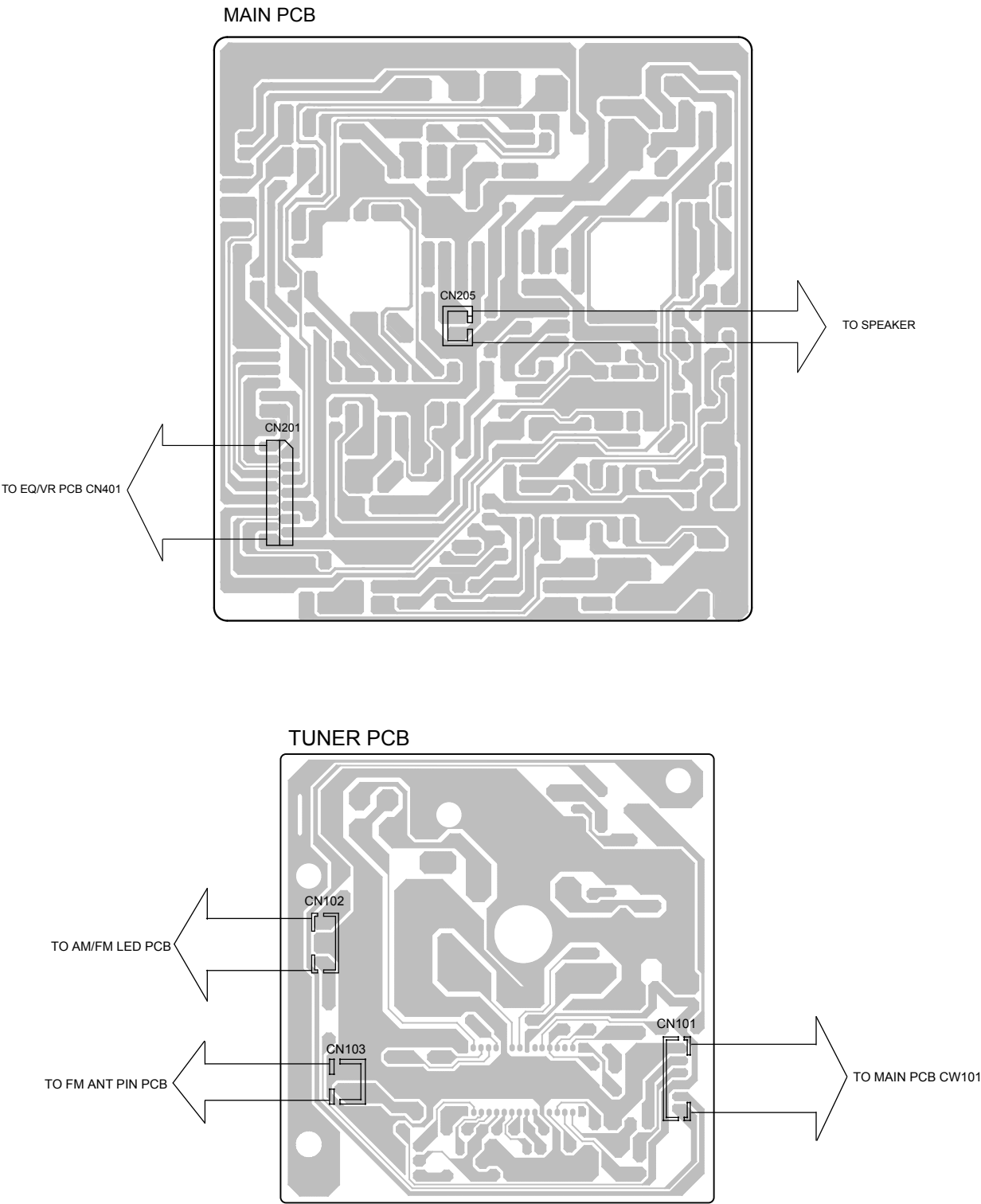
AM LED PCB



FM LED PCB



6 WIRING DIAGRAM



7 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	046-SRL10010	INSTRUCTION MANUAL - E/F/S [T/C]	
	046-R1EUR010	INSTRUCTION MANUAL - G/I/H [E,SIN,HK]	
	084-SR101200	AC ADAPTER UL 120V/60Hz - BLACK [T/C]	
	084-SR101201	AC ADAPTER UL 120V/60Hz - WHITE [T/C]	
	084-R1EU1100	AC ADAPTER VDE 230V/50Hz - BLACK W/MADE IN CHINA [E]	
	084-R1EU1102	AC ADAPTER VDE 230V/50Hz - BLACK W/O MADE IN CHINA [E]	
	084-R1EU1101	AC ADAPTER VDE 230V/50Hz - WHITE W MADE IN CHINA [E]	
	084-R1EU1103	AC ADAPTER VDE 230V/50Hz - WHITE W/O MADE IN CHINA [E]	
	084-R1UK1400	AC ADAPTER VDE 240V/50Hz - BLACK [HK]	
	084-R1UK1401	AC ADAPTER VDE 240V/50Hz - WHITE [HK]	
	089-00000016	FM LEAD-TYPE ANTENNA - BLACK	
	089-00000019	FM LEAD-TYPE ANTENNA - WHITE	

R-1

TEAC

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PREPARED IN HONG KONG

