

TEAC

SERVICE MANUAL

SR-L100

AM/FM STEREO DIGITAL RADIO WITH CD PLAYER



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.
- A 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.

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1 SAFETY INFORMATION

SAFETY INFORMATION

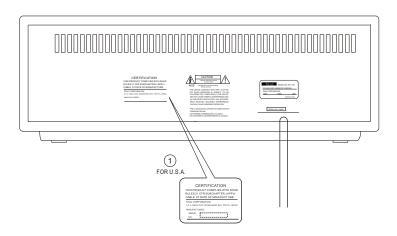
This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on The Radiation Control for Health and Safety Act of 1968" and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because 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.

 $\hbox{IF THIS PRODUCT DEVELOPS TROUBLE, MAKE A CONTACT WITH OUR SERICEMAN, AND DO NOT USE THE PRODUCT A TROUBLED STATE. \\$



Optical pickup:

Type : CMS-B35BG6

Manufacturer: Samsung Electro-Mechanic

Laser output $\,:\,$ Less than 0.5 mW on the objective lens

Wavelength : 760 - 800 nm

2 SPECIFICATIONS

TUNER SECTION

 $Frequency\ Range: \qquad \qquad FM:87.50 \sim 108.0\ MHz$

AM: 530 to 1710 kHz

CD PLAYER Section

Frequency response : $20 \text{ Hz} \sim 20 \text{ kHz} (+/-2 \text{ dB})$

Wow and Flutter: Unmeasurable

SPEAKER SYSTEM Section

Type: 65 mm x 2
Impedance: 4 ohms

GENERAL

Total Output Power: 4W + 4W

Power Requirements: AC 120V, 60Hz

Power Consumption: 28 W

Dimension (W x H x D): 340 x 125 x 249 mm

Weight: (net) 3.3 kg

Standard Accessories: Remote Control Unit (RC-1075) x1

Battery for Remote Control Unit x 1

Stereo mini plug cable 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.

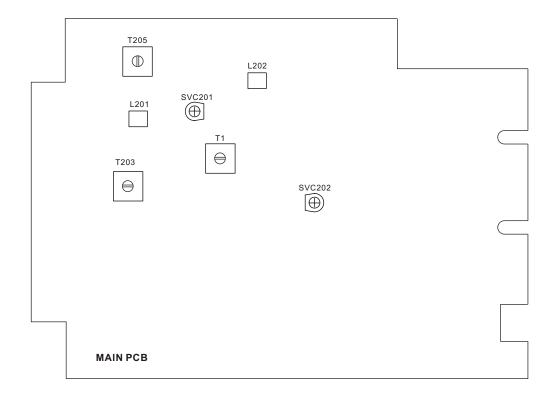
3-1-1 FM adjustment

- 1. Set the function switch to the FM position.
- 2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN 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

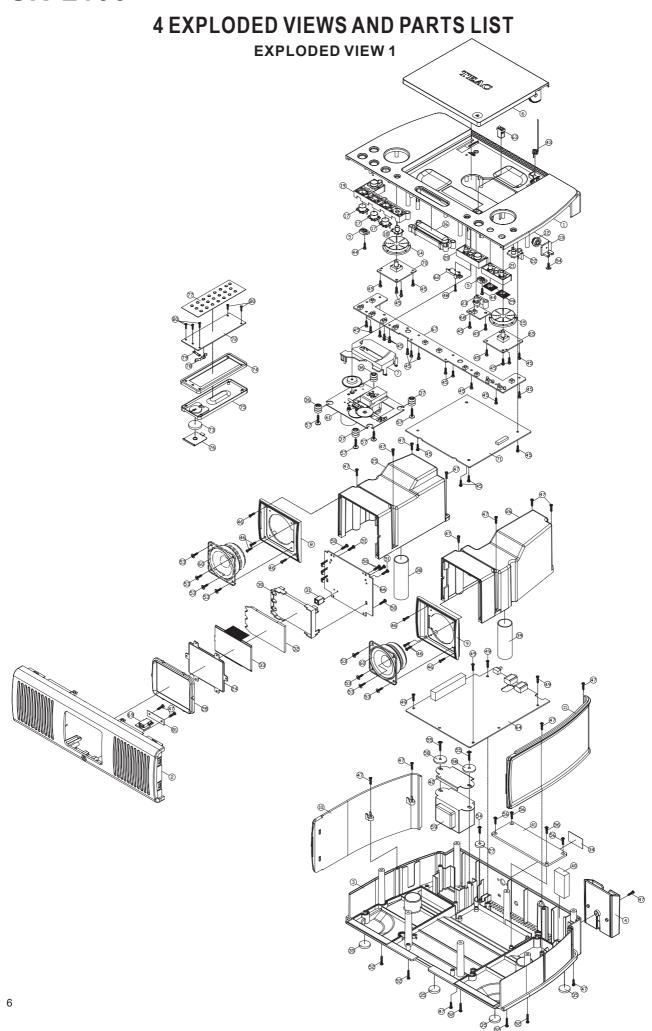


3-2-1 FM/AM alignment chart

ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1. IF adjustment 10.7 MHz		108MHz	T205	With 10.7 MHz at zero crossover
2. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L202	Adjust for max. output
	108MHz 1kHz, +/-22.5kHz dev.	108MHz		Adjust for max. output
	90MHz 1kHz, +/-22.5kHz dev.	90.1MHz	L201	Adjust for max. output
3. Tracking	106MHz 1kHz, +/-22.5kHz dev.	106.1MHz	SVC201	
	Repeat step 3 to obtain be	est tracking		and best wavelorm.
AM				
1. IF adjustment	450kHz 1kHz, 30% mod	1710kHz	T203	Center & maxoutput
	520kHz 1kHz, 30% mod	520kHz	T1	Adjust for max. output
2. AM band	1710kHz 1kHz, 30% mod	1710kHz		Adjust for max. output Adjust for max. output Adjust for max. output Adjust for max. output and best waveform.
	600kHz 1kHz, 30% mod	600kHz	AM ANT COIL	
3. Tracking	1400kHz 1kHz, 30% mod	1400kHz	SVC202	
	Repeat step 3 to obtain be	est tracking		

3-3 CD SECTION

Auto alignment.



EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION	REMARK
1-1	56-02SL88M08010	TOP CABINET	
1-2	56-04SL10008010	FRONT CABINET	
1-3	56-05SL88M08010	BOTTOM CABINET	
1-4	56-07SL88M18010	REMOTE CONTROLLER BRACKET	
		CONNECT CLIP	
1-5	56-07SL88M48000	CONNECT CLIP	
1-6	56-14SL88M08010	CD DOOR	
1-7	56-15MS0661B000	LASER COVER	
1-8	56-22SL88M08010	SIDE COVER - LEFT	
1-9	56-22SL88M18010	SIDE COVER - RIGHT	
1-10	56-22SL10008000	SPEAKER PANEL - LEFT	
1-11	56-22SL10018000	SPEAKER PANEL - RIGHT	
1-11	56-24SL88M08000	GEAR	
1-13	56-24SL88M18000	GEAR HOLDER	
1-14	56-54SL88M08000	VOLUME KNOB	
1-15	56-54SL88M18000	TUNER KNOB	
1-16	56-54SL88M28010	SNOOZE KNOB	
1-17	56-54SL88M39010	TRANSPARENT KEY-BIG	
1-18	56-54SL88M49010	TRANSPARENT KEY-SMALL	
1-19	56-54SL88M58010	POWER KEY BRACKET	
1-20	56-54SL88M68010	STOP / PLAY KEY	
0	00 0 10 200 000 10	0.0.7.22.	
1-21	56-54SL88M78000	ALARM1/2 - 2 KEY	
1-22	56-54SL88M88000	ALARM CHECK KEY	
1-23	56-54SL88M98000	TIME ADJUST KEY	
1-24	56-57SL10000010	DISPLAY LENS	
1-25	56-62SL88M08000	SPEAKER TUBE - LEFT	
1.26	FC COOL 00M4.0000	CDEAKED TUDE DICUT	
1-26	56-62SL88M18000	SPEAKER TUBE - RIGHT	
1-27	56-69SL88M08000	AC CORD PRESS PLATE	
1-28	56-78SL1000G000	DISPLAY RING	
1-29	56-78SL88M19000	TRANSPARENT KNOB RING	
1-30	56-07SL10009000	LCD BRACKET	
1-31	56-07SL88M28000	REMOTE SENSOR BRACKET	
1-32	56-57SL10010000	DISPLAY LENS	
1-33	57-26SRL1000020	FILTER SHEER	
1-34	57-08SLD88M0020	PVC PLATE	
1-35	58-263152500020	HARD RUBBER FOOT	
1 00	30-203132300020	THE ROBBERT OOT	
1-36	58-61M520R02120	SHOCK ABSORBER (PINK)	
1-37	58-61M620R00120	SHOCK ABSORBER (BLACK)	
1-38	58-64SLD88M0020	PAPER TUBE-LONG	
1-39	58-64SLD88M0120	PAPER TUBE-SHORT	
1-40	58-82SLD8800020	SPONGE	
	04 4401 50011000		
1-41	61-11SLD88M0020	WEIGHT IRON	
1-42	61-11SLD88M0120	METAL PLATE	
1-43	61-97SLD88M0021	CD DOOR SPRING	
1-44	66-140226180321	SELF-TAPPING SCREW TA/BH 2.6X8MM	
1-45	66-140226210321	SELF-TAPPING SCREW TA/BH 2.6X10MM	
1-46	66-140230212121	SELF-TAPPING SCREW TA/BH 3X12MM	
1-47	66-140230212321	SELF-TAPPING SCREW TA/BH 3X12MM	
1-48	66-140320212321	SELF-TAPPING SCREW TA/PH 2X12MM	
1-49	66-140330180321	SELF-TAPPING SCREW TA/PH 3X8MM	
1-50	66-140330210321	SELF-TAPPING SCREW TA/PH 3X10MM	
1 00	00-140000210021	CLL I/II II II COCKEW IA/I II OX IOWIWI	

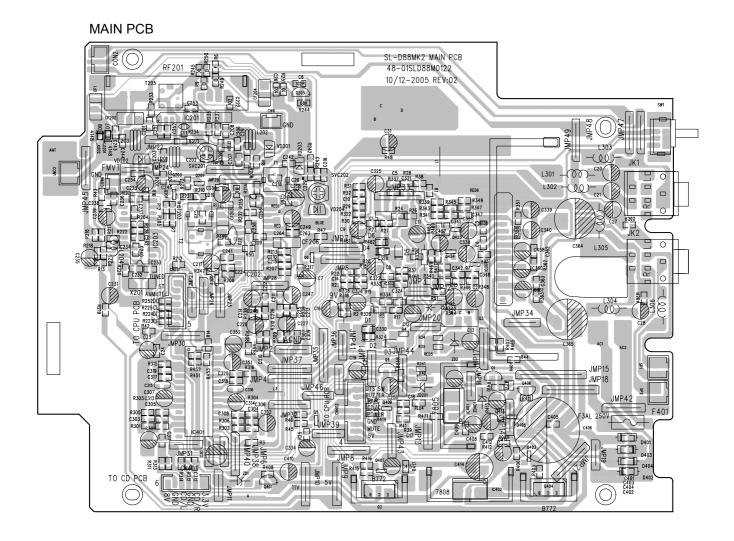
EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION
1-51	66-140330210321	SELF-TAPPING SCREW TA/PH 3X10MM
1-52	66-140330216321	SELF-TAPPING SCREW TA/PH 3X10MM
1-53	66-140830210121	SELF-TAPPING SCREW TA/WH 3X10MM
1-54	66-140830212321	SELF-TAPPING SCREW TA/WH 3X12MM
1-55	66-140830216321	SELF-TAPPING SCREW TA/WH 3X16MM
1-56	66-150830180321	SELF-TAPPING SCREW TB/WH 3X8MM
1-57	66-151426219221	SCREW TWP/BO 2.6X19 MC
1-58	68-112323161000	METAL WASHER 3.2X16X1MM
1-59	⚠ 18-203SLD88190	H/TRANSFORMER EI-48
1-60	19-021082800020	SPEAKER 4 OHM
1-61	20-70CMSB35BG60	CD MECHANISM
1-62	41-061120070020	LEAF SWITCH
1-63	41-210240000010	DOOR LOCK
1-64	05-01SL10000000	MAIN PCB ASSY
1-65	05-02SLD88M0010	TUNER PCB ASSY
1-66	05-04SL10000000	DISPLAY PCB ASSY
1-67	05-05SLD88M0001	KEYPCBASSY
1-68	05-05SLD88M0011	CLOCK PCB ASSY
1-69	05-09SLD1000000	AUX PCB ASSY
1-70	05-19SLD88M0010	VOLUME PCB ASSY
1-71	05-30SL10000000	CDPCBASSY
1-72	05-13SLD88M0000	REMOTE PCB ASSY
1-73	51-021301000080	LITHUM BATTERY DOOR
1-74	56-43DX01508000	REMOTE FRONT CABINET
1-75	56-43DX01518010	REMOTE REAR CABINET
1-76	56-440DX01508010	REMOTE BATTERY DOOR
1-77	57-33SLD88M0120	REMOTE PLATE - TEAC
1-78	61-25DX01500020	BATTERY PLATE+
1-79	61-25DX01500120	BATTERY PLATE -
1-80	66-140520170121	SELF-TAPPING SCREW TB/KH 2X7MM
1-81	58-63GR10100020	FIBRE PLATE 32.5X7X1MM

5 PC BOARDS AND PARTS LIST

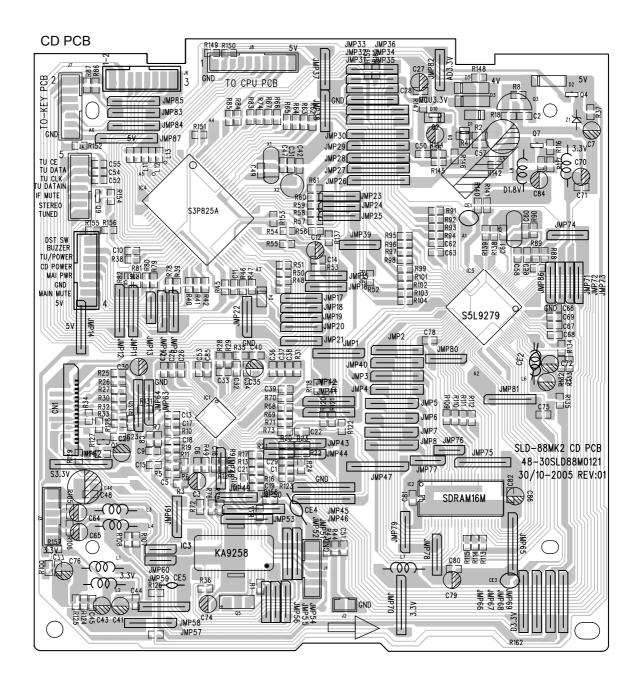
MAIN PCB ASSY

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
		05-01SL10000000	MAIN PCB ASSY	
		48-01SLD88M0123	MAIN PCB	
		40-212680215020	AM ANT COIL 68:15T	
C414	<u> </u>	26-017100650121	E.CAP 1000UF/10V	
	Δ	26-017100750121	E.CAP 1000UF/16V	
2004,000		20-017100730121	E.OAI 100001710V	
C406	<u> </u>	26-017680850121	E.CAP 6800UF/25V	
CF201		31-028107000120	CER. FILTER LT10.7MA5-A	
CF203		31-026455000110	CER. FILTER SFU450B	
CF206		31-046456000220	RESONATOR ZTB456F15	
CON2		43-01220130120	WAFER 2.MM 3P	
CN201		43-012200170120	WAFER 2MM 7PIN	
N401		43-012200170120	WAFER 2MM 6PIN	
CN402		43-012200180120	WAFER 2MM 8PIN	
		12-1N4148000125	DIODE - 1N4148	
01-6,201,202	Λ			
D401-404	/!\	12-RL2020000021	DIODE RL-202	
401	<u> </u>	46-015300300010	AXIAL FUSE 3A/250V	
C1,302		16-BA4558000021	IC - BA4558	
C201		16-TA8176SN0021	IC - TA8176SN	
C202		16-LA1832000021	IC - LA1832	
C203		16-LC7213100021	IC - LC72131	
2204		16 07524000004	10 1 075242	
C301		16-LC7534200021	IC - LC75342	
C304		16-BA5417000021	IC - BA5417	
C401		16-KA7805000121	IC - KA7805	
C402		16-KA7808000221	IC - KA7808	
JK2		43-431360001020	PHONE JACK D3.6MM	
.201,203		40-351500135020	FM COIL 5X3.5X0.8MM	
.202		40-351500125020	FM COIL 5X2.5X0.8MM	
301-306		38-013100050220	AXIAL INDUCTOR 10UH	
21,4,401		11-PSS8050C0021	SMD TR - PSS8050C	
2,404		11-KSB772YS0021	TR - KSB772Y	
23		11-KSD882Y00021	TR - KSD882Y	
Q5,6,201-203,,403	3,	11-PMBT39040021	SMD TR - PMBT3904	
2405,407,409				
2204		11-KTC9015S0025	SMD TR - 9015S-C	
2406		11-PSS8550C0025	SMD TR - PSS8550C	
453,454		11-9014C0000025	TR - 9014C	
P1,2		43-012250120120	WAFER 2.5MM 2P	
SW1		41-132222000820	SWITCH SK-22D22-G8	
SV201		27-501602202020	TRIMMER 20PF	
SV201 SV202		27-501602202020	TRIMMER 20PF TRIMMER 10PF	
J v ZUZ		21-30 1002 102020	I MINIMILIA TOLAL	
1		40-02660R002020	I.F.T - 660R (RED)	
Γ2		31-038107020110	DISCRIMINATOR FILTER CDA10.7	
Г203		40-02A049004020	I.F.T - A049 (YELLOW)	
205		40-027400003120	I.F.T - 740 (ORANGE)	
/D201,202		12-1SV101000021	VARICAP DIODE 1SV-101	
/D202 224		10.10\/4.40000001	VADICAD DIODE 40V 440	
/D203,204		12-1SV149000021	VARICAP DIODE 1SV-149	
(201		31-017450002030	CRYSTAL 4.500 MHZ	
D1		12-011390320125	ZENER DIODE 3.9V	
.D2		12-011910320125	ZENER DIODE 9.1V	
ZD3		12-011430320125	ZENER DIODE 4.3V	
ZD201		12-011560320125	ZENER DIODE 5.6V	
D401		12-011300320125	ZENER DIODE 3.6V ZENER DIODE 11V	
10+U1		12-012110320123	ZEINER DIODE IIV	



CD PCB ASSY

05-30SL10000000 CD PCB ASSY
48-30SLD88M0122 CD PCB
C27
CN1 43-022100216120 F.F.C WAFER 1MM 16P
D1,4,9,10 12-1N4148000021 DIODE 1N4148
D3,5 12-1N4001000021 DIODE 1N4001
IC1 16-S1L9226X0121 IC - S1L9226X01
IC3 16-D92580000021 IC - D9258
IC4 16-S3P825A01121 IC - S3P825AXZZ
IC5 16-S5L927900121 IC - S5L9279X01
J2 43-012200120120 WAFER 2MM 2P
J3 43-012200160120 WAFER 2MM 6P
J8 43-022200210120 WAFER 2MM 10P
JMP87 32-033100000020 FERRITE BEAD W/5T 10UH
L1-6,8 38-013100050020 AXIAL INDUCTOR 10UH
Q1 11-PMBT39060021 SMD TR - PMBT3906
Q2,4.7,9 11-PMBT39040021 SMD TR - PMBT3904
Q3 11-9015C0000021 TR - 9015C
Q5 11-KSB772YS0021 TR - KSB772Y
X1 31-017800002120 CRYSTAL 8.00MHZ
X2 31-015320003310 CRYSTAL 32.768KHZ
X3 31-018169302220 CRYSTAL 16.9344MHZ
Z1 12-011470320121 ZENER DIODE 4.7V
Z2 12-011390320121 ZENER DIODE 3.9V



KEY PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARK
	05-05SLD88M0001	KEY PCB ASSY	
	48-05SLD88M0122	KEYPCB	
CON1	43-022200180120	WAFER 2MM 8PIN	
CON4	43-022200170120	WAFER 2MM 7PIN	
D1,2	12-1N4148000021	DIODE 1N4148	
LED3-10	13-011300022020	LED LAMP 3MM	
Q5,7,101-103,105,	11-PMBT39040021	SMD TR - PMBT3904	
Q107			
Q104	11-PMBT39060021	SMD TR - PMBT3906	
SW2	41-150010110020	TACT SWITCH 4.5MM	
SW101-112	41-150010030010	TACT SWITCH 5MM	

DISPLAY PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REM
	05-04SL10000000	DISPLAYPCBASSY	
	48-04SL10000220	DISPLAY PCB	
Q1	11-PMBT39060021	SMD TR - PMBT3906	
Q2,3	11-PMBT39040021	SMD TR - PMBT3904	
D3	12-1N4148000125	DIODE 1N4148	
LED1,2,3	13-011200121020	LED LAMP 2X4MM (WHITE)	
LCD1	13-05SL10000020	LCD DISPLAY FA1508TT-P	
UI	16-PT6524000021	IC - PT6524-LQFP	
REMOTE 1	17-05FM60380010	OPTIC SENSER #FM-6038TM2	

VOLUME PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-19SLD88M0010	VOLUME PCB ASSY	
	48-19SLD88M0120	VOLUME PCB	
VOL2	22-501200001020	ROTARY ENCODER	

TUNER PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-02SLD88M0010	TUNER PCB ASSY	
	48-19SLD88M1120	TUNER PCB	
VOL1	22-501200001020	ROTARY ENCODER	

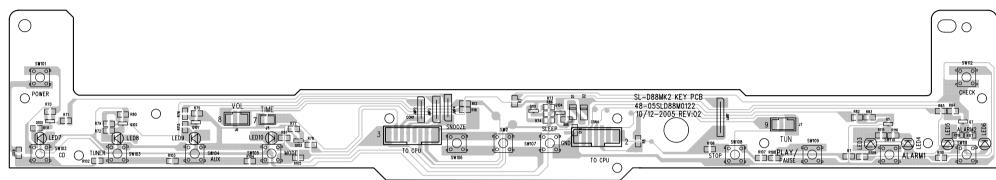
CLOCK PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	05-05SLD88M0011 48-05SLD88M1120	CLOCK PCB ASSY CLOCK PCB	
SW1	41-150010030010	TACT SWITCH 5MM 4 LEGS	

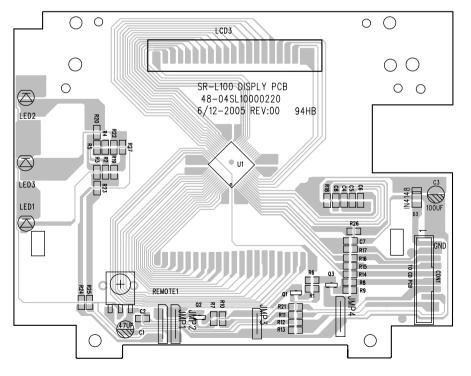
AUX PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
JACK	05-09SL10000000 48-09SL10000220 43-43155000020	AUX PCB ASSY AUX PCB PHONE JACK 3.5MM	

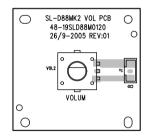
KEY PCB



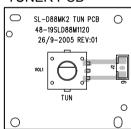
DISPLAY PCB



VOLUME PCB



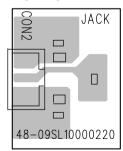
TUNER PCB



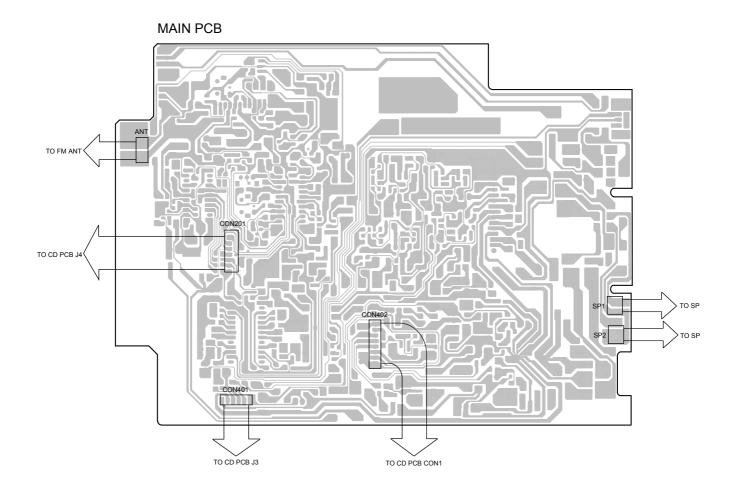
CLOCK PCB

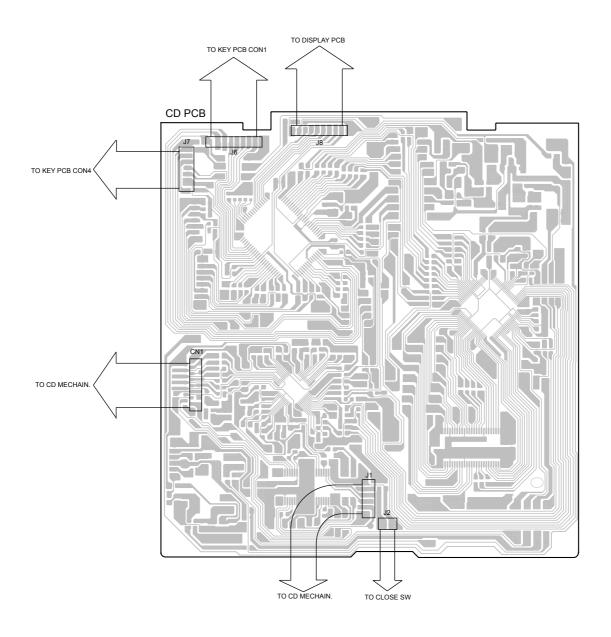


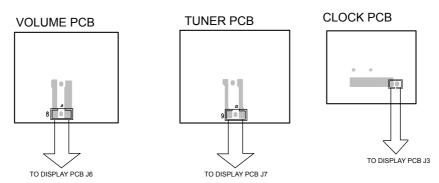
AUX PCB



6 WIRING DIAGRAM







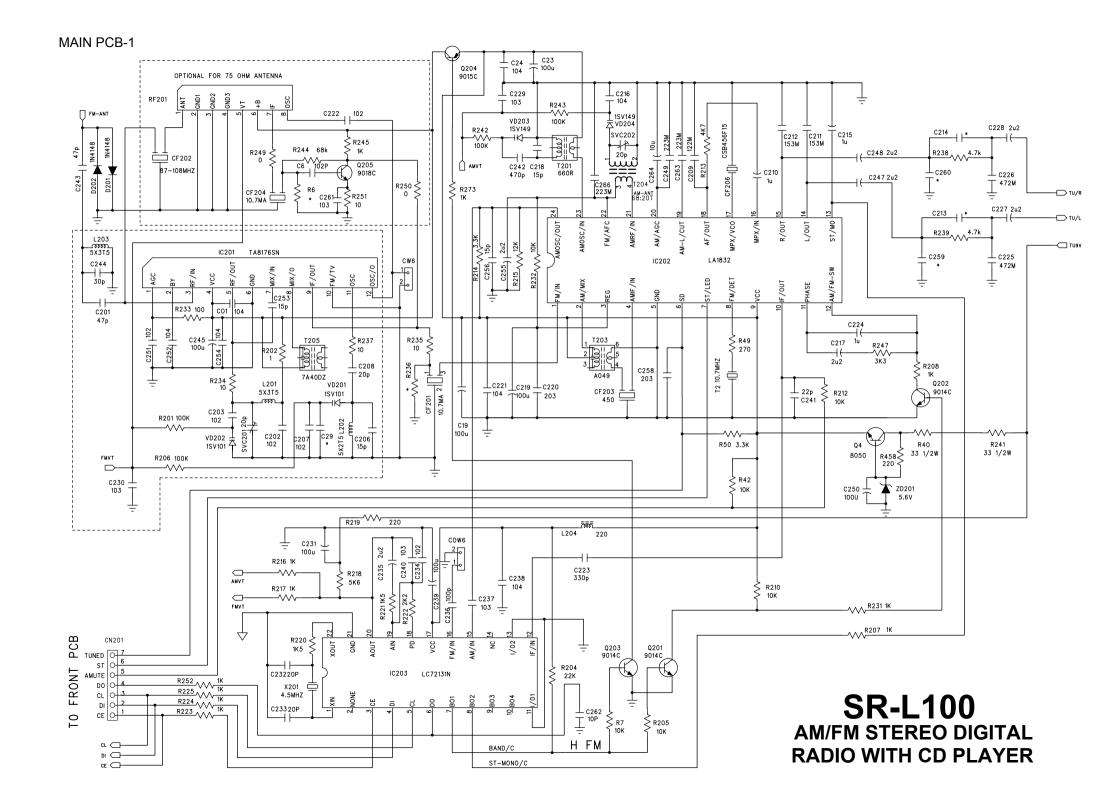
7 INCLUDED ACCESSORIES

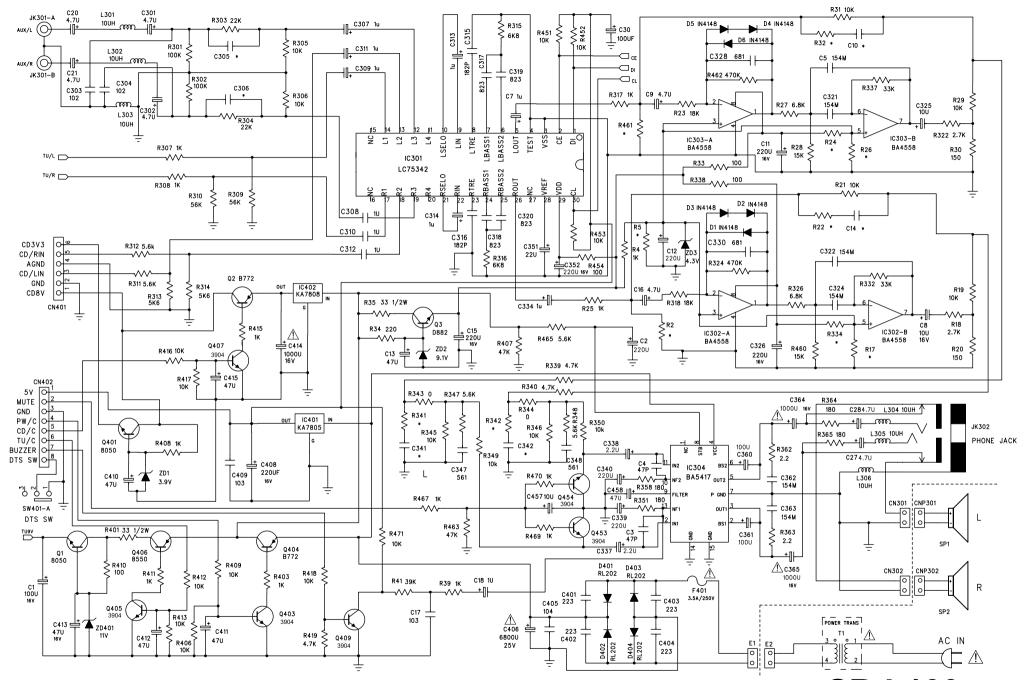
INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARK
	77-20SL10000020	INSTRUCTION BOOK - E/F/SP	
	02-17SL10000000	REMOTE CONTROL	
	45-263500000020	CONNECT CORD 3.5MM ST/PLUGx2	
	51-021301000080	LITHIUM BATTERY CR2032 (GP)	

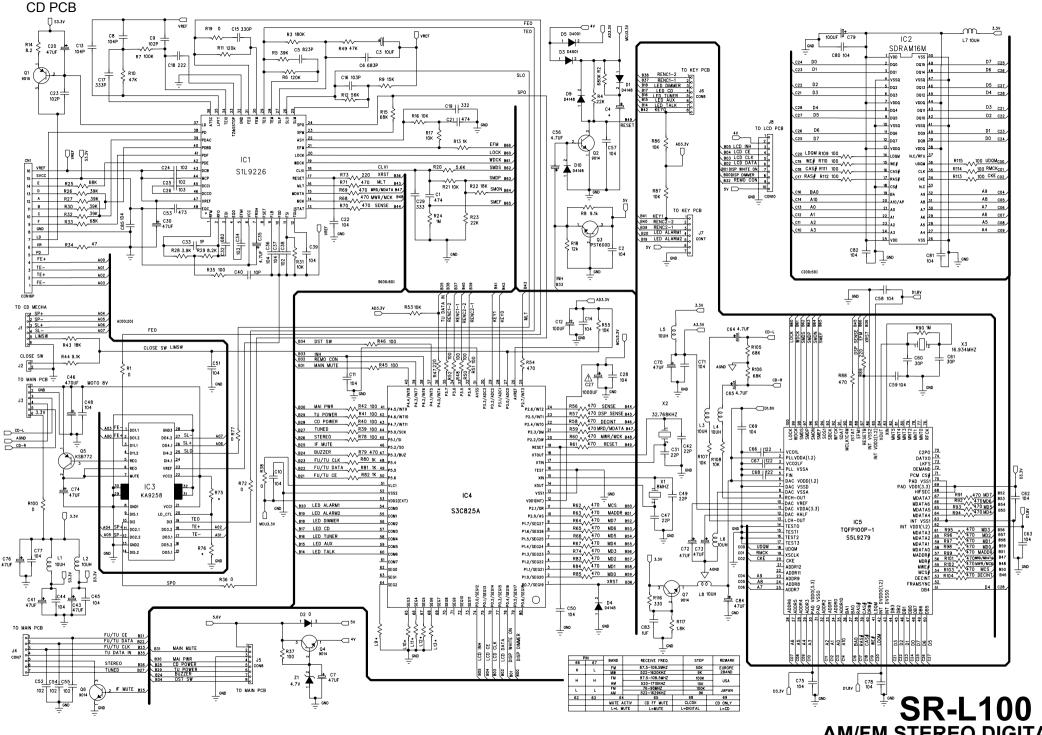
TEAC

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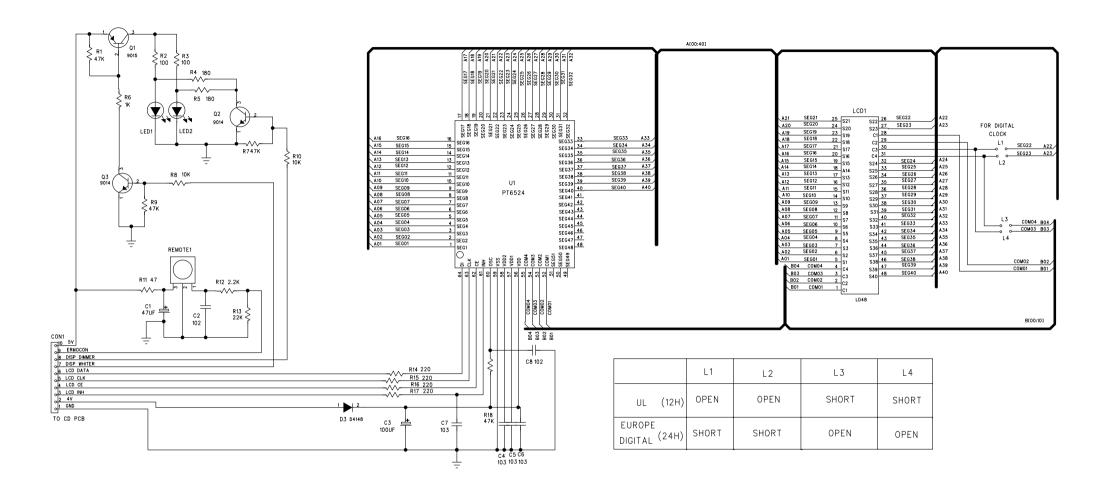


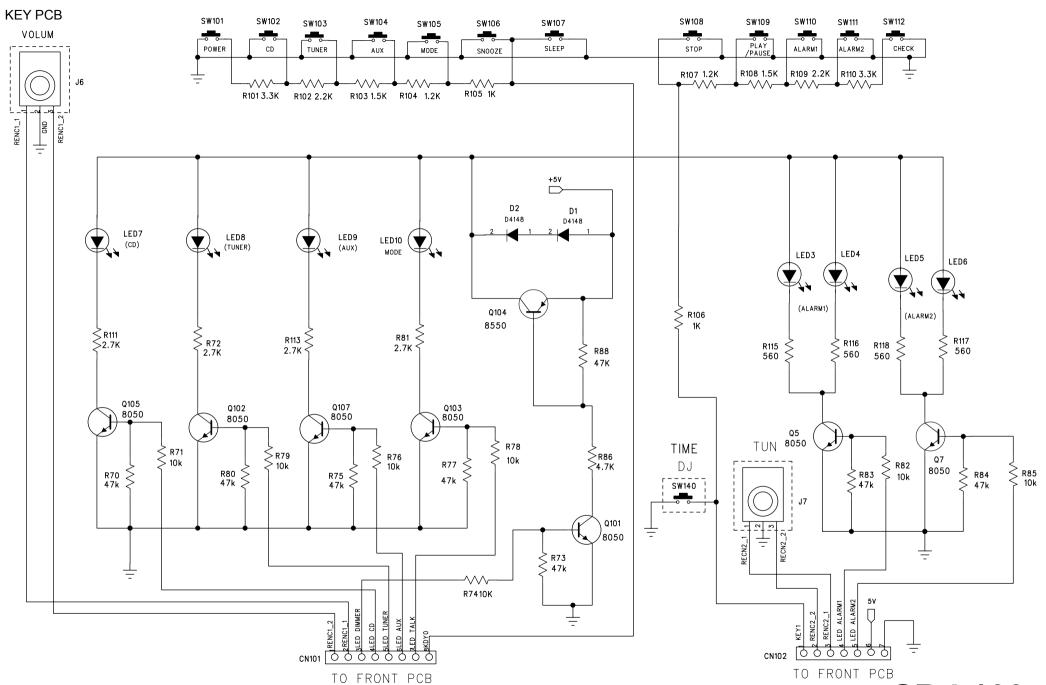


SR-L100
AM/FM STEREO DIGITAL
RADIO WITH CD PLAYER



AM/FM STEREO DIGITAL RADIO WITH CD PLAYER





SR-L100
AM/FM STEREO DIGITAL
RADIO WITH CD PLAYER