Service Document
Exchange Set

Musik Boy 50L RP 5240 LW

Service Manual

Sicherheit Safety

Materialnr./Part No. 720108000000

⚠ Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

Dieses Service Dokument ist nur in Datenform verfügbar
This Service Document is only available as data

Änderungen vorbehalten/Subject to alteration

Made by GRUNDIG in Germany • H-S43 0802
http://www.grundig.com

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NOTE : USING SONY IC CXA1191 WITHOUT FM IFT

ALIGNMENT PROCEDURE

MODEL NO.: GRUNDIG RP5240LW

INSTRUMENTS REQUIRED

1. Signal Generator
2. FM Signal Generator
3. FM/AM IF Sweep Generator (10.7 MHz for FM)
4. VTVM
5. Oscilloscope
6. Frequency counter
7. Regulated DC power supply

GENERAL PREPARATION

1. Check source voltage, DC or AC according to specificaions
2. Set function switch to band being aligned
3. Signal input should be kept as low as possible to avoid AGC and AFC function
4. Standard modulation : AM 1 KHz 30% mod
   FM 1 KHz 22.5 KHz dev

AM IF ALIGNMENT

STEP	SIGNAL SOURCE (AM RF Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop	460KHz	TP 4 Detector output terminal and TP 2 ground	Quiet Point	T 2	Maximum	Volume control at min. position
2	Repeat step 1 for max. output						

FM IF ALIGNMENT

This model requires no FM IF alignment as the IF is fixed by ceramic filter and discriminator CF 1 & CF 2. Please take note that correct type and same color dot of ceramic filter is used in servicing, diff color dot of ceramic filter may cause worse IF 'S' curve characteristic and distortion.

Connect IF genescope output terminal to TP 3 & TP 2 (GND) in series with a 100 Pf capacitor, connect scope input terminal to TP 4 & TP 2 (GND), then the IF characteristic curve can be observed.

ALIGNMENT PROCEDURE

MODEL NO.: GRUNDIG RP5240LW

SIGNAL SOURCE (FM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
TP 1 through matching network if necessary	87.35 MHz (modulated)	Terminals across speaker voice coil	(Lowest end)	L 4 stretch or squeeze	Maximum	Volume control at max. position
	108.25 MHz (modulated)		(Highest end)	VC1 B (Osc. trimmer)		
	88 MHz (modulated)		88 MHz	L 3 (RF coil) stretch or squeeze		
	106 MHz (modulated)		106 MHz	VC1 C (RF trimmer)		
Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

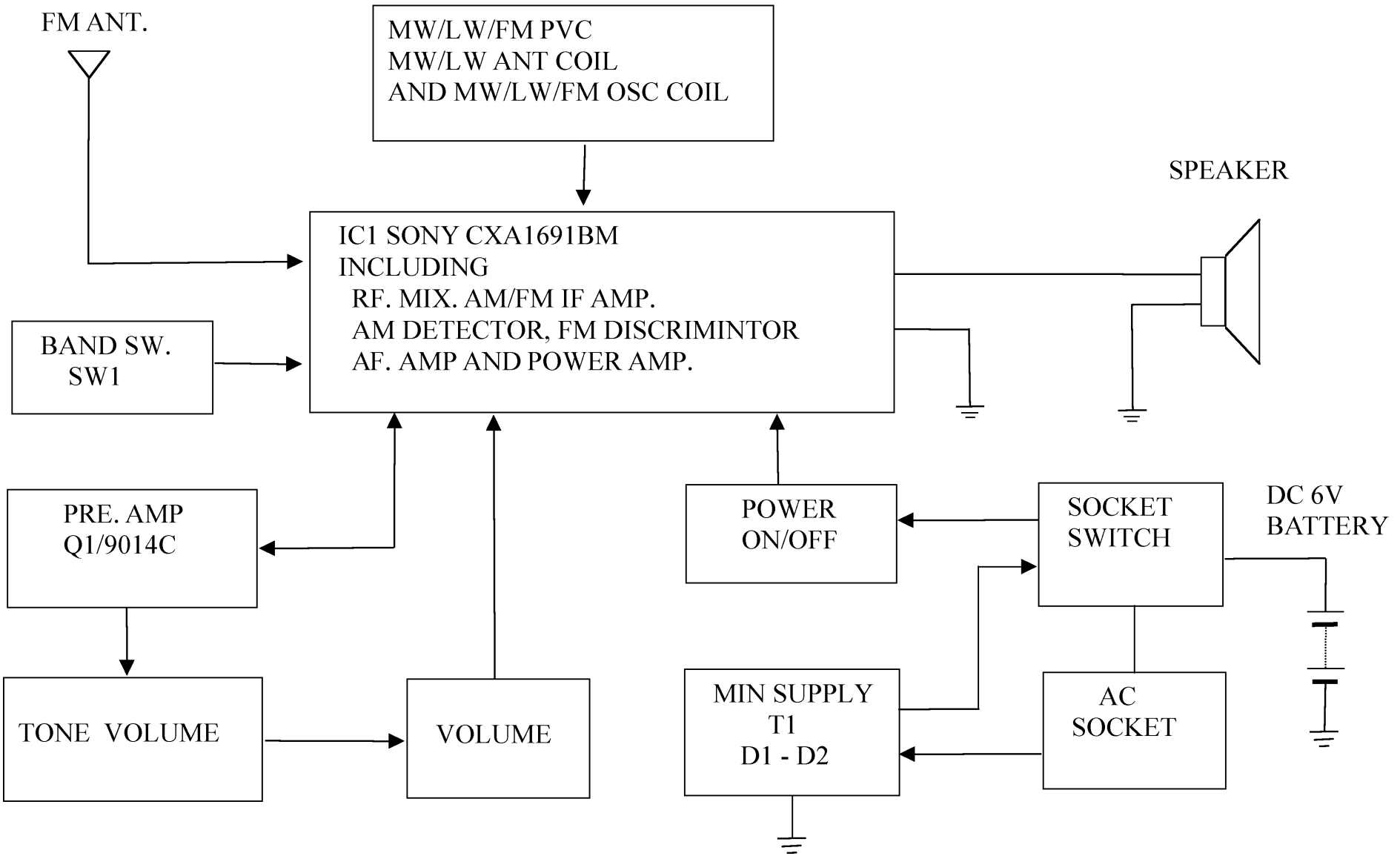
4LIGNMENT

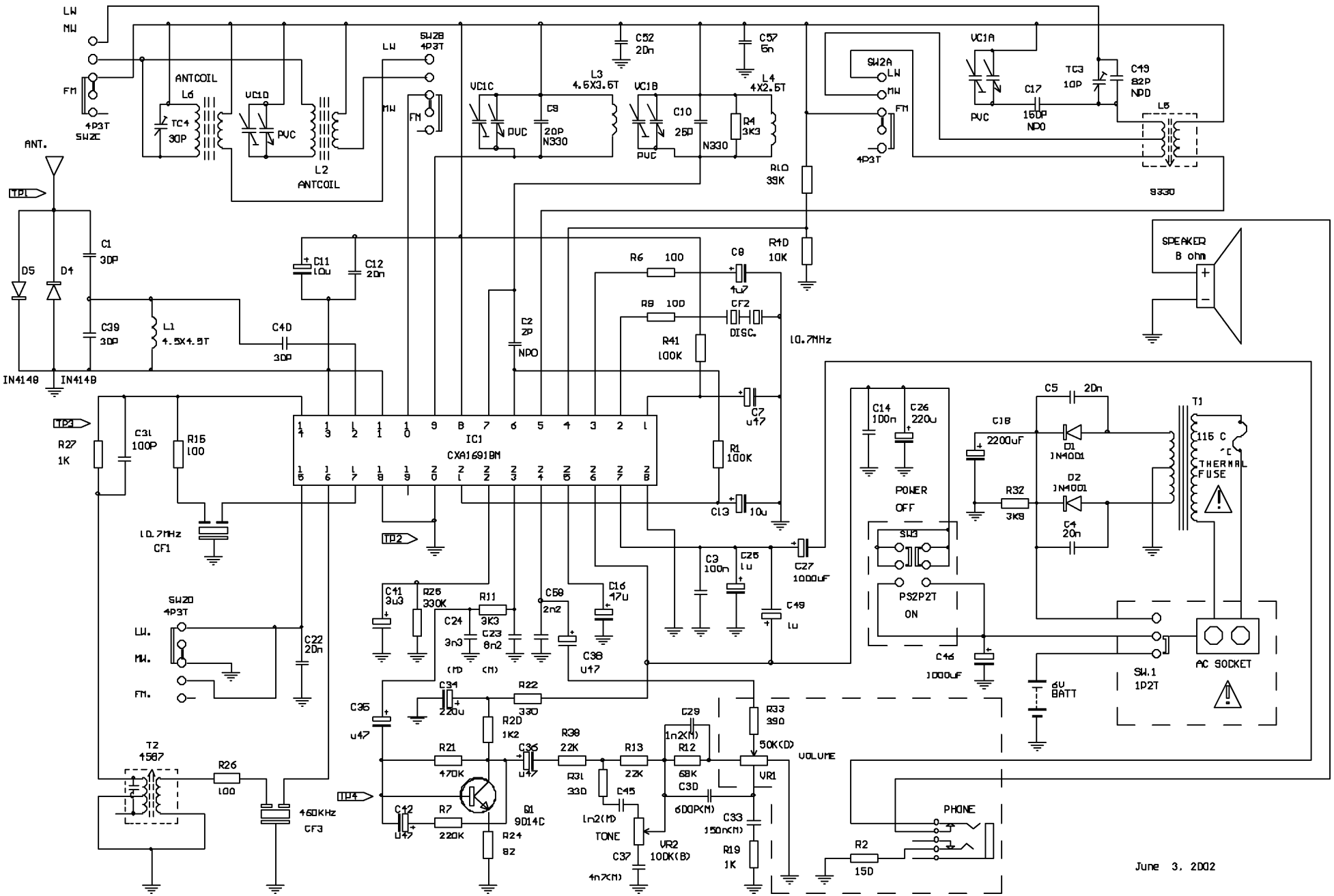
SIGNAL SOURCE (AM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
A standard radiation loop ant.	515 KHz (modulated)	Across speaker voice coil	(Lowest end)	L 5 (Osc. coil)	Maximum	Volume control at max. position
	1640 KHz (modulated)		(Highest end)	VC1 A (Osc. trimmer)		
	558 KHz (modulated)		558 KHz	L 2 (ant. coil)		
	1440 KHz (modulated)		1440 KHz	VC1 D (ant. trimmer)		
Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

4LIGNMENT

SIGNAL SOURCE (LW Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
A standard radiation loop ant.	142 KHZ (modulated)	Terminals across speaker voice coil	(Lowest end)	NA	Maximum	Volume control at max. position
	292 KHz (modulated)		(Highest end)	TC 3 (Osc. trimmer)		
	153 KHz (modulated)		153 KHz	L 6 (ant. coil)		
	261 KHz (modulated)		261 KHz	TC 4 (ant. trimmer)		
Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

MODEL: GRUNDIG RP 5240LW BLOCK DIAGRAM





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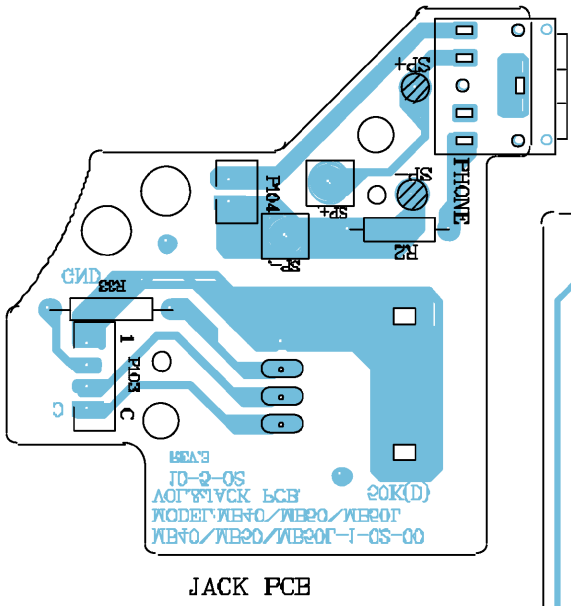
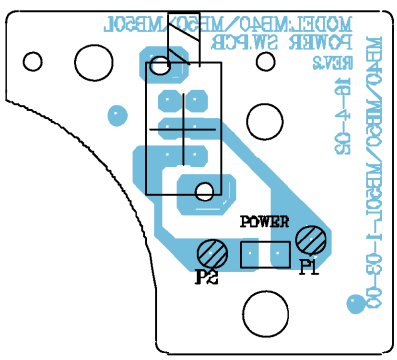
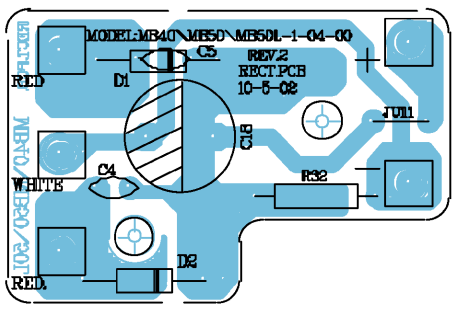


JACK PCB

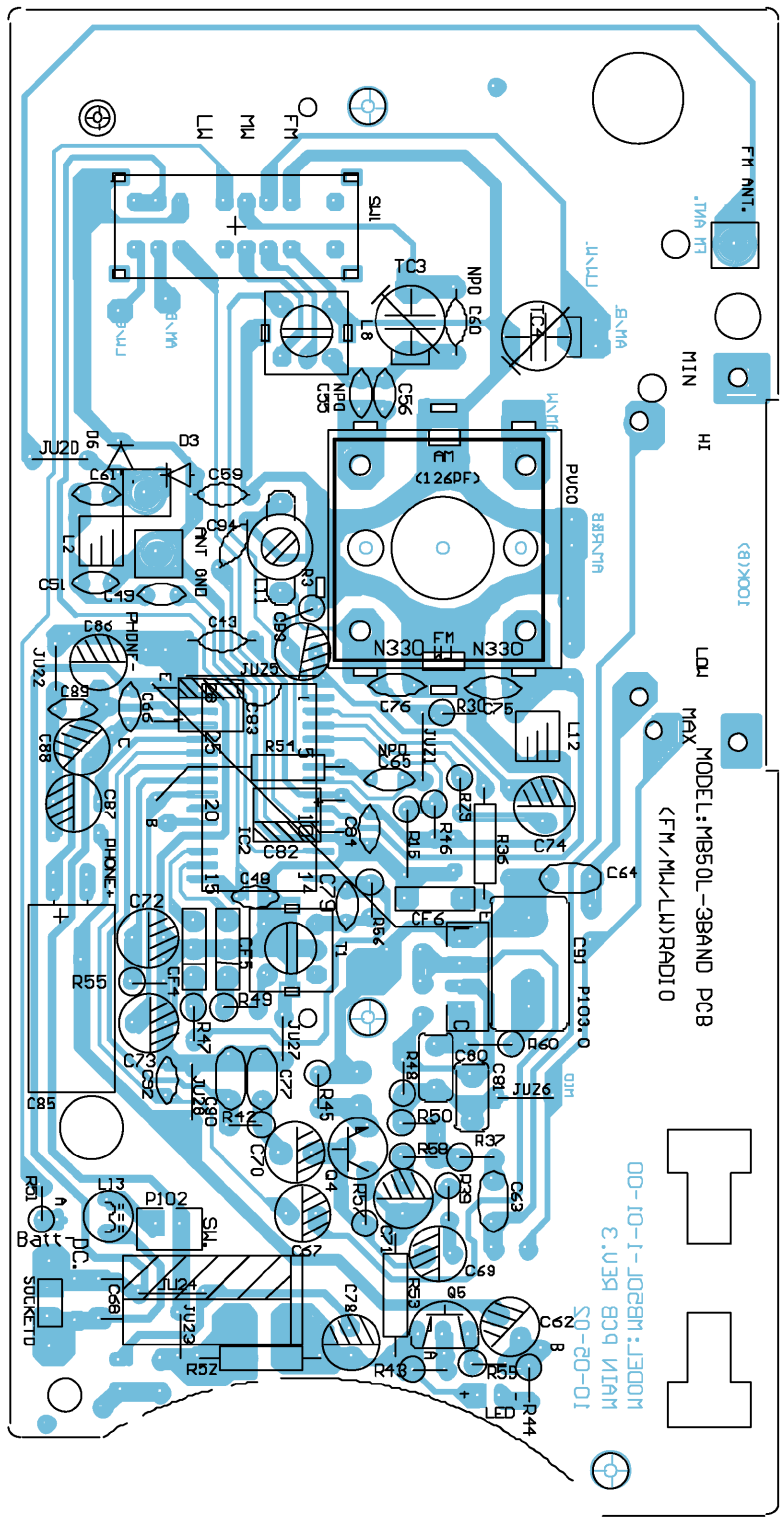


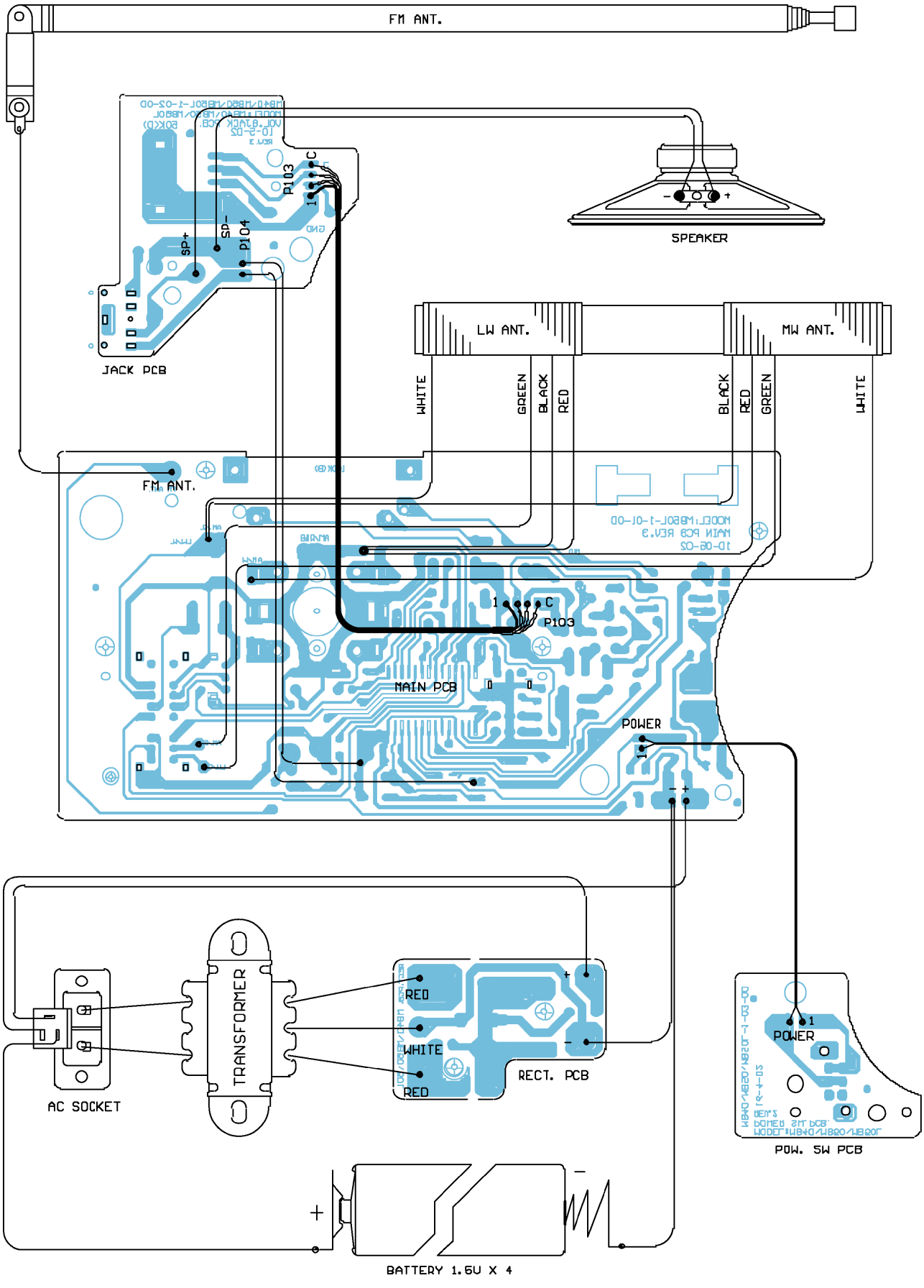
POWER SW. PCB

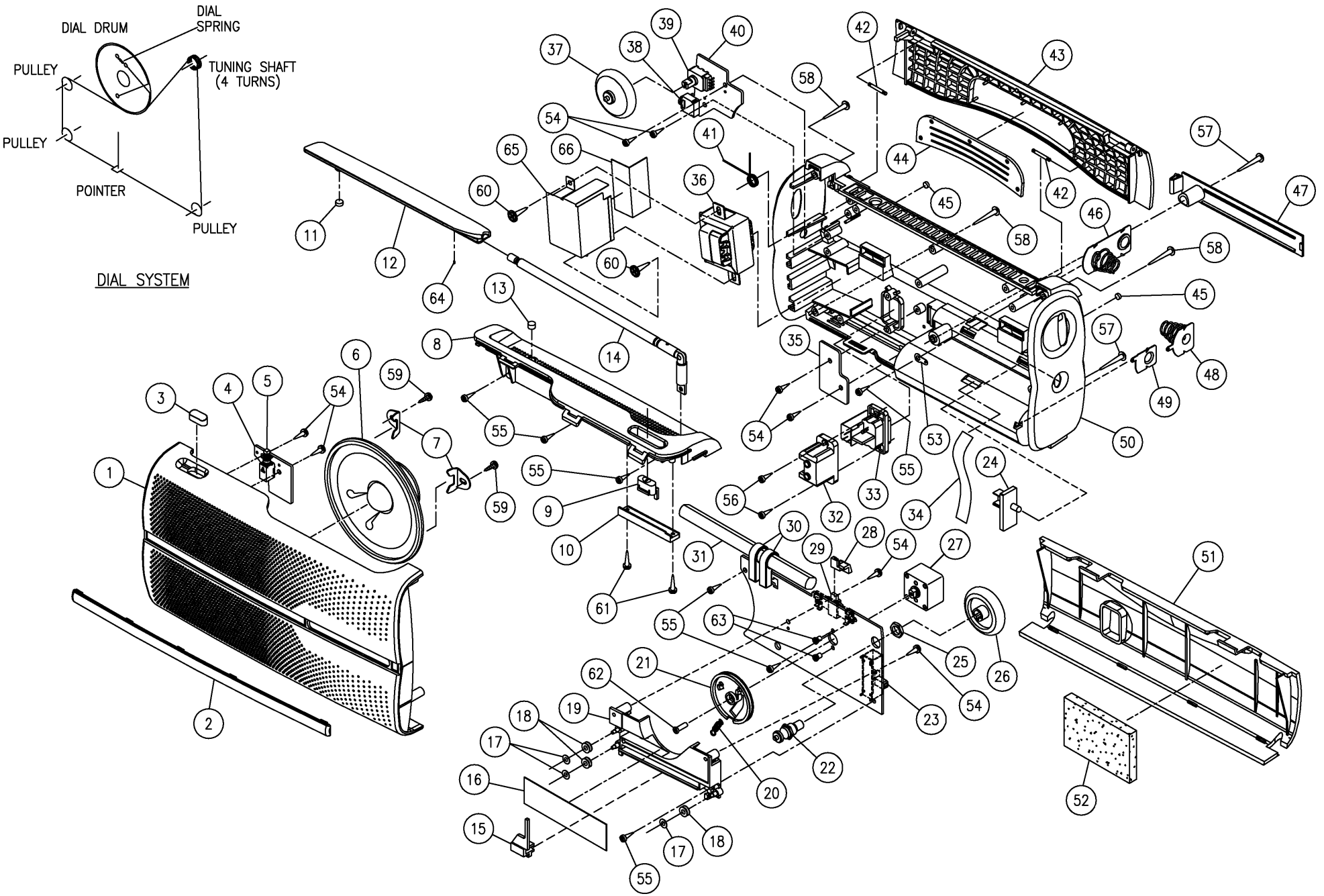


RECTIFIER PCB

MAIN PCB




FM ANT.
SPEAKER
JACK PCB
P103
P104
SP+
SP-
LW ANT.
MW ANT.
WHITE
GREEN
BLACK
RED
BLACK
RED
GREEN
WHITE
FM ANT.
MAIN PCB
POWER
AC SOCKET
TRANSFORMER
RED
WHITE
RED
RECT. PCB
POWER
POW. SW PCB
BATTERY 1.6U X 4


DIAL DRUM
DIAL SPRING
PULLEY
TUNING SHAFT (4 TURNS)
PULLEY
POINTER
PULLEY
DIAL SYSTEM