

Service  
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**Service**



# Service Manual



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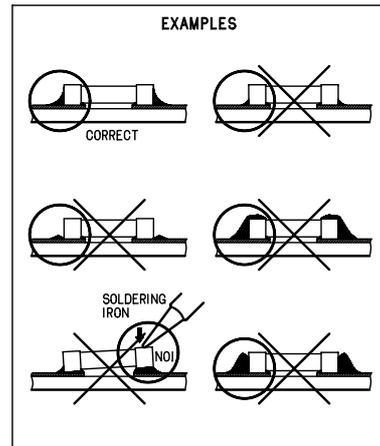
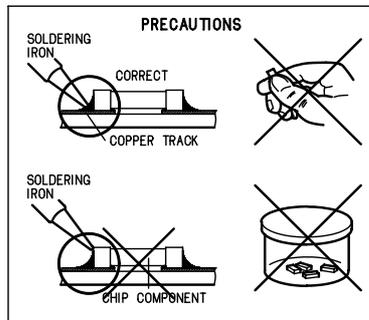
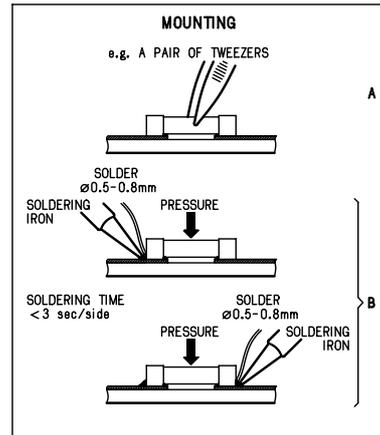
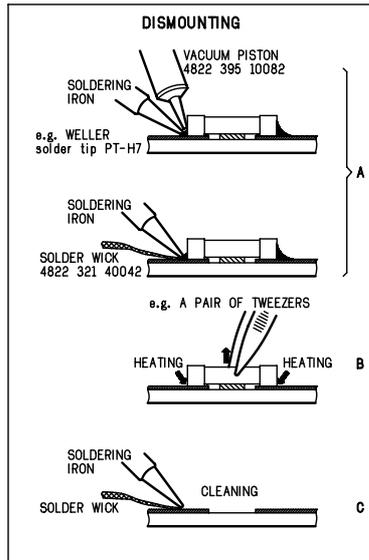
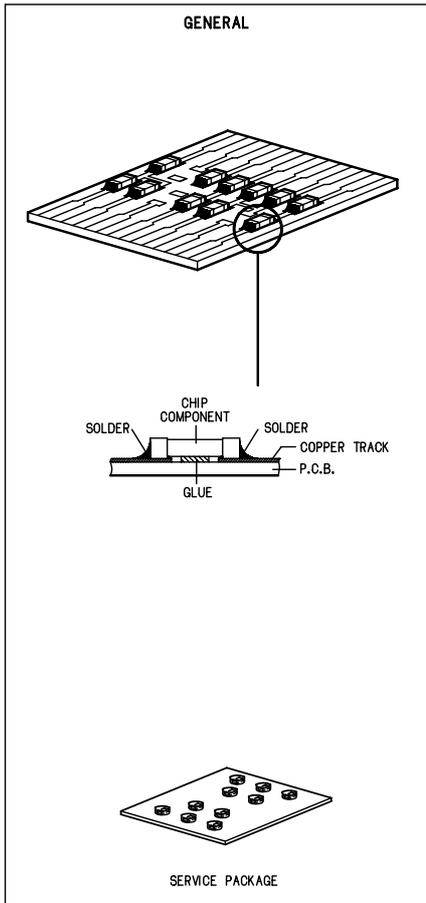
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Version 1.0



**PHILIPS**

# HANDLING CHIP COMPONENTS



## ⓐ WARNING

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wristband with resistance. Keep components and tools at this potential.

## ESD



## Ⓝ WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

## ⓕ ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet sertit d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

## ⓓ WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

## Ⓢ AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

## ⓐ

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used. Safety components are marked by the symbol .

## SAFETY



## Ⓝ

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast. De Veiligheidsonderdelen zijn aangeduid met het symbool .

## ⓕ

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées. Les composants de sécurité sont marqués .

## ⓓ

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden. Sicherheitsbauteile sind durch das Symbol  markiert.

## Ⓢ

Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati. Componenti di sicurezza sono marcati con .

ⓐ **DANGER:** Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.



## Ⓢ Varning !

Osynlig laserstrålning när apparaten är öppnad och spårren är urkopplad. Betrakta ej strålen.

## ⓓK Advarsel !

Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

## ⓕ Varoitus !

Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen !

## ⓐ

After servicing and before returning the set to customer perform a leakage current measurement test from all exposed metal parts to earth ground, to assure no shock hazard exists. The leakage current must not exceed 0.5mA.

## ⓕ

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

# TECHNICAL SPECIFICATIONS

## GENERAL

Mains voltage	-/00C : 230 V
	-/05/10 : 240 V
Mains frequency	-/00C/05/10 : 50 Hz
Battery	: 9 V (R14/UM2 x 6)
Power consumption	: 12 W
Dimension (W x H x D)	: 360 x 225 x 152mm
Weight	: 2.3 Kg

## AMPLIFIER

Output power	mains : 2 x 1 W
	battery : 2 x 1 W
Speaker impedance	: 2 x 8 ohm
Frequency response	: 100 Hz - 10 kHz ( $\pm 3$ dB)

## TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
IF frequency	: 10.7 MHz $\pm$ 0.2 MHz
Sensitivity	: 28 dBf at 26dB S/N
Selectivity	: 24 dB at 300kHz
IF rejection	: 65 dB
Image rejection	: 26 dB

## TUNER - AM SECTION

Tuning range	: 512 - 1635 kHz
IF frequency	: 468 kHz $\pm$ 3 kHz
Sensitivity	: 4000 $\mu$ V/m at 26dB S/N
Selectivity	: 20 dB
IF rejection	: 70 dB
Image rejection	: 32 dB

## AUDIO CASSETTE RECORDER

Number of tracks	: 1 stereo
Tape speed	: 4.76 cm/sec $\pm$ 3%
Wow & flutter	: < 0.48 JIS UWTD
Fast wind/rewind C60	: 130 sec.
Frequency response P/B	: 125 - 8000 Hz
S/N ratio	: > 36 dB

## COMPACT DISC

Frequency response	: 100 Hz - 10 kHz
S/N ratio	: 60 dB
Channel difference 1 kHz	: 2 dB
Channel crosstalk 1 kHz	: 40 dB
Laser wavelength	: 780 $\pm$ 20 nm
Laser light power	: < 0.5 mW

## SERVICE TOOLS

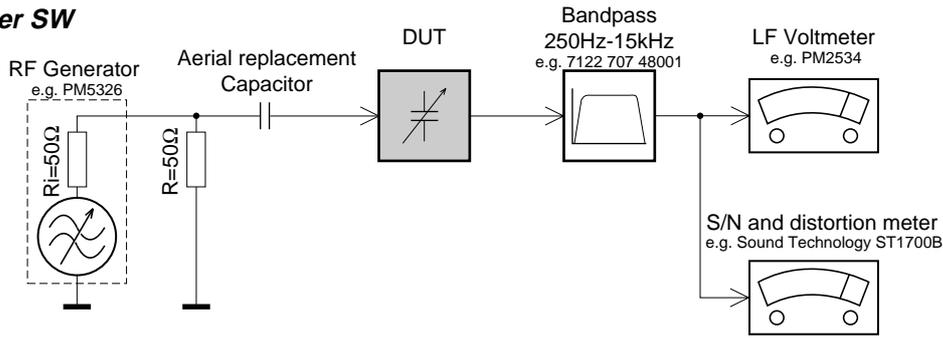
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155

## AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat large 1200x650x1.25mm	4822 466 10953
small 600x650x1.25m	4822 466 10958
anti-static wristband	4822 395 10223
connection box (3 press stud connections, 1M $\Omega$ )	4822 320 11307
extendible cable (2m, 2M $\Omega$ , to connect wristband to connection box)	4822 320 11305
connecting cable (3m, 2M $\Omega$ , to connect table mat to connection box)	4822 320 11306
earth cable (1M $\Omega$ , to connect any product to mat or to connection box)	4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)	4822 310 10671
wristband tester	4822 344 13999

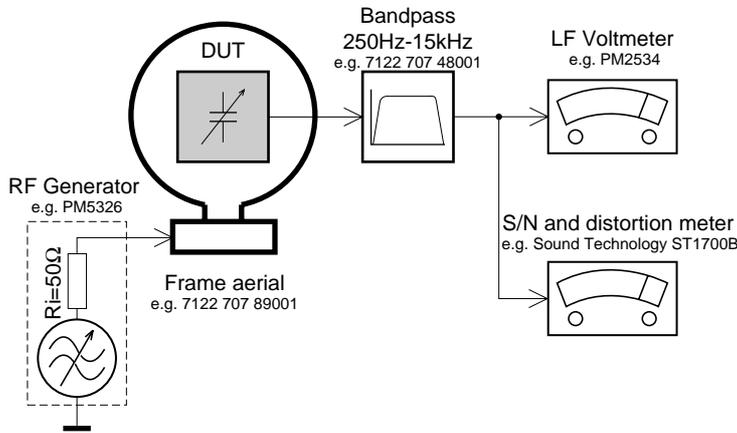
# SERVICE MEASUREMENT

## Tuner SW



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday«s cage. Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

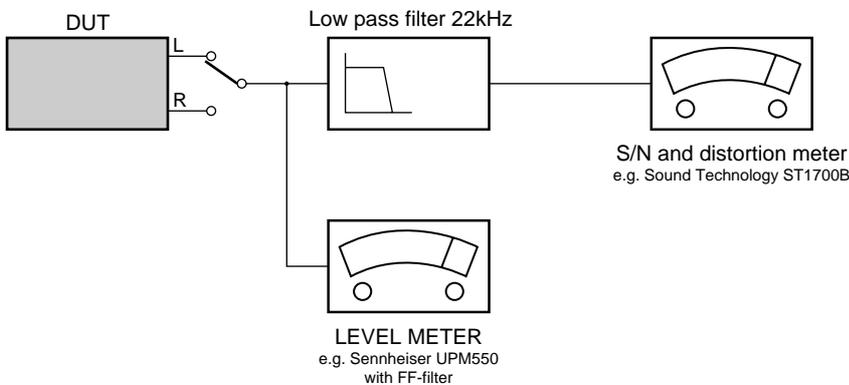
## Tuner AM (MW,LW)



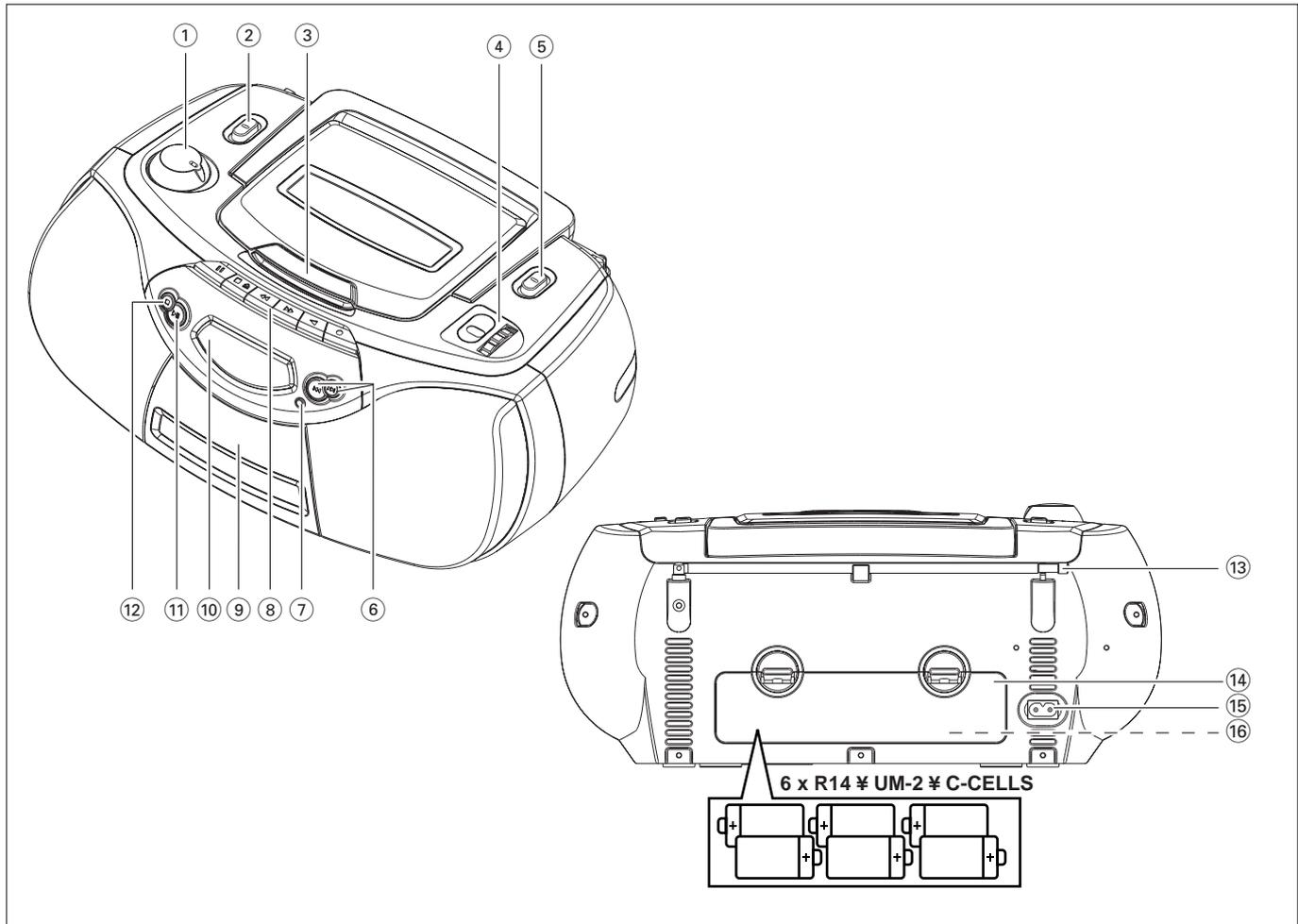
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday«s cage.

## CD

Use Audio Signal Disc SBC429 4822 397 30184 (replaces test disc 3)  
L.P.F. = 13<sup>th</sup> order filter 4822 395 30204



## CONNECTIONS AND CONTROLS



### Top and front panels (See 1)

- ① **VOLUME** – to adjust volume level
- ② **Source selector : CD, TUNER, TAPE/POWER OFF**  
– selects CD, tuner or tape source of sound  
– power off switch
- ③ **CD door**
- ④ **TUNING** – tunes to radio stations
- ⑤ **BAND** – selects waveband
- ⑥ **PREVIOUS, NEXT** ◀◀ , ▶▶  
– skips or searches a passage/track backwards or forward
- ⑦ **PROG** – programs and reviews programmed track numbers
- ⑧ **CASSETTE RECORDER keys:**  
  - ⏸ – pauses playback or recording
  - ▲ – stops the tape;  
– opens the cassette holder
  - ◀◀ or ▶▶ – fast rewinds/ winds tape
  - ▶ – starts playback
  - – starts recording
- ⑨ **Cassette door**
- ⑩ **CD Display** – shows the CD functions
- ⑪ **PLAY/PAUSE** ▶⏸ – starts or pauses CD playback.
- ⑫ **STOP** ■ – stop playback;  
– erases a CD program.

### Back panel

- ⑬ **Telescopic antenna** - improves FM reception.  
**Note: AM band antenna is built into set (see Tuner reception)**
- ⑭ **Battery door** - open to insert 6 x 1.5V **R-14/ UM2/ C-cells.**
- ⑮ **AC POWER/MAINS** - inlet for power cord.
- ⑯ **Voltage selector** – (inside the battery compartment, not all versions) adjust to match the local voltage 110/220V before plugging in the set.

# CONNECTIONS AND CONTROLS

## Power Supply

Whenever convenient, use the mains supply cord if you want to conserve battery life. Make sure you remove the plug from the set and wall outlet before inserting batteries.

### Batteries (not included)

- 1 Open the battery compartment and insert six batteries, type **R-14, UM-2** or **C-cells**, (preferably alkaline) with the correct polarity as indicated by the "+" and "-" symbols inside the compartment. (See **1**)
- 2 Replace the compartment door, making sure the batteries are firmly and correctly in place. The set is now ready to operate.

### **Batteries contain chemical substances, so they should be disposed of properly.**

Incorrect use of batteries can cause electrolyte leakage and will corrode the compartment or cause the batteries to burst:

- Do not mix battery types: e.g. alkaline with carbon zinc. Only use batteries of the same type for the set.
- When inserting new batteries, do not try to mix old batteries with the new ones.
- Remove the batteries if the set is not to be used for a long time.

### Using AC Mains

- 1 Check if the power/mains voltage, **as shown on the type plate located on the bottom of the set**, corresponds to your local power supply. If it does not, consult your dealer or service center.
  - 2 Connect the power cord to the AC POWER/MAINS inlet and the wall socket. The mains lead is now connected and ready for use.
  - 3 To switch the set off completely, withdraw the power cord from the wall socket.
- Disconnect the mains lead from the wall socket to protect your set during heavy thunderstorms.

### **The type plate is located on the bottom of the set.**

### Switching POWER on/off:

#### Save energy

To avoid unnecessary energy consumption, always adjust the **source selector** to **TAPE/POWER OFF** after using the set. Also check that the tape deck keys are released.

## General operation

- 1 To select your sound source adjust the **source selector** to : **CD, TUNER** or **TAPE/POWER OFF**.
- 2 Adjust the sound with the **VOLUME** control.
- 3 To switch off the set, adjust the source selector to **TAPE/POWER OFF** position and check the cassette keys are released.

## Trouble shooting

### Problem

- Possible cause
- Remedy

### No sound /power

- Volume not adjusted
- Adjust the VOLUME
- Power cord not securely connected
- Connect the AC power cord properly
- Batteries dead/ incorrectly inserted
- Insert (fresh) batteries correctly

### Display does not function properly/ No reaction to operation of any of the controls

- Electrostatic discharge
- Switch off and unplug the set. Reconnect after a few seconds

### The CD skips tracks

- CD damaged or dirty
- Replace or clean CD
- Program is active
- Quit program mode

### - - indication

- No CD inserted
- Insert a CD
- CD badly scratched or dirty
- Replace/ clean CD, see Maintenance
- Laser lens steamed up
- Wait until lens has cleared
- CD-R is blank or not finalized/ CD-RW inserted
- Use a finalized CD-R or suitable CD Audio disc only

### Poor cassette sound quality

- Dust and dirt on the heads, etc.
- Clean deck parts, see Maintenance
- Use of incompatible cassette types (METAL or CHROME)
- Only use NORMAL (IEC I) for recording

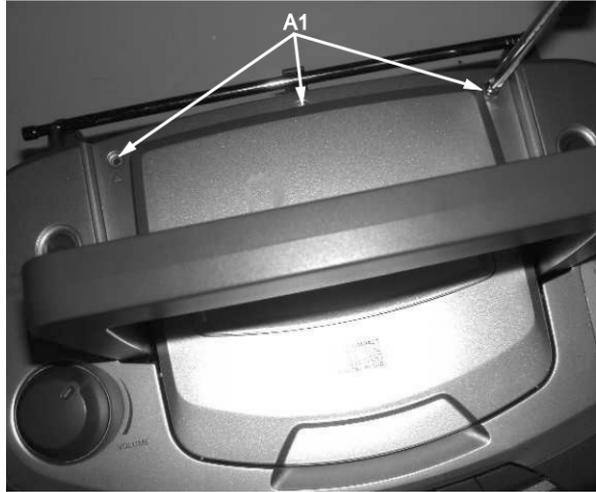
### Recording does not work

- Cassette tab(s) may be broken
- Apply adhesive tape over the missing tab space

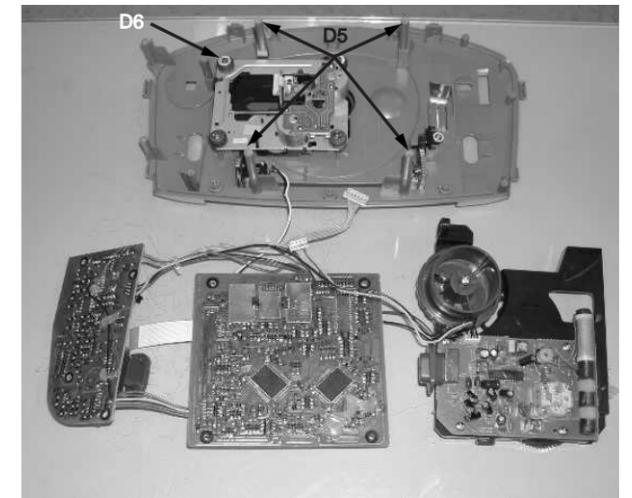
For more information on operation instruction please visit Philips Audio internet site :  
<http://www.audio.philips.com>

**DISASSEMBLY DIAGRAM**

- A. REMOVE BACK CABINET ASSEMBLY**
- REMOVE SCREWS A1(3x10) 3PCS
  - REMOVE SCREWS A2(3x30) 5PCS
  - REMOVE BACK CABINET



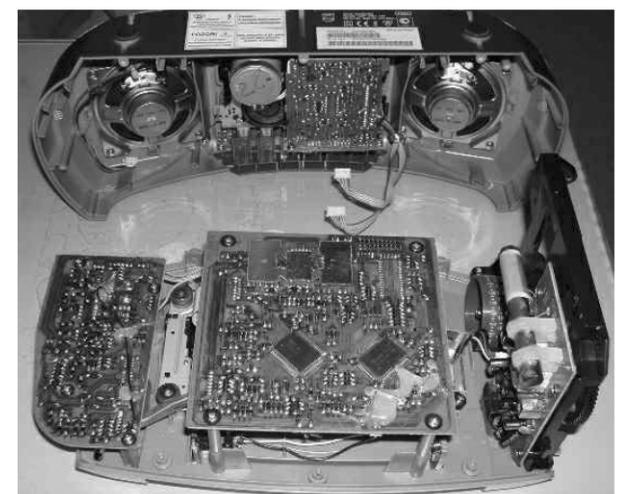
- D REMOVE DECK MECHANISM**
- REMOVE SCREWS D5(3x10) 4PCS
  - REMOVE SCREWS D6(2.5x10) 4PCS



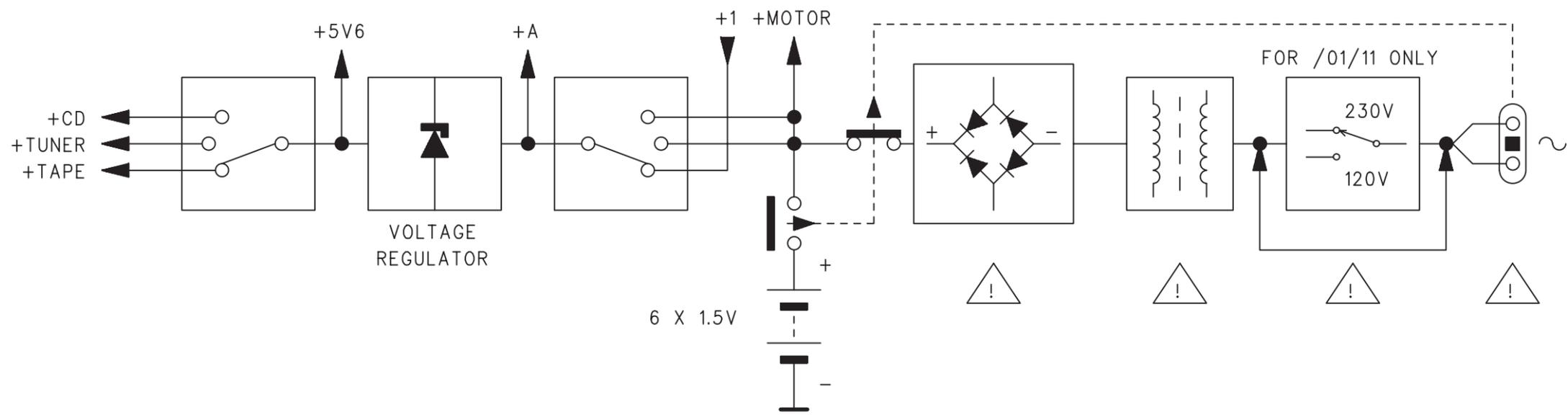
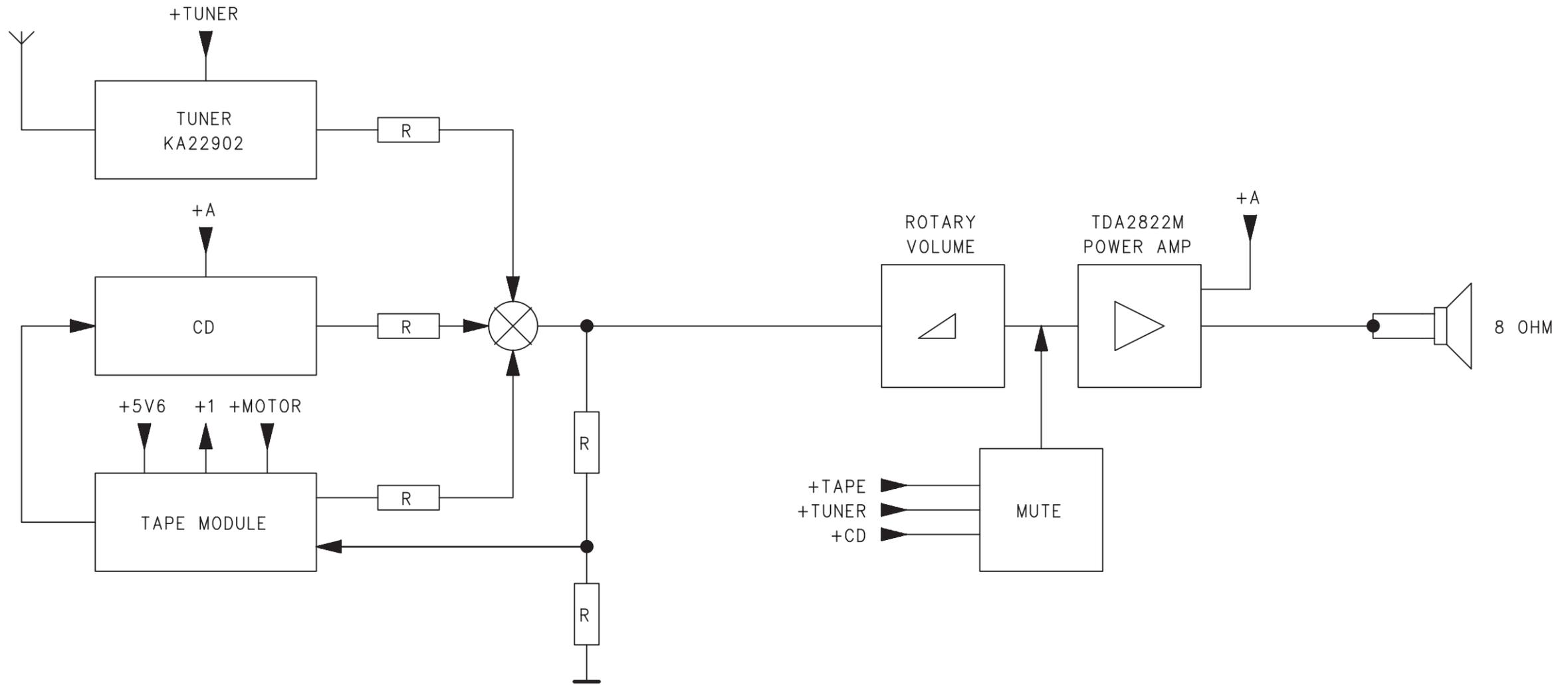
- B. REMOVE HANDLE**
- PRESS DOWN THE STOPPER AND PULL THE HANDLE OUT
  - REMOVE HANDLE



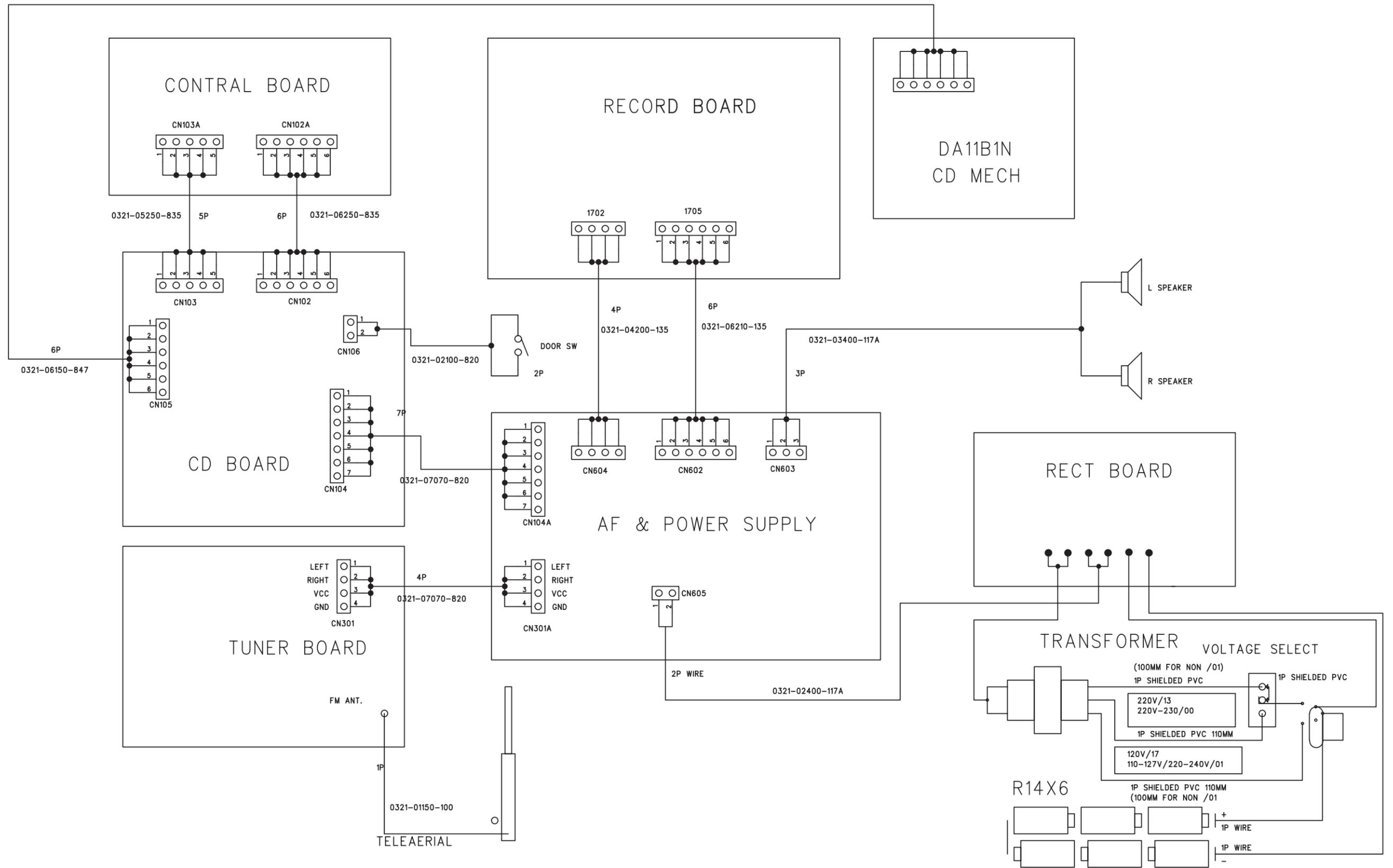
- C REMOVE TOP CABINET ASSEMBLY**
- REMOVE SCREWS C3(3x20) 2PCS
  - REMOVE SCREWS C4(3x10) 1PC
  - REMOVE TOP CABINET



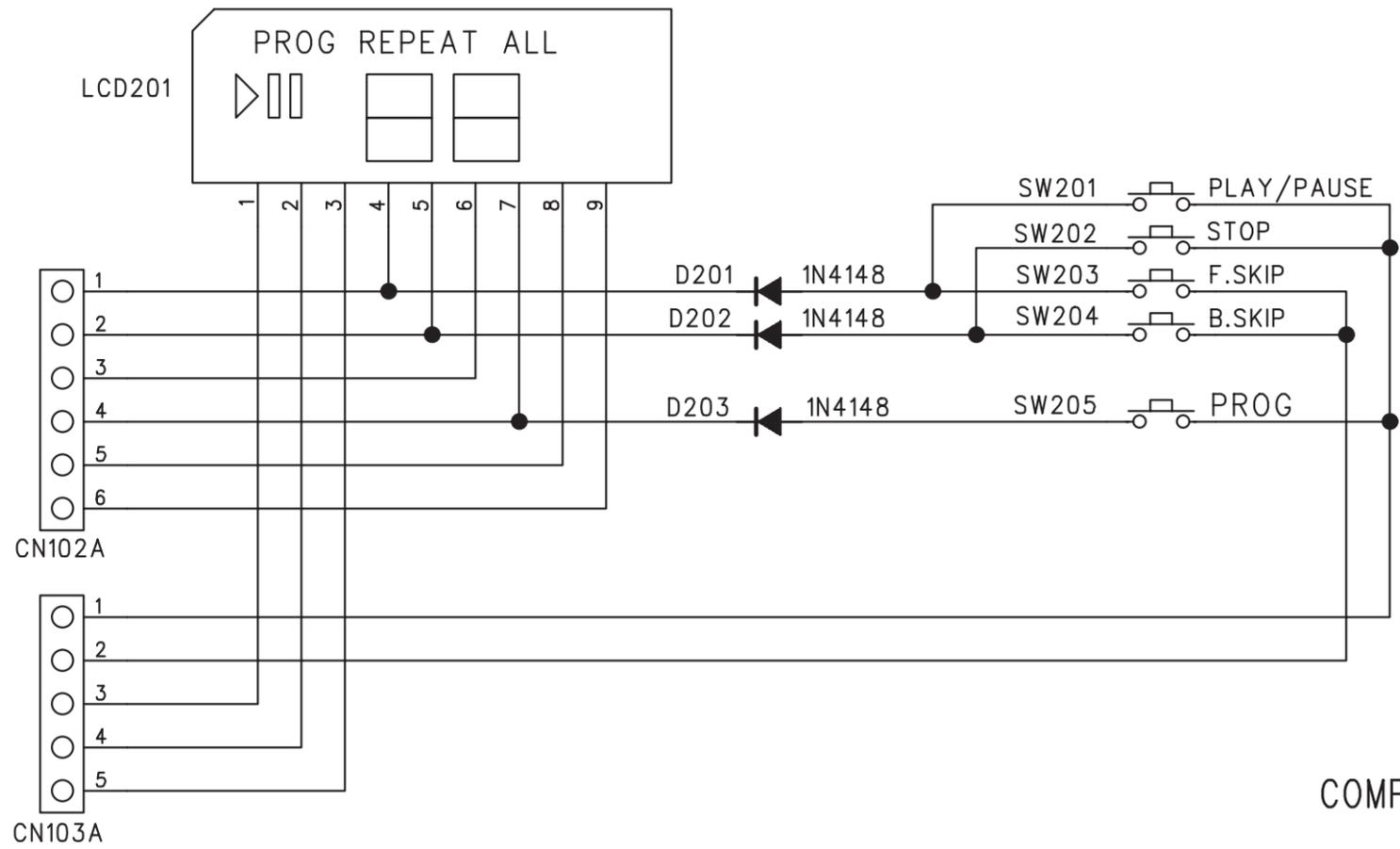
BLOCK DIAGRAM



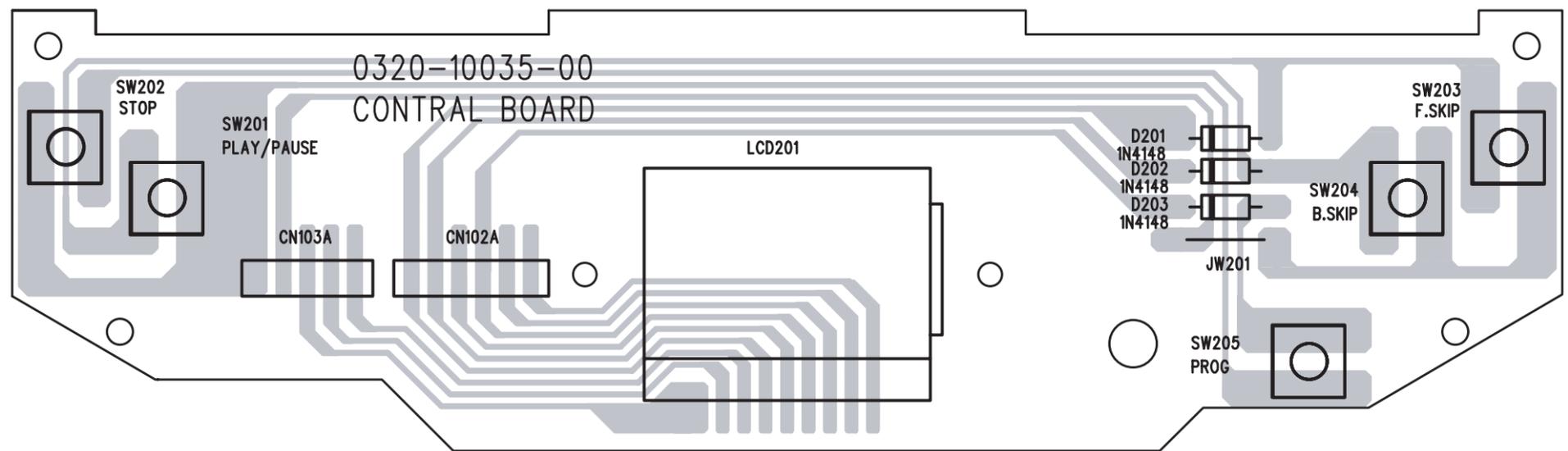
# WIRING DIAGRAM



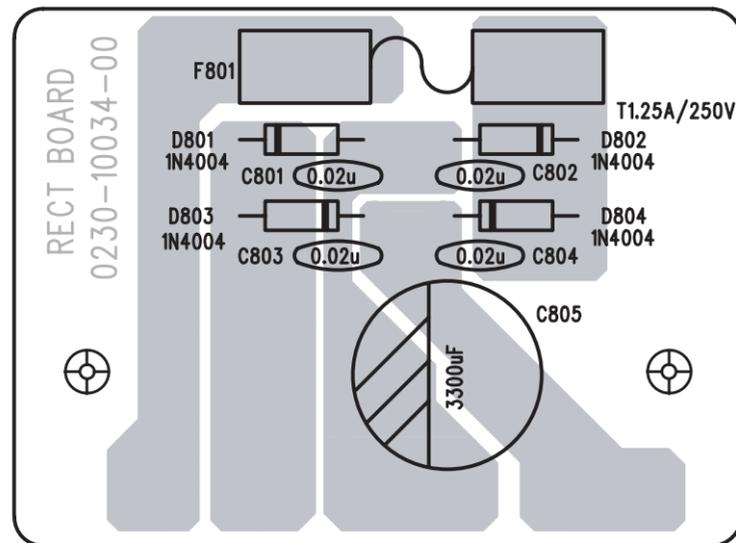
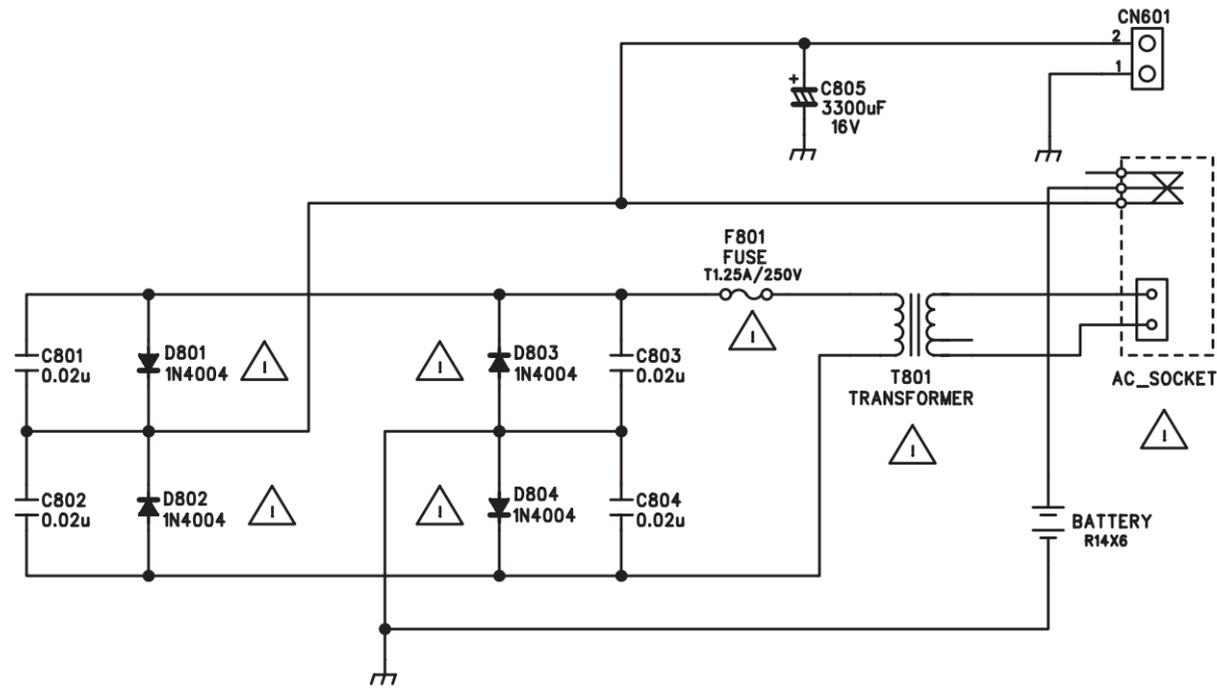
# CONTROL BOARD - CIRCUIT / LAYOUT DIAGRAM



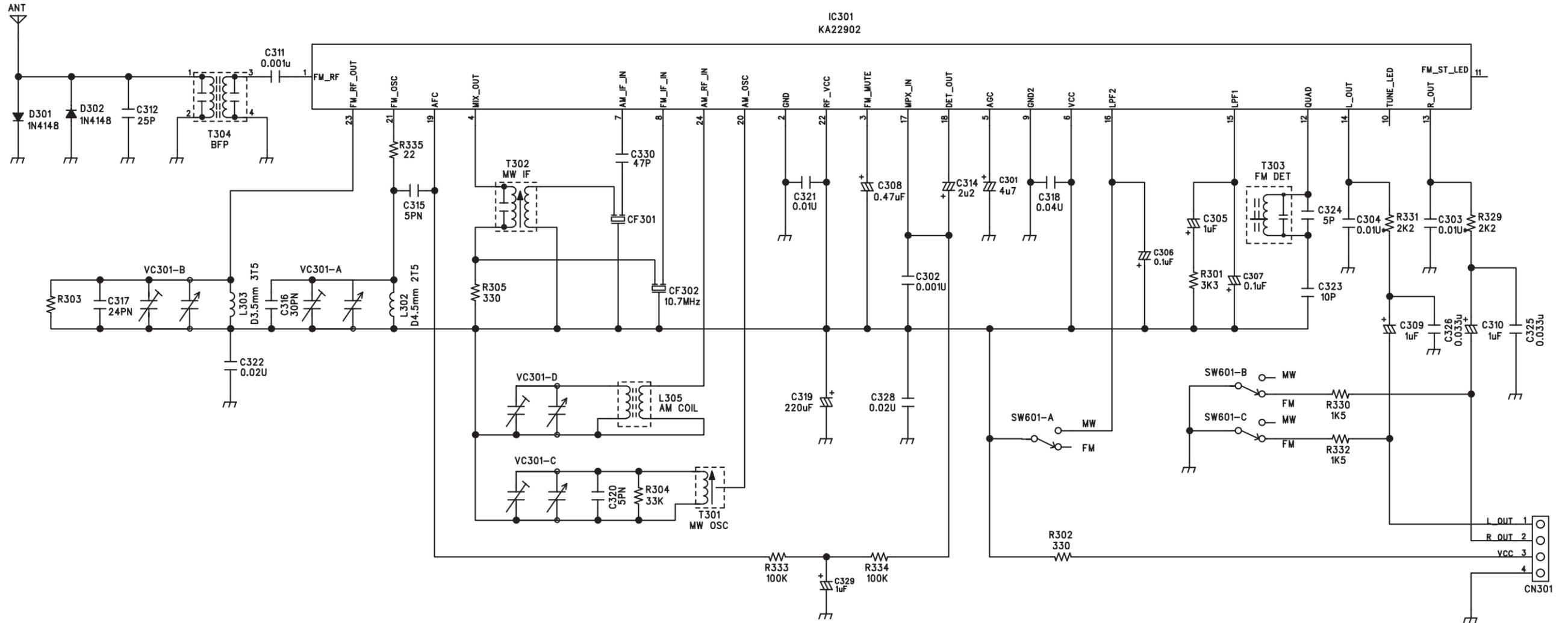
COMPONENT SIDE



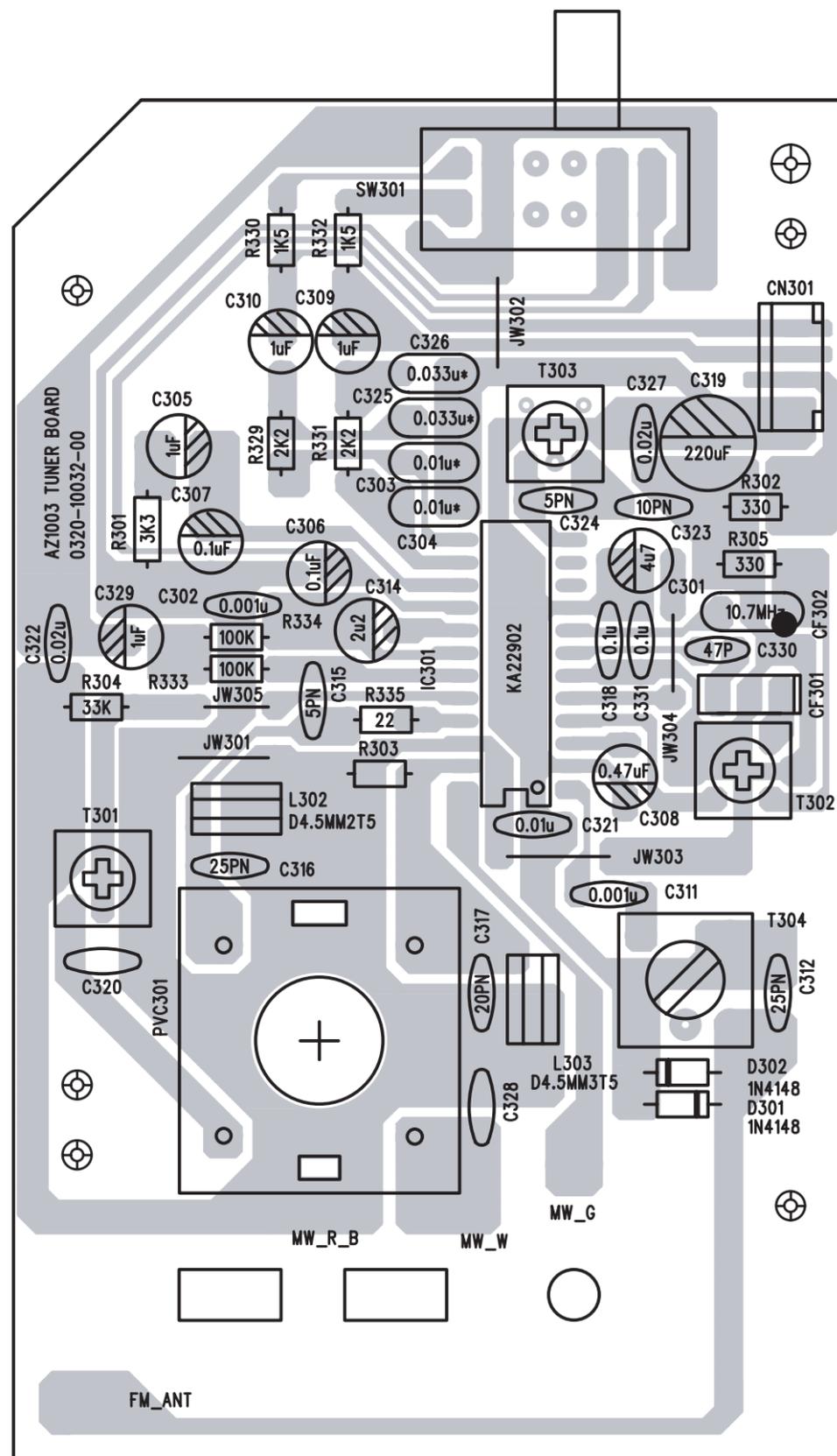
# RECTIFIER BOARD - CIRCUIT / LAYOUT DIAGRAM



# TUNER BOARD - CIRCUIT DIAGRAM



TUNER BOARD LAYOUT DIAGRAM



TUNER ADJUSTMENT

Alignment Procedure

Model No. AZ-1003

Instruments Required :

1. AM Signal Generator
2. FM Signal Generator
3. AM/FM if Sweep Generator
4. Dual Trace Oscilloscope
5. Solid State Voltage Meter (SSVM)
6. Frequency Counter
7. Nonmetallic Alignment Tools
8. Test Tape : Teac - MTT 113N (6.3 kHz) or Equiv.
9. Test Tape : Teac - MTT 111N (3 kHz) or Equiv.

Important

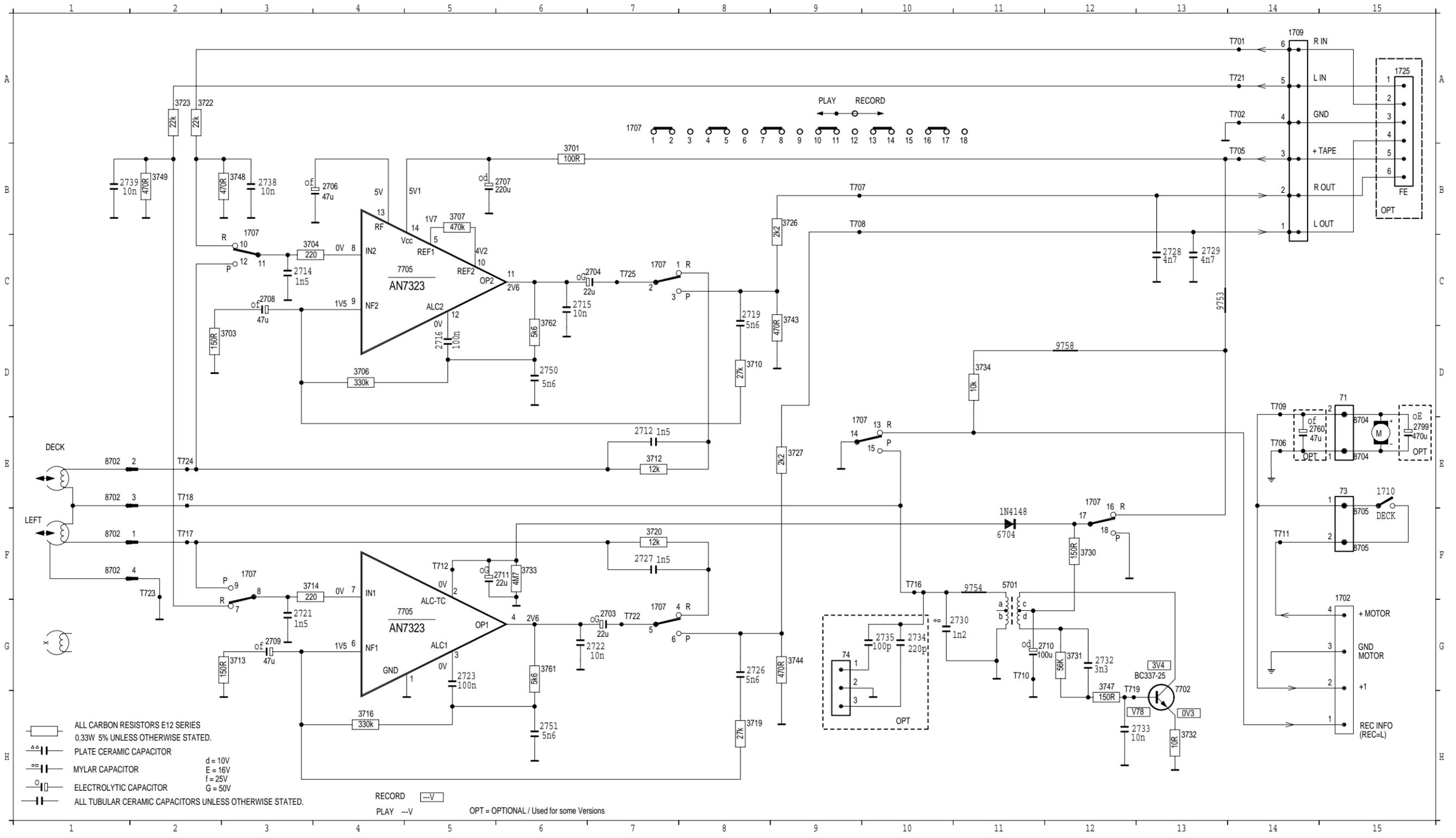
1. Check Power Source Voltage
2. Set the Function Switch to Band Being Aligned.
3. Volume Should Be Turned To Minimum.
4. Signal Input Should be Kept as Low as Possible.
5. AM Modulation : 1 kHz 30%
6. FM Modulation : 1 kHz 22.5 kHz DEV.

Radio Alignment

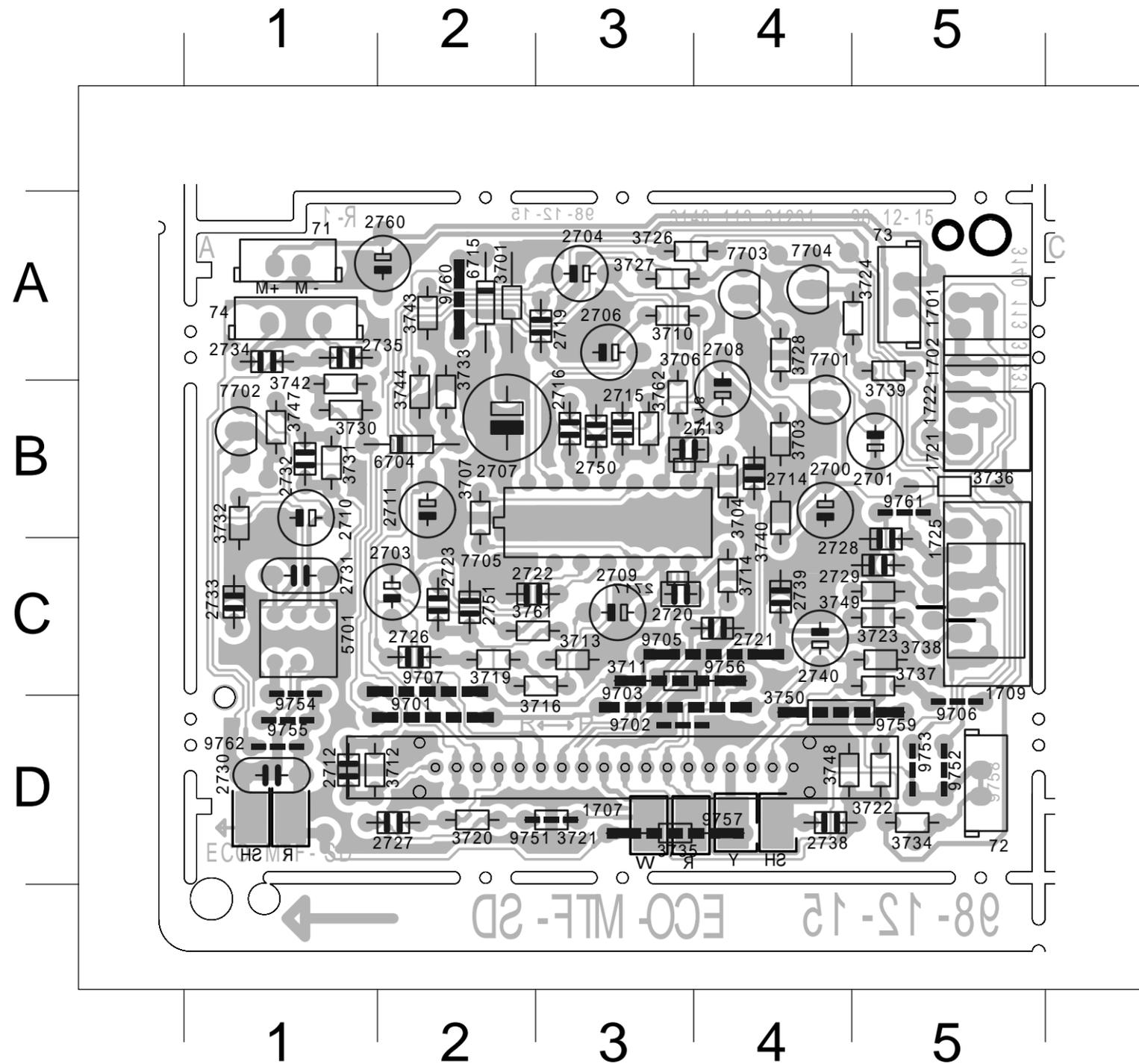
	Frequency	Input	Varian	Adjust	Output	Scope/Meter
MW IF						
	455 kHz	LOOP ANT AM Coil	MIN.	T302	IC301 Pins 18	MAX.
MW IF						
	520 kHz 1750 kHz	LOOP ANT	MAX. MIN.	T301 VC301C	IC301 Pins 18	MAX.
	600 kHz 1400 kHz	AM Coil	600 kHz 1400 kHz	L305 VC301D		MAX.
FM IF						
	10.7 MHz	IC301 Pins 4	MIN.	T303	IC301 Pins 18	Symmetrical
FM IF						
	87.5 MHz 108.5 MHz	FM ANT. C312 Cer. Cap.	MAX. MIN.	L302 VC301A	IC301 Pins 18	MAX.
	90 MHz 106 MHz		90 MHz 106 MHz	L303 VC301B		MAX.

# RECORDER BOARD - CIRCUIT DIAGRAM

71	D15	1707	C 3	1709	A14	2706	B 4	2711	F 6	2719	C 8	2727	F 7	2733	H13	2750	D 6	3703	D 3	3712	E 7	3720	F 7	3730	F12	3743	C 9	3761	G 6	7705	G 4	8702	E 1	9753	C13	T705	B14	T710	G11	T718	E 2	T724	E 2
73	E15	1707	G 7	1710	B15	2707	B6	2712	E 7	2721	G 3	2728	C13	2734	G10	2751	H 6	3704	C 4	3713	G 3	3722	A 2	3731	G12	3744	G 9	3762	D 6	7705	C 4	8704	E15	9754	F11	T706	B14	T711	F14	T719	H13	T725	C 7
74	G 9	1707	C 7	1725	A15	2708	C 3	2714	C 3	2722	G 7	2729	C13	2735	G10	2760	H14	3706	D 4	3714	F 3	3723	A 2	3732	H13	3747	G12	5701	F11	8702	F 1	8704	E15	9758	D12	T707	B10	T712	F 5	T721	A14		
1702	G15	1707	E 9	2703	G 7	2709	G 3	2715	C 6	2723	G 5	2730	G11	2738	B 3	2799	H15	3707	D 5	3716	H 4	3726	B 9	3733	F 6	3748	B 3	6704	F 1	8705	F15	T701	A14	T708	B10	T716	F10	T722	G 7				
1707	F 3	1707	E12	2704	C 7	2710	G12	2716	D 5	2726	G 8	2732	G12	2739	B 1	3701	B 6	3710	D 8	3719	H 8	3727	E 9	3734	D11	3749	B 2	7702	H13	8702	E 1	8705	F15	T702	A14	T709	D14	T717	F 2	T723	F 2		



RECORDER BOARD - CIRCUIT DIAGRAM



71 A 1	2729 C 5	3733 B 2	9756 C 3
72 D 5	2730 D 1	3734 D 5	9757 D 3
73 A 5	2731 C 1	3735 D 3	9759 D 4
74 A 1	2732 B 1	3736 B 5	9760 A 2
1701 A 5	2733 C 1	3737 C 5	9761 B 5
1702 B 5	2734 A 1	3738 C 5	9762 D 1
1707 D 3	2735 A 1	3739 A 5	T701 C 5
1709 C 5	2738 D 4	3740 B 4	T702 C 5
1721 B 5	2739 C 4	3742 B 1	T705 B 5
1722 B 5	2740 C 4	3743 A 2	T706 B 5
1725 C 5	2750 B 3	3744 B 2	T709 A 5
2700 B 4	2751 C 2	3747 B 1	T710 C 1
2701 B 5	2760 A 2	3748 D 4	T711 B 5
2703 C 2	3701 A 2	3749 C 5	T712 C 2
2704 A 3	3703 B 4	3750 D 4	T713 A 5
2706 A 3	3704 B 4	3761 C 2	T714 D 5
2707 B 2	3706 B 3	3762 B 3	T715 D 5
2708 B 4	3707 B 2	5701 C 1	T716 D 1
2709 C 3	3710 A 3	6704 B 2	T719 B 1
2710 B 1	3711 C 3	6715 A 2	T720 A 5
2711 B 2	3712 D 1	7701 B 4	T721 C 5
2712 D 1	3713 C 3	7702 B 1	T722 C 2
2713 B 3	3714 C 4	7703 A 4	T725 D 2
2714 B 4	3716 C 3	7704 A 4	T7707 A 4
2715 B 3	3719 C 2	7705 B 3	T7708 A 4
2716 B 3	3720 D 2	9701 D 2	
2717 C 3	3721 D 3	9702 D 3	
2718 B 3	3722 D 5	9703 D 3	
2719 A 3	3723 C 5	9705 C 4	
2720 C 3	3724 A 5	9706 D 5	
2721 C 4	3726 A 3	9707 C 2	
2722 C 2	3727 A 3	9751 D 3	
2723 C 2	3728 A 4	9752 D 5	
2726 C 2	3730 B 1	9753 D 5	
2727 D 2	3731 B 1	9754 C 1	
2728 C 5	3732 B 1	9755 D 1	

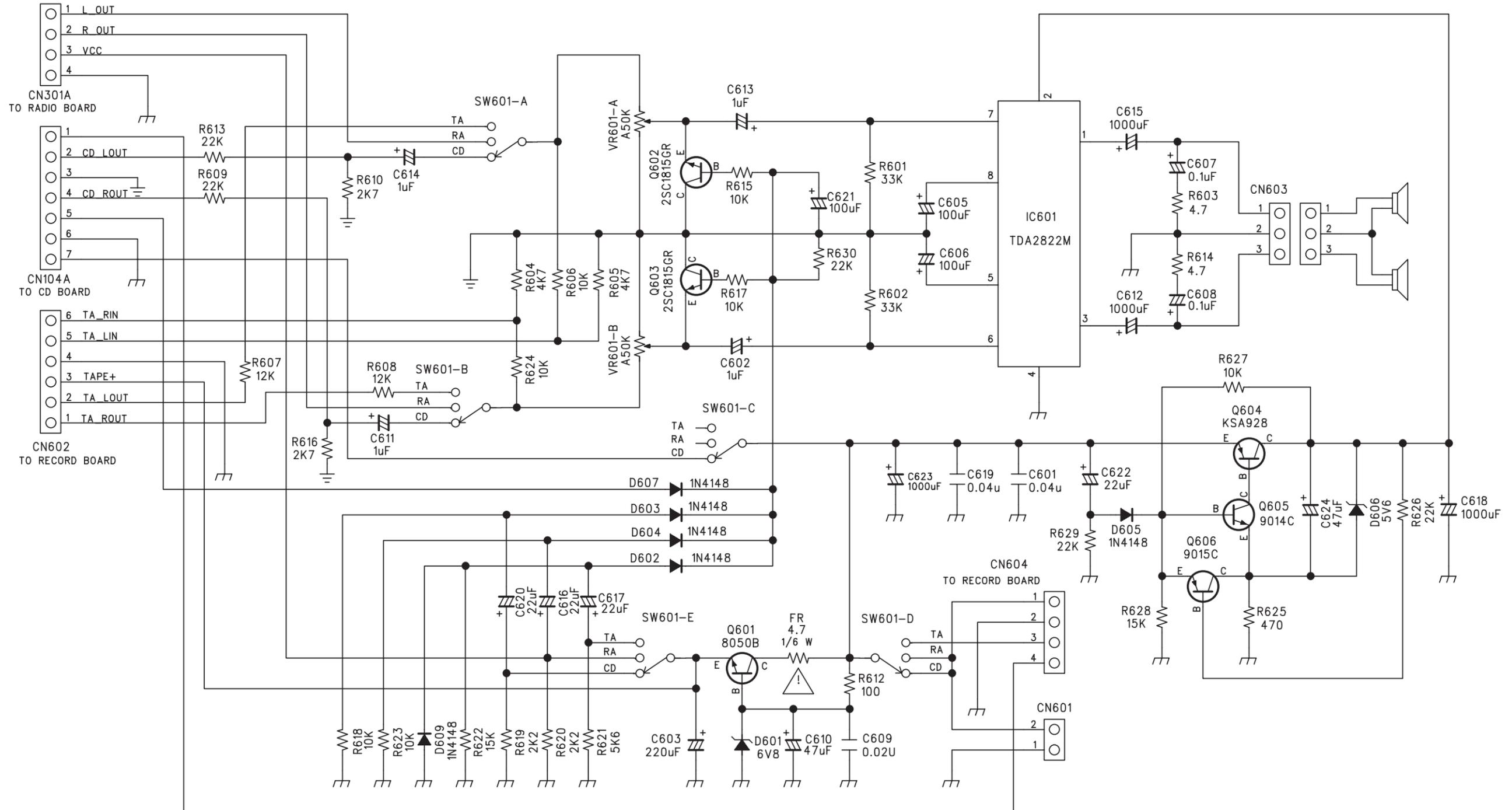
CASSETTE ADJUSTMENT

Adjustment	Cassette	SK ....	Deck 1	Measure on	Read on	Adjust with	Adjust to
Azimuth	10 kHz SBC420*	Tape	Play	H/P Jack	mV meter	Left hand Screw R/P head	max.
Motor Speed	3150 kHz SBC420*	Tape	Play	H/P Jack	Wow and flutter meter	Preset in motor	**a

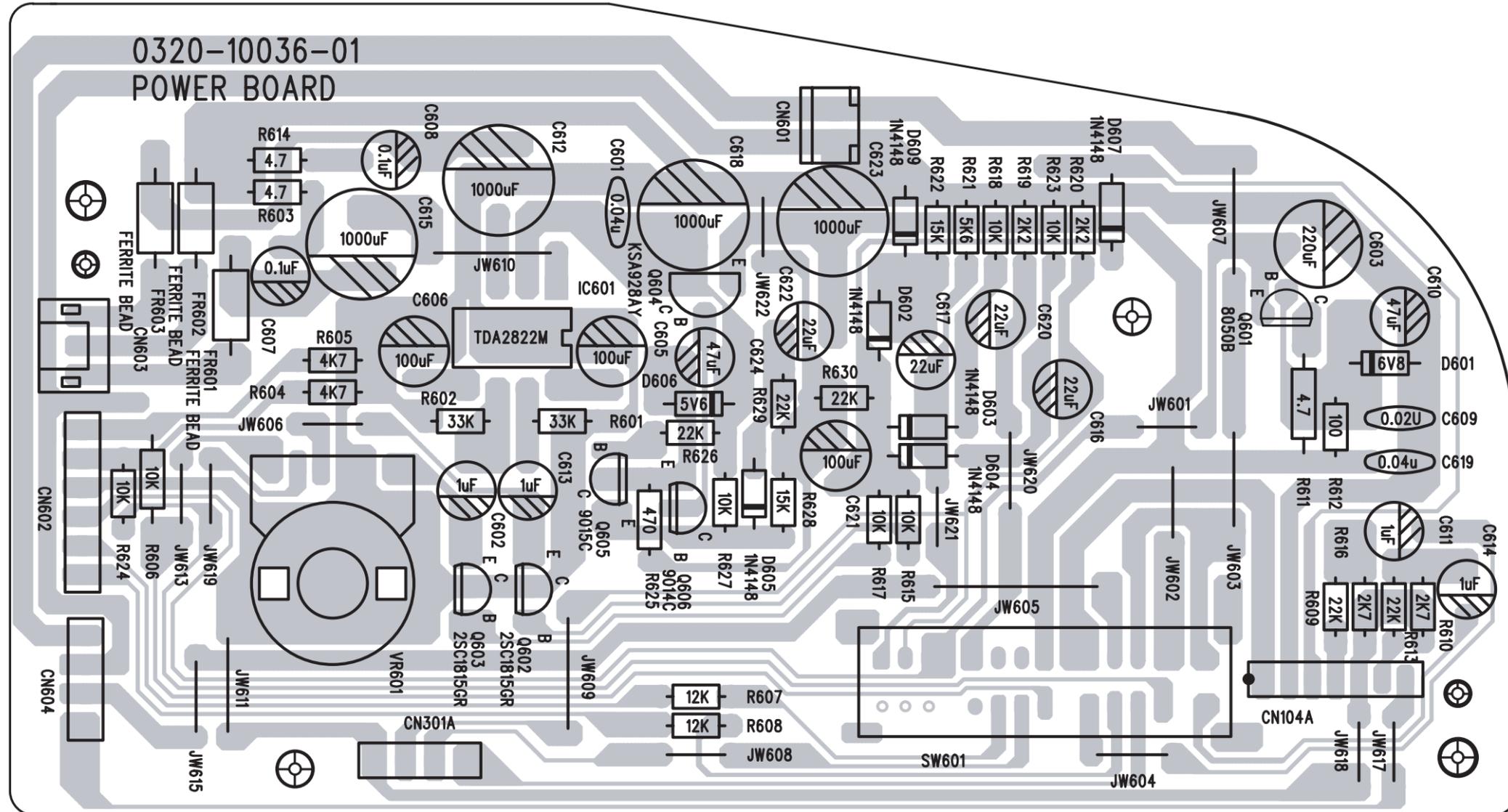
\* SBC420 : 4822 397 30071

\*\*a The maximum permissible speed deviation is -3%.  
Moreover, the wow and flutter value can be read.

# POWER BOARD - CIRCUIT DIAGRAM

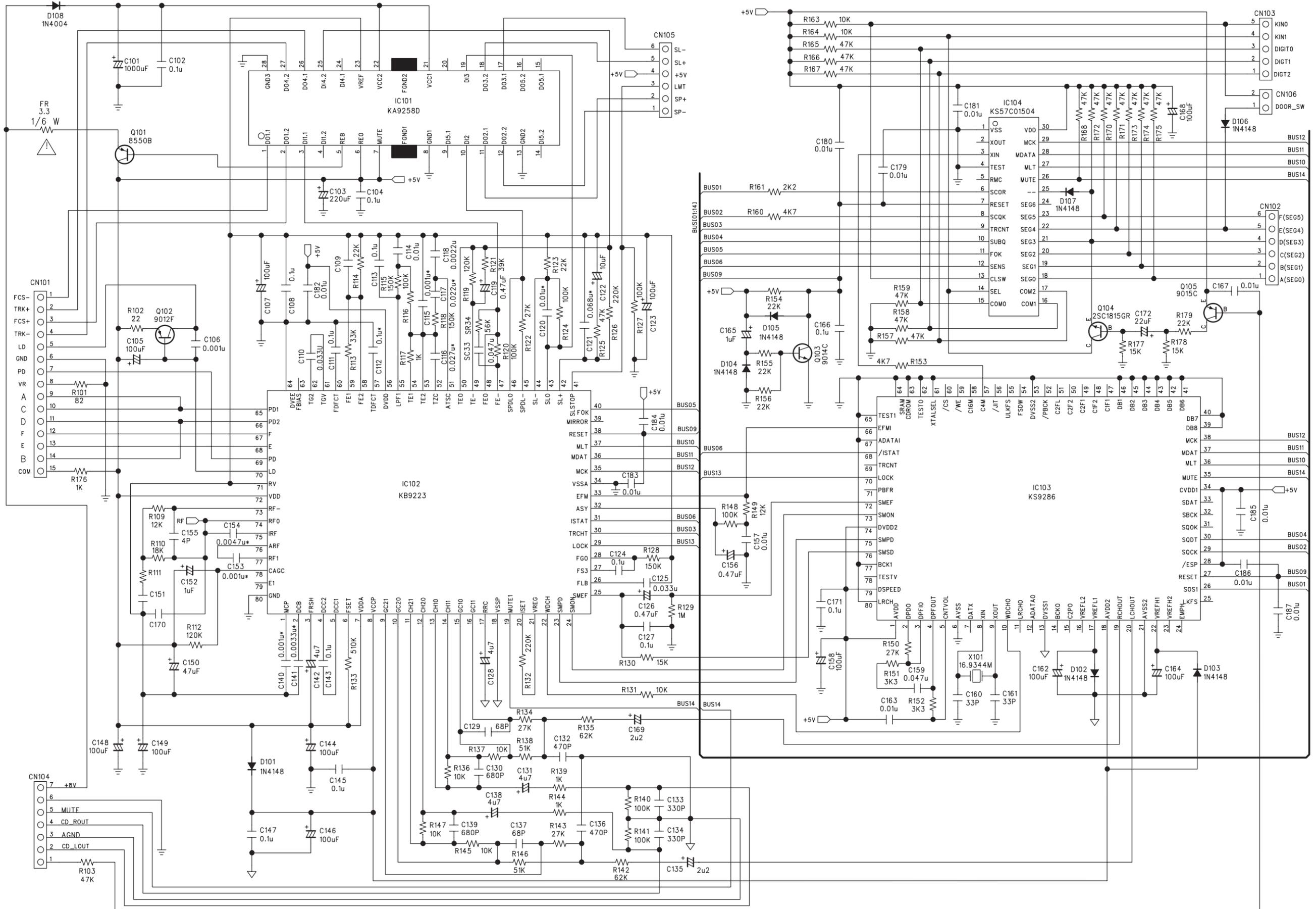


POWER BOARD - LAYOUT DIAGRAM

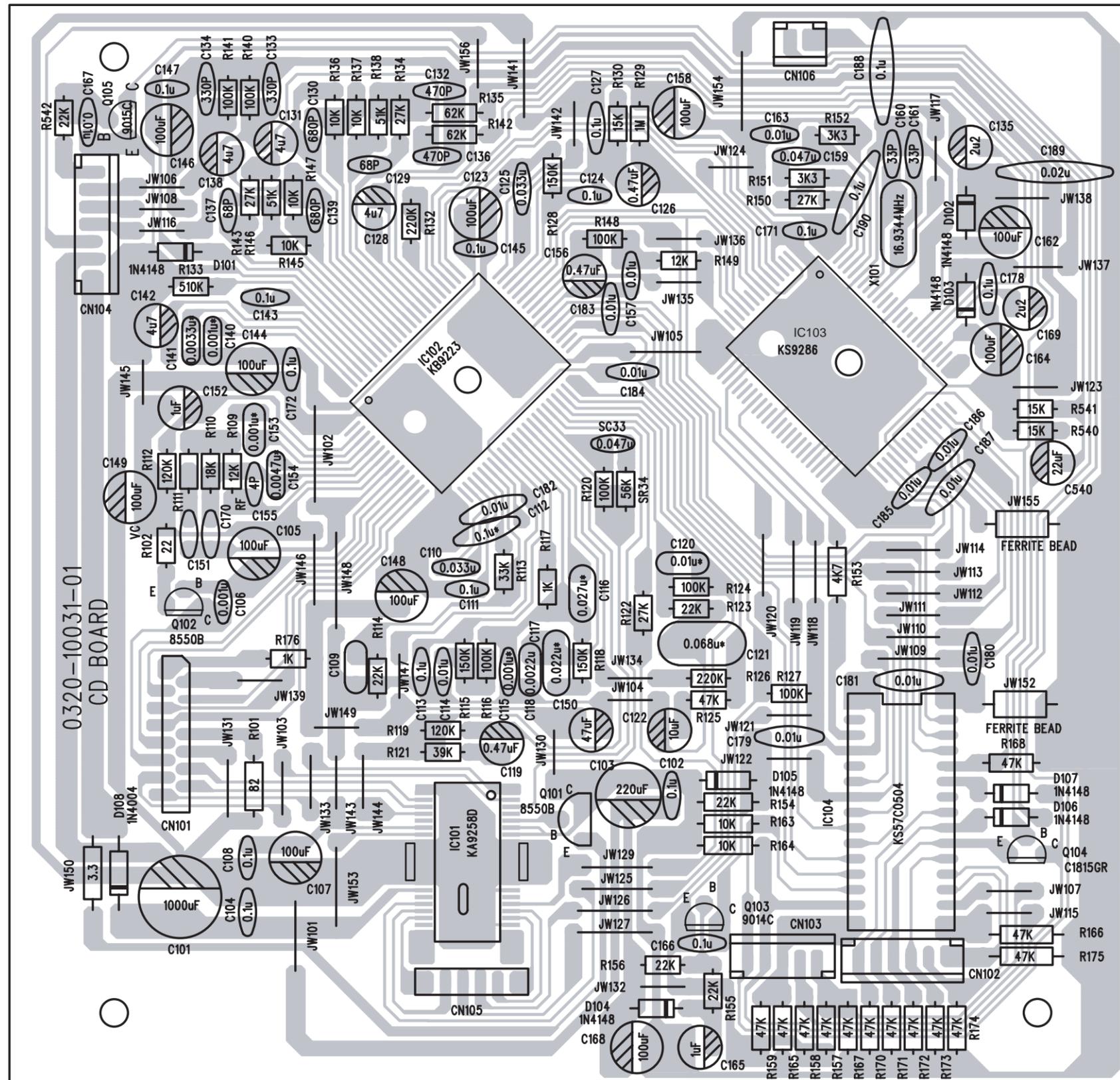


CD  
RADIO  
TAPE

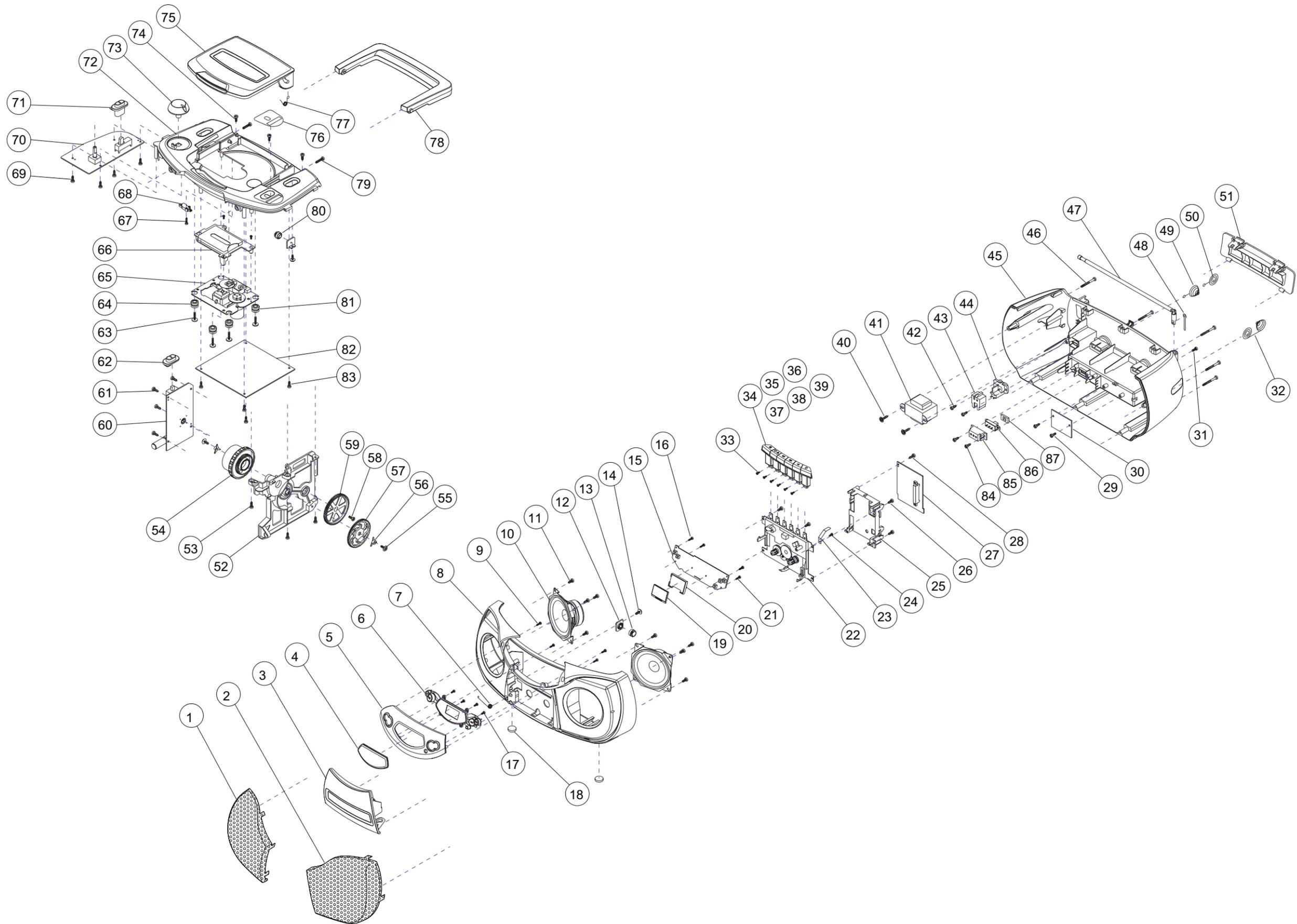
# CD BOARD - CIRCUIT DIAGRAM



CD BOARD - LAYOUT DIAGRAM



# EXPLODED VIEW DIAGRAM - CABINET



## MECHANICAL PARTSLIST

3	9965 000 16757	CASS DOOR
4	9965 000 16765	LCD DISPLAY LENS
5	9965 000 16755	FRONT CONTROL PANEL
6	9965 000 16767	CD CONTROL KNOB SET
7	3140 111 01220	CASS. DOOR SPRING
8	9965 000 16750	FRONT CABINET
12	9965 000 14239	CASS DOOR GEAR HOLDER
13	4822 522 10778	CASS. DOOR GEAR
20	3140 114 43740	LCD-BRACKET
22	9965 000 14240	TAPE DECK TK20FX-V682-001
23	9965 000 08506	REC SPRING
25	3140 114 20430	BRACKET ECO-MTF-SD
32	3140 111 01280	BATTERY CONTACT (+,-)
34	9965 000 16764	CASS KNOB (PAUSE)
35	9965 000 16763	CASS KNOB (STOP)
36	9965 000 16762	CASS KNOB (REW)
37	9965 000 16761	CASS KNOB (F.F)
38	9965 000 16760	CASS KNOB (PLAY)
39	9965 000 16759	CASS KNOB (REC)
45	9965 000 16751	BACK CABINET
47	3140 118 71920	TELESCOPIC AERIAL
49	3140 111 01270	BATTERY CONTACT SPRING (-)
50	3140 111 22110	BATTERY CONTACT SPRING (+)
51	9965 000 16756	BATTERY DOOR
54	9965 000 16758	TUNING KNOB
57	9965 000 16770	CONNECTING GEAR
59	3140 114 43760	PVC GEAR
62	9965 000 16769	BAND KNOB
64	4822 529 10386	DAMPER - RUBBER (30 DEG)
65	3103 309 05360	CD DA11B1N DRIVE ASSY
66	4822 442 01905	LENS COVER
71	9965 000 16768	SOURCE KNOB
72	9965 000 16753	TOP CD CABINET
73	9965 000 16766	VOLUME KNOB
75	9965 000 16752	CD DOOR
77	4822 492 11201	CD DOOR SPRING
78	9965 000 16754	HANDLE
81	4822 529 10387	DAMPER - RUBBER (40 DEG)
	9965 000 16771	DFU AZ1004 (E/F/S/GE/DU)
	9965 000 16772	DFU AZ1004 (I/SW/DA/FI/POR/GK)
	9965 000 16773	DFU AZ1004 (RU/POL/CZE/SLO/HUN)

# ELECTRICAL PARTSLIST

## CD MAIN BOARD

### - MISCELLANEOUS -

JW150	△	9965 000 16782	FUSIBLE RES 3.3 R 1/6W 5%
X101		9965 000 16781	CER.RES CRA16.93M
		9965 000 16774	FFC 15P/70MM AD
		4822 278 90739	CD DOOR SWITCH

### - DIODES -

D101	4822 130 30621	1N4148
D102	4822 130 30621	1N4148
D103	4822 130 30621	1N4148
D104	4822 130 30621	1N4148
D105	4822 130 30621	1N4148
D106	4822 130 30621	1N4148
D107	4822 130 30621	1N4148
D108	5322 130 34574	1N4004G

### - IC & TRANSISTORS -

IC101	9965 000 16777	MM1469A
IC102	9965 000 16778	KB9223
IC103	9965 000 16779	KS9286
IC104	9965 000 16780	KS57C01504-NV15
Q101	4822 130 63423	8550C
Q102	9965 000 16775	9012F
Q103	4822 130 60644	9014C
Q104	4822 130 41319	2SC1815BL
Q105	9965 000 16776	9015C

## CONTROL BOARD

### - MISCELLANEOUS -

SW201	4822 276 13443	SWITCH-TACT
SW202	4822 276 13443	SWITCH-TACT
SW203	4822 276 13443	SWITCH-TACT
SW204	4822 276 13443	SWITCH-TACT
SW205	4822 276 13443	SWITCH-TACT

### - DIODES -

D201	4822 130 30621	1N4148
D202	4822 130 30621	1N4148
D203	4822 130 30621	1N4148
LCD201	9965 000 16783	LCD DISPLAY 91792TR-P

## TUNER BOARD

### - MISCELLANEOUS -

SW301	9965 000 16784	SLIDE SWITCH 4P2T
VC301	9965 000 16798	PVC WF-16B2C-13K
	4822 158 60645	FERRITE BAR D10X80

### - COILS AND FILTERS -

CF302	9965 000 16789	LT10.7MS CER.FILTER
CR301	9965 000 16797	CER. FILTER SFU465B
L302	4822 157 71567	FM COIL 2.5T
L303	9965 000 11817	FM COIL 3-1/2T
L305	9965 000 16788	MW ANT.COIL 95T:15T
T301	9965 000 16786	MW OSC.COIL 843744
T302	9965 000 16787	IFT M W 843745
T303	4822 157 10689	FM DET COIL
T304	9965 000 16790	BAND PASS FILTER

### - DIODES -

D301	4822 130 30621	1N4148
D302	4822 130 30621	1N4148

### - IC & TRANSISTORS -

IC301	9965 000 16785	KA22902
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## RECORDER BOARD

### - MISCELLANEOUS -

1707	4822 277 11504	PUSH SWITCH 6P2T
5701	4822 157 10371	BIAS OSC COIL

### - DIODES -

6704	4822 130 30621	1N4148
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### - IC & TRANSISTORS -

7702	4822 130 40981	BC337-25
7705	4822 209 17498	AN7323

## ELECTRICAL PARTSLIST

### POWER BOARD

#### - MISCELLANEOUS -

FR601	9965 000 16808	FERRITE BEAD 3.5X6X0.8MM
FR602	9965 000 16808	FERRITE BEAD 3.5X6X0.8MM
FR603	9965 000 16808	FERRITE BEAD 3.5X6X0.8MM
R611	9965 000 16811	FUSING RES 4.7R 1/4W 5%
SW601	9965 000 16806	SLIDE SW. 6P3T
VR601	9965 000 16807	VOLUME A50KX2

#### - DIODES -

D601	9965 000 16809	ZENER 7.5V 1/2W
D602	4822 130 30621	1N4148
D603	4822 130 30621	1N4148
D604	4822 130 30621	1N4148
D605	4822 130 30621	1N4148
D606	9965 000 16810	ZENER 5.6V 1/2W
D607	4822 130 30621	1N4148
D608	4822 130 30621	1N4148

#### - IC & TRANSISTORS -

IC601	5322 209 83002	TDA2822M
Q601	4822 130 63422	8050B
Q602	4822 130 41319	2SC1815BL
Q603	4822 130 41319	2SC1815BL
Q604	9965 000 11826	KSA928AY
Q605	9965 000 16776	9015C
Q606	4822 130 60644	9014C

### RECTIFIER BOARD

#### - MISCELLANEOUS -

F801	△ 4822 070 31252	FUSE 1.25A
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#### - DIODES -

D801	5322 130 34574	1N4004G
D802	5322 130 34574	1N4004G
D803	5322 130 34574	1N4004G
D804	5322 130 34574	1N4004G

### OTHERS

#### - MISCELLANEOUS -

△ 9965 000 08577	AC SOCKET TC08-115-02
△ 9965 000 16812	TRANSFORMER 230V VDE
△ 2422 070 98151	MAINSKORD EUR /00C
△ 4822 321 10886	MAINSKORD UK /05
△ 2422 070 98148	MAINSKORD AUS /10
9965 000 16813	SPEAKER 3" 8 OHM 2W

Note : Only these parts mentioned in the list are normal service parts.

