

Service Document **Exchange Set**

Sono Clock 890

GRUNDIG

Service Manual

Sicherheit Safety

Materialnr./Part No.
72010 800 0000



Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 72010 800 0000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, 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 • E-BS31 0700

<http://www.grundig.com>

Alignment Information

Model : GRUNDIG SC890

Ref. No. : SC890

Date : 29 FEB 2000

A) FM Radio section

1) FM IF

INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
TP8	10.7MHz	TP3,4	Quiet Point	T101,102	S curve symmetrical	Vol. at min. position

2) RF VOLTAGE

BAND	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
FM	--	TP2,5	108MHz	L102	High end 7.3V ~ 7.7V	1.7V ~2.3V

3) FM RF

INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
TP1,2	88MHz	Speaker	88MHz	L101	Max. o/p	Vol. at max. position
TP1,2	106MHz	" "	106MHz	TC102	" "	" "

4) 75KHZ CRYSTAL

		OUTPUT		ADJUST	ADJUST FOR	REMARK
		TP6,7		CHECK ONLY	75KHz± 4HZ	

5) 32.768KHZ CRYSTAL

		OUTPUT		ADJUST	ADJUST FOR	REMARK
		IC201, PIN 56		TC202	Clock accuracy ± 20 sec/month	

6) 4.194304MHZ CRYSTAL

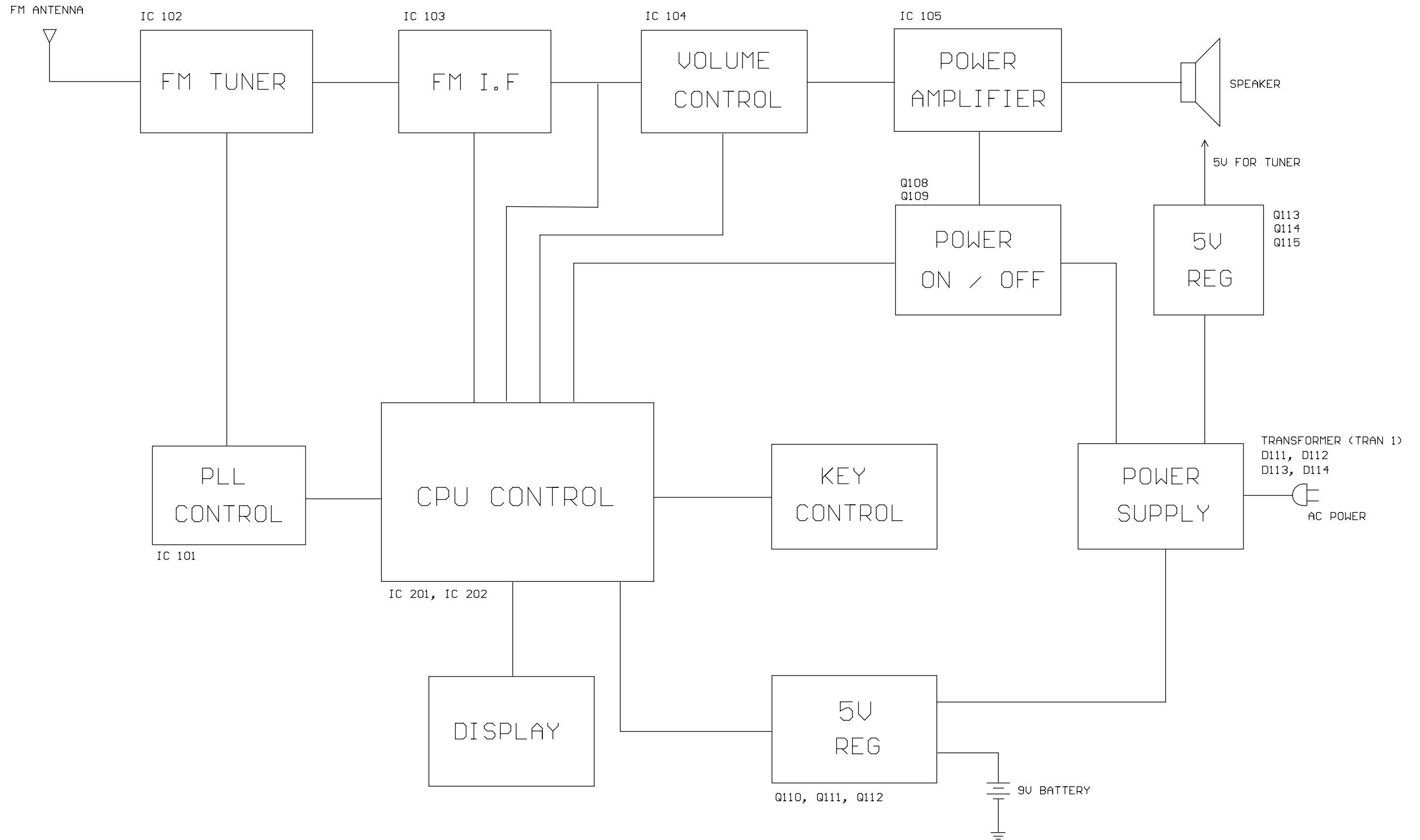
		OUTPUT		ADJUST	ADJUST FOR	REMARK
		IC201, PIN 59		CHECK ONLY	4.194296MHz ~ 4.194336MHz	

7) 4.332MHZ CRYSTAL

		OUTPUT		ADJUST	ADJUST FOR	REMARK
		IC202, PIN 14		TC 201	4.332MHz ± 500Hz	

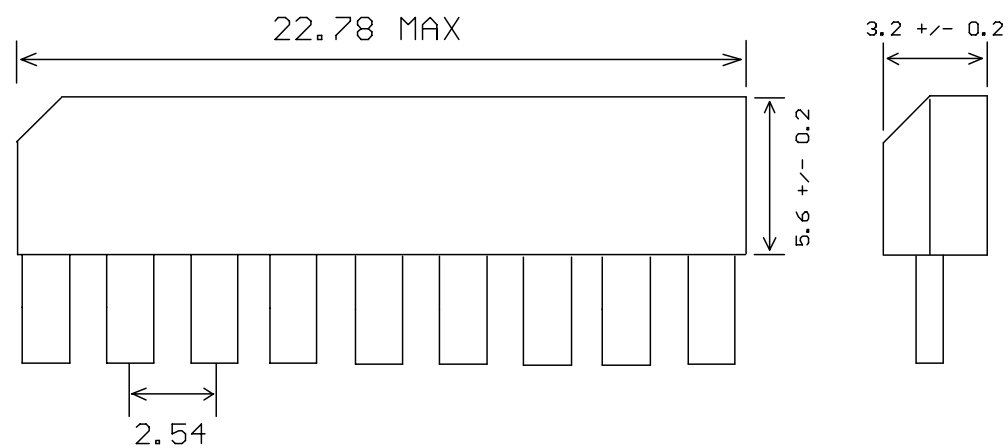
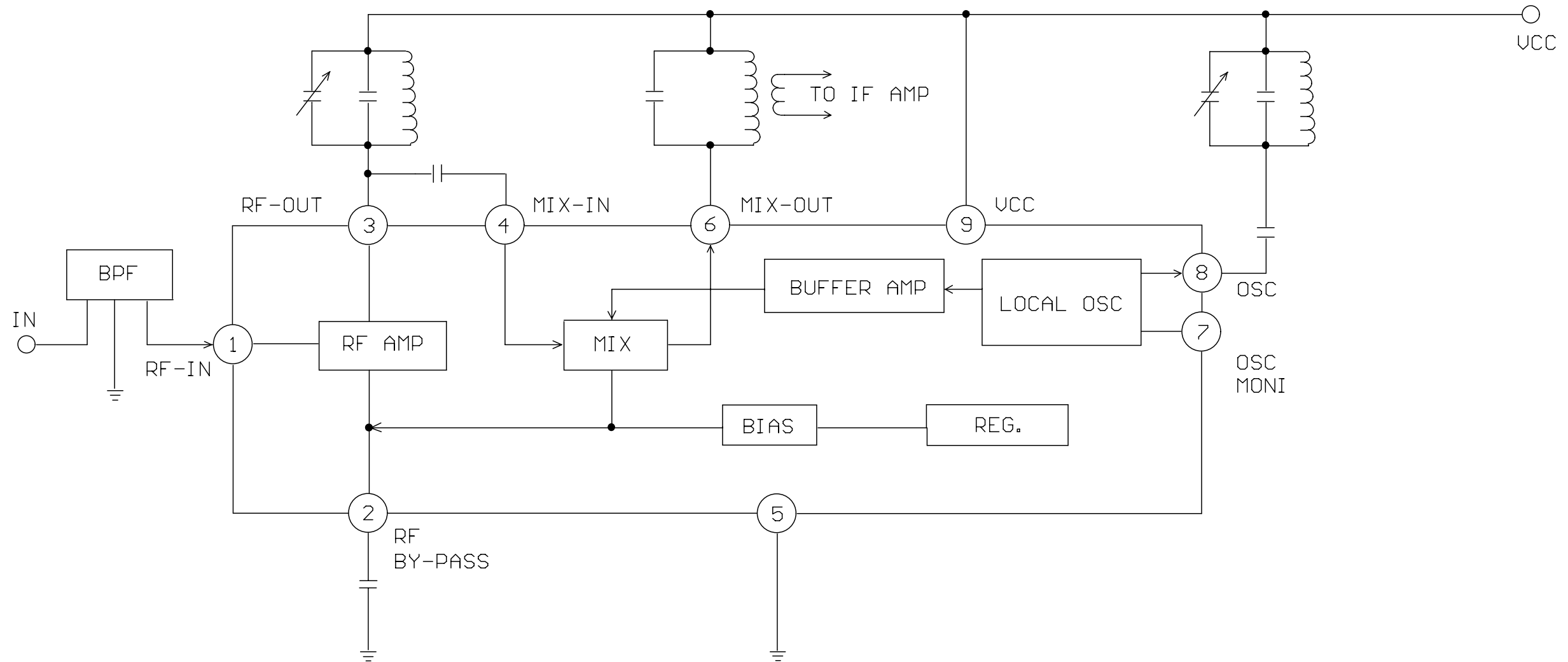
Note :

1. Use the digital meter to measure each required voltage on the above items.
2. Use weak signal in RF alignment.
3. Radio & LCD board must be connected before alignment.
4. Use the frequency counter to measure each required frequency on the above items.

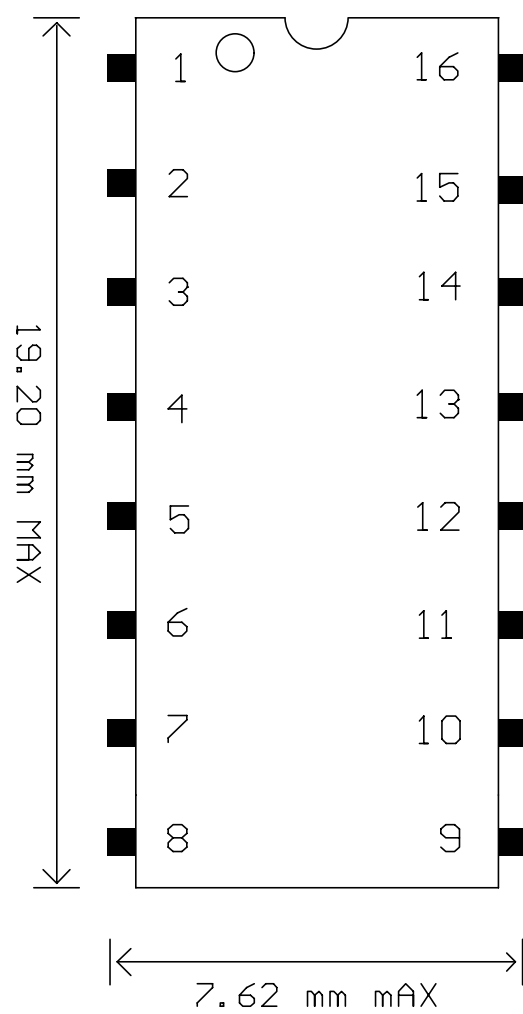
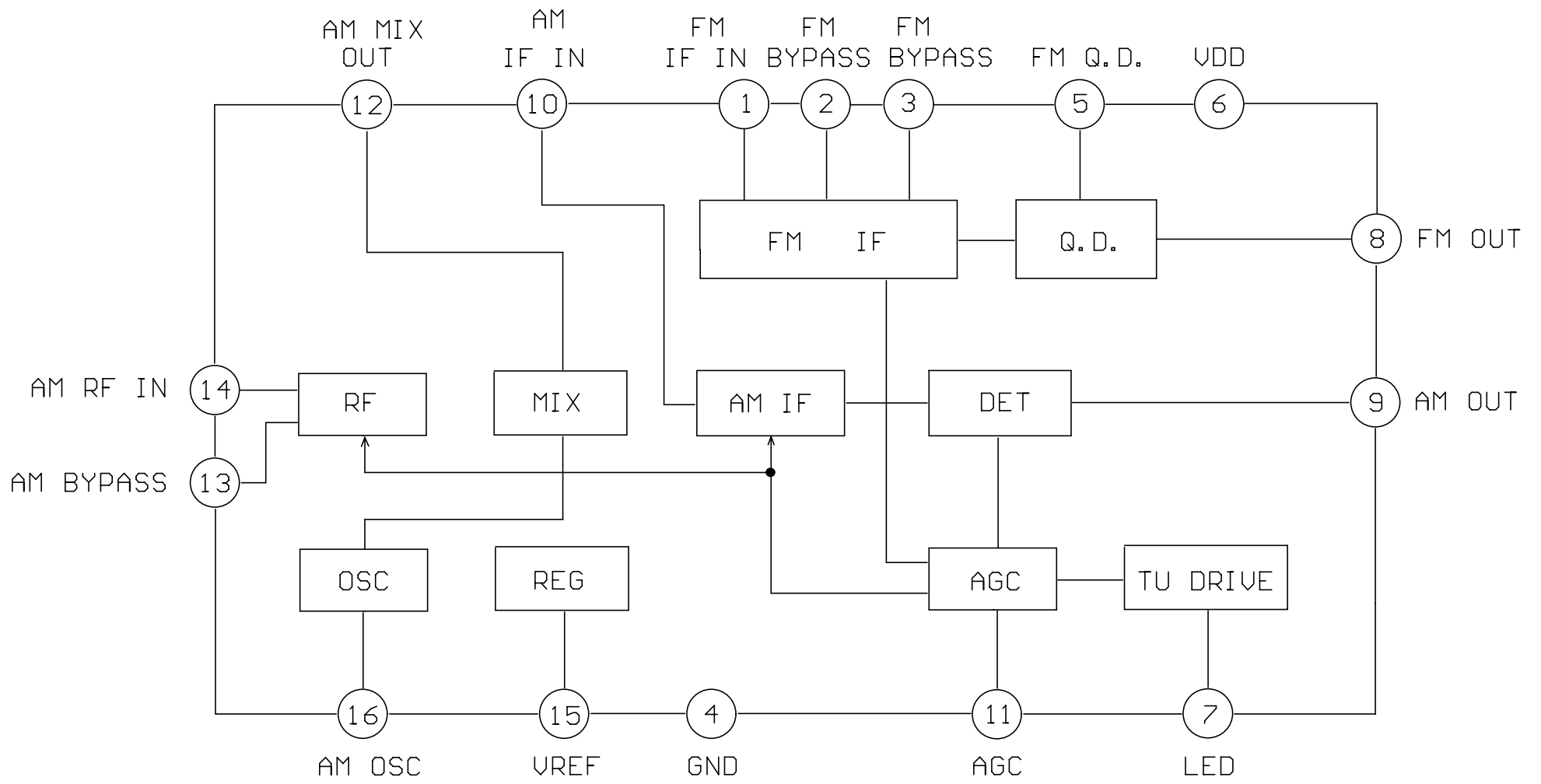


MODEL: SC890 BLOCK DIAGRAM

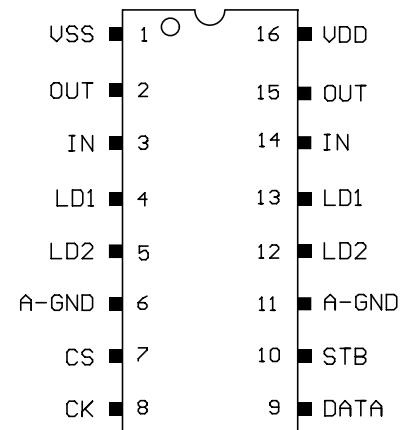
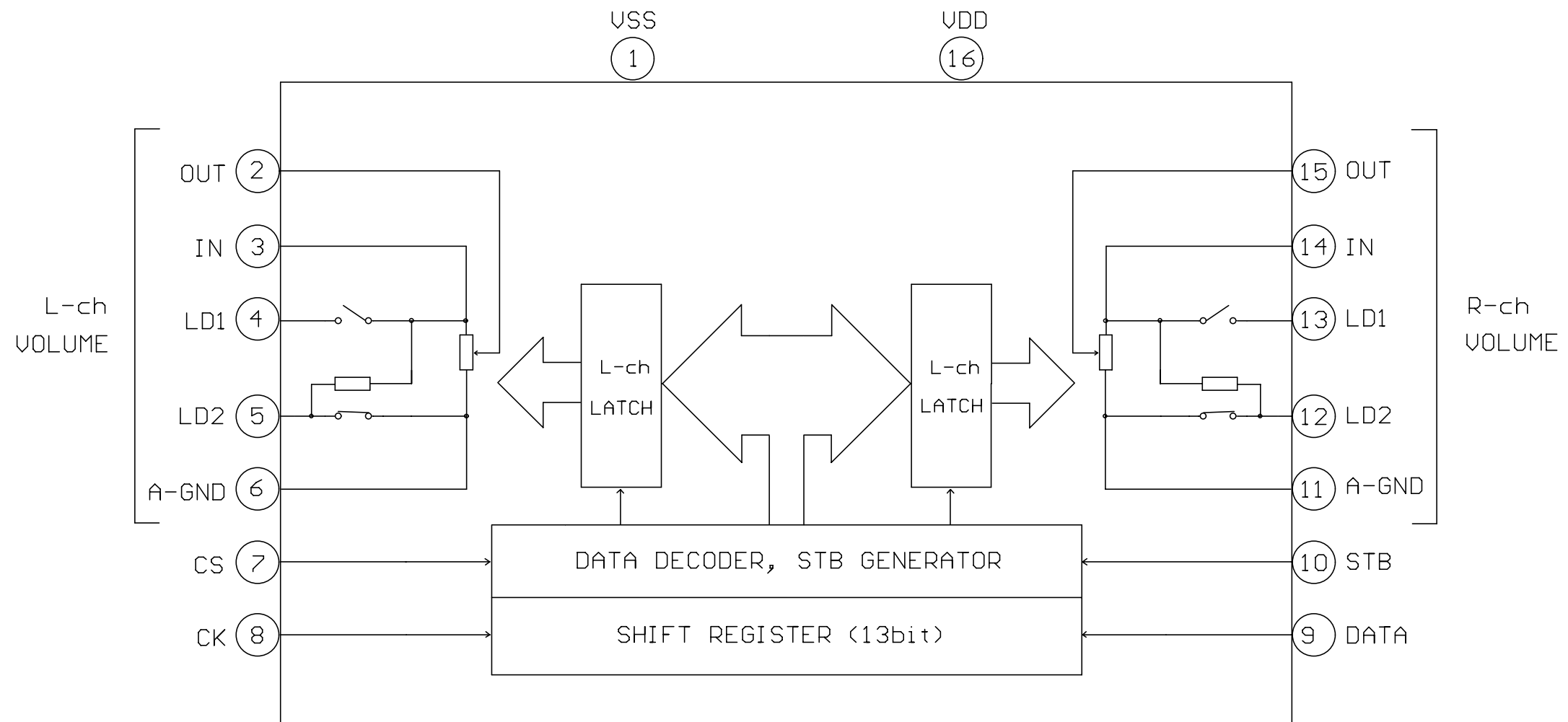
BLOCK DIAGRAM OF IC102, TA7358



BLOCK DIAGRAM OF IC103, LA1260

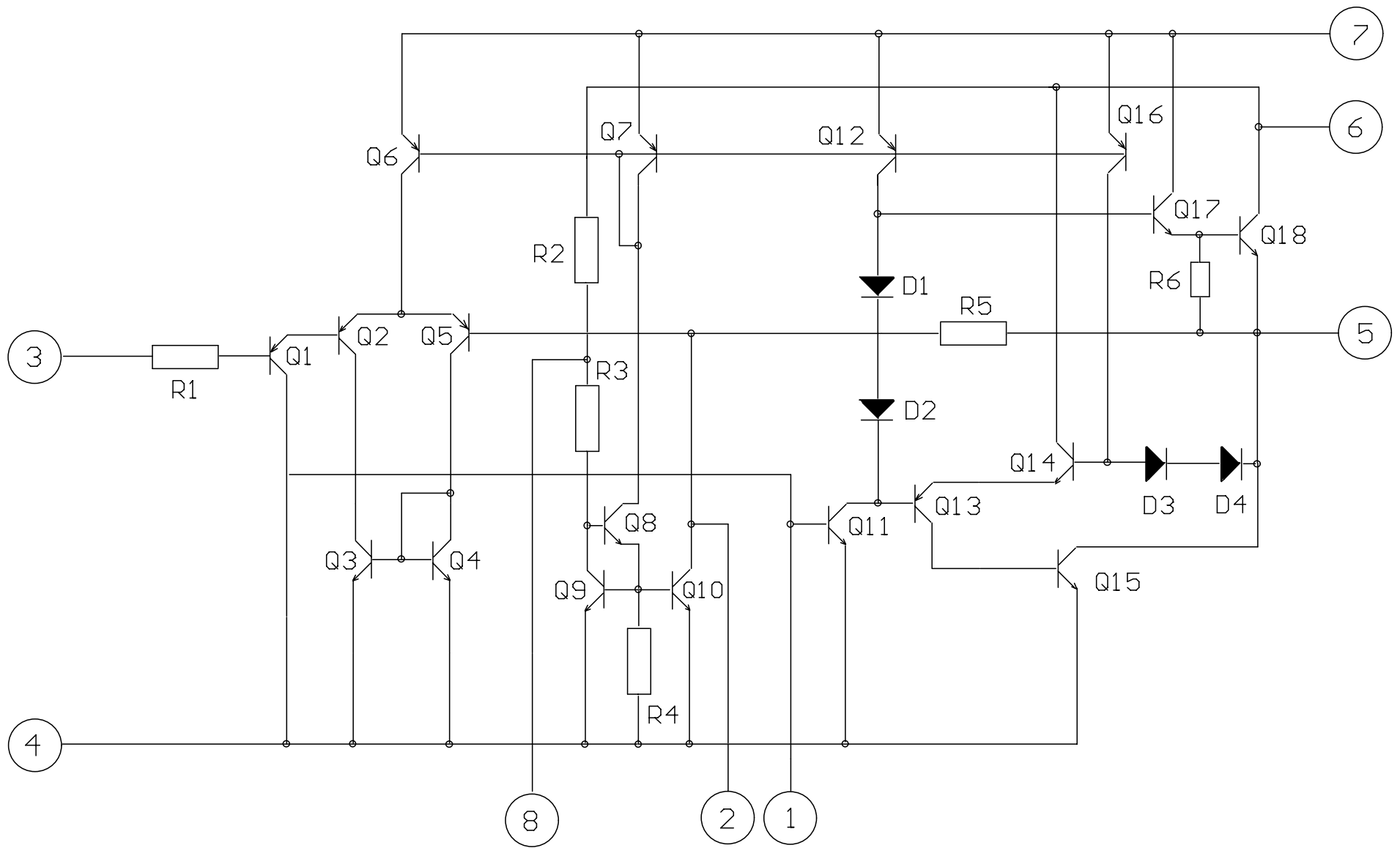


BLOCK DIAGRAM OF IC104, TC9260



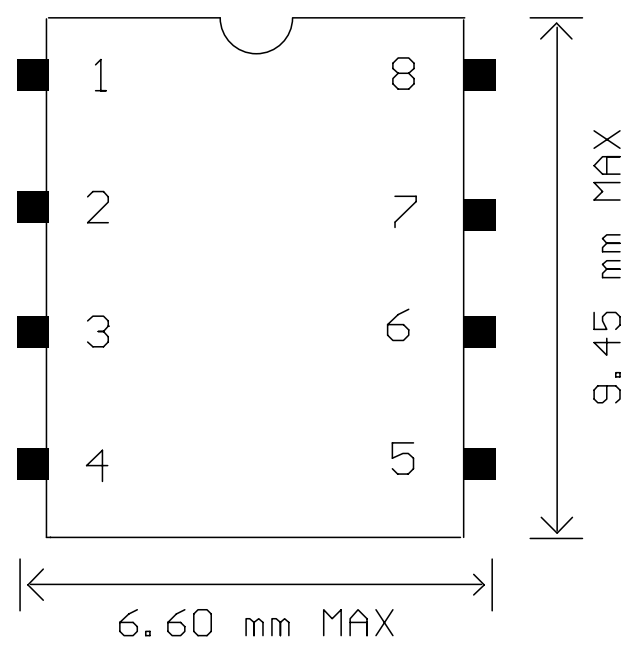
Package is DIP 16 (TC9260P) and SOP 16 (TC9260F)

BLOCK DIAGRAM OF IC105, KA2201

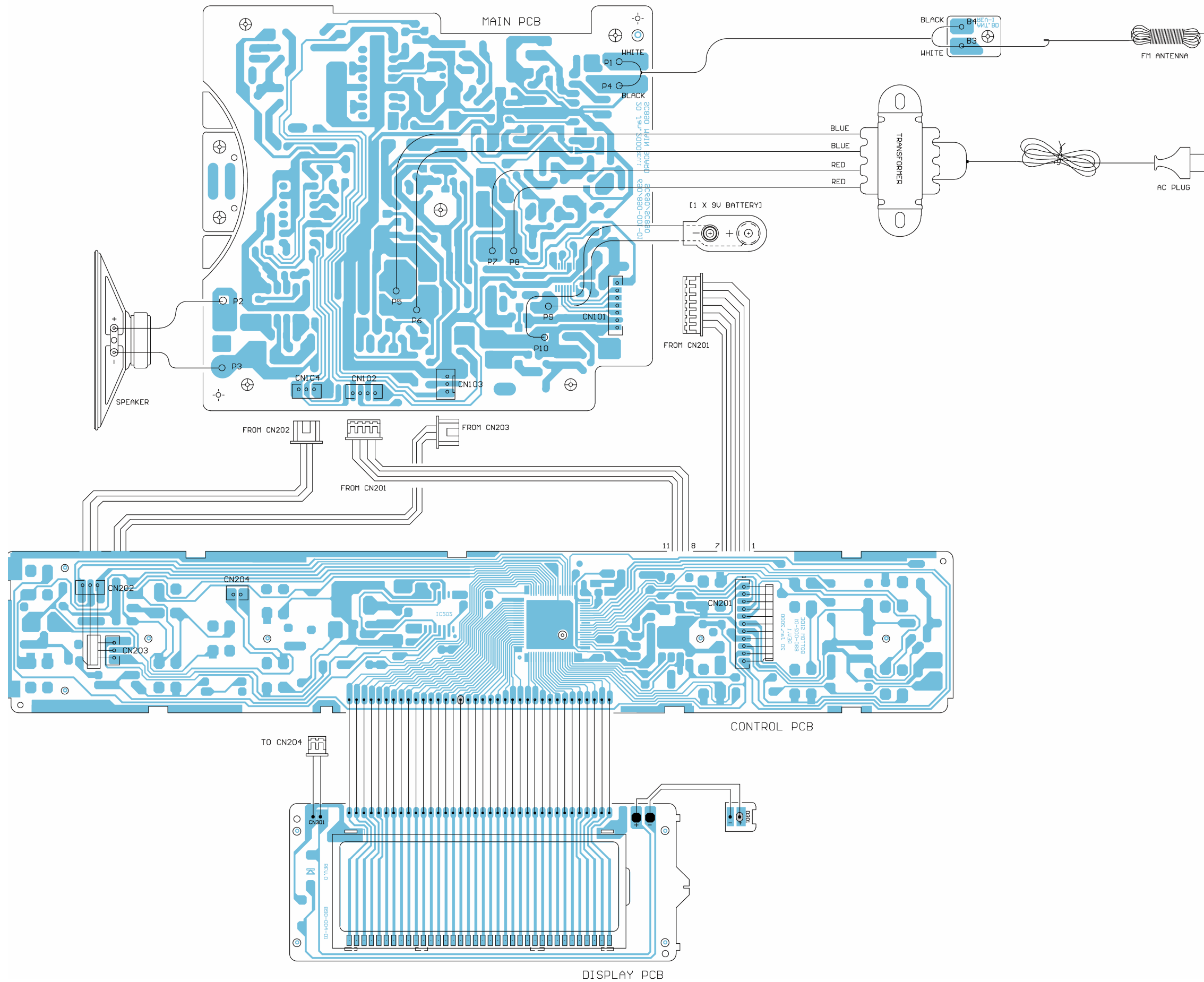


CONNECTION DIAGRAM

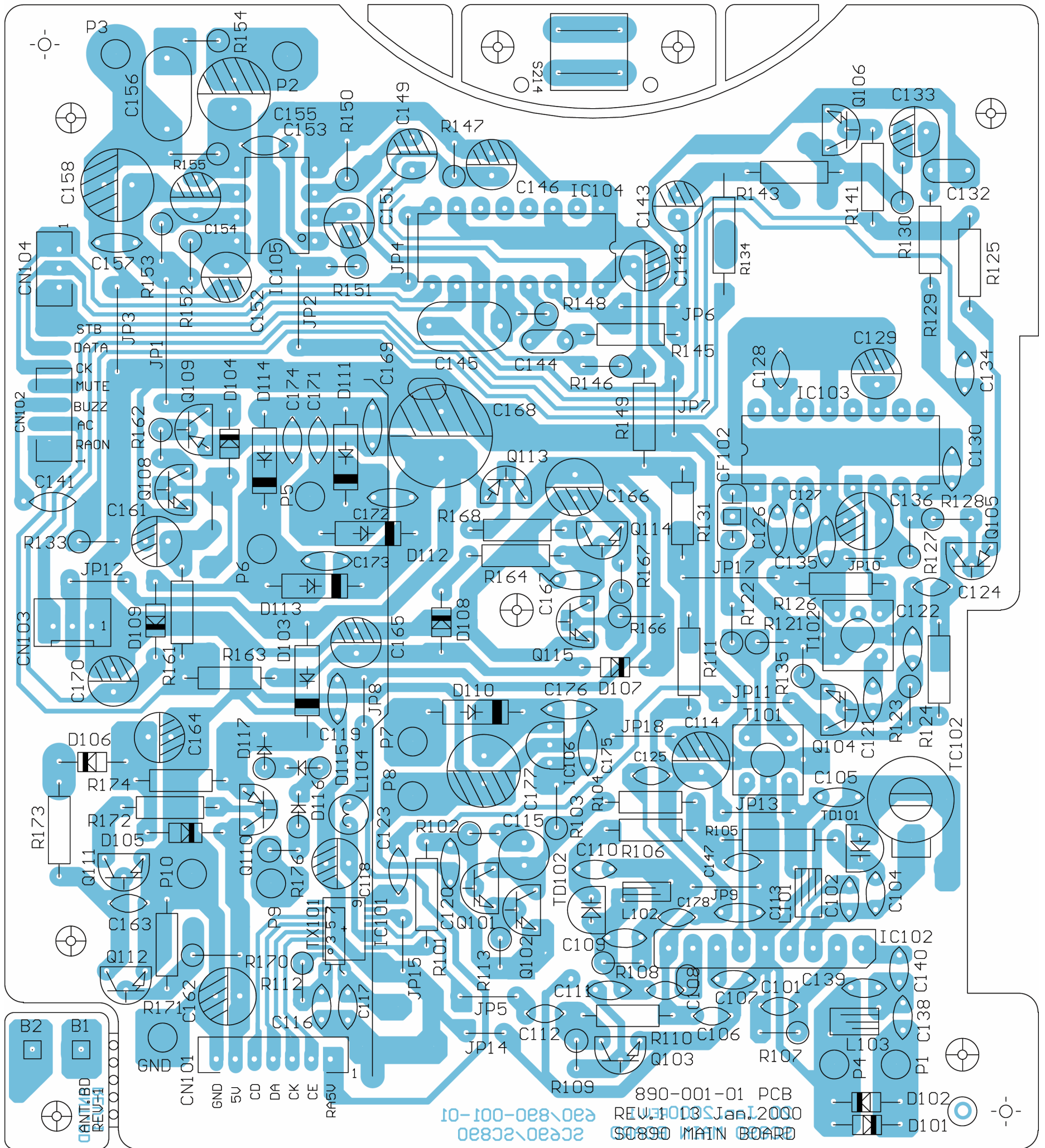
PIN NO.	CONNECTION
1	-----
2	-----
3	INPUT
4	GND
5	OUTPUT
6	VCC
7	-----
8	-----



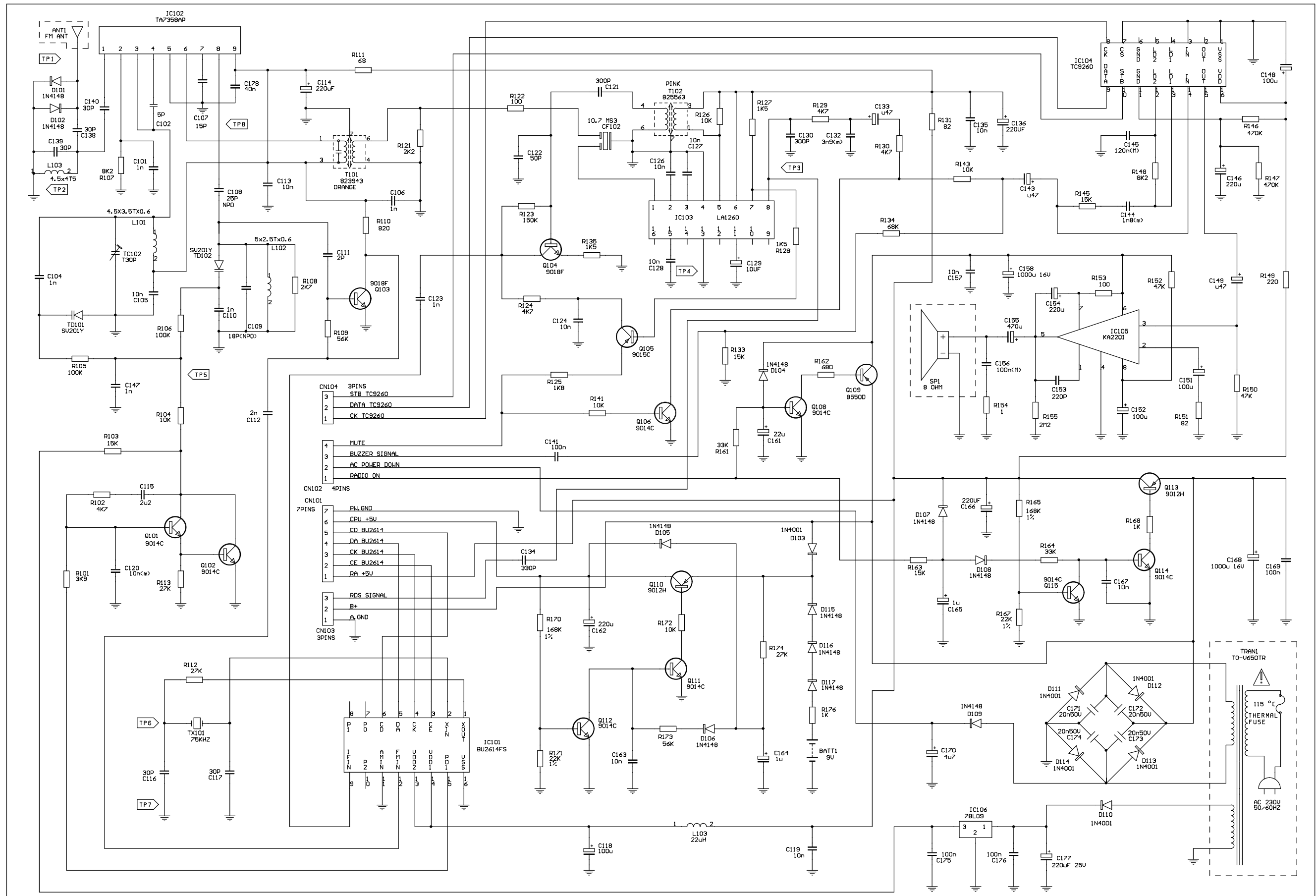
GRUNDIG SC890 WIRING DIAGRAM



GRUNDIG SC890 PCB LAYOUT

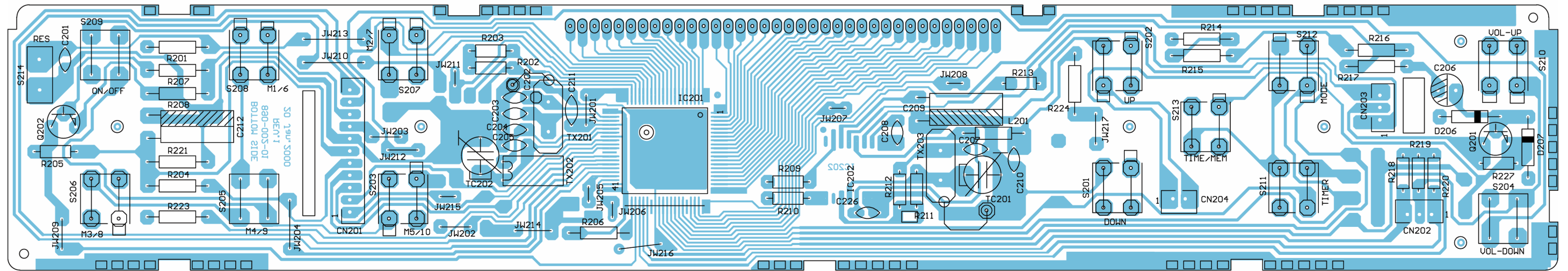


MAIN PCB



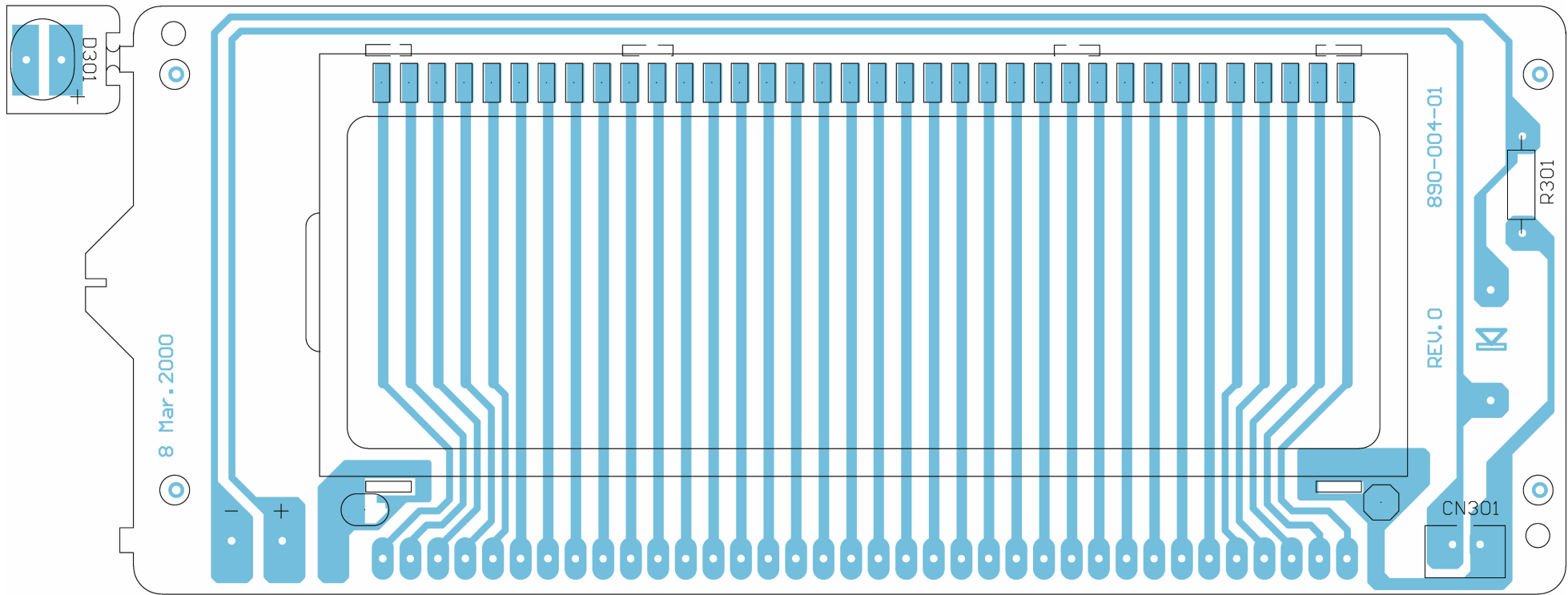
DTAKI HONG KONG		
Title	SC890 RADIO & POWER SECTION	
Size	Document Number	REV
C	8901.SCH	2
Date	April 26, 2000	Sheet 1 of 2

GRUNDIG SC890 PCB LAYOUT

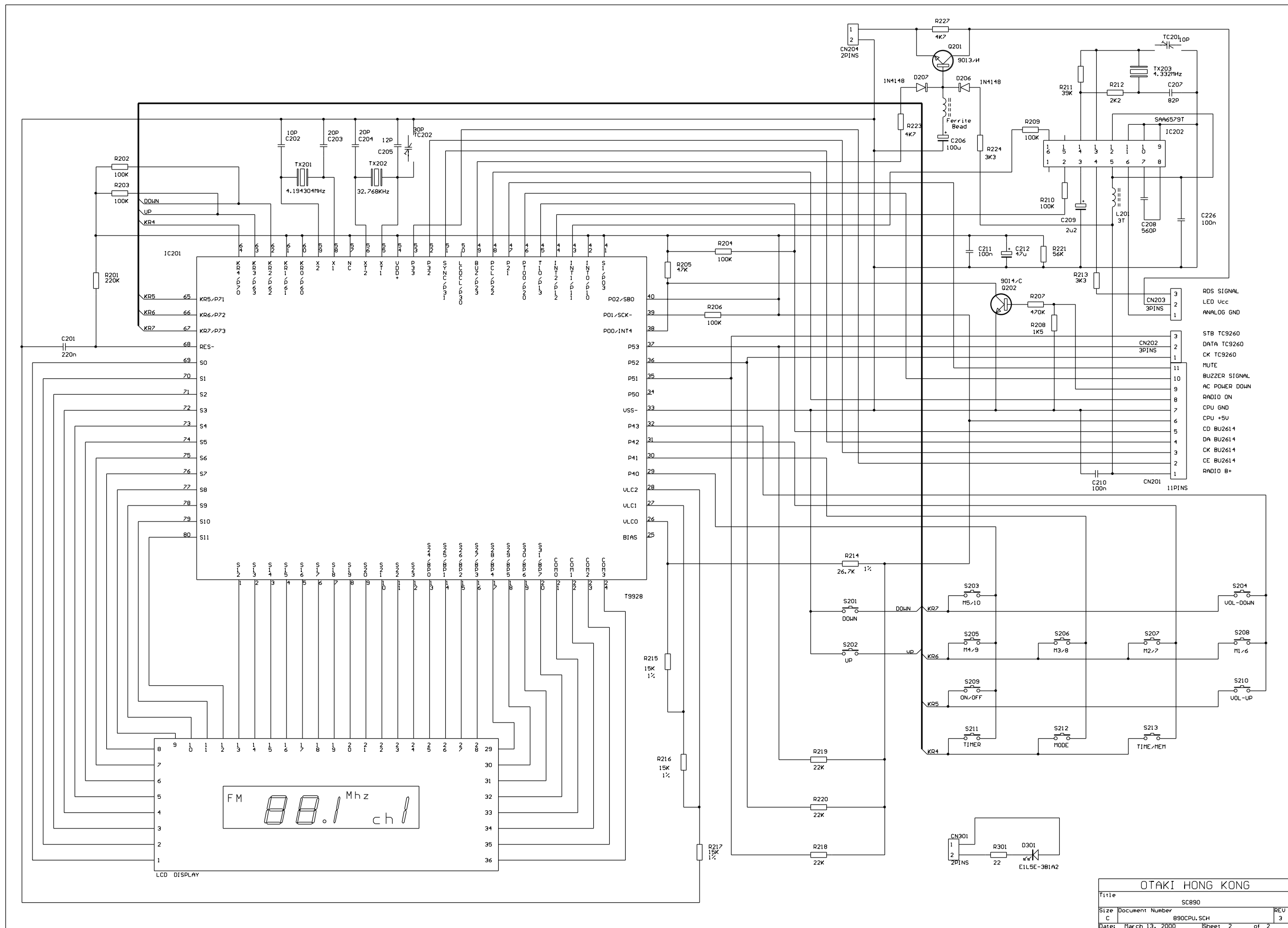


CONTROL PCB

GRUNDIG SC890 PCB LAYOUT



DISPLAY PCB



OTAKI HONG KONG			
Title	SC890		
Size	Document Number	890CPU.SCH	REV 3
Date:	March 13, 2000	Sheet 2	of 2

VOLTAGE TABLE OF MODEL : GRUNDIG SC890 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : IC'S

IC 102, TA7358AP	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0.52
2	1.23
3	3.42
4	1.22
5	0
6	3.42
7	2.68
8	3.39
9	3.42

IC 105, KA2201	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0.65
2	0.57
3	0
4	0
5	6.84
6	12.9
7	12.7
8	7.58

IC 103, LA1260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	1.52
2	1.52
3	1.52
4	0
5	3.8
6	3.8
7	3.8
8	1.64
9	1.47
10	1.52
11	0.75
12	2.68
13	0
14	0
15	2.41
16	1.83

IC 101, BU2614	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	2.43
2	2.1
3	0
4	4.97
5	0
6	4.97
7	0
8	0
9	0
10	0
11	0
12	2.37
13	4.96
14	4.96
15	1.14
16	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC890 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : IC'S

IC 104, TC9260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	2.41
12	2.41
13	2.41
14	2.41
15	2.41
16	4.95

IC 106, 78L09	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	16.7
2	0
3	9

VOLTAGE TABLE OF MODEL : GRUNDIG SC890 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : TRANSISTORS
MEASURED CONDITION : AT POWER ON

Q101	9014C
C	5.25
B	1.11
E	0.58

Q109	85500
C	12.9
B	12.2
E	12.9

Q201	9014C
C	12.9
B	4.2
E	3.53

Q102	9014C
C	5.25
B	0.58
E	0

Q110	9012H
C	4.96
B	11.7
E	12.3

Q202	9014C
C	0.03
B	0.59
E	0

Q103	9018F
C	2
B	0.76
E	0

Q111	9014C
C	11.6
B	0.51
E	0

Q104	9018F
C	0
B	0
E	0

Q112	9014C
C	0.51
B	0.56
E	0

Q105	9015C
C	0
B	3.75
E	0

Q113	9012H
C	4.94
B	12.4
E	13

Q106	9014C
C	0
B	0
E	0

Q114	9014C
C	12.2
B	0.56
E	0

Q108	9014C
C	0.17
B	0.7
E	0

Q115	9014C
C	0.56
B	0.56
E	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC890 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : TRANSISTORS

MEASURED CONDITION : AT POWER OFF

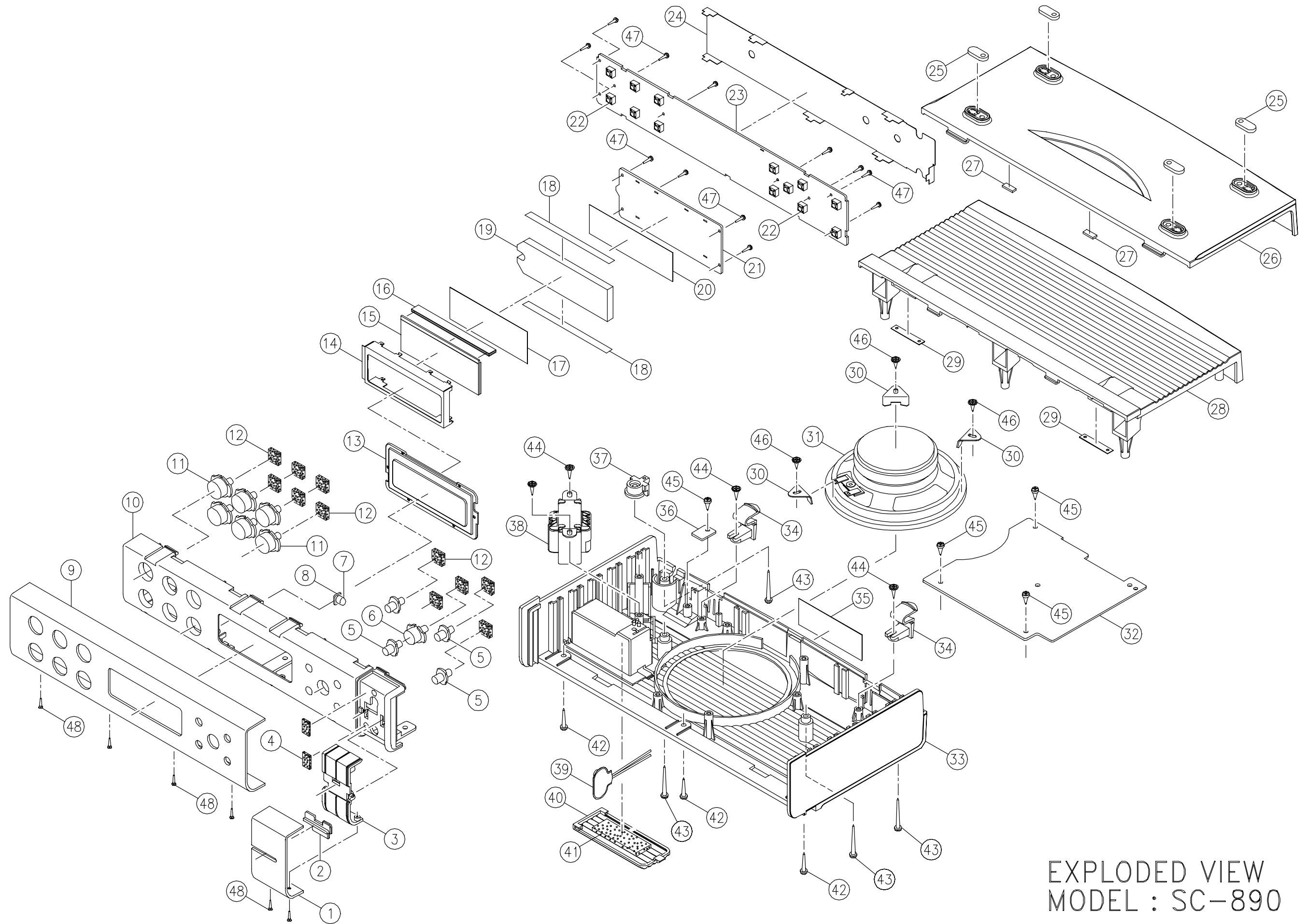
Q108	9014C
C	14.1
B	0
E	0

Q109	85500
C	0.62
B	14.1
E	14.8

Q110	9012H
C	4.96
B	13.5
E	14.1

Q111	9014C
C	13.4
B	0.48
E	0

Q112	9014C
C	0.48
B	0.56
E	0



EXPLODED VIEW
MODEL : SC-890