



Service Document **Exchange Set**

Sono Clock 420

**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
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<http://www.grundig.com>

Alignment Information

Model : GRUNDIG SC420

Ref. No. : SC420

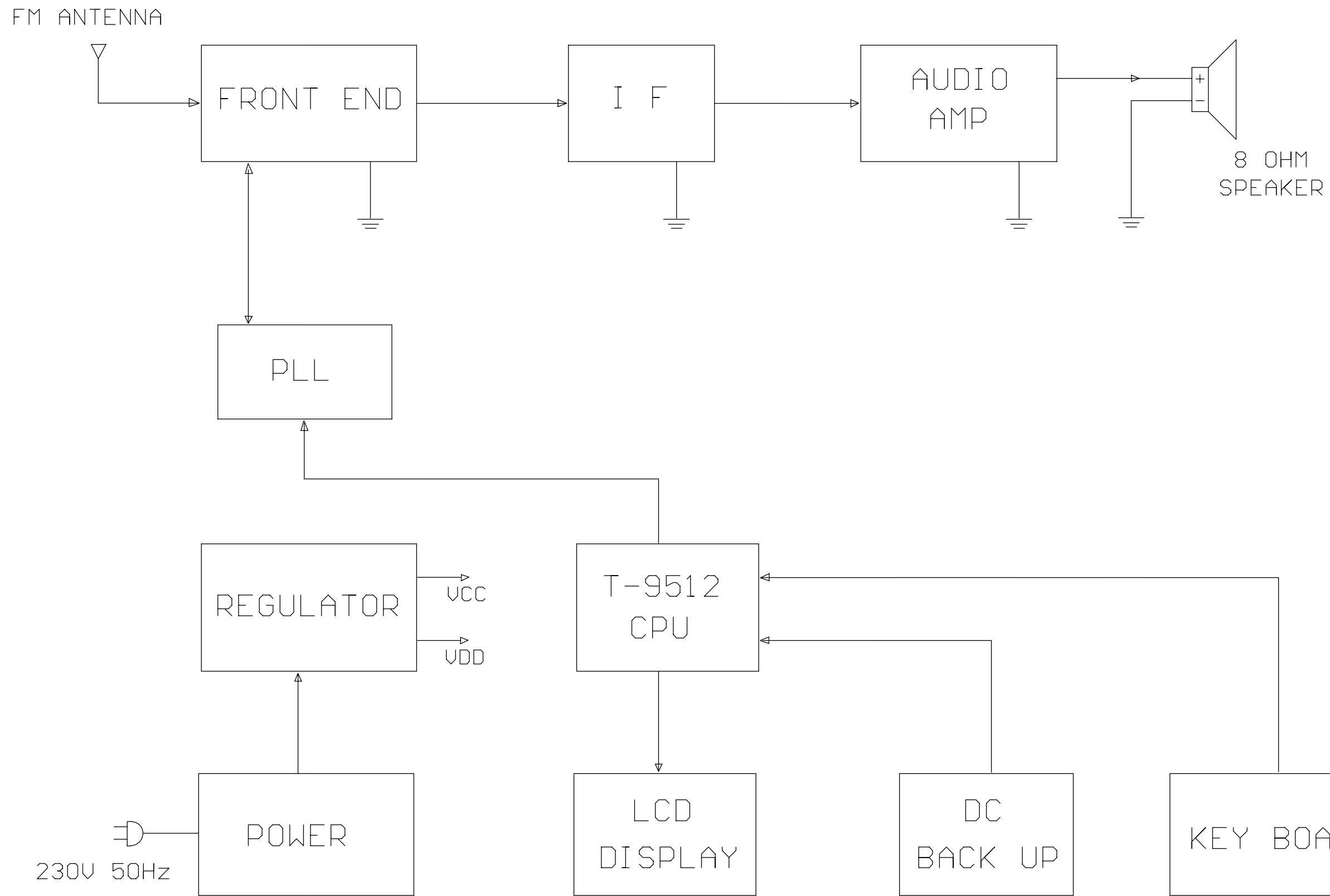
Date : 21-Jan-00

A) FM Radio section

1) FM IF							
INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK	
TP3,	210.7MHz	TP5,2	Quiet Point	T1,2	Max. o/p symmetrical	Vol. at min. position	
2) RF VOLTAGE							
BAND	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK	
FM	--	TP4,2	87.5MHz	L2	1.9 ~ 2.1V	high end 7.5 ~8V	
3) FM RF							
INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK	
TP1,2	90MHz	Speaker	90MHz	L1	Max. o/p	Vol. at max. position	
TP1,2	106MHz	“ “	106MHz	TC1	“ “	“ “	
4) 75KHZ CRYSTAL							
		OUTPUT		ADJUST	ADJUST FOR	REMARK	
		TP6,7		TC2	75K± 1HZ		

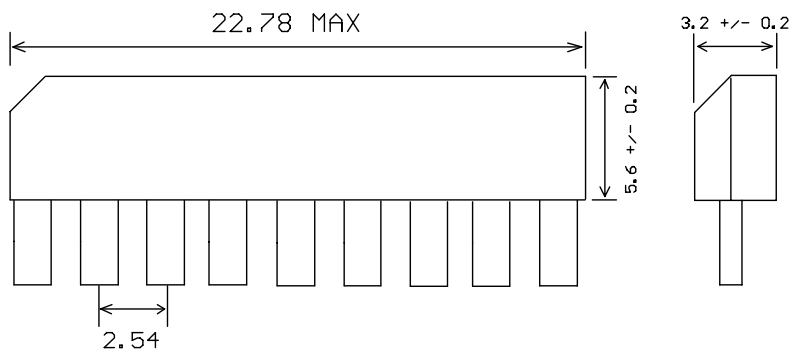
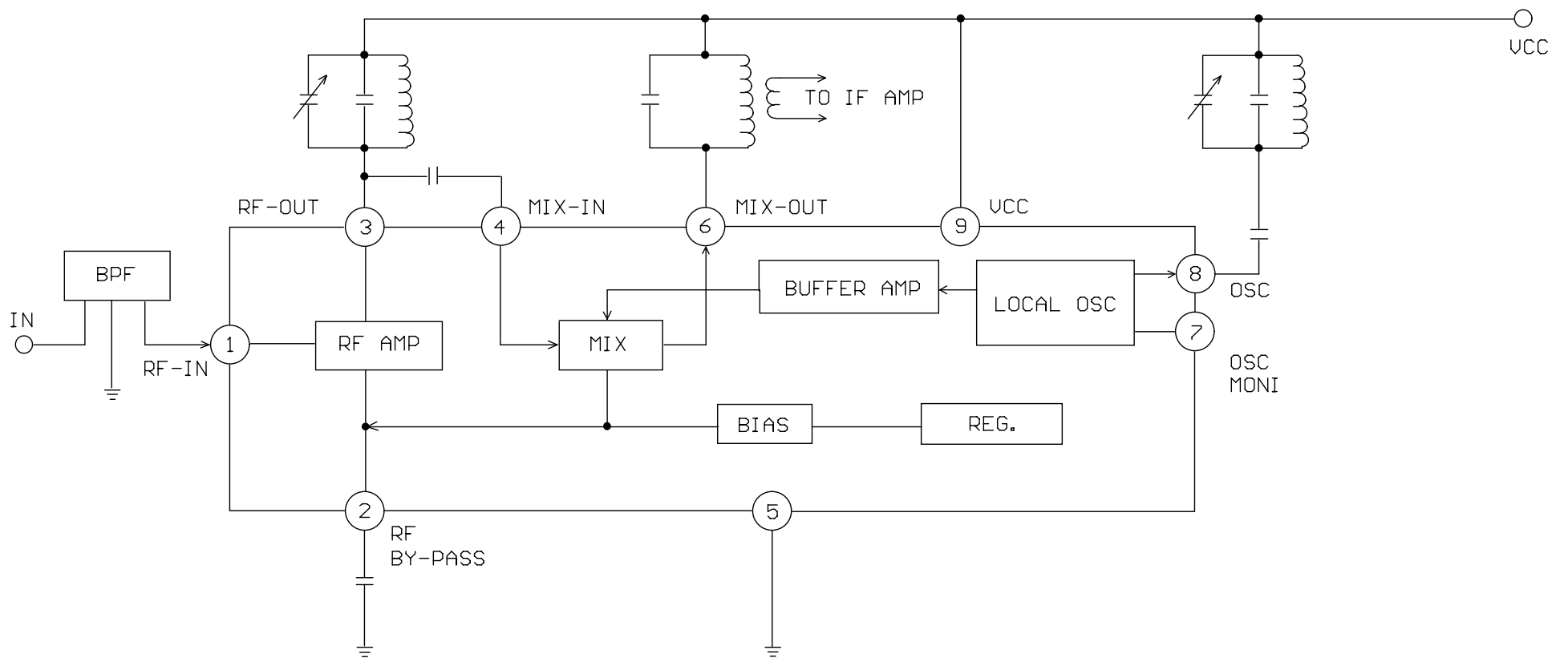
Note :

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

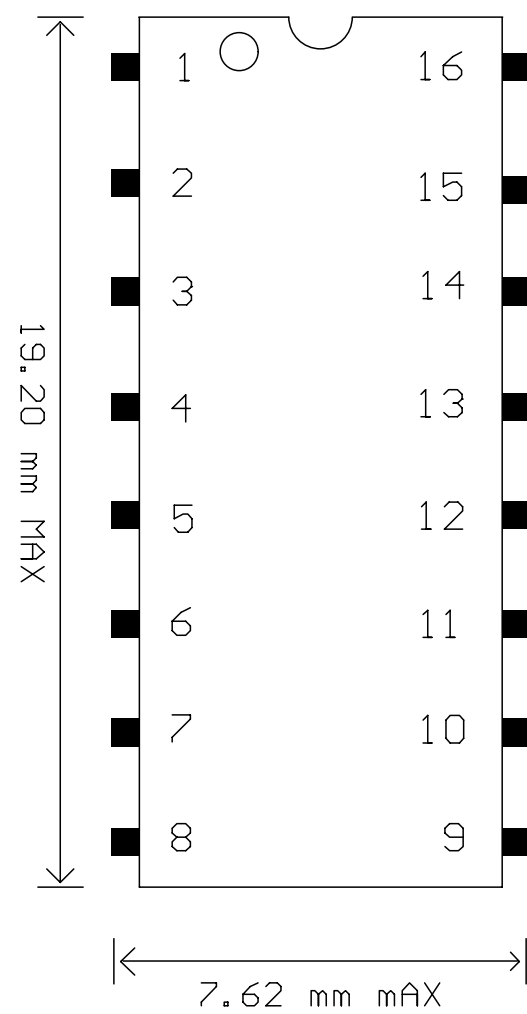
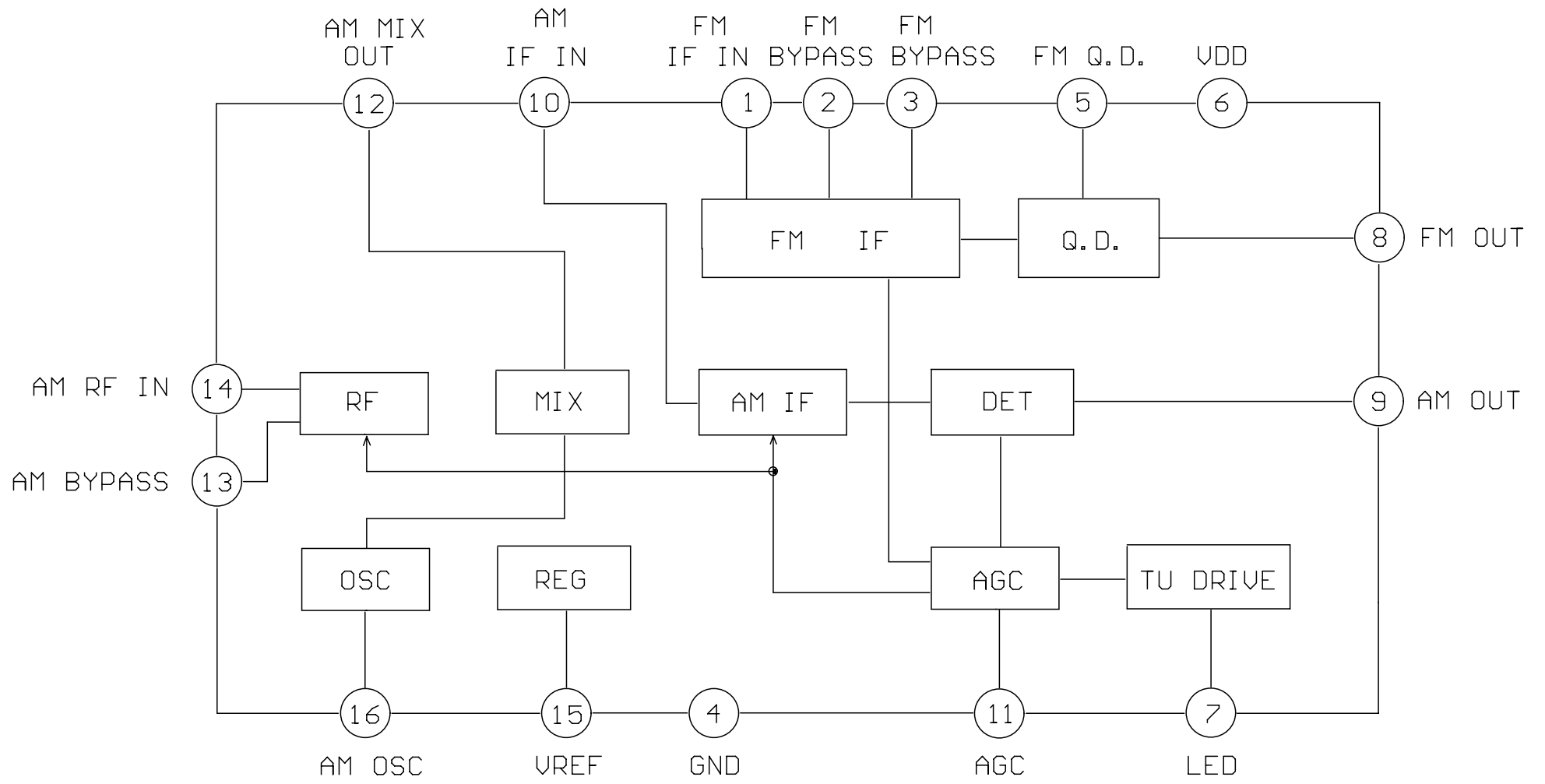


MODEL: SC420 BLOCK DIAGRAM

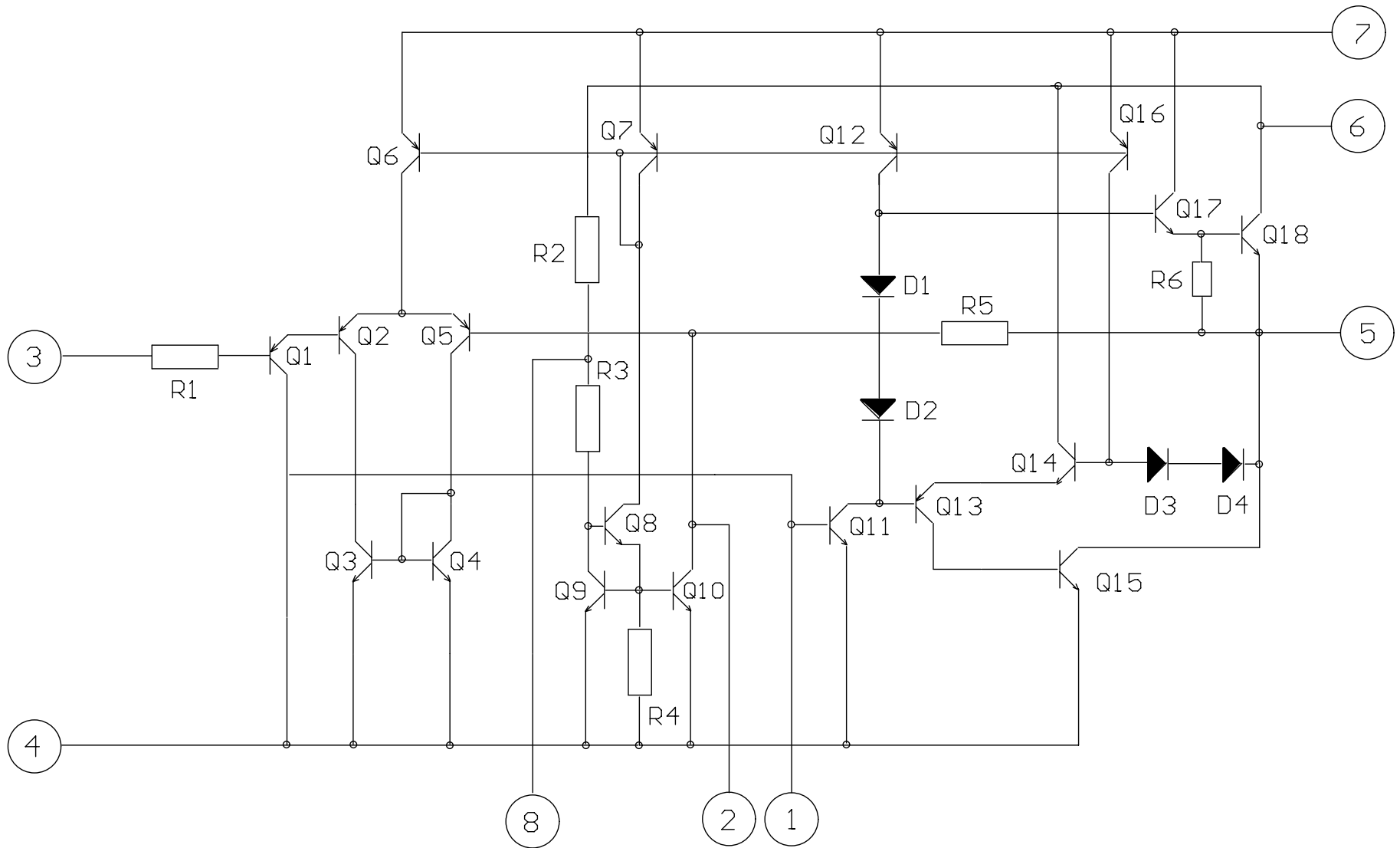
BLOCK DIAGRAM OF IC1, TA7358



BLOCK DIAGRAM OF IC2, LA1260

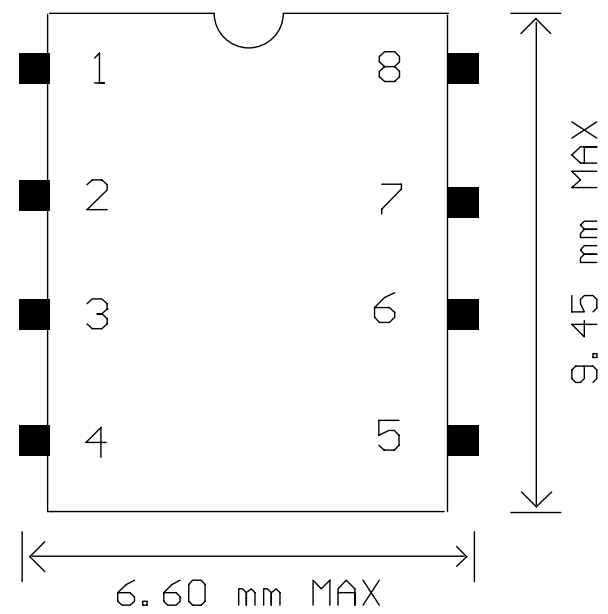


BLOCK DIAGRAM OF IC3, KA2201

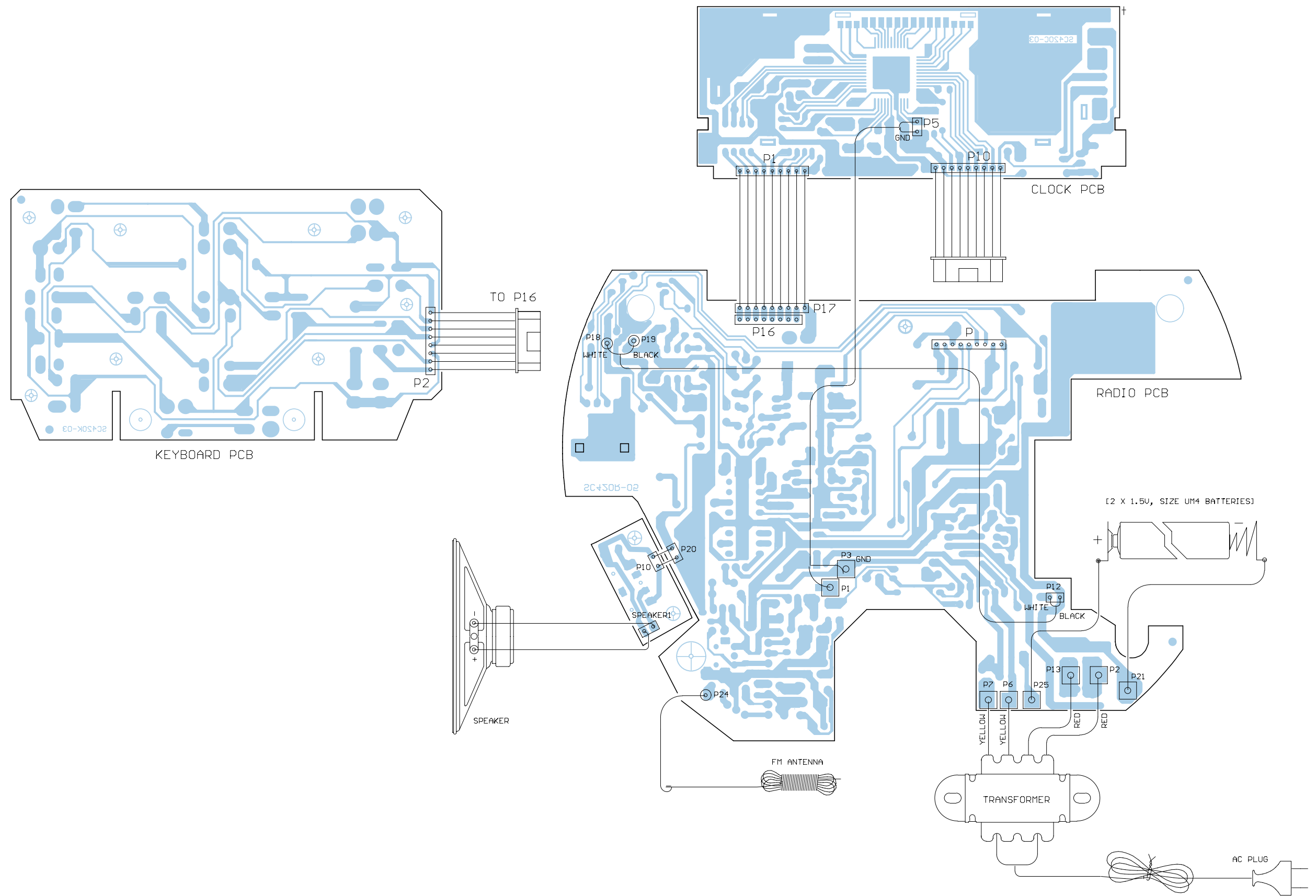


CONNECTION DIAGRAM

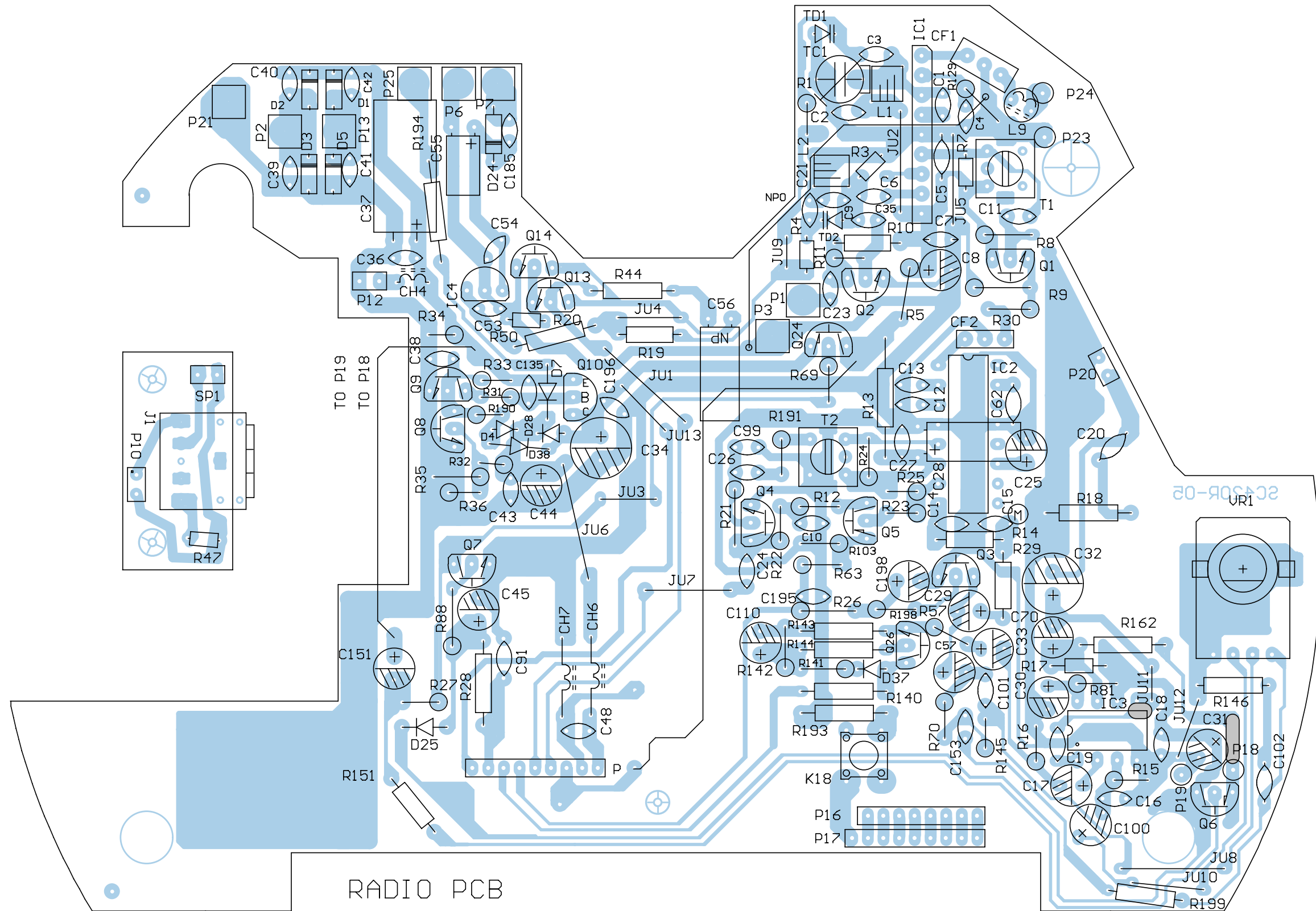
PIN NO.	CONNECTION
1	-----
2	-----
3	INPUT
4	GND
5	OUTPUT
6	VCC
7	-----
8	-----



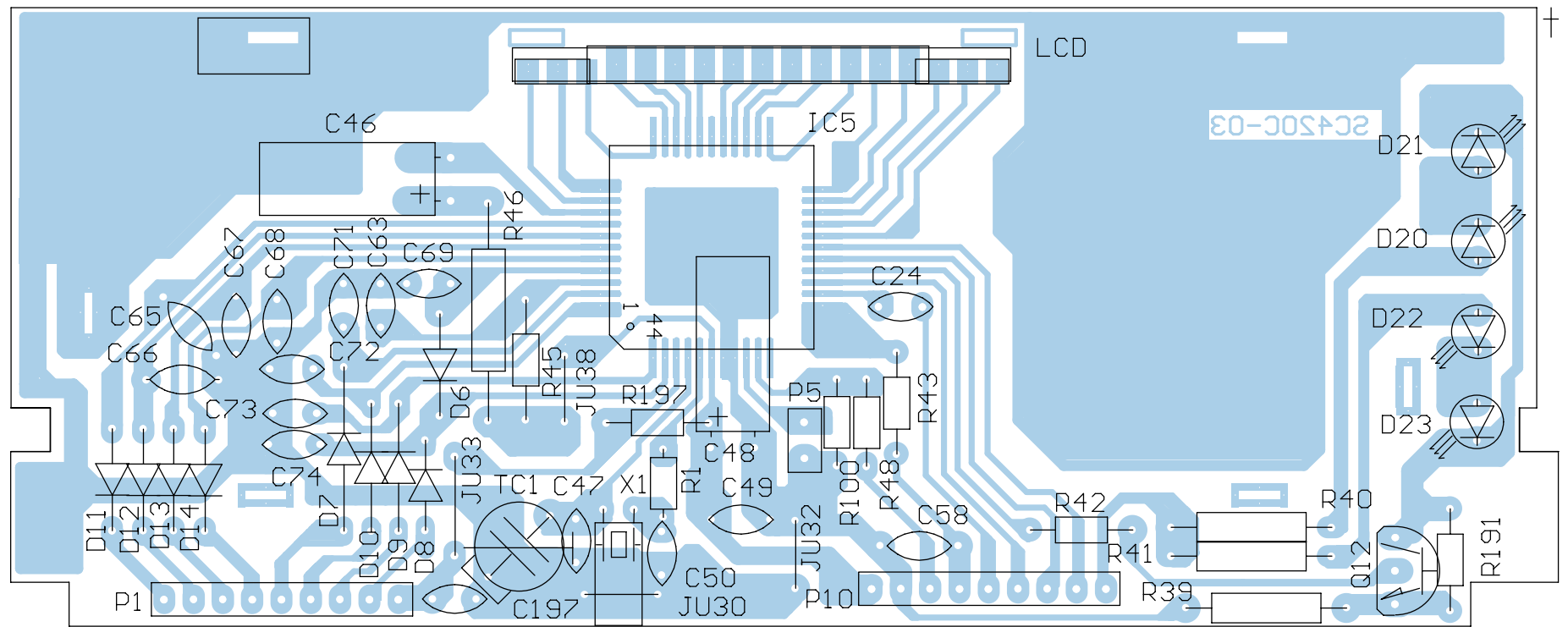
GRUNDIG SC420 WIRING DIAGRAM



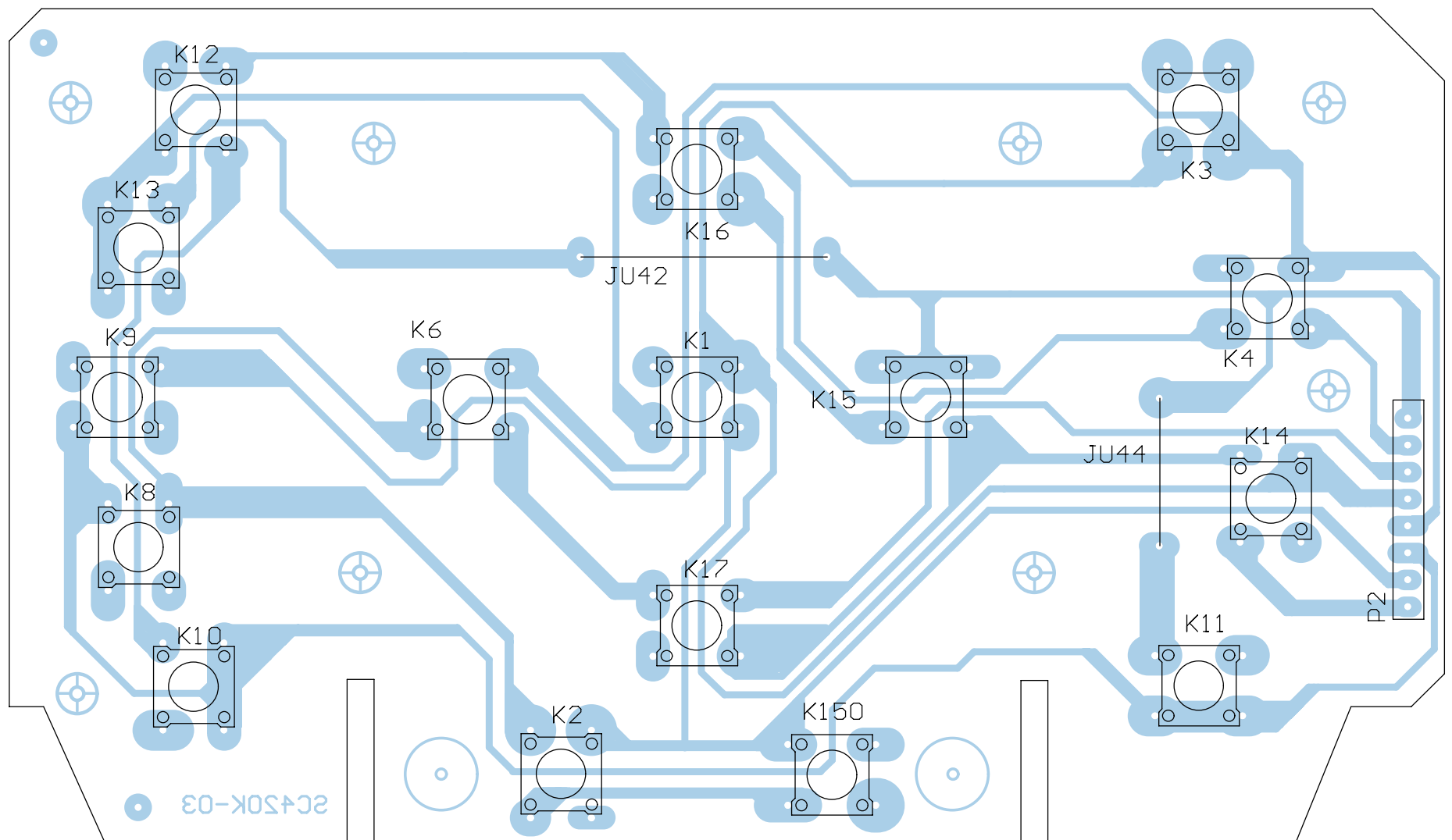
GRUNDIG SC420 PCB LAYOUT



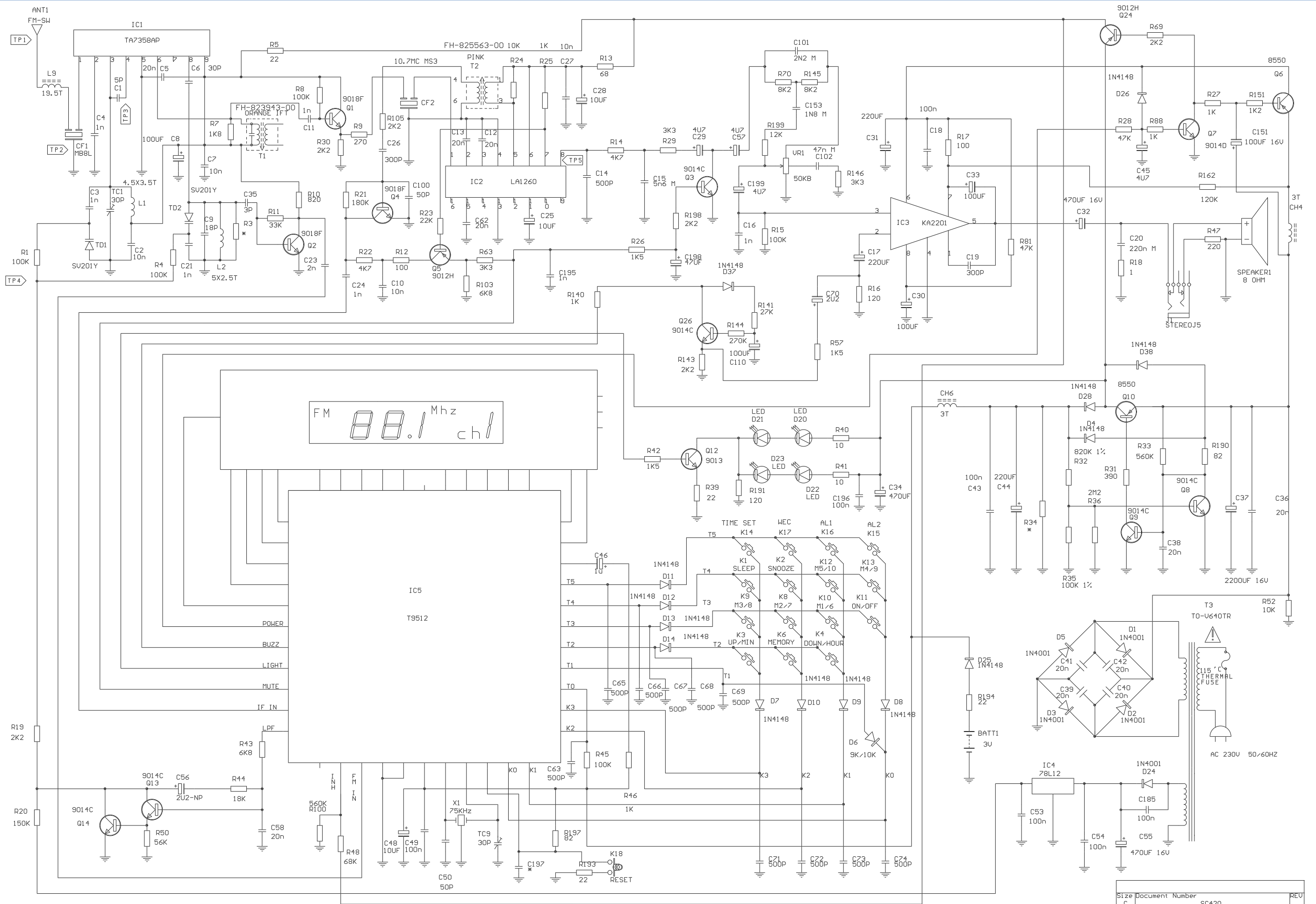
GRUNDIG SC420 PCB LAYOUT



CLOCK PCB



KEYBOARD PCB



Size Document Number REV
 C SC420
 Date: January 25, 2000 Sheet 1 of 1

VOLTAGE TABLE OF MODEL : GRUNDIG SC420 (UNITS = VOLTS)

DATE : 21 Jan 00

COMPONENTS : IC'S

IC 1, TA7358AP	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,93
2	1,64
3	5,1
4	1,6
5	0
6	5,1
7	4,41
8	5,07
9	5,1

IC 3, LM820	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,64
2	0,56
3	0,002
4	0
5	6,1
6	11,6
7	11,5
8	6,9

IC 2, LA1260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	1,5
2	1,5
3	1,5
4	0
5	4,74
6	4,6
7	0,64
8	1,43
9	1,44
10	1,5
11	1,34
12	3,22
13	0
14	0
15	2,36
16	1,8

IC 4, S-80720AL	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	12,03
2	19,15
3	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC420 (UNITS = VOLTS

DATE : 21 Jan

COMPONENTS : IC'S

IC 5, T-9512-1					
AT POWER ON CONDITION (V-OUT = Volts or Milli-Volts (mV))					
PIN NO.	V-OUT	PIN NO.	V-OUT	PIN NO.	V-OUT
1	0	21	3,8	41	1,9
2	0	22	3,2	42	4,7
3	4,75	23	3,2	43	1.7mV
4	0	24	3,2	44	1.7mV
5	4,73	25	3,2		
6	4,75	26	3,2		
7	4,74	27	3,2		
8	4,74	28	4,7		
9	1,8	29	1.5mV		
10	3,26	30	1.4mV		
11	3,25	31	1.5mV		
12	3,25	32	2,45		
13	3,25	33	1.7mV		
14	3,25	34	23mV		
15	3,23	35	4,72		
16	3,23	36	2,42		
17	4,72	37	0		
18	3,25	38	0		
19	3,25	39	4,7		
20	3,25	40	2,18		

VOLTAGE TABLE OF MODEL : GRUNDIG SC420 (UNITS = VOLTS)

DATE : 21 Jan 00

COMPONENTS : TRANSISTORS
 MEASURED CONDITION : AT POWER ON

Q1	9018F
C	5,26
B	3,33
E	2,64

Q8	9014C
C	0,56
B	0,5
E	0

Q26	9014C
C	0
B	0,35
E	0

Q2	9018F
C	2,52
B	0,76
E	0

Q9	9014C
C	10,9
B	0,56
E	0

Q3	9014C
C	0,028
B	0
E	0

Q10	8550
C	5,38
B	10,9
E	11,5

Q4	9018F
C	0
B	0
E	0

Q12	9013
C	1,36
B	0
E	0,2

Q5	9012H
C	0,025
B	0,64
E	0,001

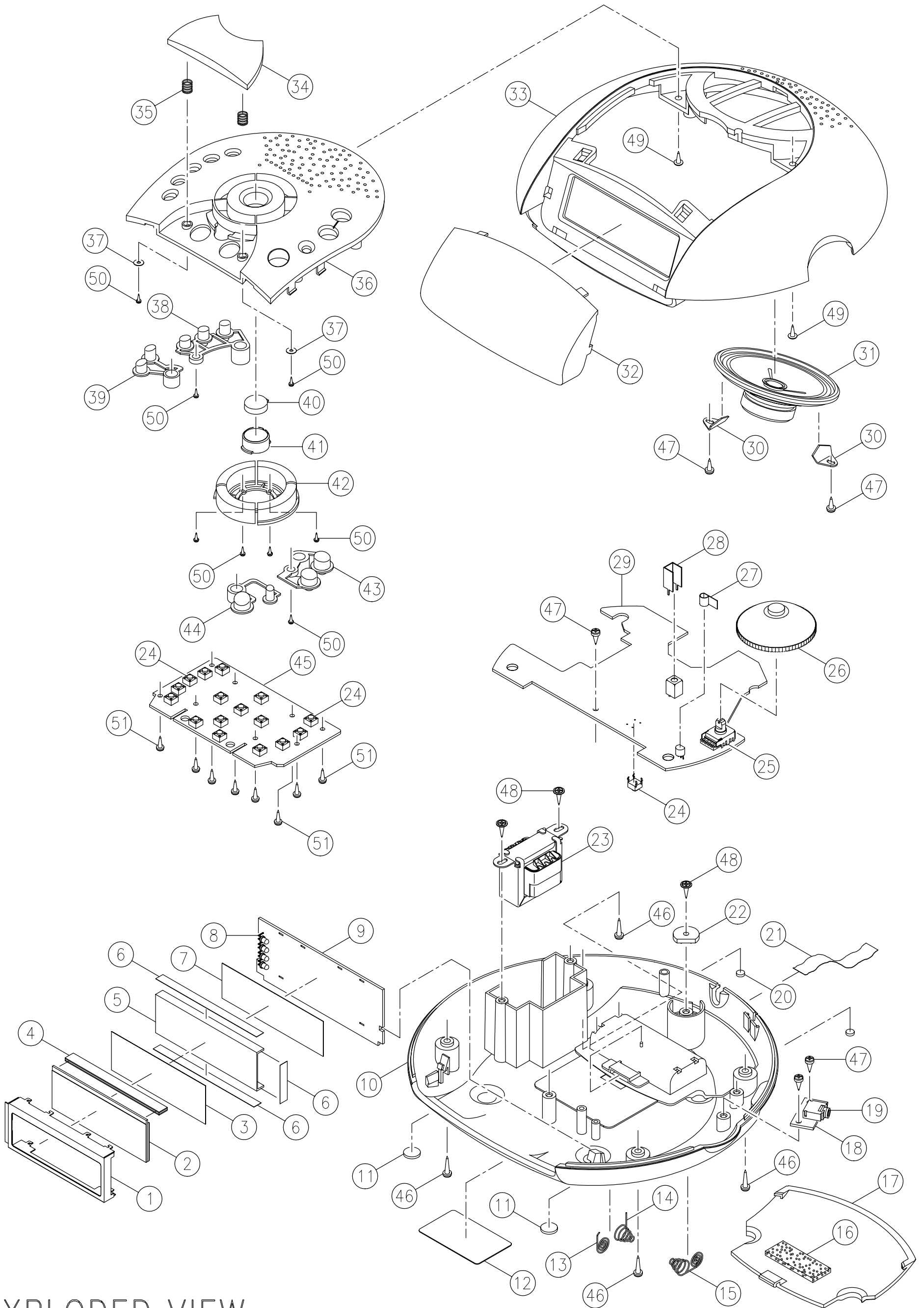
Q13	9014C
C	2
B	1,02
E	0,53

Q6	9012H
C	11,5
B	10,8
E	11,6

Q14	9014C
C	2
B	0,53
E	0

Q7	9014C
C	0,14
B	0,7
E	0

Q24	9012H
C	4,2
B	4,61
E	5,36



EXPLODED VIEW
MODEL : SC-420