Service Document
Exchange Set

Sono Clock 620 LED
ab Seriennummer 059398
from serial number 059398 on

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
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http://www.grundig.com

GRUNDIG

Alignment Information

Model : GRUNDIG SC620
Ref. No. : SC620
Date : 21-Jan-00

A) FM Radio section

1) FM IF

INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
TP3,2	10.7MHz	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_ 10HZ	

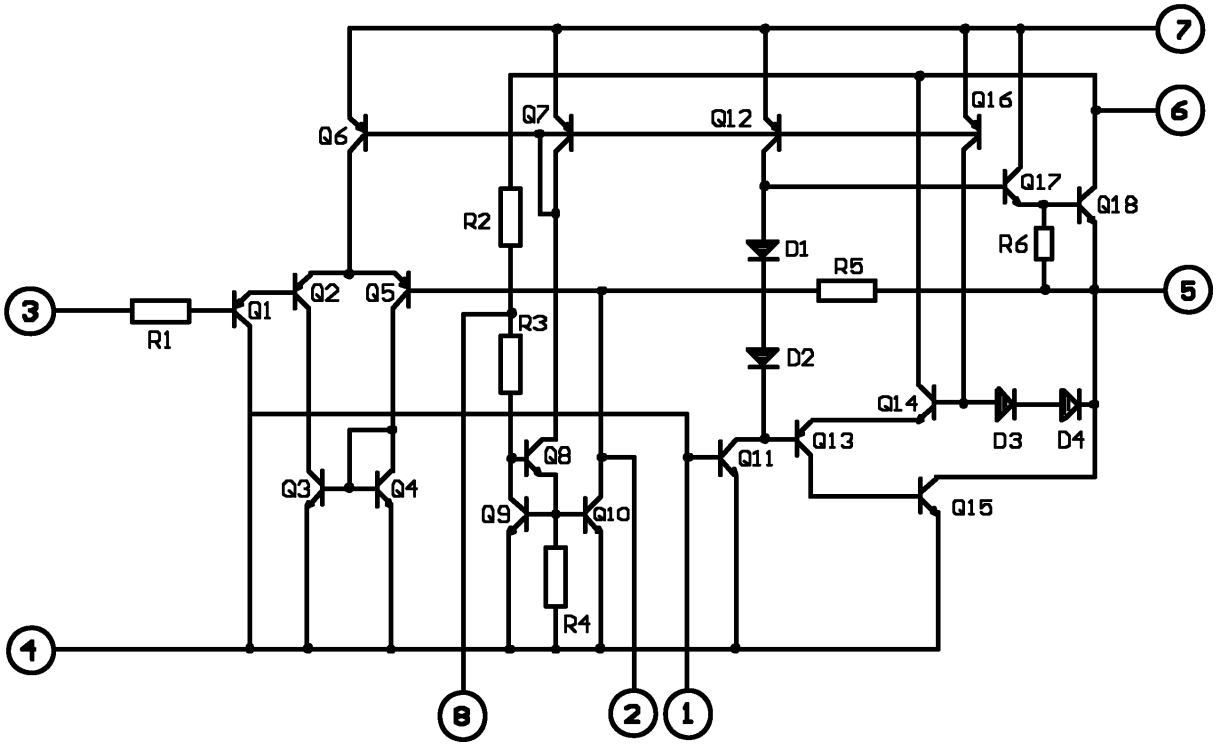
5) 4.332MHZ CRYSTAL

		OUTPUT		ADJUST	ADJUST FOR	REMARK
		TP8,9		TC3	4.332M_ 10HZ	

Note :

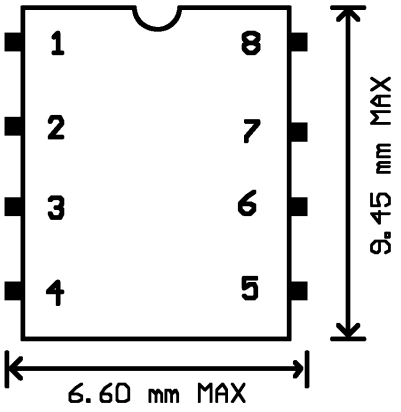
1. Use a digital meter to measure each required voltage on above items
2. Use weak signal in RF alignment
3. Radio & LCD board must be connected before alignment
4. Use the frequence counter to measure each required frequency on above items.

BLOCK DIAGRAM OF IC1, KA2201

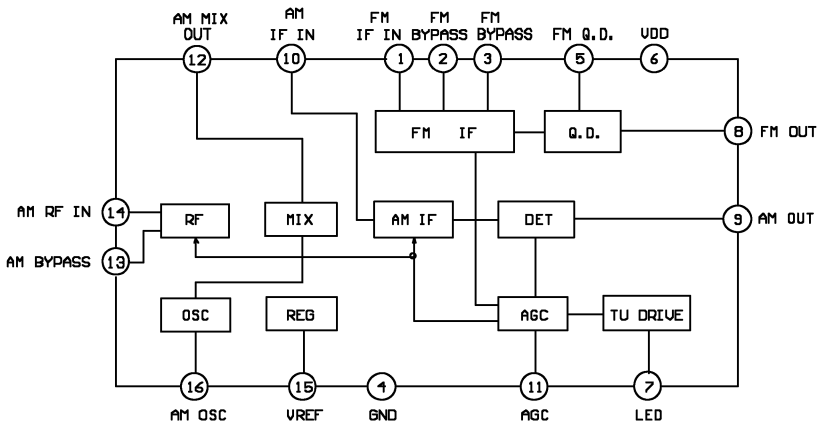


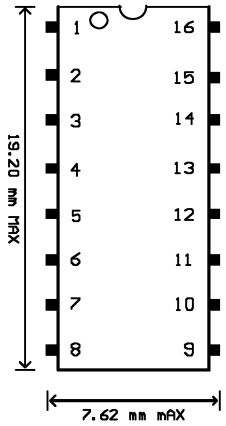
CONNECTION DIAGRAM

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

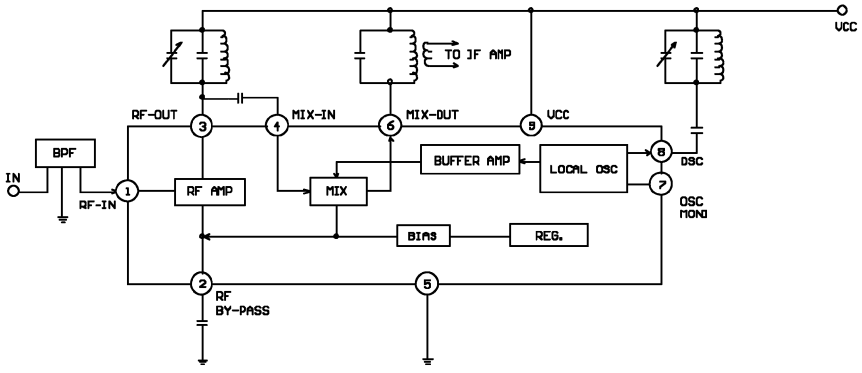


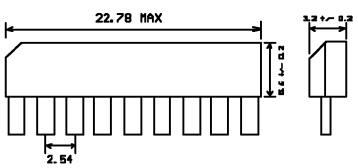
BLOCK DIAGRAM OF IC3, LA1260

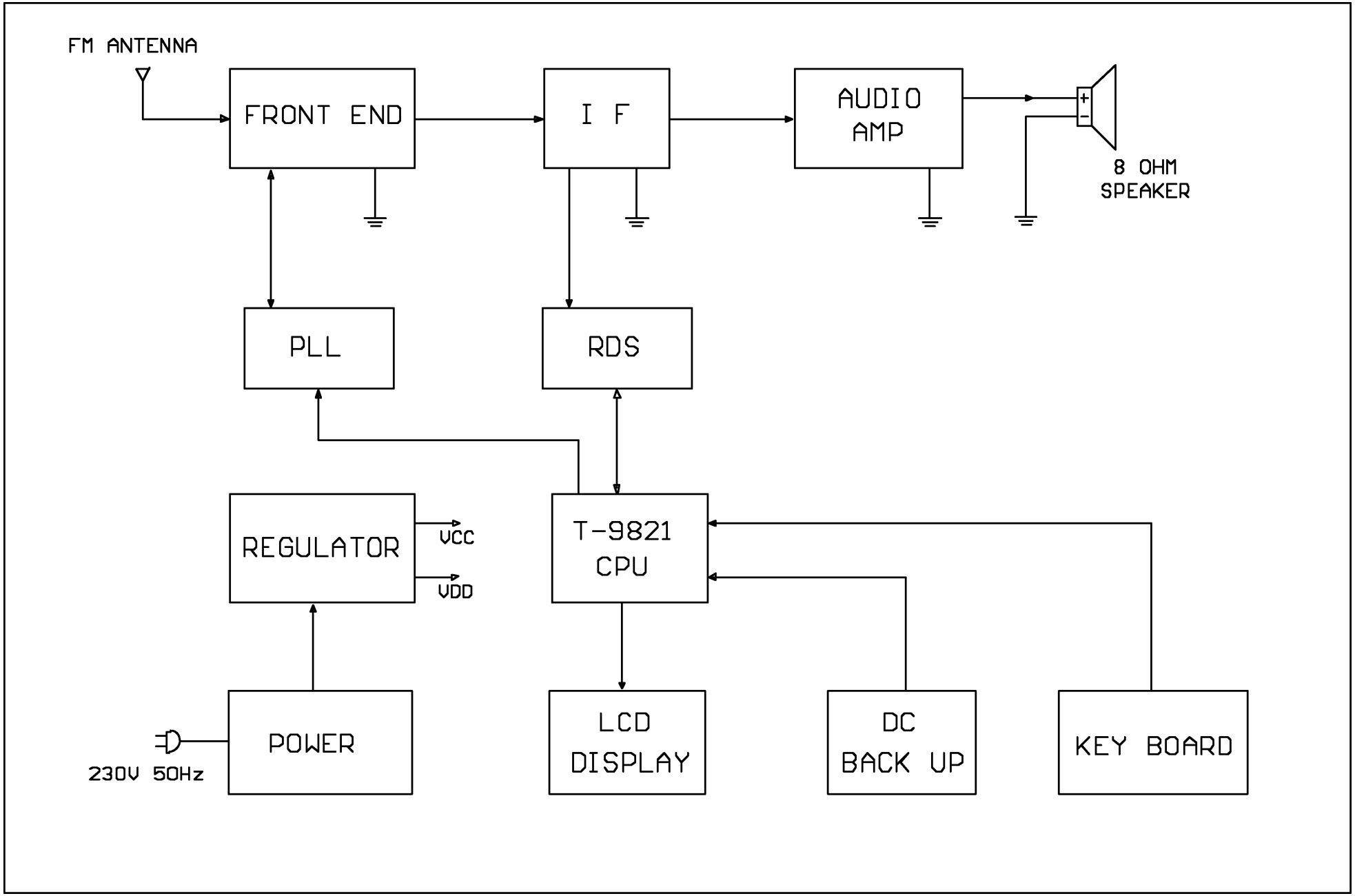




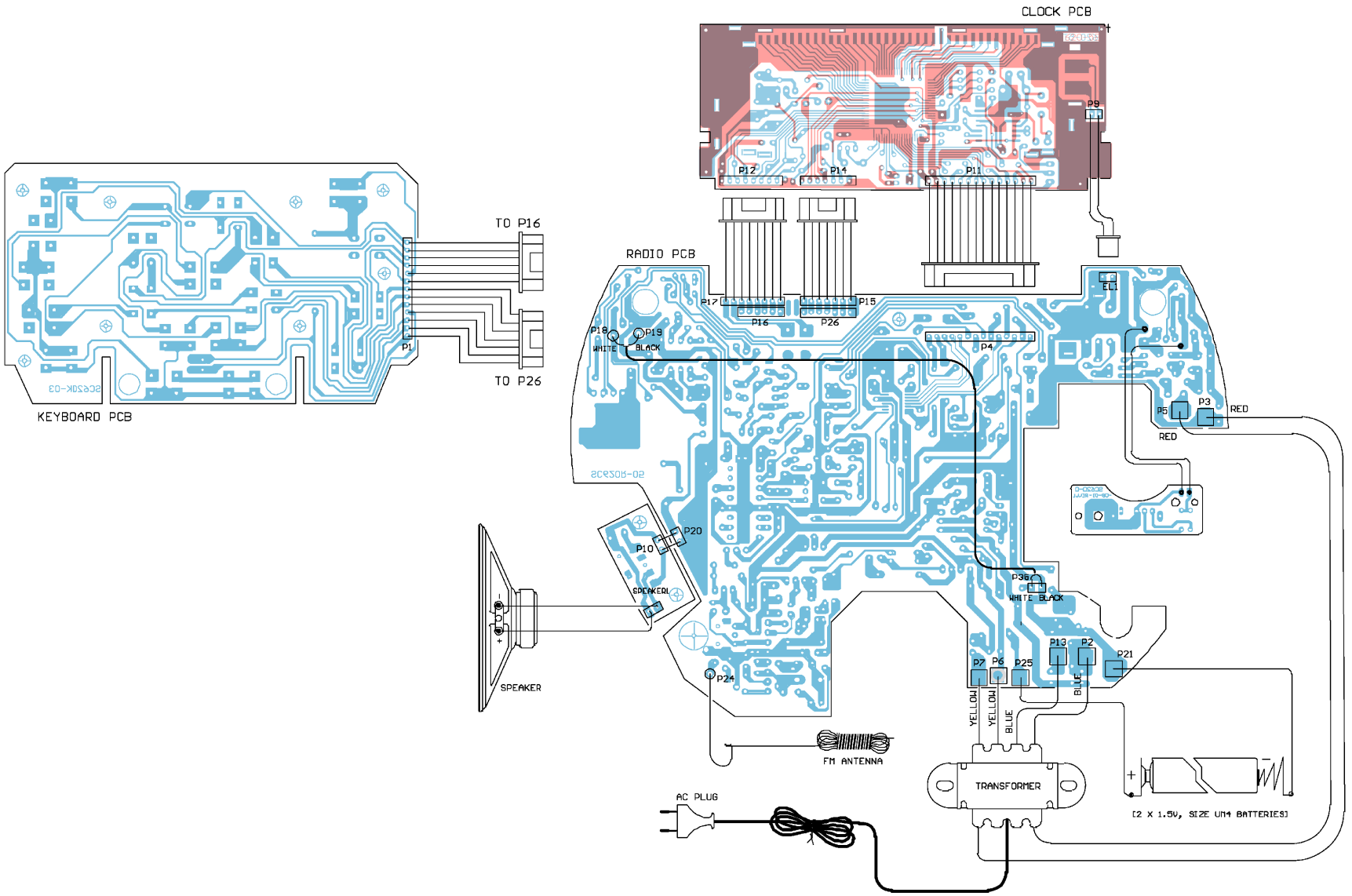
BLOCK DIAGRAM OF IC1, TA7358

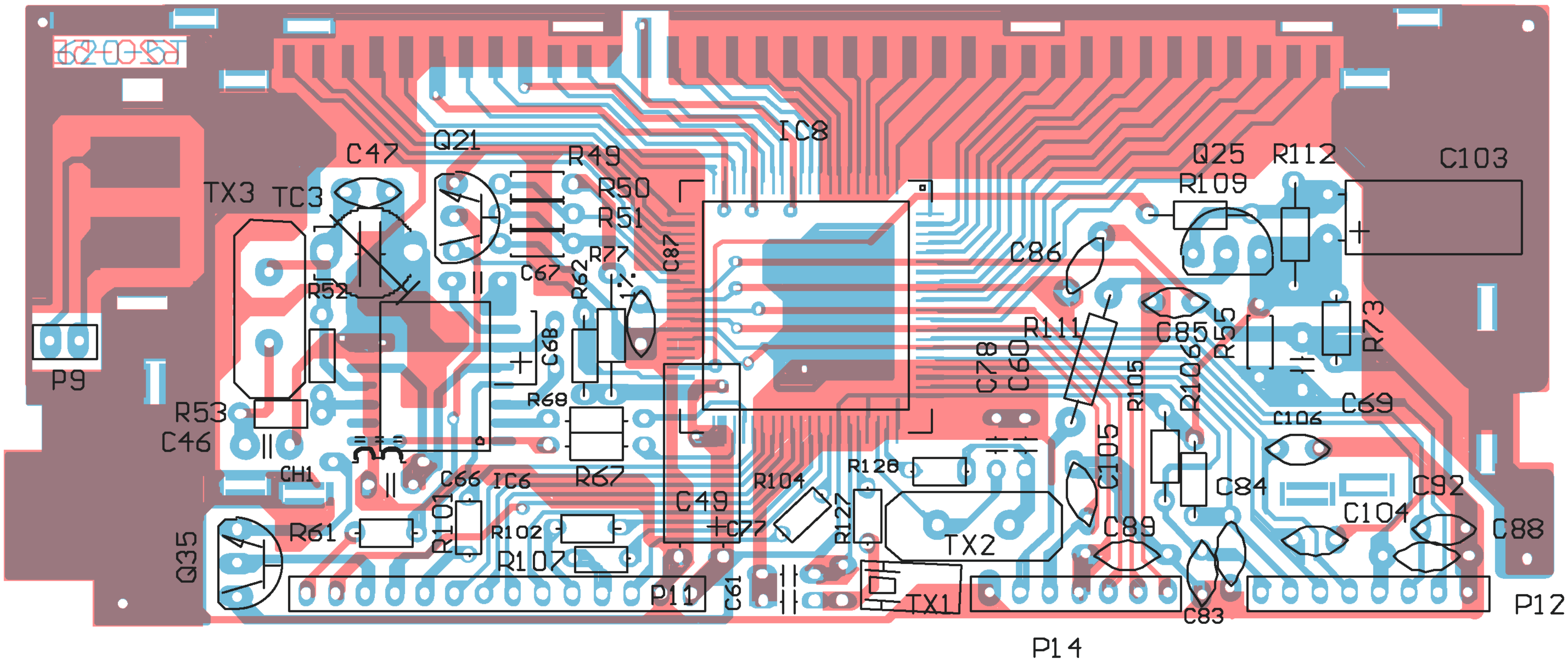


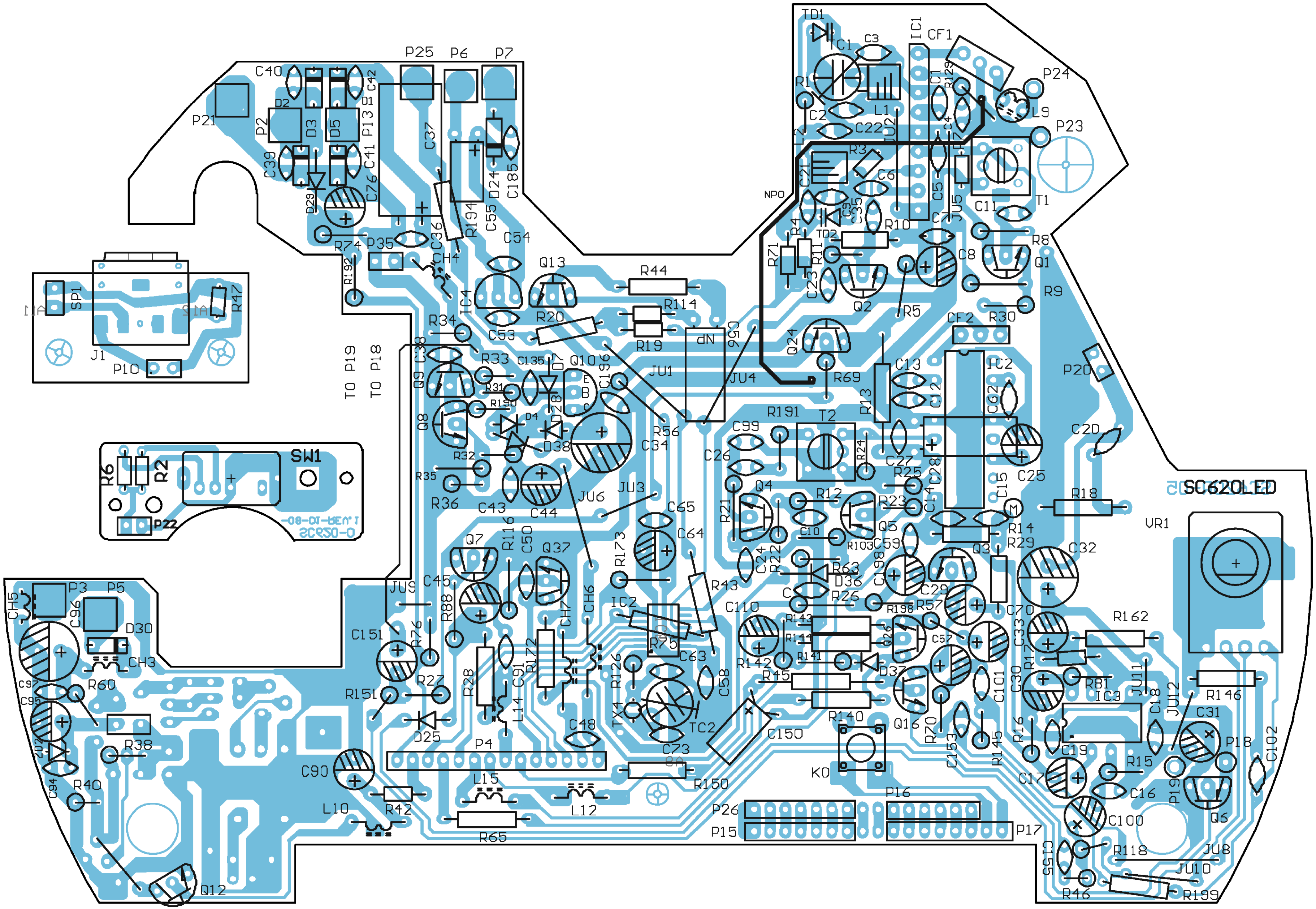



FM ANTENNA
FRONT END
I F
AUDIO AMP
8 OHM SPEAKER
PLL
RDS
REGULATOR
VCC
VDD
T-9821 CPU
POWER
230V 50Hz
LCD DISPLAY
DC BACK UP
KEY BOARD

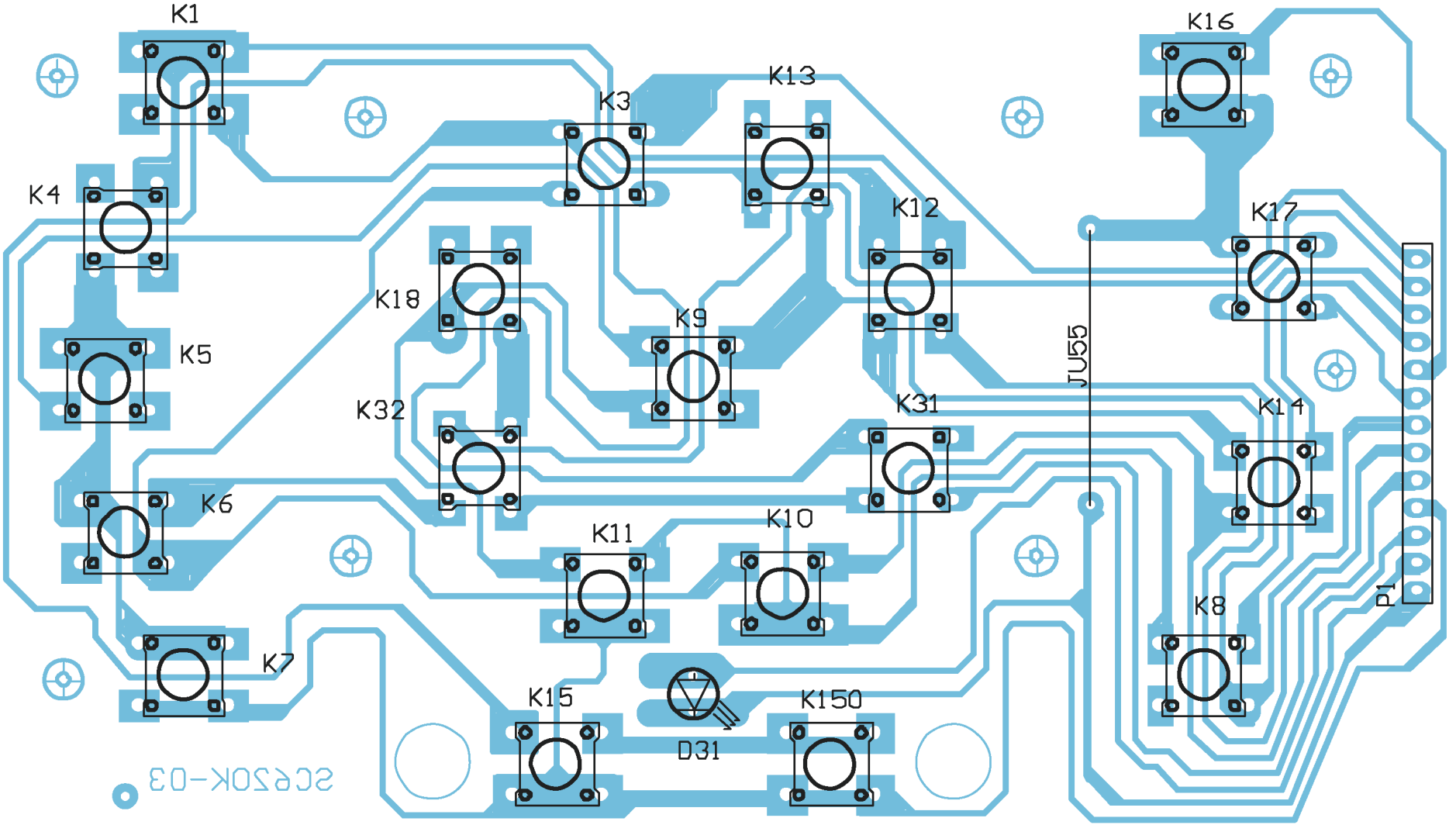
GRUNDIG SC620 WIRING DIAGRAM

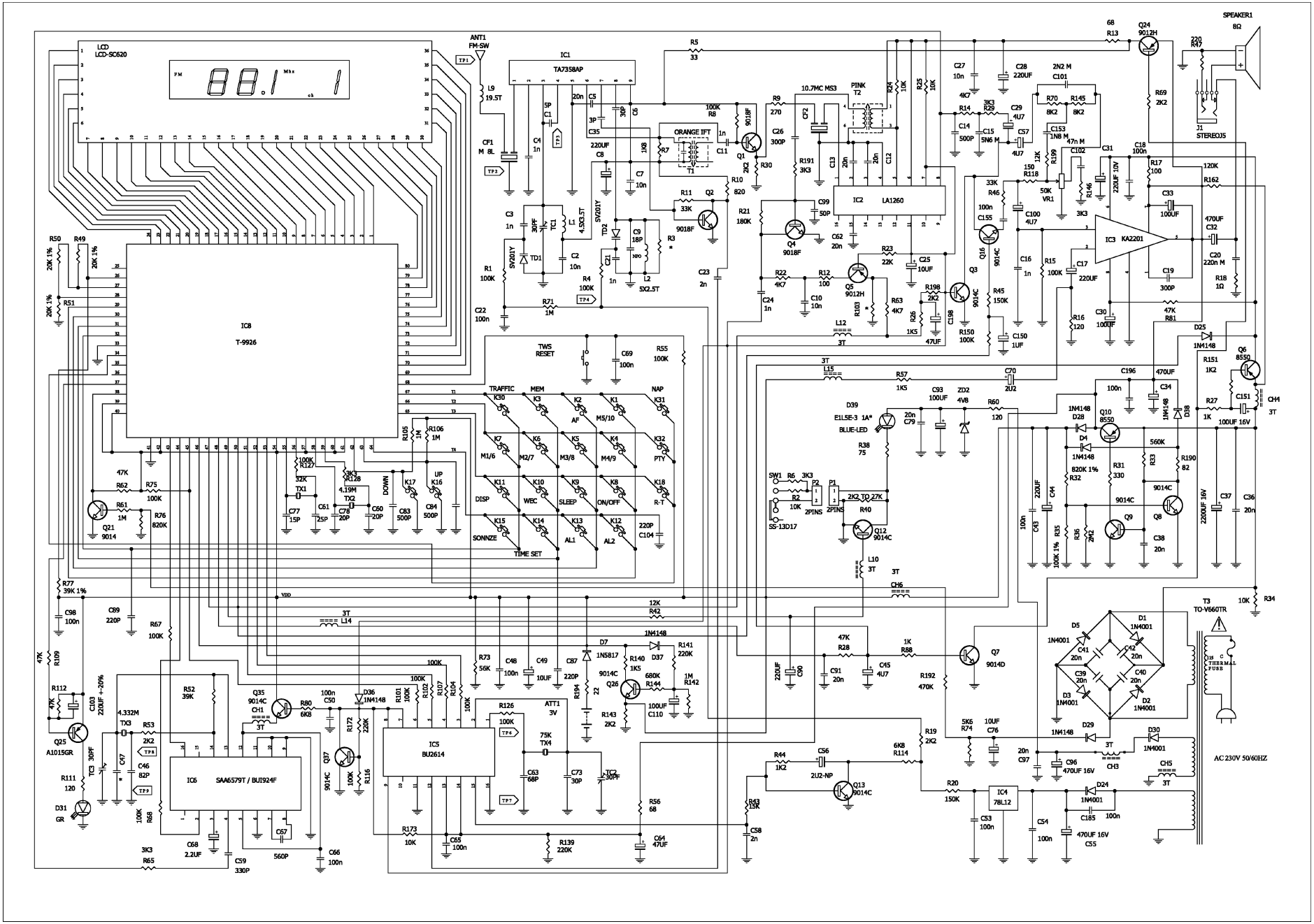



IC8
Q21
C47
R49
R50
R51
TX3
TC3
R77
C87
C67
R62
R52
Q25
R112
C103
R109
C86
C85
R111
R55
R73
R106
C78
C60
R105
C69
C106
P9
R53
C46
C68
R68
R67
CH1
C66
IC6
C49
R104
R128
C105
C84
C92
C104
C88
C89
R127
C77
TX2
Q35
R61
R101
R102
R107
P11
C61
TX1
P14
C83
P12



P25
P6
P7
C40
C42
D2
D1
P21
P2
D3
D5
P13
C41
C37
C39
C76
D29
D24
C185
R194
C55
C36
R74
P35
CH4
C54
R192
Q13
R44
SP1
R47
J1
P10
TO P19
TO P18
IC4
R34
C53
R20
R114
R19
NP
JU1
JU4
R33
C135
D7
Q10
C196
Q9
C38
R31
R190
D4
D28
D38
Q8
R32
R35
R36
C43
C44
JU6
JU3
C65
C64
R56
C34
SW1
R6
R2
P22
TD1
IC1
C3
CF1
P24
R1
L1
L9
C2
C22
JU2
P23
L2
R3
C21
C6
NPO
C9
C35
R4
TD2
R10
C5
JU5
C11
T1
R71
R11
C23
C7
C8
R8
Q1
Q2
R5
R9
Q24
CF2
R30
R69
C13
IC2
P20
R13
C12
C62
R191
T2
C99
C26
R24
C27
R25
C28
C20
C25
C15
C14
R18
SC620LED
VR1
Q4
R12
R21
R23
Q5
C10
R103
C59
R14
R29
C32
Q3
C24
R22
R63
D36
C198
R26
C29
R198
R57
C70
R162
C33
Q7
R116
C50
Q37
R173
R43
C45
JU9
R88
CH7
CH6
C110
R143
R144
R75
C57
Q26
C151
R76
R172
R126
C63
R142
R141
D37
R17
R81
JU11
IC3
C18
JU12
R146
R27
R28
C91
L14
TX4
C58
R45
C30
C101
R151
D25
P4
C48
TC2
C73
C150
R140
Q16
R70
C153
R145
R16
C19
C31
P18
C102
R15
C17
C16
P19
Q6
C100
C90
L15
L12
R150
K0
P26
P16
P15
P17
C155
R118
JU8
JU10
R46
R199
L10
R42
R65
P3
P5
CH5
C96
D30
CH3
C97
R60
C95
ZD2
R38
C94
R40
Q12


K1
K3
K13
K16
K4
K12
K17
K18
K9
K5
JU55
K32
K31
K14
K6
K10
K11
K8
P1
K7
K15
K150
D31
SC6220K-03


LCD
LCD-SC620
IC8
T-9926
IC1
TA7358AP
IC2
LA1260
IC3
KA2201
IC4
78L12
IC5
BU2614
IC6
SAA6579T / BUI924F
SPEAKER1
8Ω
J1
STEREOJ5
ANT1
FM-SW
TRAFFIC
MEM
NAP
AF
M5/10
M1/6
M2/7
M3/8
M4/9
PTY
DISP
WEC
SLEEP
ON/OFF
R-T
SONNZE
TIME SET
AL1
AL2
TWS
RESET
UP
DOWN
ORANGE IFT
PINK
10.7MC MS3
BLUE-LED
AC 230V 50/60HZ

VOLTAGE TABLE OF MODEL : GRUNDIG SC620 (UNITS = VOLTS)

DATE : 21 Jan 00

COMPONENTS : IC'S

IC 1, TA7358AP	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,53
2	1,24
3	5,38
4	1,23
5	0
6	5,36
7	4,72
8	5,33
9	5,36

IC 3, KA2201	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,64
2	0,6
3	0
4	0
5	6,16
6	11,65
7	11,5
8	6,91

IC 2, LA1260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	1,54
2	1,54
3	1,54
4	0
5	4,95
6	4,69
7	0,65
8	1,57
9	1,45
10	1,54
11	1,41
12	3,4
13	0
14	-2,45
15	2,41
16	2,28

IC 4, 78L12	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	18,95
2	0
3	12,15

IC 5, BU2614	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	2,64
2	1,82
3	0,06
4	5,01
5	0,08
6	0
7	5,32
8	5,32
9	0,01
10	0
11	0
12	2,58
13	5,46
14	5,46
15	0,56
16	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC620 (UNITS = VOLTS)

DATE : 21 Jan 00

COMPONENTS : IC'S

IC 6, SAA6579T	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	4,58
2	1,8
3	2,29
4	2,28
5	4,58
6	0
7	2,27
8	2,34
9	0
10	0
11	0
12	4,57
13	2,29
14	2,32
15	2,29
16	2,29

IC 8, T98F1							
AT POWER ON CONDITION (V-OUT = VOLTS)							
PIN NO.	V-OUT	PIN NO.	V-OUT	PIN NO.	V-OUT	PIN NO.	V-OUT
1	1,49	21	1,51	41	4,99	61	4,99
2	1,49	22	1,51	42	4,99	62	4,99
3	1,51	23	1,51	43	2,15	63	3,64
4	1,51	24	1,51	44	1,6	64	4,7
5	1,49	25	5	45	0,16	65	4,73
6	1,52	26	3,01	46	0	66	4,74
7	1,52	27	2,02	47	0	67	4,75
8	1,5	28	1,01	48	4,99	68	4,82
9	1,49	29	0	49	0	69	1,5
10	1,5	30	0	50	0	70	1,5
11	1,5	31	0	51	0	71	1,51
12	1,48	32	0	52	4,99	72	1,49
13	1,49	33	0	53	0	73	1,5
14	1,51	34	0	54	4,99	74	1,5
15	1,5	35	0	55	1,48	75	1,35
16	1,5	36	0	56	2,54	76	1,5
17	1,51	37	4,99	57	4,99	77	1,5
18	1,5	38	0,05	58	2	78	1,5
19	1,51	39	5	59	2,89	79	1,5
20	1,5	40	5	60	4,99	80	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC620 (UNITS = VOLTS)

DATE : 21 Jan 00

COMPONENTS : TRANSISTORS
MEASURED CONDITION : AT POWER ON

Q1	9018F
C	5,32
B	3,41
E	2,7

Q2	9018F
C	2,5
B	0,77
E	0

Q3	9014C
C	0
B	0
E	0

Q4	9018F
C	0
B	0
E	0

Q5	9012H
C	0
B	0,6
E	0

Q6	8550
C	11,68
B	10,82
E	11,72

Q7	9014D
C	0,1
B	0,7
E	0

Q8	9014C
C	0,55
B	0,5
E	0

Q9	9014C
C	10,96
B	0,55
E	0

Q10	8550
C	5,68
B	11,07
E	11,7

Q12	9013
C	0
B	0
E	2,85

Q13	9014C
C	1,47
B	0,55
E	0

Q16	9014C
C	0,3
B	0
E	0

Q18	9013
C	1,05
B	0,35
E	0

Q19	902H
C	1,05
B	3,37
E	3,4

Q20	9013
C	10,1
B	4,04
E	3,4

Q21	9014
C	0,05
B	0,57
E	0

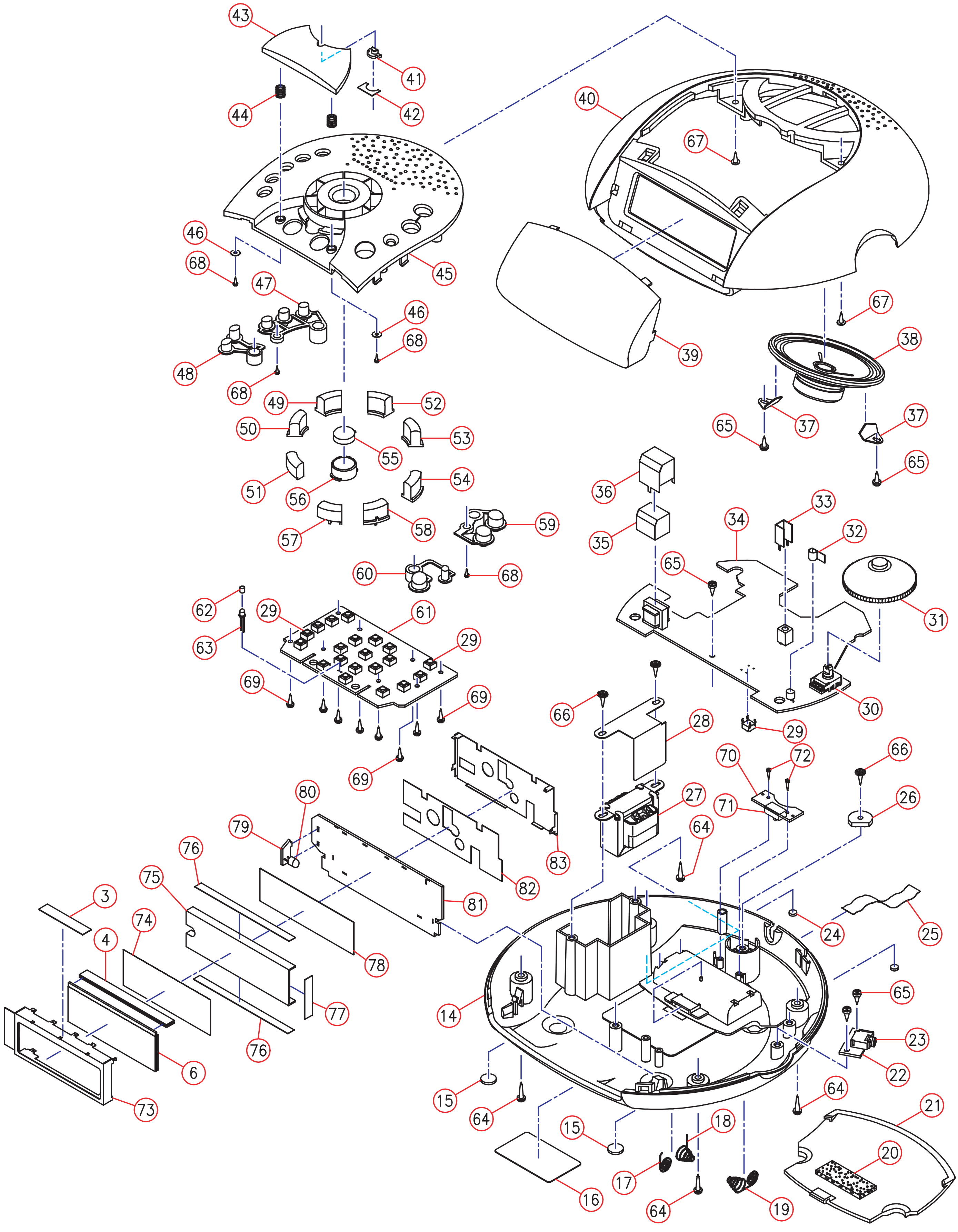
Q24	9012H
C	5,64
B	4,91
E	5,67

Q25	A10156R
C	4,98
B	1,02
E	4,99

Q26	9014C
C	0
B	0,07
E	0

Q35	9014C
C	4,99
B	5,24
E	4,58

Q37	9014C
C	5,23
B	0,11
E	0



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