ORDER NO. KM49311689C3

Service Manual

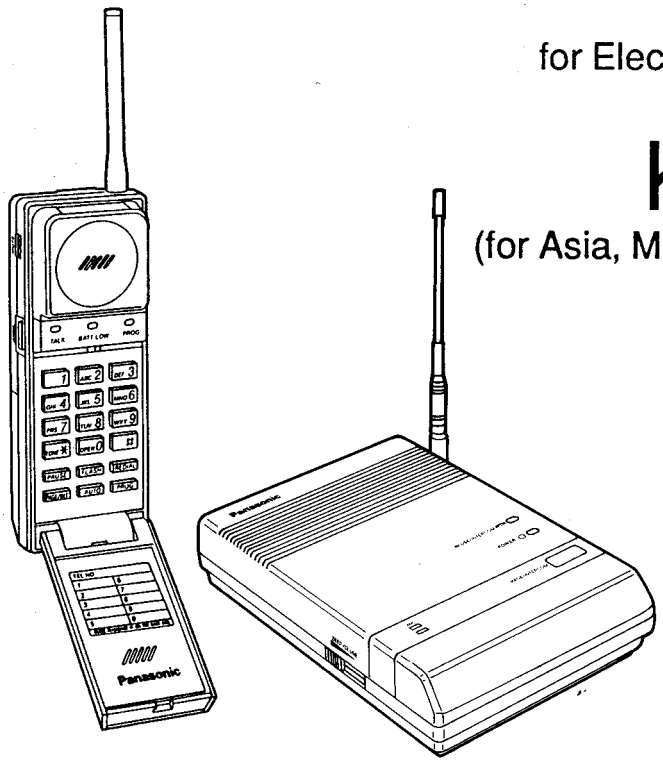
and Technical Guide

EASA-PHONE

Proprietary Wireless Phone
for Electronic Modular Switching System
and Digital Super Hybrid System

KX-T7980BX

(for Asia, Middle Near East and Other areas)



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BLOCK DIAGRAM (PORTABLE HANDSET)\БЛОК-СХЕМА (ТРУБКА)

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CABINET AND ELECTRICAL PARTS LOCATION (BASE UNIT)\РАСПОЛОЖЕНИЕ ЧАСТЕЙ КОРПУСА И ЭЛЕКТРИЧЕСКИХ ДЕТАЛЕЙ (БАЗОВЫЙ БЛОК)

CABINET AND ELECTRICAL PARTS LOCATION (PORTABLE HANDSET)\РАСПОЛОЖЕНИЕ ЧАСТЕЙ КОРПУСА И ЭЛЕКТРИЧЕСКИХ ДЕТАЛЕЙ (ТРУБКА)

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REPLACEMENT PARTS LIST (BASE UNIT)\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ (БАЗОВЫЙ БЛОК)

REPLACEMENT PARTS LIST (PORTABLE HANDSET)\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ (ТРУБКА)

Panasonic

■ SPECIFICATIONS

	Base Unit	Portable Handset
Power Source:	AC Adaptor	Rechargeable Ni-Cd battery
Receiving Frequency:	40 channels within 814~815 MHz	40 channels within 904~905 MHz
Receiving Method:	Double super heterodine	Double super heterodine
Transmitting Frequency:	40 channels within 904~905 MHz	40 channels within 814~815 MHz
Oscillation Method:	PLL synthesizer	PLL synthesizer
Detecting Method:	Quadrature Discriminator	Quadrature Discriminator
Tolerance of OSC Frequency:	±4.5 kHz	±4.5 kHz
Modulation Method:	F3 (frequency modulation)	F3 (frequency modulation)
ID Code:	20-bit written in ROM	20-bit written in ROM
Dial Mode:		Tone (DTMF)/Pulse
Redial:		Up to 30 digits
Save:		Up to 30 digits
Power Consumption:		20 hrs at Standby, 3 hrs at Talk
Dimension (H×W×D):	38×120×170 mm	150×57×34 mm
Weight:	400 g	280 g

Design and specifications are subject to change without notice.

DISASSEMBLY INSTRUCTIONS

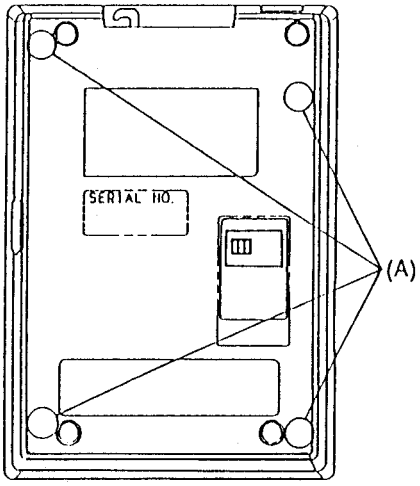


Fig. 5

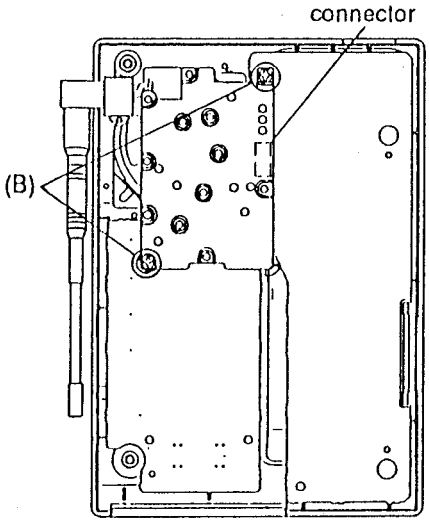


Fig. 6

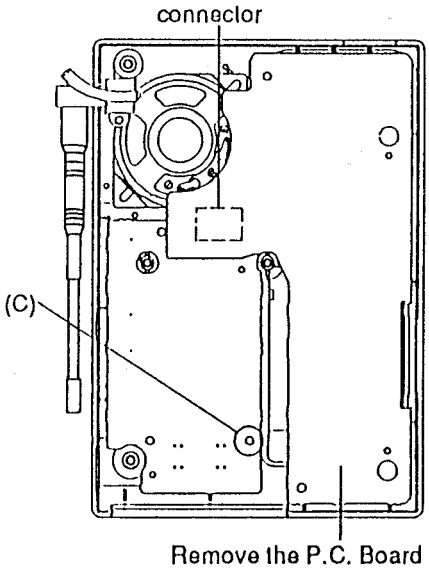


Fig. 7

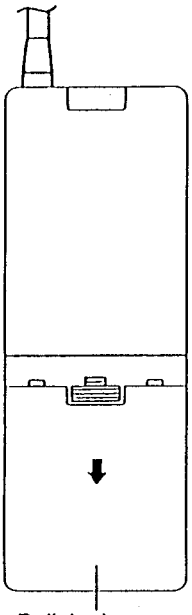


Fig. 8

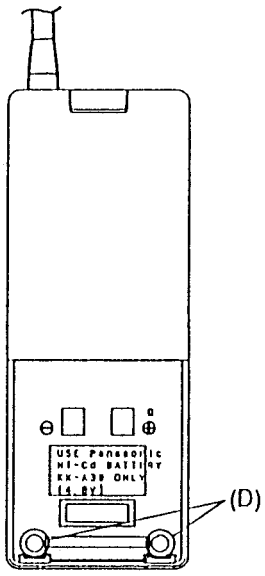


Fig. 9

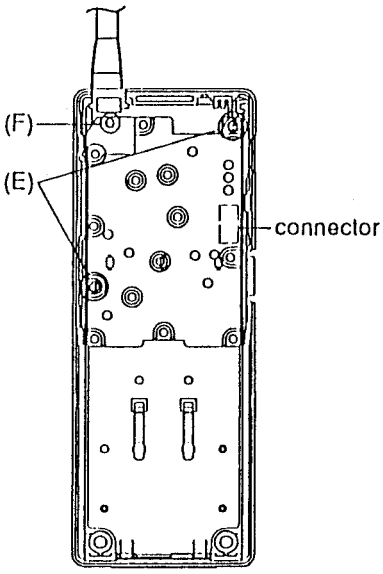


Fig. 10

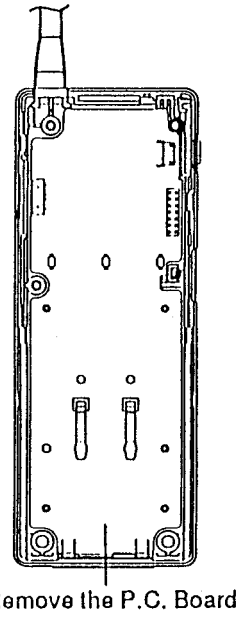


Fig. 11

Ref. No.	Procedure	Shown In Fig.-	To Remove-	Remove-
1	1	2	Lower Cabinet	Screws (3 X 16, 3 X 10).....(A) X 4
2	1,2	2		
3	1~3	3	RF Unit	Screws (2.6 X 20).....(B) X 2
4	1~4	3		Remove the connector
5	1~5	4	Main P.C. Board	Remove the connector
6	1~6	4		Screw (3 X 16).....(C) X 1
7	7	5	Cabinet Cover	Pull the battery
8	7,8	6		Screws (2.6 X 4).....(D) X 2
9	7~9	7	RF Unit	Screws (2.6 X 20).....(E) X 2
10	7~10	7		Screw (2.6 x 14).....(F) X 1
11	7~11	7		Remove the connector
12	7~12	8	Main P.C.Board	Remove the P.C.Board

CPU DATA (BASE UNIT)

IC1 MN170801KAV

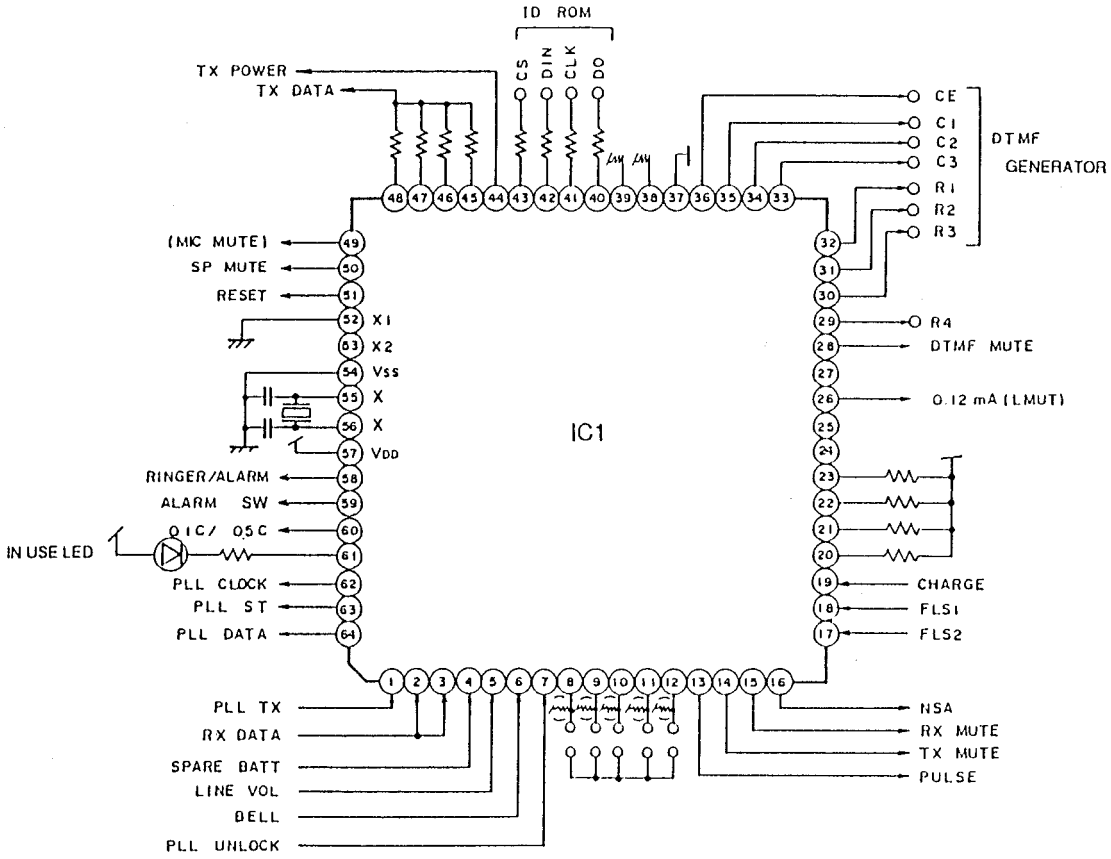


Fig. 12

CPU DATA (PORTABLE HANDSET)

IC1 MN170801KAU

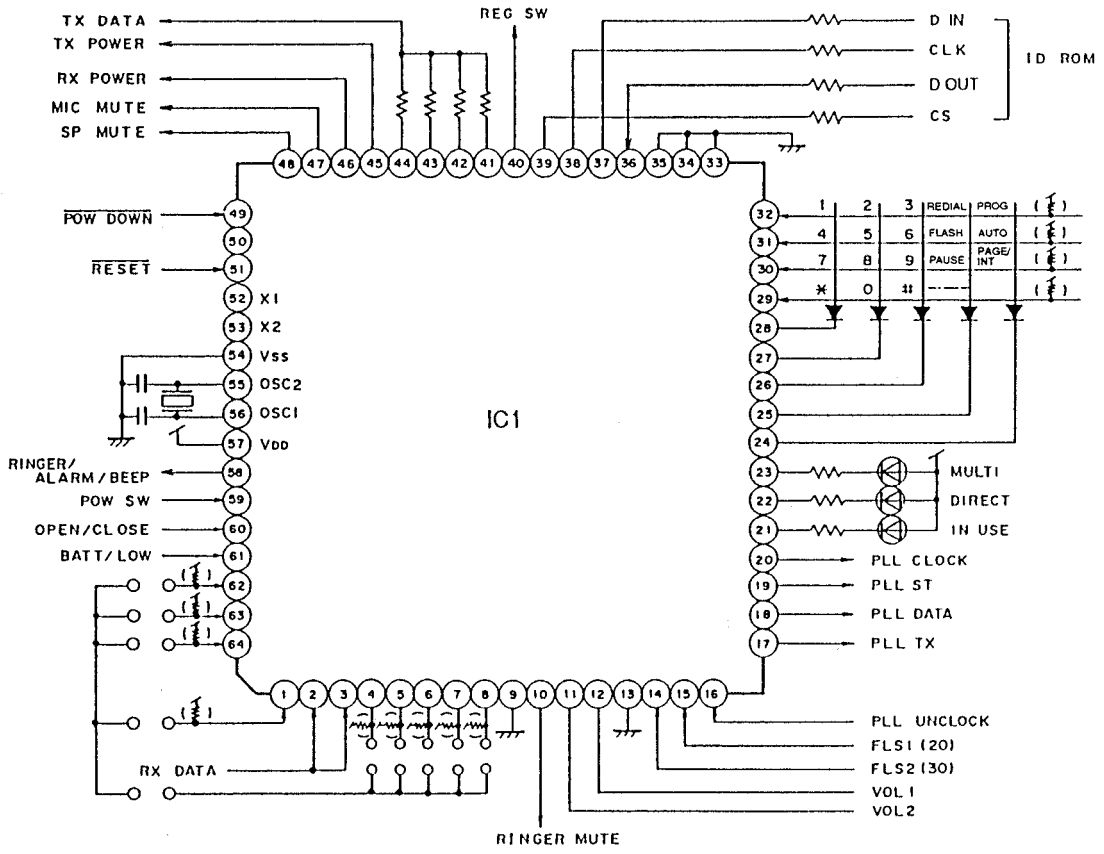


Fig. 13

ADJUSTMENTS (KX-T7980BXR)

After servicing the RF unit, never make adjustments without assembling the upper RF unit cover and the lower RF unit cover with screws.

Adjustment Preparations

1. Connect the main P.C. Board to RF unit by the extension cord (both base unit and portable handset).
2. Short TP2 and V_{SS} in the portable handset and short TP1, TP2 and V_{SS} in the base unit.
3. Connect a distortion meter (with AC voltmeter) to the telephone line output on the base unit and to the SPK terminals (TP3) on the portable handset.
4. Disconnect the points A and B of RF unit in the portable handset.
5. Connect 5 V to the battery terminals.
6. Press the PAUSE switch of portable handset to set the Talk of test mode.

If your unit have below symptom, adjust for each item as table of adjustment on page 12.

Symptom	Remedy
Does not link between base unit and portable handset.	Adjust the adjustment items (A), (B) and (F).
The sound quality is wrong.	Adjust the adjustment item (C).
The reception sensitivity is wrong.	Adjust the adjustment item (D).
Speaker level of portable handset is unstable.	Adjust the adjustment item (E).
Transmission sound for receiver is unstable.	Adjust the adjustment items (I).

Main P.C. Board of Base Unit

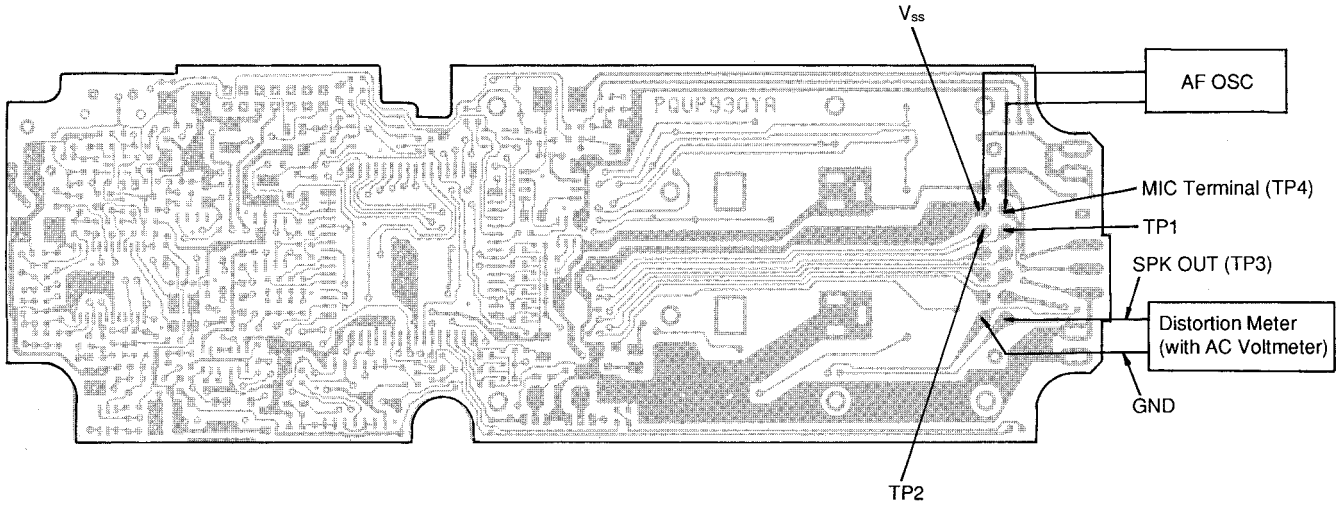


Fig. 14

Item	Adjustment Item	Procedure
(A)	RX VCO Voltage Adjustment	Place the voltmeter probe at TP5 and adjust the voltage to 1.5 V using VC301. **(When TP5 voltage is within 1.5 V±0.5 V, no need of adjusting.)**
(B)	TX VCO Voltage Adjustment	Place the voltmeter probe at TP6 and adjust the voltage to 1.2 V using VC302. **(When TP6 voltage is within 1.2 V±0.5 V, no need of adjusting.)**
(C)	Detective Coil Adjustment	Connect a signal generator (904.0125 MHz, 1 kHz modulation frequency, 3 kHz modulation, +60 dBμV emf output level) to the RF block section TP A. Adjust the AC voltmeter to the maximum level using L302.
(D)	Distortion Adjustment	Connect a signal generator (904.0125 MHz, 1 kHz modulation frequency, 3 kHz modulation, +60 dBμV emf output level) to the RF block section TP A. Adjust the distortion to the minimum using L301.
(E)	SP Output Adjustment	Connect a signal generator (904.0125 MHz, 1 kHz modulation frequency, 3 kHz modulation, +60 dBμV emf output level) to the RF block section TP A. Adjust VR305 so that the speaker output is –21 dBm (600Ω).
(F)	20 dB Electric Detective Adjustment	Set the signal generator so that the distortion and noise of speaker output is 28%~35%. Adjust VR302 so that CN1 pin 9 is set the point that iterate high and low (tolerance ±4 dB).
(G)	Max. Modulation	Connect a modulation meter and signal generator (904.0125 MHz, 60 dBμV, unmodulation) in TPA and GND. Connect an AF oscillator (f=1 kHz, –31 dBm level) to the MIC terminals (TP4) and V_{SS} on the portable handset. Adjust VR303 to set the modulation to 3.0 kHz.

Note: After this adjustment—

1. Disconnect TP2 and V_{SS}.
2. Connect the Test Point A and B.

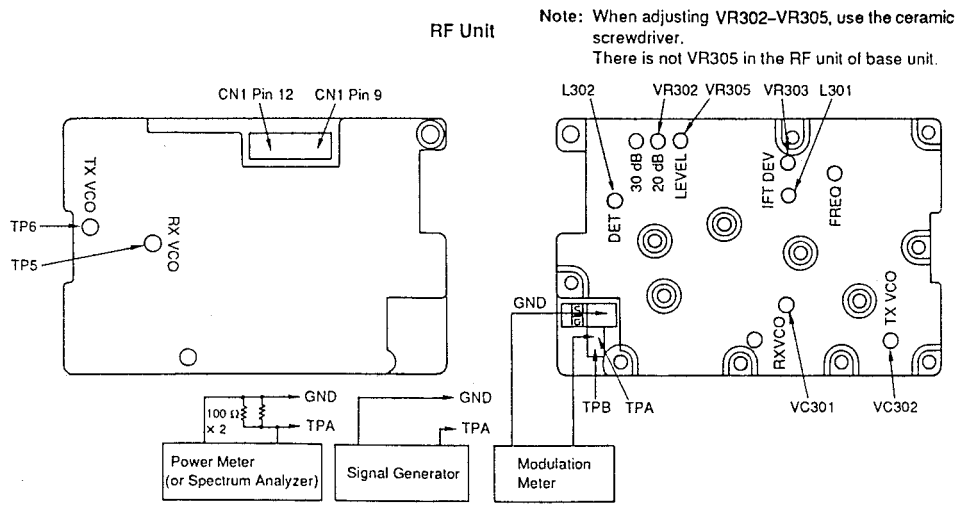


Fig. 15

ADJUSTMENTS (KX-T7980BXH)

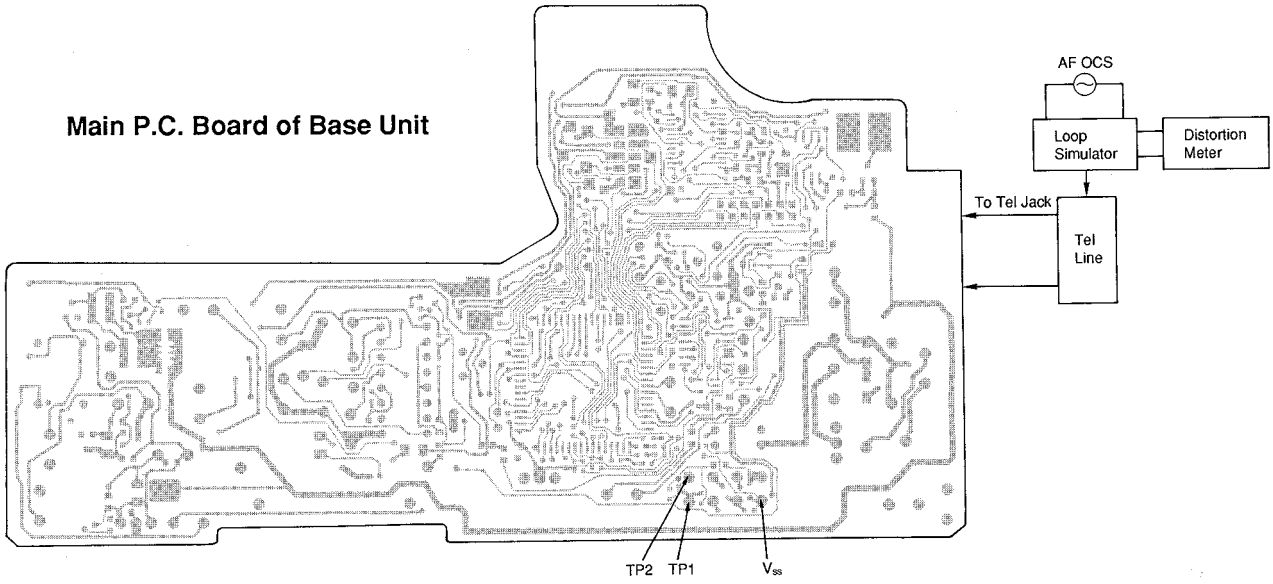
After servicing the RF unit, never make adjustments without assembling the upper RF unit cover and the lower RF unit cover with screws.

Adjustment Preparations

1. Connect the main P.C. Board to RF unit by the extension cord (both base unit and portable handset).
2. Short TP2 and V_{SS} in the portable handset and short TP1, TP2 and V_{SS} in the base unit.
3. Connect a distortion meter (with AC voltmeter) to the telephone line output on the base unit and to the SPK terminals (TP3) on the portable handset.
4. Connect the AC adaptor to the AC jack of base unit.

If your unit have below symptom, adjust for each item as table of adjustment on page 15.

Symptom	Remedy
Does not link between base unit and portable handset.	Adjust the adjustment items (A), (B) and (F).
The sound quality is wrong.	Adjust the adjustment item (C).
The reception sensitivity is wrong.	Adjust the adjustment item (D).
Transmission sound for receiver is unstable.	Adjust the adjustment item (I).
Reception sound from transmission is unstable.	Adjust the adjustment item (J).



Item	Adjustment Item	Procedure
(A)	RX VCO Voltage Adjustment	Place the voltmeter probe at RF unit TP5 and adjust the voltage to 1.8 V using VC301. **(When TP5 voltage is within 1.8 V±0.5 V, no need of adjusting.)**
(B)	TX VCO Voltage Adjustment	Place the voltmeter probe at TP6 and adjust the voltage to 1.8 V using VC302. **(When TP6 voltage is within 1.8 V±0.5 V, no need of adjusting.)**
(C)	Detective Coil Adjustment	Connect the signal generator (814.0125 MHz, 1 kHz modulation frequency, 2 kHz modulation +20 dBμ emf output level) to the RF block section TP A and GND. Adjust the AC voltmeter to the maximum level using L302.
(D)	Distortion Adjustment	Connect the signal generator (814.0125 MHz, 1 kHz modulation frequency, 2 kHz modulation +20 dBμ emf output level) to the RF block section TP A and GND. Adjust the distortion to the minimum using L301.
(E)	20 dB Electric Detective Adjustment	Set the signal generator so that the distortion and noise of telephone line output is 28%~35%. Adjust VR302 so that CN1 pin 9 is set the point that iterate high and low (tolerance ±4 dB).
(F)	Max. Modulation	Connect a modulation meter and signal generator (814.0125 MHz, 60 dBμV, unmodulation) in TPA and GND. Connect the AF oscillator (f=1 kHz, +6 dBm) to the telephone line output. Adjust VR303 to set the modulation to +4.5 kHz.
(G)	RX Adjustment	Apply a signal (f=1 kHz, −12 dBm) to the telephone line output by the AF oscillator. Adjust R86 to set the modulation to 3 kHz.

Note: After this adjustment, disconnect TP1, TP2 and V_{SS}.

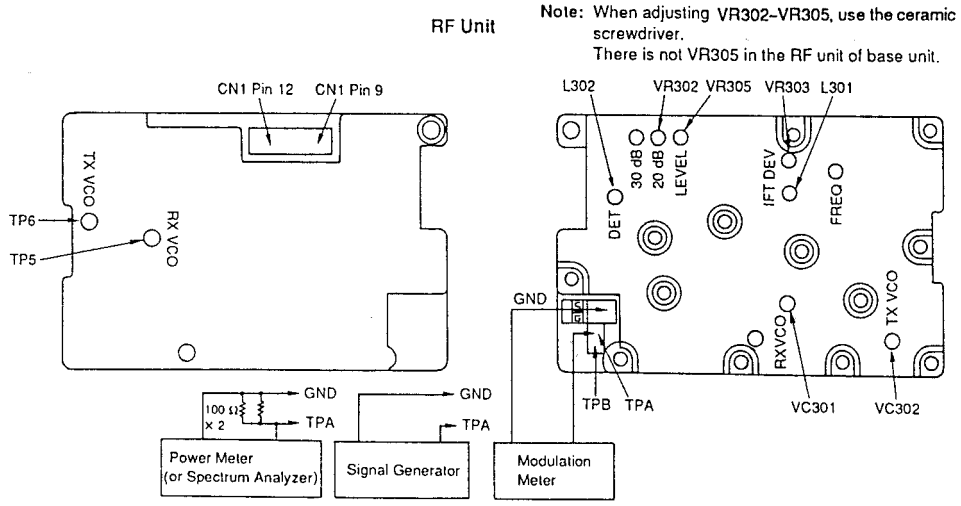


Fig. 17

BASE UNIT RX
PORTABLE HANDSET TX

CH		CH		CH		CH	
1	814.0125	11	814.2625	21	814.5125	31	814.7625
2	814.0375	12	814.2875	22	814.5375	32	814.7875
3	814.0625	13	814.3125	23	814.5625	33	814.8125
4	814.0875	14	814.3375	24	814.5875	34	814.8375
5	814.1125	15	814.3625	25	814.6125	35	814.8625
6	814.1375	16	814.3875	26	814.6325	36	814.8875
7	814.1625	17	814.4125	27	814.6625	37	814.9125
8	814.1875	18	814.4375	28	814.6875	38	814.9375
9	814.2125	19	814.4625	29	814.7125	39	814.9625
10	814.2375	20	814.4875	30	814.7375	40	814.9875

BASE UNIT TX
PORTABLE HANDSET RX

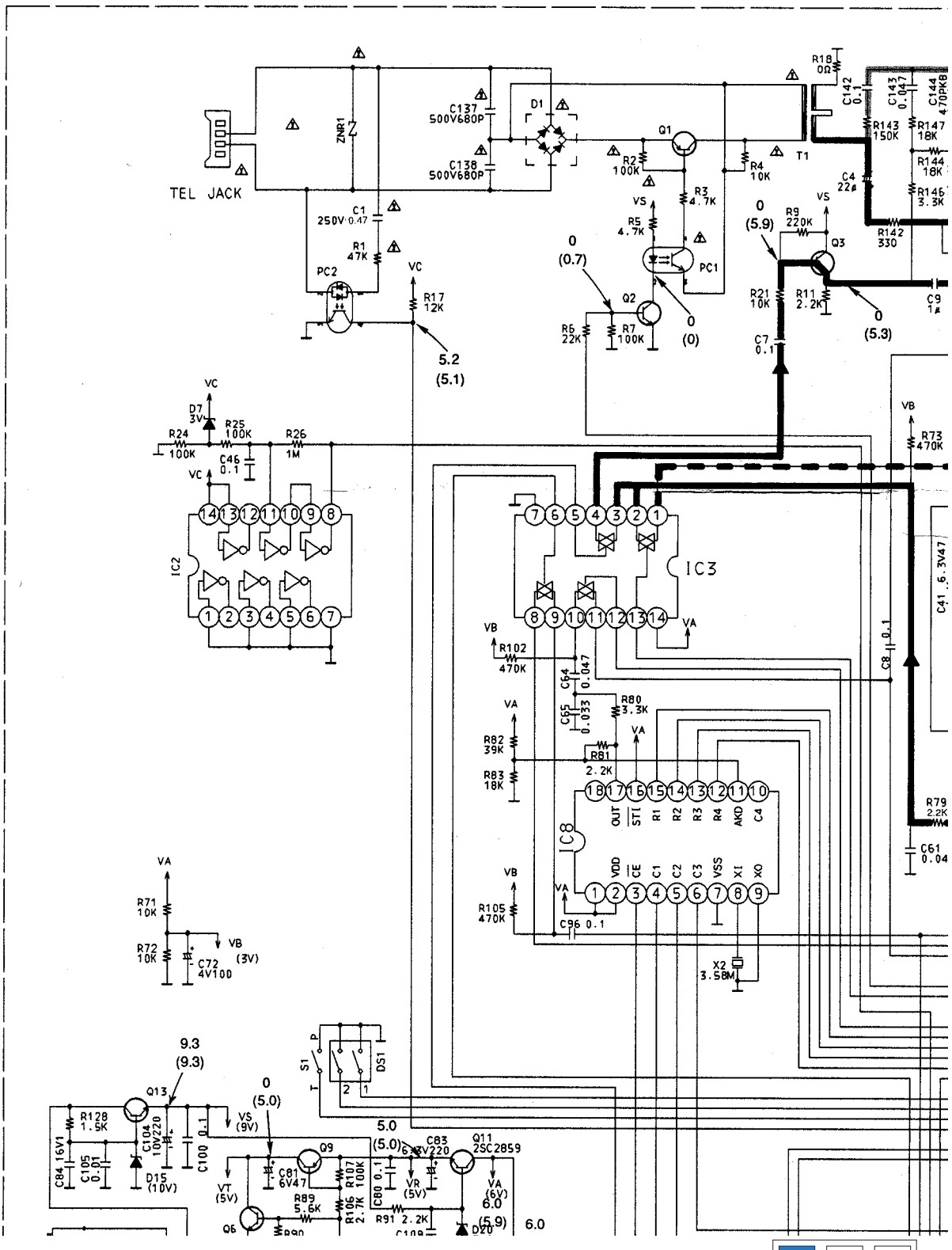
CH				CH			
1	904.0125	11	904.2625	21	904.5125	31	904.7625
2	904.0375	12	904.2875	22	904.5375	32	904.7875
3	904.0625	13	904.3125	23	904.5625	33	904.8125
4	904.0875	14	904.3375	24	904.5875	34	904.8375
5	904.1125	15	904.3625	25	904.6125	35	904.8625
6	904.1375	16	904.3875	26	904.6325	36	904.8875
7	904.1625	17	904.4125	27	904.6625	37	904.9125
8	904.1875	18	904.4375	28	904.6875	38	904.9375
9	904.2125	19	904.4625	29	904.7125	39	904.9625
10	904.2375	20	904.4875	30	904.7375	40	904.9875

IC1																																					
Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Standby	5.2	2.3	2.3	4.4	0	5.2	4.2	5.2	5.2	5.2	5.2	5.2	0	5.2	0	0	5.0	5.0	5.2	5.3	5.2	5.2	5.2	0	0	0	0	0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	0	0	5.2	5.2	5.2	0	0
Talk	0	2.3	2.3	4.4	0	5.2	0	5.1	5.1	5.1	5.1	5.1	5.1	0	5.1	0	0	0	5.2	5.3	5.1	5.2	5.1	0	0	5.1	0	0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0	0	5.1	5.1	5.1	0	0

IC6								
Pin / Mode	1	2	3	4	5	6	7	8
Standby	3.0	3.0	3.0	0	3.0	3.0	3.0	6.0
Talk	3.0	3.0	3.0	0	3.0	3.0	3.0	6.0

IC8																		
Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Standby	6.0	6.0	0	5.2	5.2	5.2	0	0	6.0	5.9	1.8	5.2	5.2	5.2	5.2	6.0	1.8	0
Talk	5.9	5.9	0	5.1	5.1	5.1	0	0	5.9	5.9	1.8	5.1	5.1	5.1	5.1	5.9	1.7	0

IC9								
Pin / Mode	1	2	3	4	5	6	7	8
Standby	0	4.9	0	0	0	5.2	0	4.9
Talk	0	4.9	0	0	0	5.1	0	4.9



SCHEMATIC DIAGRAM (KX-T7980BXH)

7 | 8 | 9 | 10 | 11 | 12 | 13

IC2

Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Standby	0	5.2	0	5.2	0	5.2	0	5.2	0	0	3.8	0	5.2	5.2
Talk	0	5.2	0	5.2	0	5.2	0	5.2	0	0	3.8	0	5.2	5.2

IC4

Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Standby	0	2.6	0.8	0	0	0.6	0	2.9	5.6	5.9	5.8	4.8	1.4	1.4
Talk	0	2.6	0	0	0	0.6	0	2.9	5.6	5.8	5.8	4.8	1.4	1.4

IC10

Pin / Mode	1	2	3	4	5	6	7	8
Standby	2.3	2.3	2.3	0	2.3	2.3	2.3	6.0
Talk	2.3	0	2.2	0	2.3	2.3	2.3	5.9

IC14

Pin / Mode	1	2	3	4	5	6	7	8
Standby	4.7	4.7	4.6	0	4.6	4.7	4.7	9.4
Talk	4.7	4.7	4.6	0	4.6	4.7	4.7	9.3

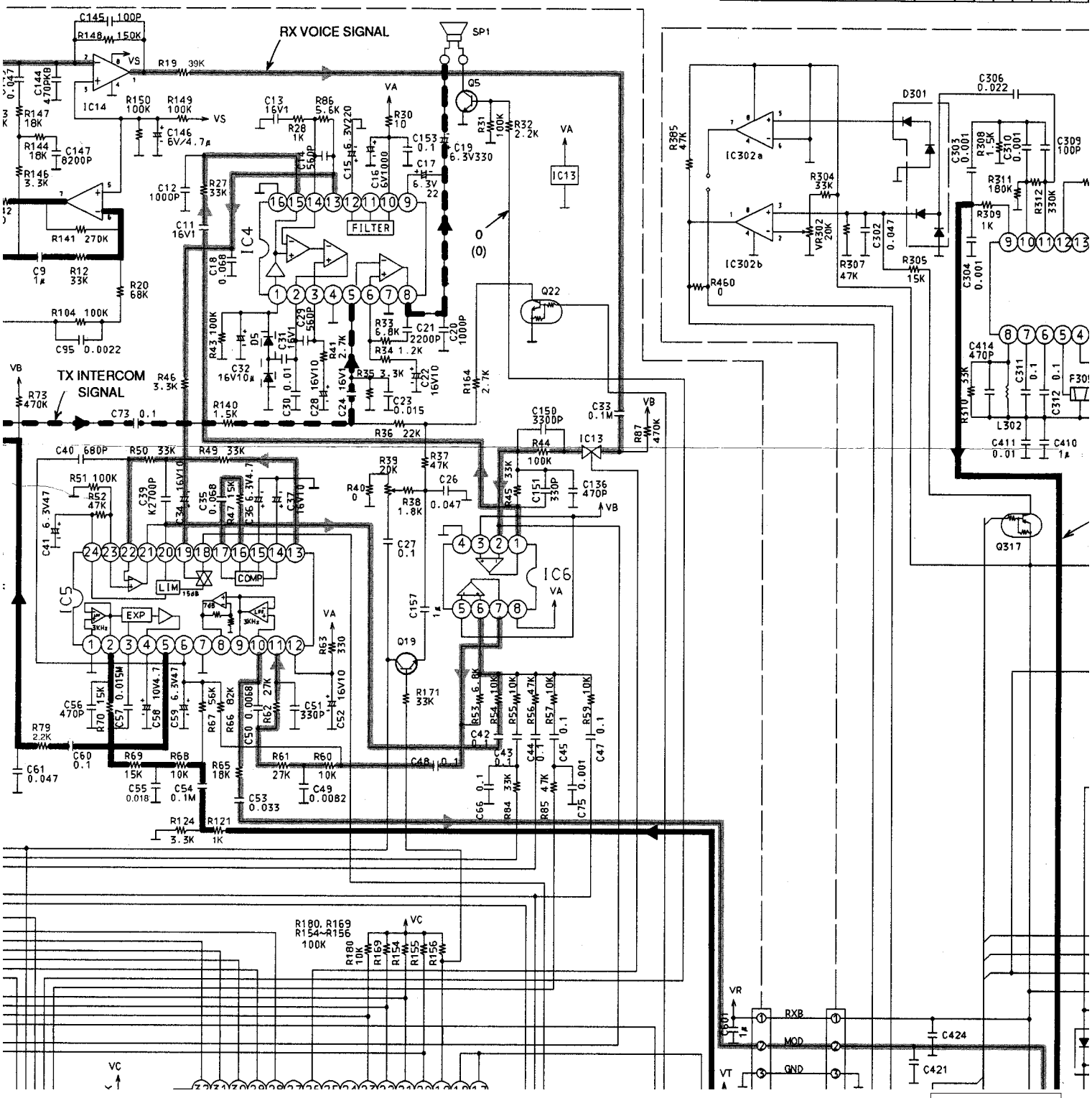
IC301

Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Standby	4.5	4.1	4.5	4.5	4.1	0	4.1	4.5	1.7	0.8	2.6	1.4	0	0	0	1.8
Talk	4.4	4.0	4.3	4.5	4.1	4.1	4.1	4.5	1.7	0.8	2.5	0	0	0	0	0

IC302

Pin / Mode	1	2	3	4	5	6	7	8
Standby	4.9	0.7	1.4	0	0.6	0.6	0	5.0
Talk	0	0.7	0	0	0.6	0.6	0	5.0

Pin / Mode	1	2	3	4	5	6	7
Standby	5.0	5.0	0	0	0	4.6	0.5
Talk	5.1	5.2	5.1	2.3	2.3	0	2.1



IC5

10	11	12	13	14	15	16	Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5.9	5.8	4.8	1.4	1.4	1.4	0	Standby	0	1.6	1.6	1.2	1.6	1.6	0	0	1.8	1.6	1.6	5.1	1.6	1.6	0.5	1.6	0	0	1.6	1.6	1.6	1.6	2.3	3.2
5.8	5.8	4.8	1.4	1.4	1.4	0	Talk	0	1.6	1.6	0.6	1.6	1.6	0	0	1.8	1.6	1.6	5.0	1.6	1.6	0.7	1.6	1.6	0	1.6	1.6	1.6	1.6	2.3	3.4

IC303

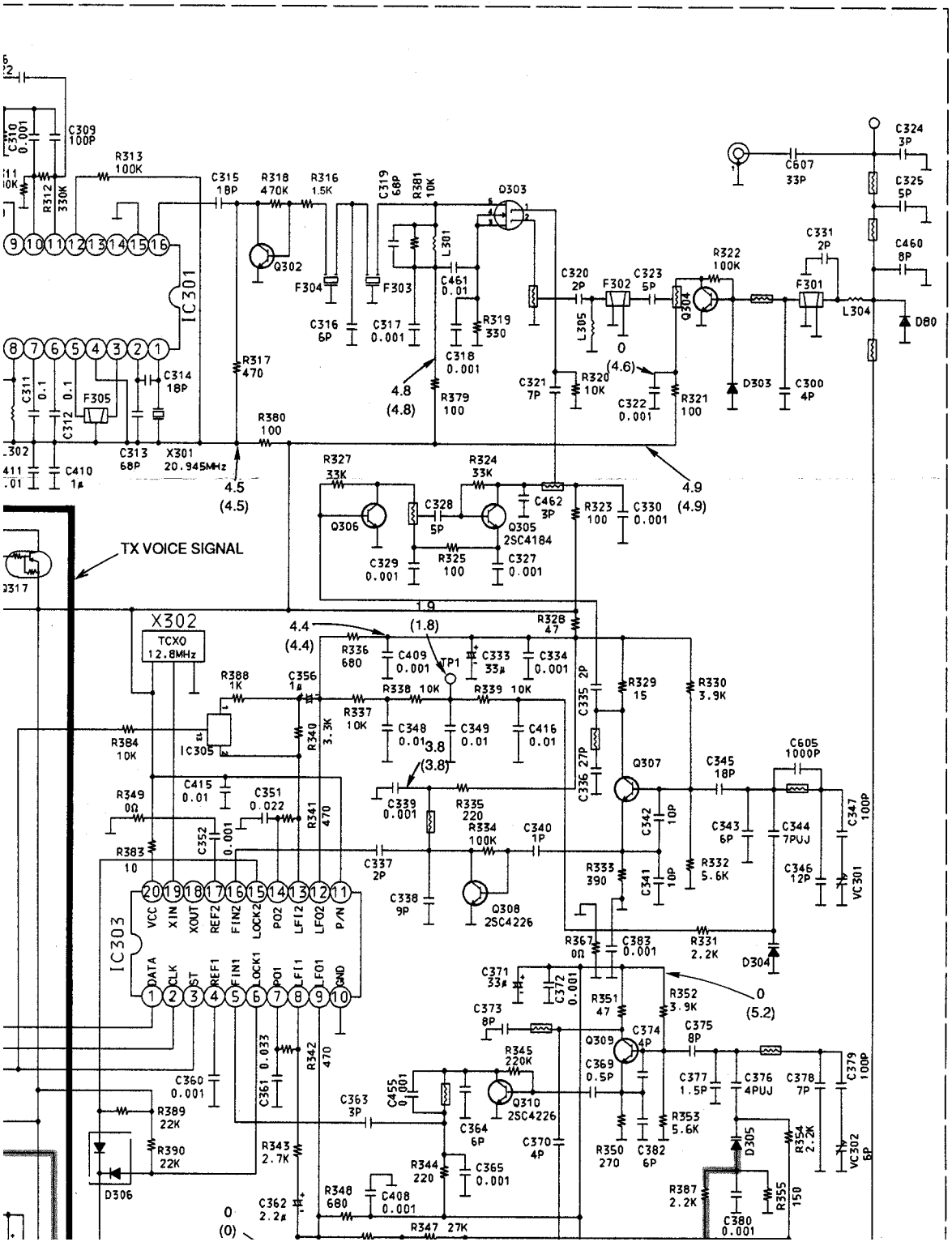
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0	0	0	4.6	0.5	0.5	0	0	5.0	0	0	0	0	2.4	2.4	1.8	1.2	4.8
2.1	2.3	2.3	0	2.1	2.1	0	0	5.0	1.7	2.0	2.0	0	2.4	2.4	1.7	0	4.6

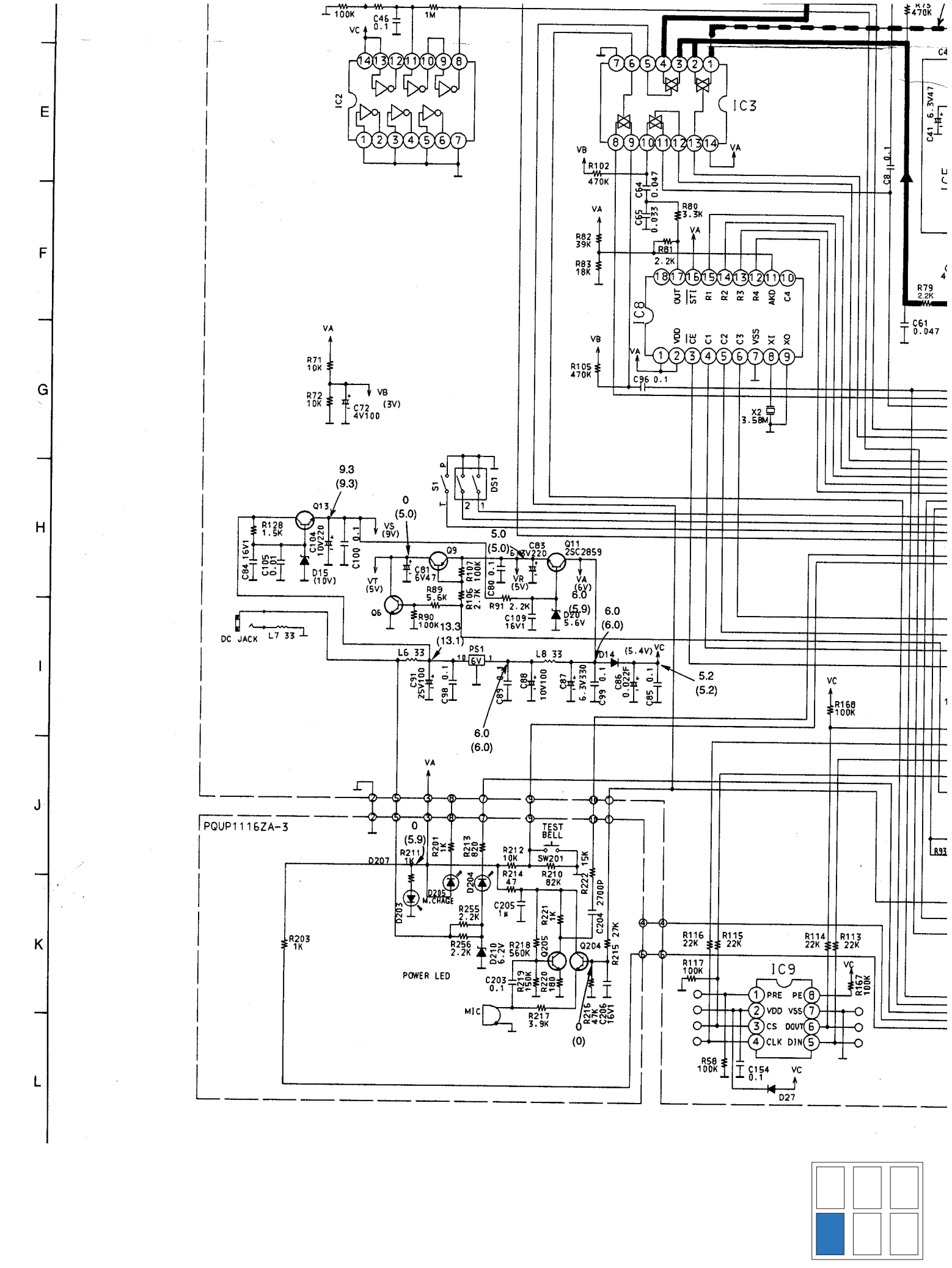
IC304

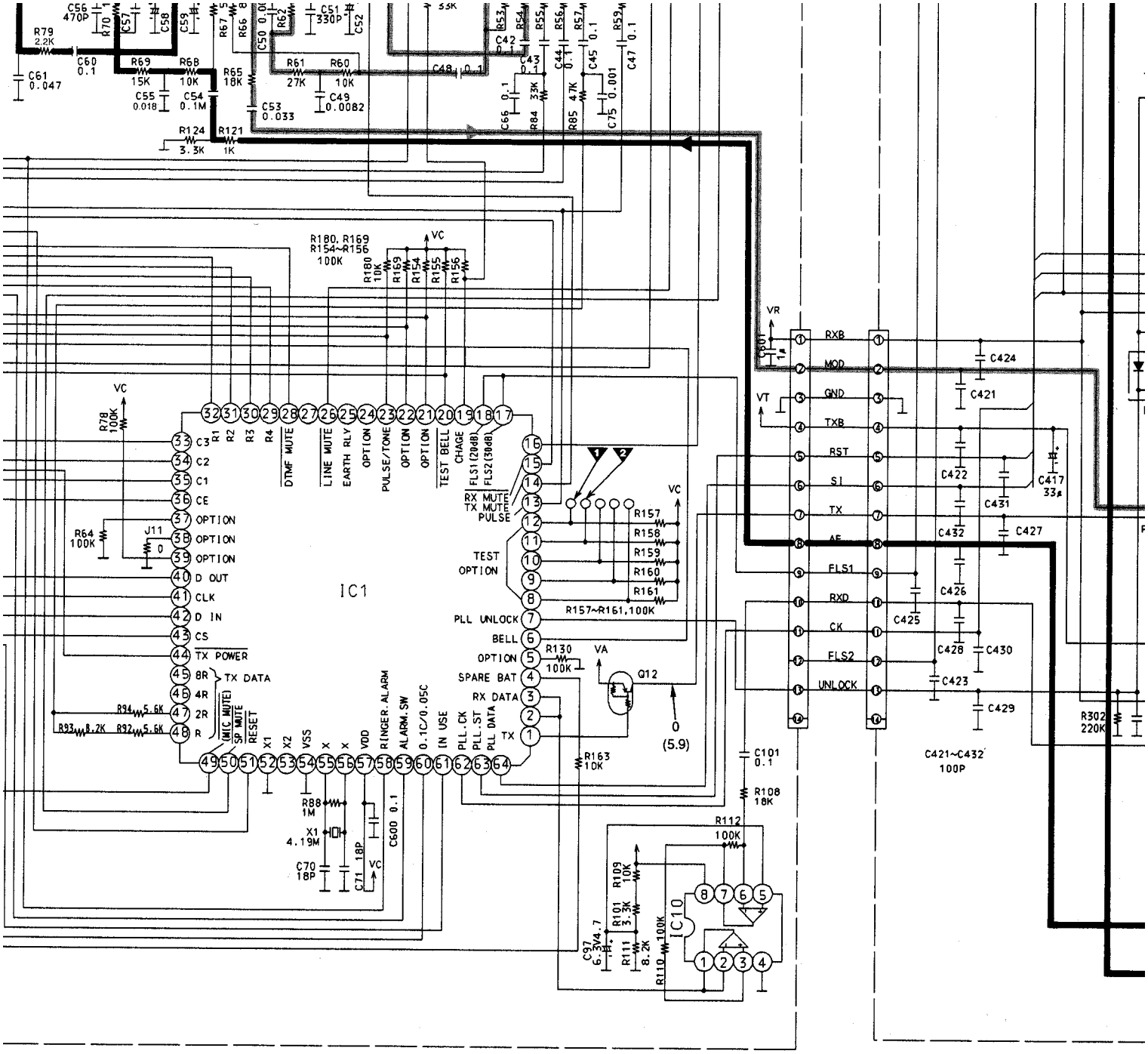
Pin / Mode	1	2	3	4	5	6	7	8
Standby	2.3	2.3	2.2	0	0	0	0	0
Talk	2.2	2.2	2.2	0	2.2	2.3	2.3	5.0

CN301

Pin / Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Standby	5.0	0	0	5.0	0	5.0	5.9	2.2	4.9	2.2	5.0	0	4.1	0
Talk	5.0	0	0	5.0	5.1	5.1	5.9	2.2	0	2.2	5.2	0	0	0



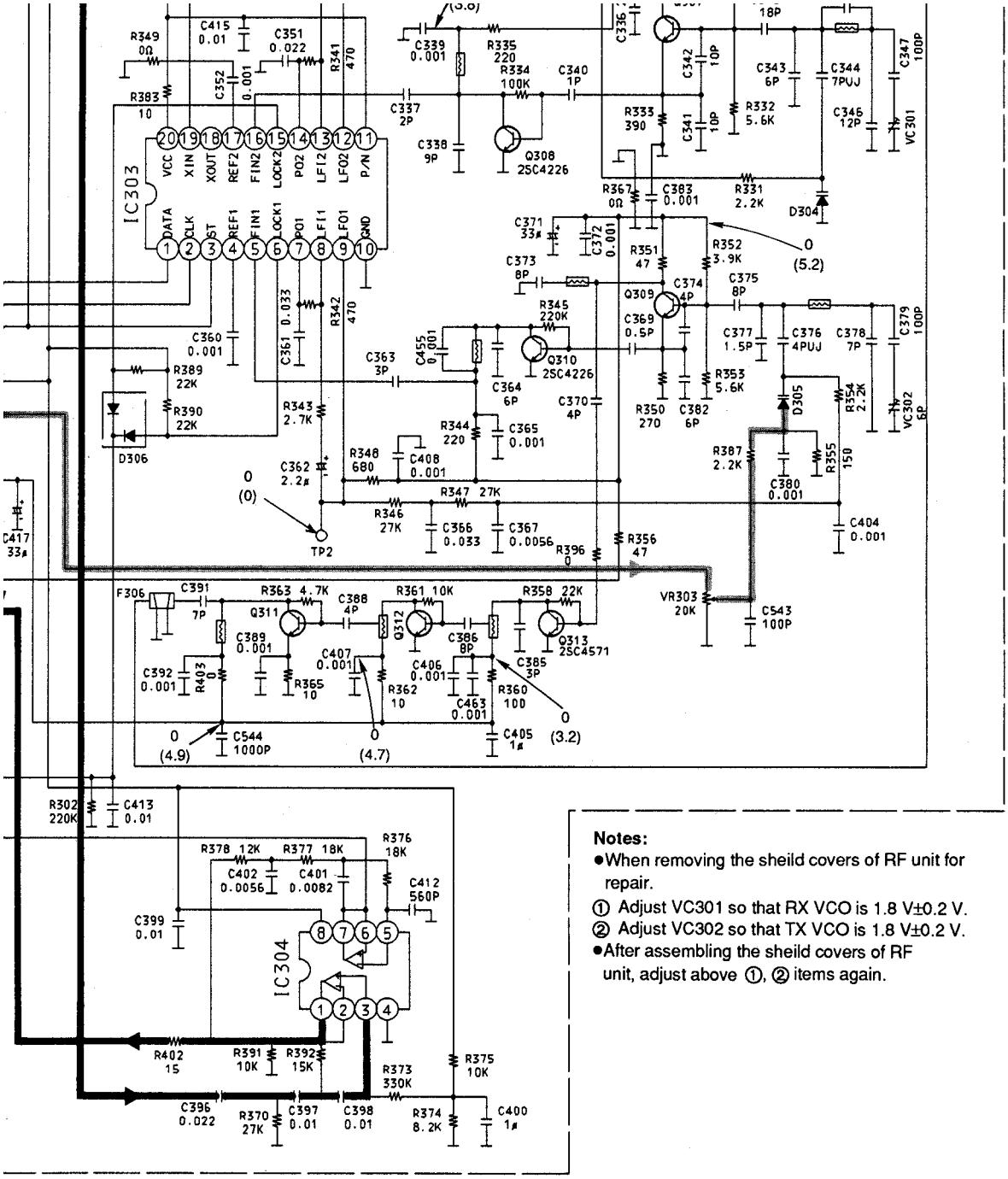

PQUP1116ZA-3
IC2
IC3
IC8
IC9
Q13
Q9
Q11 2SC2859
Q6
Q204
Q205
D15 (10V)
D20 5.6V
D204
D205 M.CHAGE
D210 6.2V
D27
PS1 6V
SW201
TEST BELL
POWER LED
MIC
DC JACK
X2 3.58M
VA
VB
VC
VS (9V)
VT (5V)
VR (5V)
9.3
(9.3)
0
(5.0)
5.0
(5.0)
6.0
(6.0)
13.3
(13.1)
5.2
(5.2)
0
(5.9)
0
(0)
PRE
VDD
CS
CLK
VSS
DOUT
DIN
PE



odified at any time
ology.

Important Safety Notice

The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards.
When servicing, it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of schematic.



Notes:

- When removing the sheild covers of RF unit for repair.

① Adjust VC301 so that RX VCO is 1.8 V±0.2 V.

② Adjust VC302 so that TX VCO is 1.8 V±0.2 V.

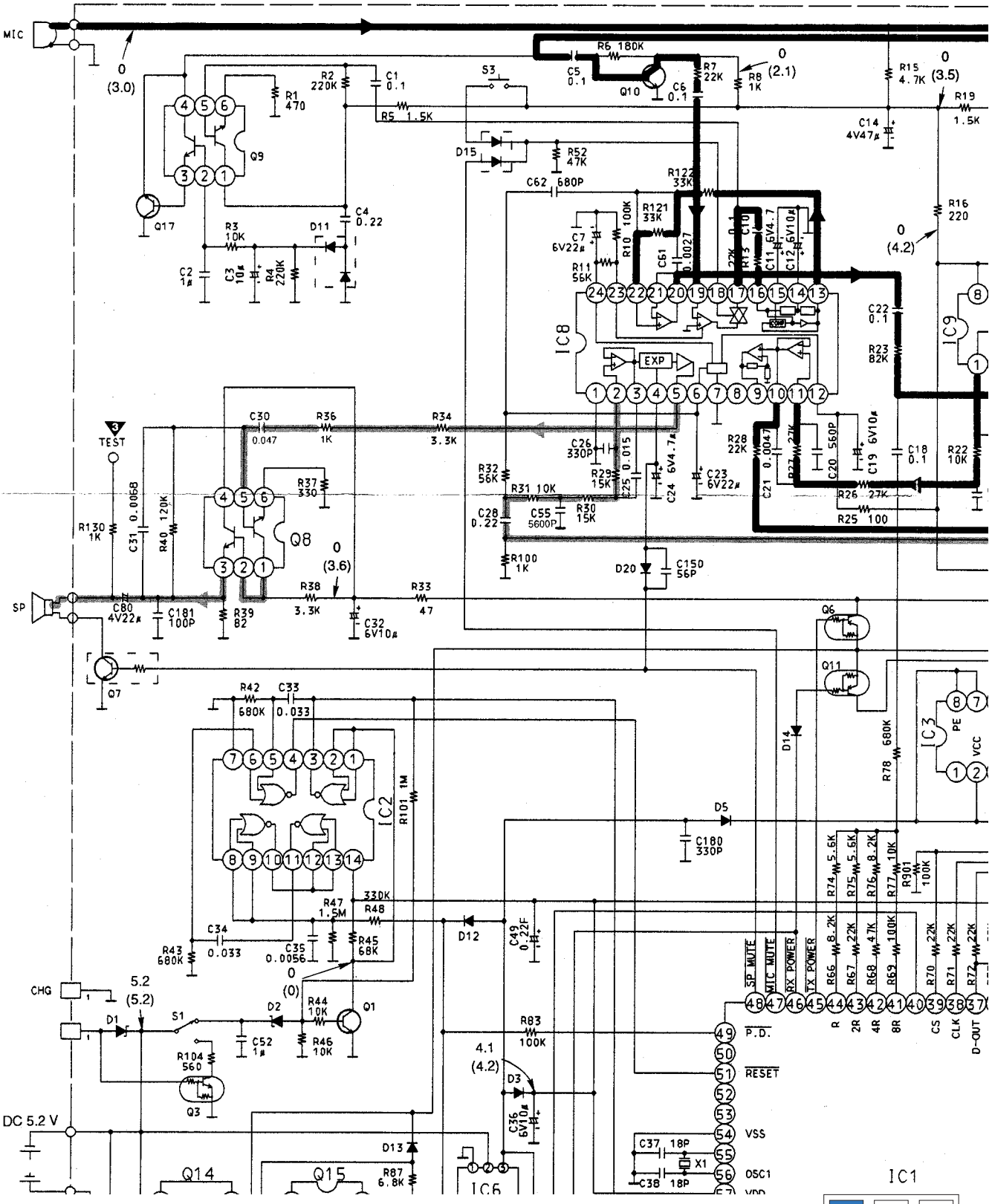
- After assembling the sheild covers of RF unit, adjust above ①, ② items again.

IC2														
Mode \ Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Standby	0	0	4.1	4.1	0	0	0	3.5	3.5	0	4.1	0	0	4.1
Talk	0	0	4.2	4.2	0	0	0	3.5	3.5	0	4.2	0	0	4.2

IC4								
Mode \ Pin	1	2	3	4	5	6	7	8
Standby	1.0	1.0	0	0	0	0	0	0
Talk	1.5	1.5	1.5	0	1.5	0	1.5	4.0

IC6			
Mode \ Pin	1	2	3
Standby	0	5.2	4.5
Talk	0	5.2	4.5

Mode \ Pin	1	2	3
Standby	0	0	0
Talk	0	1.6	1.6



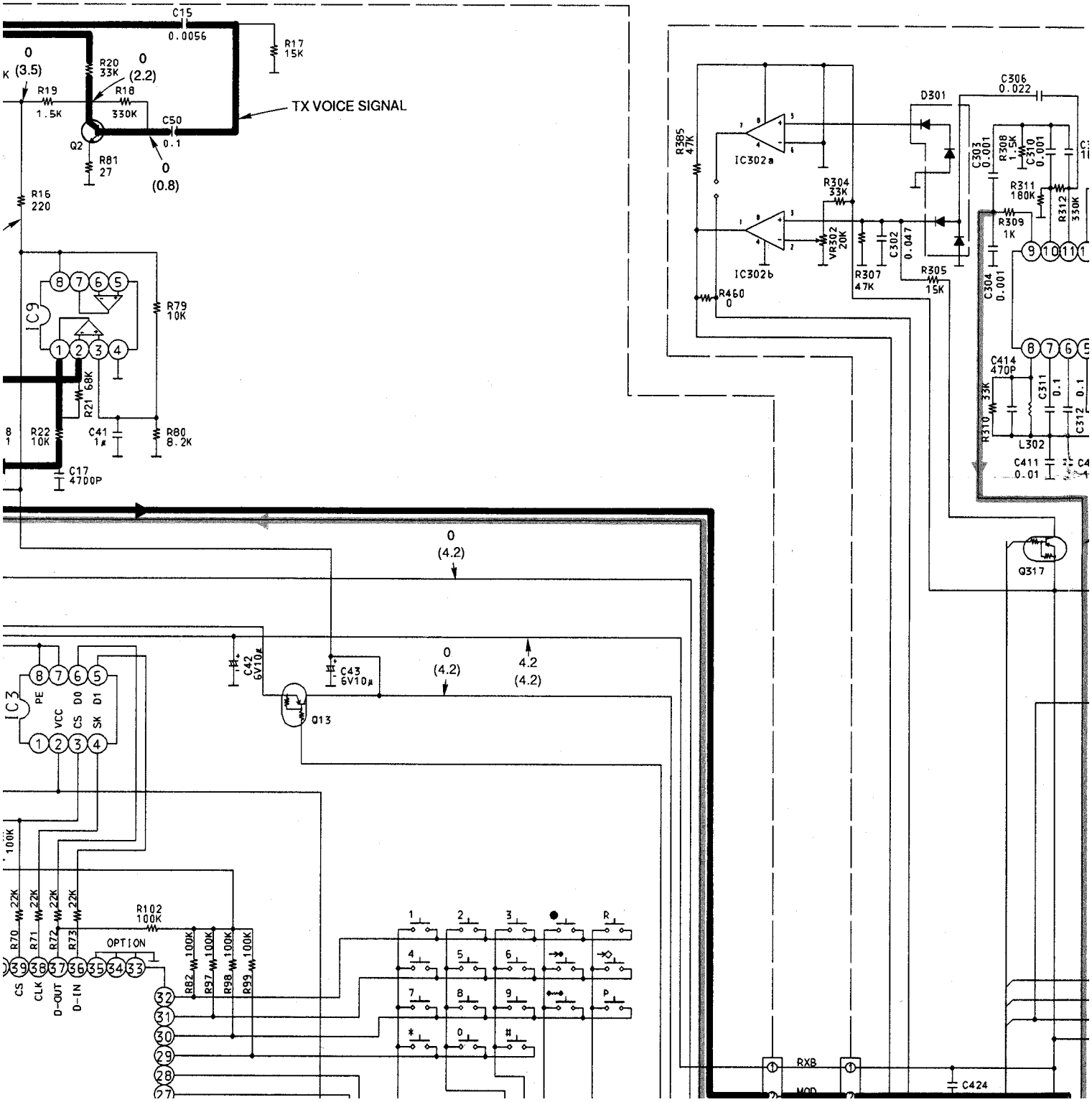
SCHEMATIC DIAGRAM (KX-T7980BXR)

7 | 8 | 9 | 10 | 11 | 12 | 13

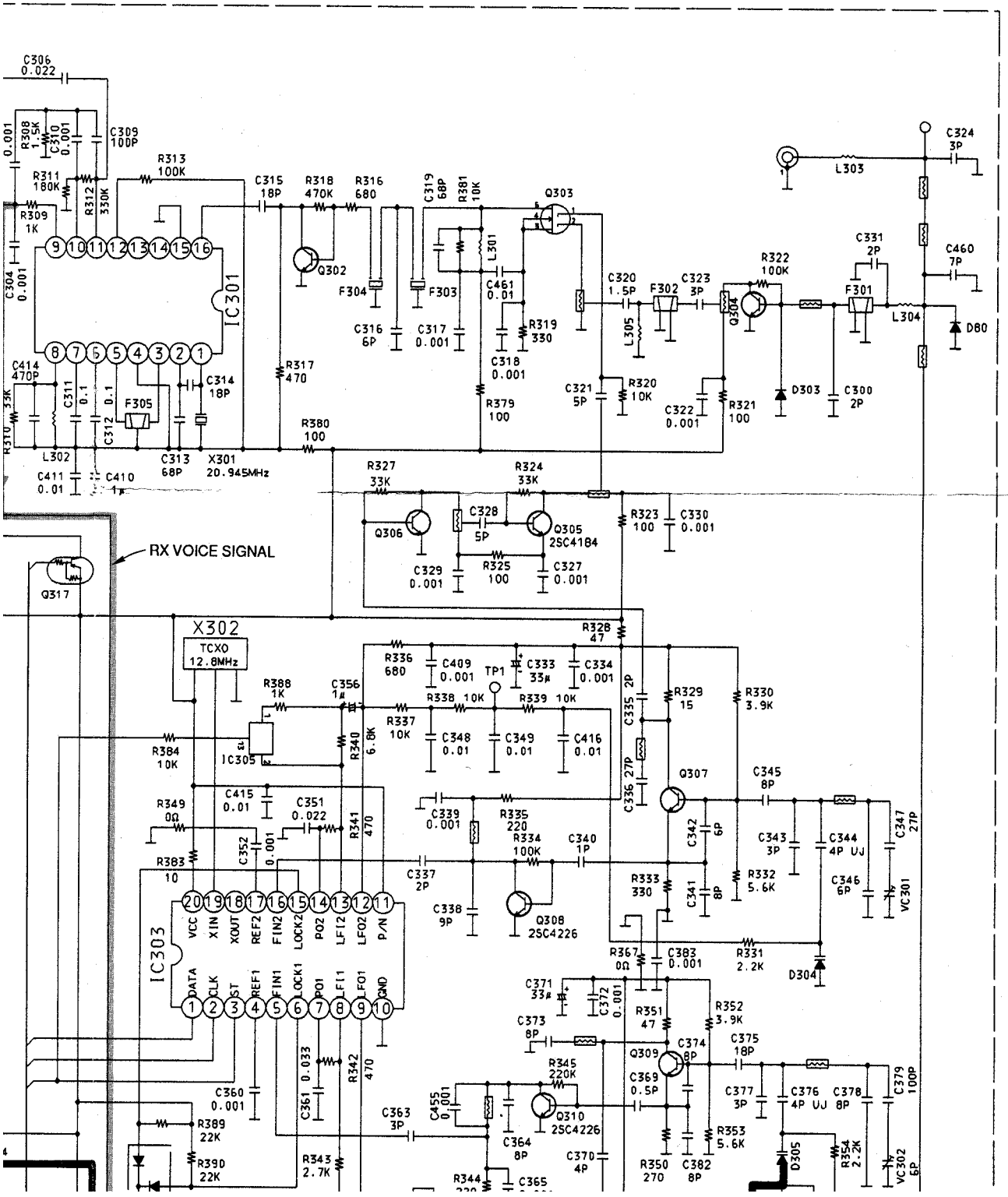
IC8																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0.25	0	0	0	0.25			0	0	0	0	0	0	0	0	0
0	1.6	1.6	1.2	1.6	1.6	0	0	2.4	1.8	1.8	0.4	1.6	1.6	0	1.6	0	0	1.6	1.6	1.6	1.6	2.1	3.4

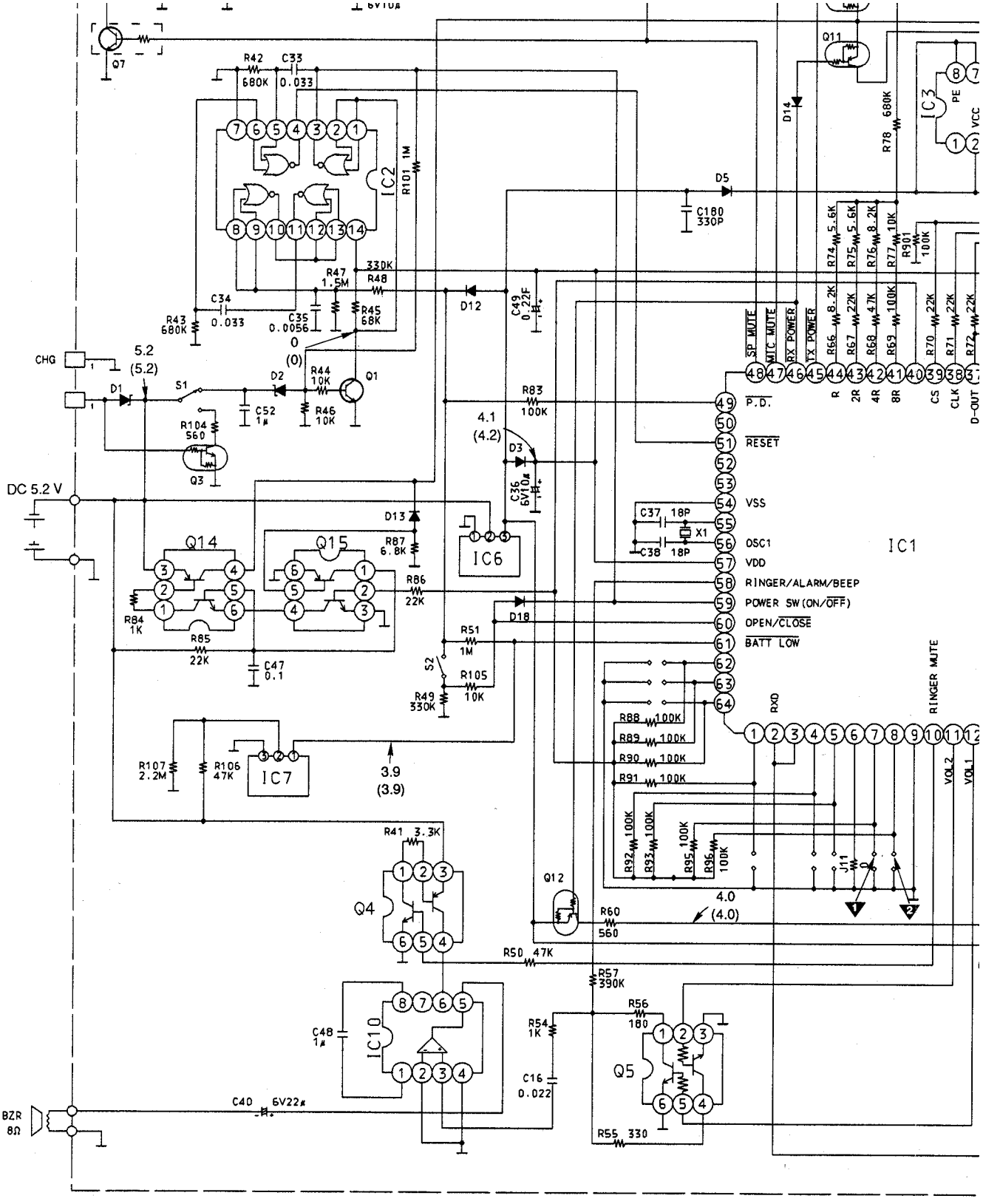
IC9								
Mode \ Pin	1	2	3	4	5	6	7	8
Standby	0	0	0	0	0	0	0	0
Talk	1.9	1.9	1.9	0	1.1	1.1	3.0	4.2

IC10									
Mode \ Pin	1	2	3	4	5	6	7	8	Mode \ Pin
Standby	0	0	0	0	0.3	0	0	0.2	Standby
Talk	0.3	0	0	0	0.3	0.3	0	0	Talk



		IC301																IC302								Q8						
7	8	Mode \ Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Mode \ Pin	1	2	3	4	5	6	7	8	Mode \ Pin	1	2	3	4	5	6
0	0.2	Standby	3.6	3.1	3.6	3.7	3.3	3.3	3.3	3.7	1.4	0.8	2.6	1.3	0	0.7	0	1.8	Standby	4.1	0.6	1.0	0	0	1.1	3.7	0	Standby	0	0	0	0	0	0
0	0	Talk	3.6	3.0	3.6	3.6	3.3	3.3	3.3	3.6	1.4	0.8	2.6	1.3	0	0.8	0	1.8	Talk	4.1	0.6	1.0	0	0	1.1	3.7	4.1	Talk	1.6	1.6	1.0	3.6	0.8	0

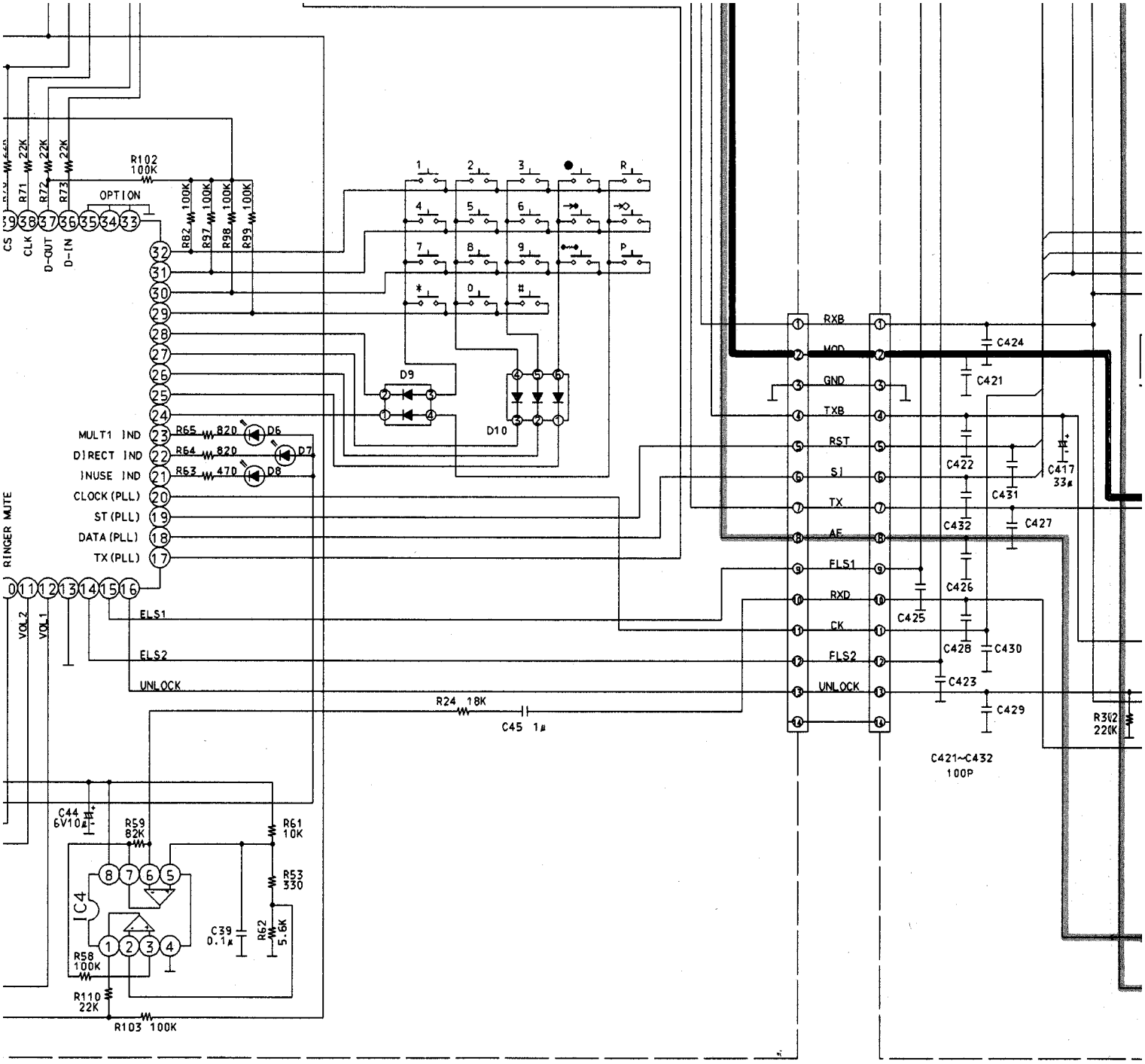




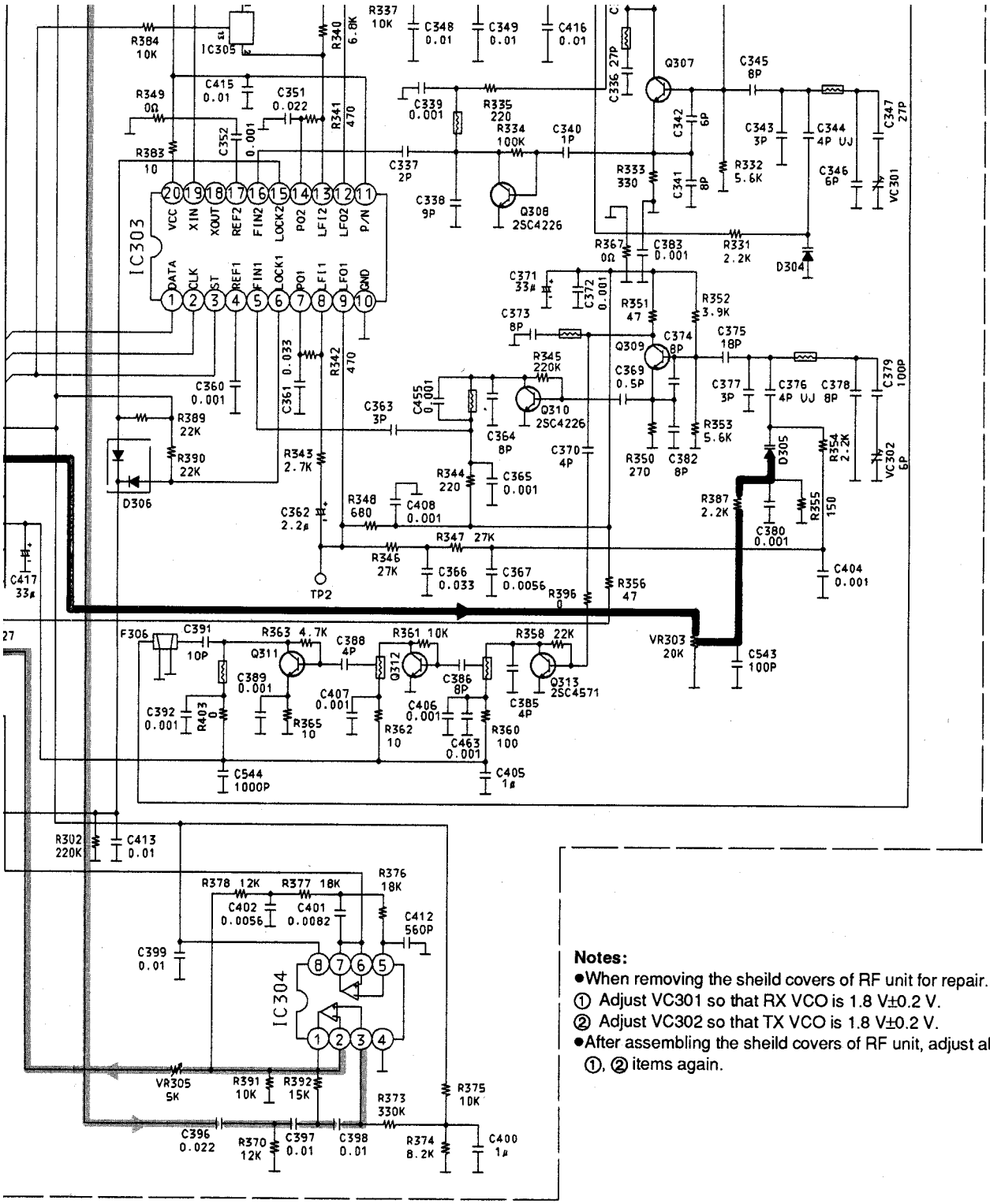
Notes: 1. S1: Power/Ringer Switch
2. S2: Open/Close detect switch
3. S3: Mute Power Switch

DC voltage measurements are taken with an electronic voltmeter from the negative voltage line.
STAND BY position. ( ): Talk position.

This schematic with the develo



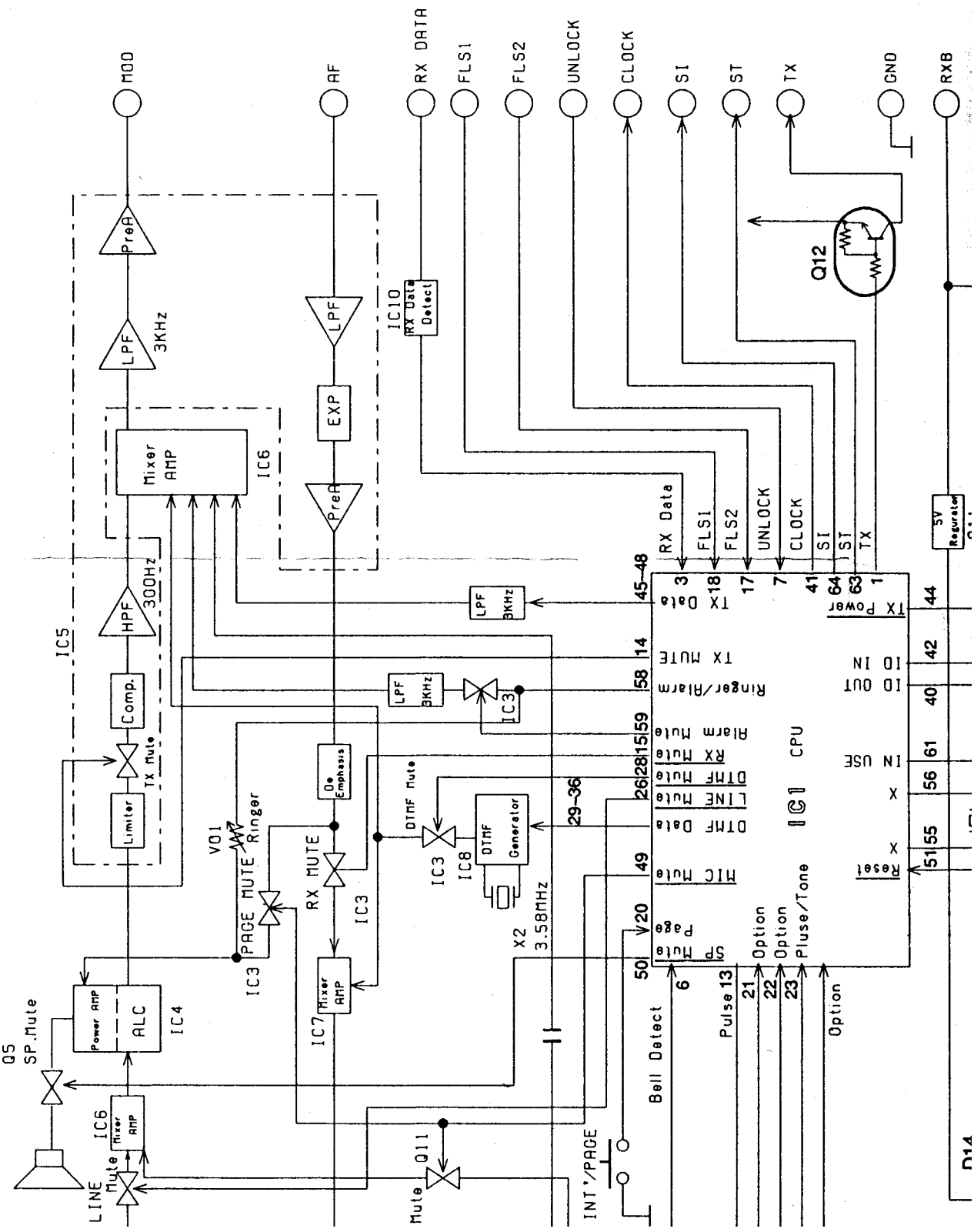
ematic diagram may be modified at any time
development of new technology.



Notes:

- When removing the sheild covers of RF unit for repair.
  ① Adjust VC301 so that RX VCO is 1.8 V±0.2 V.
  ② Adjust VC302 so that TX VCO is 1.8 V±0.2 V.
- After assembling the sheild covers of RF unit, adjust above ①, ② items again.

BLOCK DIAGRAM (BASE UNIT)
(Main P.C. Board)



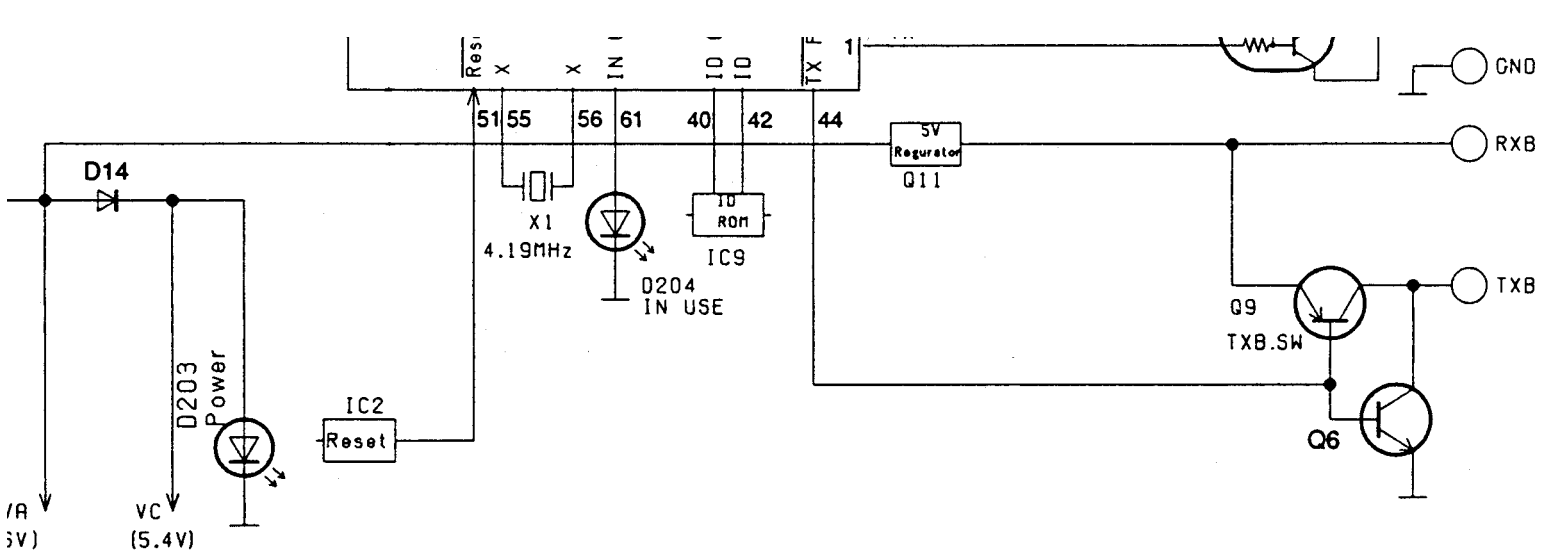
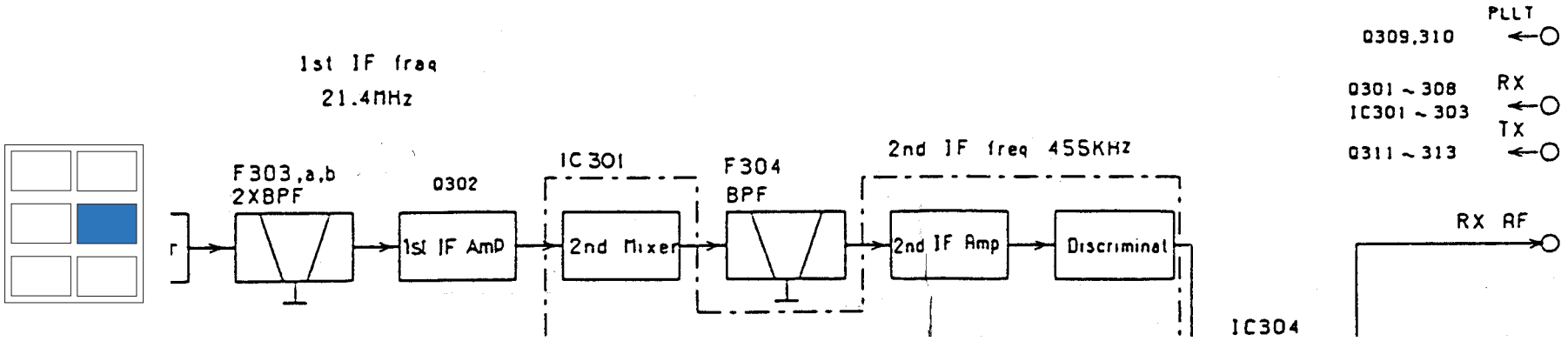
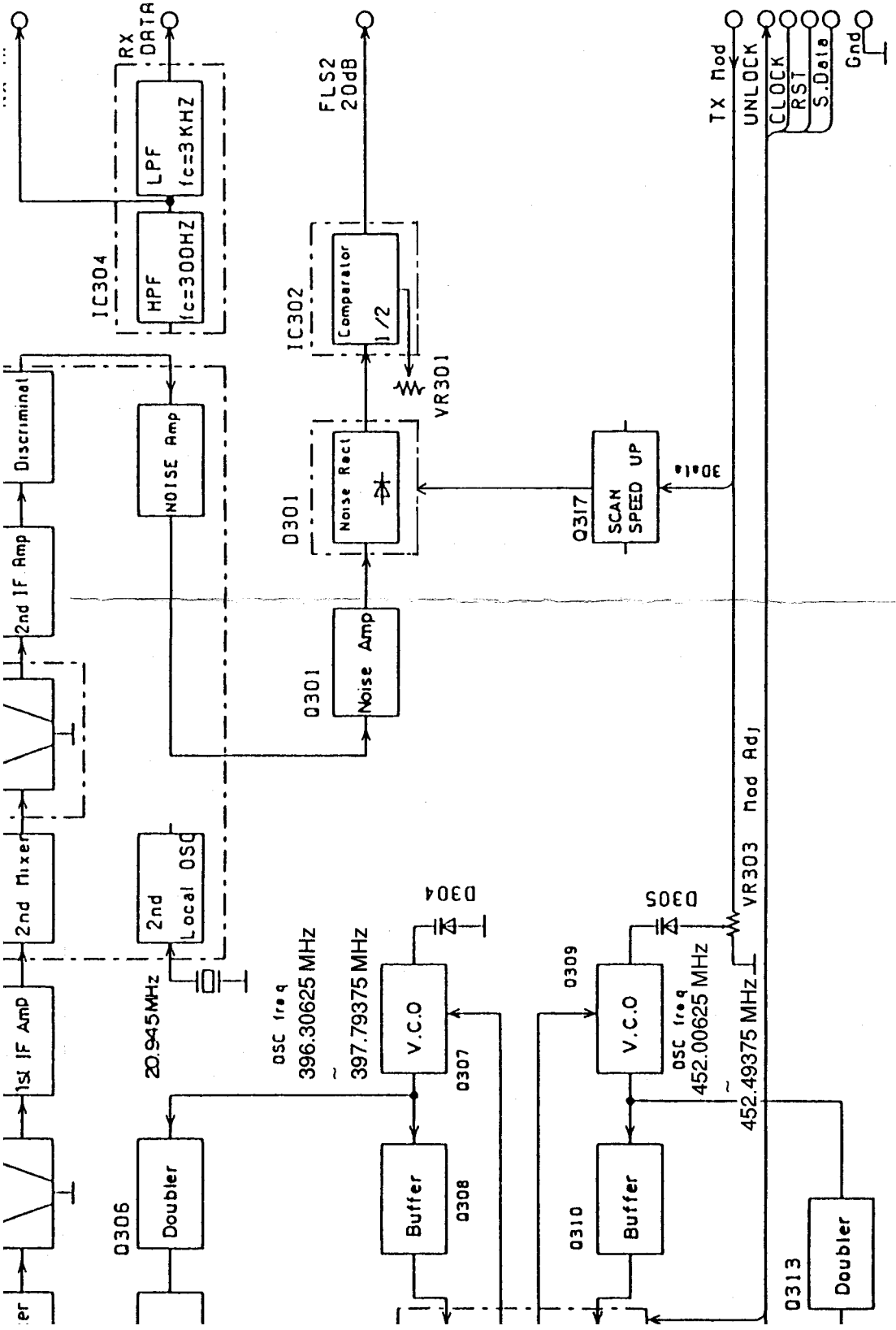
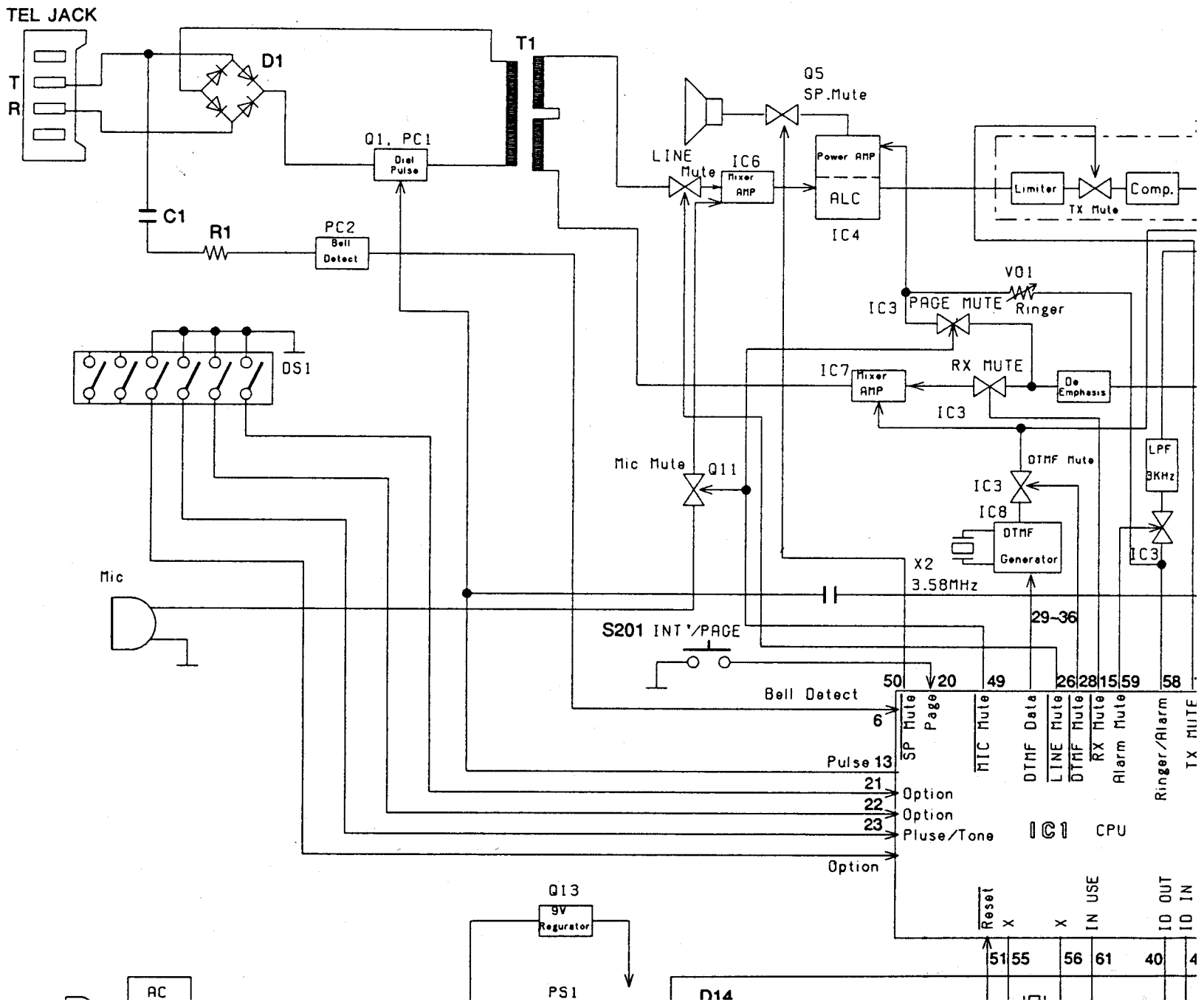

51
55
56
61
40
42
44
1
GND
RXB
TXB
5V Regurator
Q11
D14
X1
4.19MHz
ID ROM
IC9
D204
IN USE
Q9
TXB.SW
Q6
D203
Power
IC2
Reset
VC
(5.4V)

Fig. 18


1st IF freq
21.4MHz
F303,a,b
2XBPF
Q302
1st IF Amp
IC301
2nd Mixer
F304
BPF
2nd IF freq 455KHz
2nd IF Amp
Discriminat
IC304
PLLT
Q309,310
Q301 ~ 308
IC301 ~ 303
RX
TX
Q311 ~ 313
RX AF

BLOCK DIAGRAM (BASE UNIT)
(RF Unit)




TEL JACK
T
R
D1
T1
Q1, PC1
Dial Pulse
C1
R1
PC2
Bell Detect
Q5
SP.Mute
LINE Mute
IC6
Mixer AMP
Power AMP
ALC
IC4
Limiter
TX Mute
Comp.
VO1
IC3
PAGE MUTE
Ringer
DS1
IC7
Mixer AMP
RX MUTE
De Emphasis
IC3
Mic Mute
Q11
DTMF Mute
IC3
IC8
DTMF Generator
LPF 3KHz
IC3
X2
3.58MHz
Mic
29~36
S201 INT'/PAGE
Bell Detect
50
20
49
26
28
15
59
58
6
SP Mute
Page
MIC Mute
DTMF Data
LINE Mute
DTMF Mute
RX Mute
Alarm Mute
Ringer/Alarm
TX MUTE
Pulse 13
21
Option
22
Option
23
Pluse/Tone
IC1 CPU
Option
Q13
9V Regurator
PS1
Reset
X
X
IN USE
ID OUT
ID IN
51
55
56
61
40
AC
D14

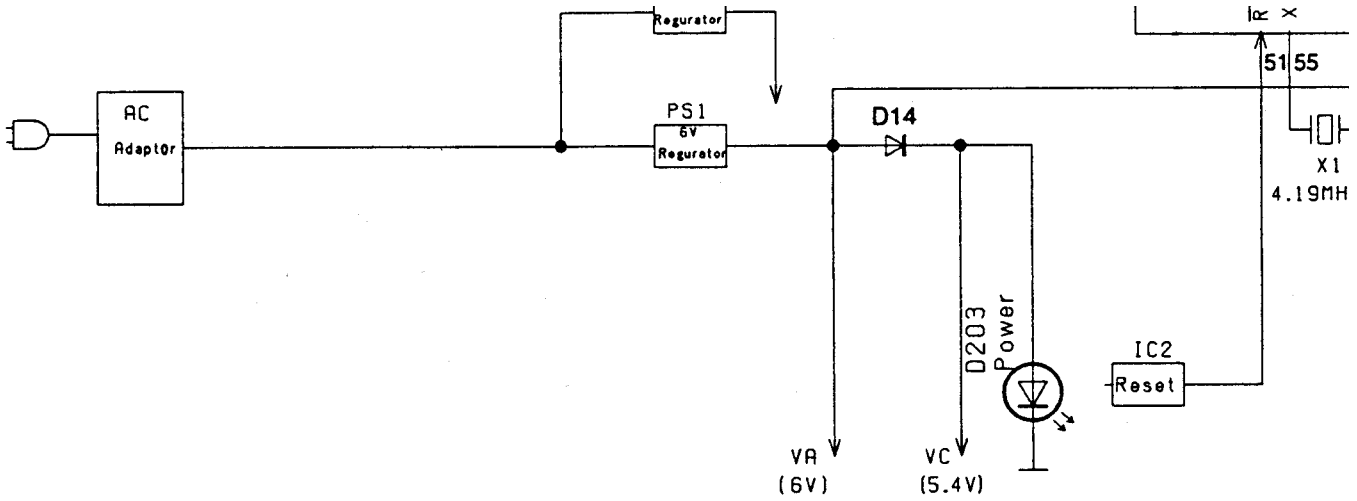
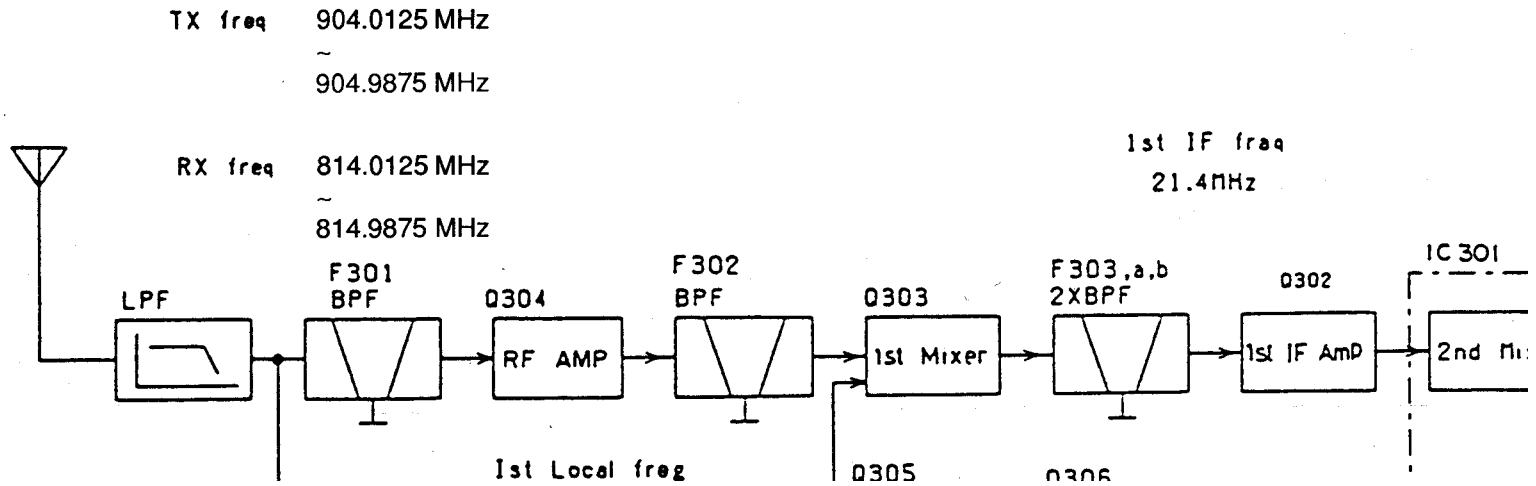
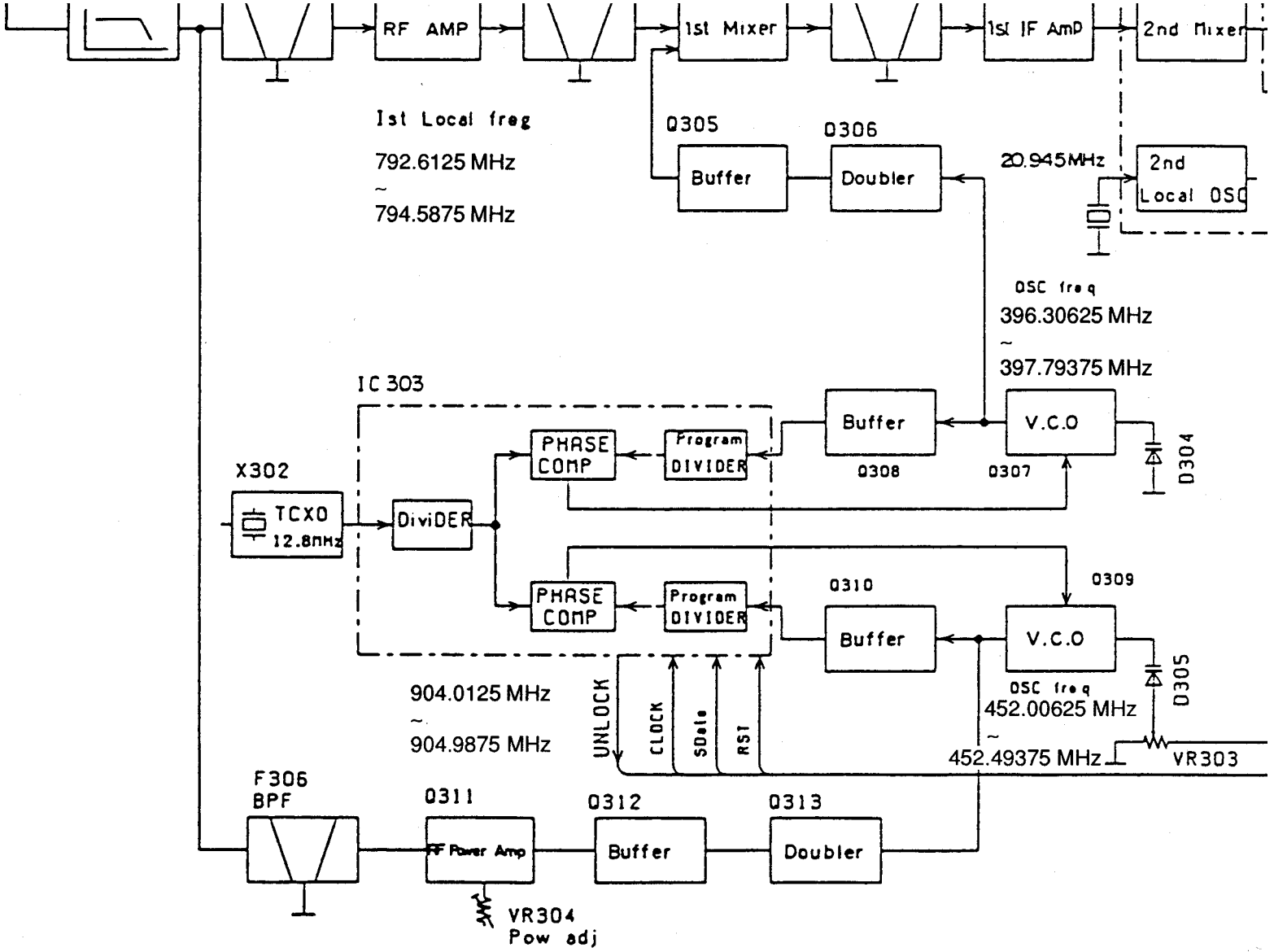

Regurator
AC
Adaptor
PS1
6V
Regurator
D14
51
55
X1
4.19MH
D203
Power
IC2
Reset
VA
(6V)
VC
(5.4V)

Fig. 18


TX freq
904.0125 MHz
~
904.9875 MHz
RX freq
814.0125 MHz
~
814.9875 MHz
1st IF freq
21.4MHz
LPF
F301
BPF
Q304
RF AMP
F302
BPF
Q303
1st Mixer
F303,a,b
2XBPF
Q302
1st IF AmP
IC 301
2nd Mi
1st Local freq
Q305
Q306


RF AMP
1st Mixer
1st IF Amp
2nd Mixer
1st Local freq
792.6125 MHz
~
794.5875 MHz
Q305
Q306
Buffer
Doubler
20.945MHz
2nd Local OSC
OSC freq
396.30625 MHz
~
397.79375 MHz
IC 303
Buffer
V.C.O
PHASE COMP
Program DIVIDER
Q308
Q307
D304
X302
TCXO 12.8MHz
DiviDER
Q310
Q309
904.0125 MHz
~
904.9875 MHz
UNLOCK
CLOCK
SData
RST
OSC freq
452.00625 MHz
~
452.49375 MHz
D305
VR303
F306 BPF
Q311
Q312
Q313
RF Power Amp
Buffer
Doubler
VR304
Pow adj

BLOCK DIAGRAM (P
(Main P.C

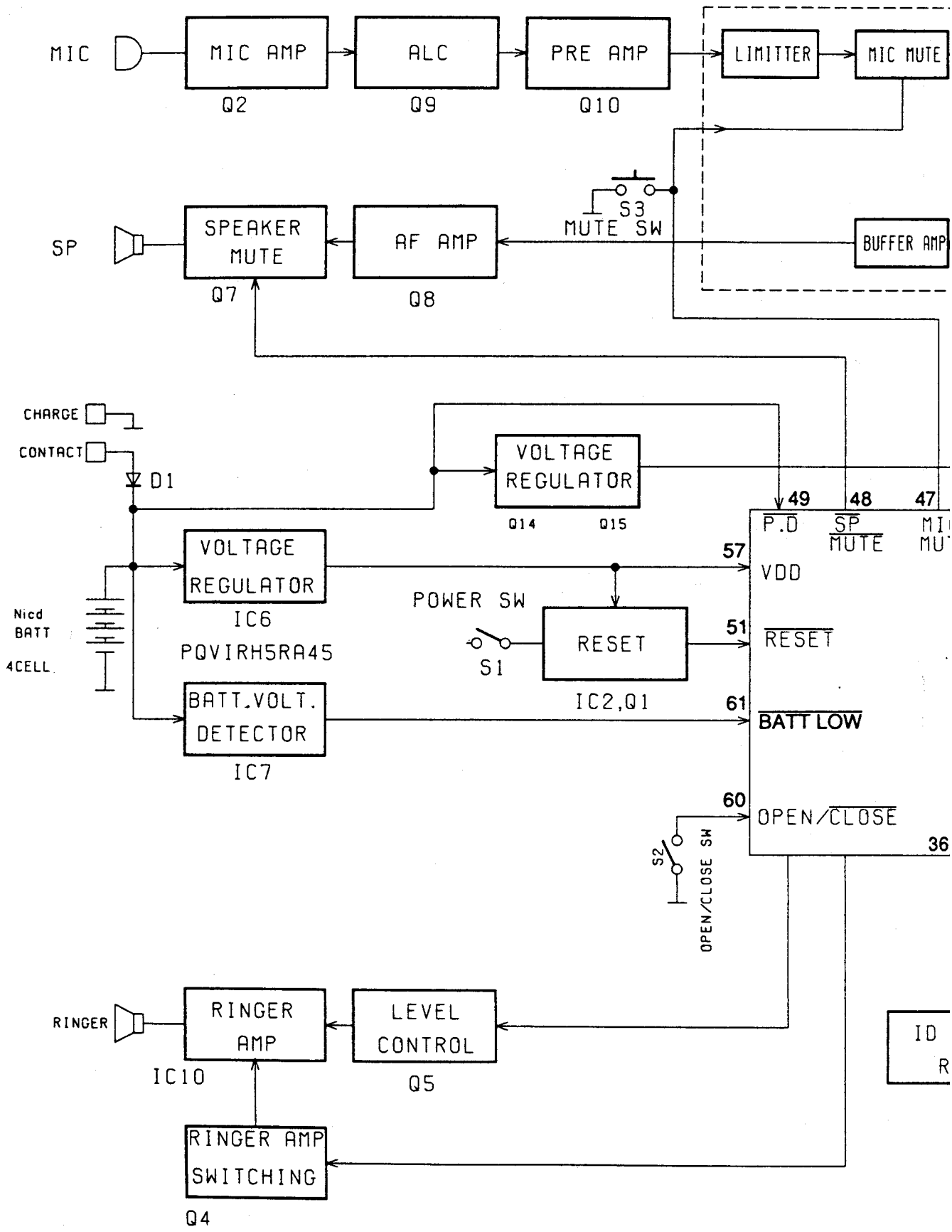


Fig. 33

ıGRAM (PORTABLE HANDSET)
(Main P.C. Board)

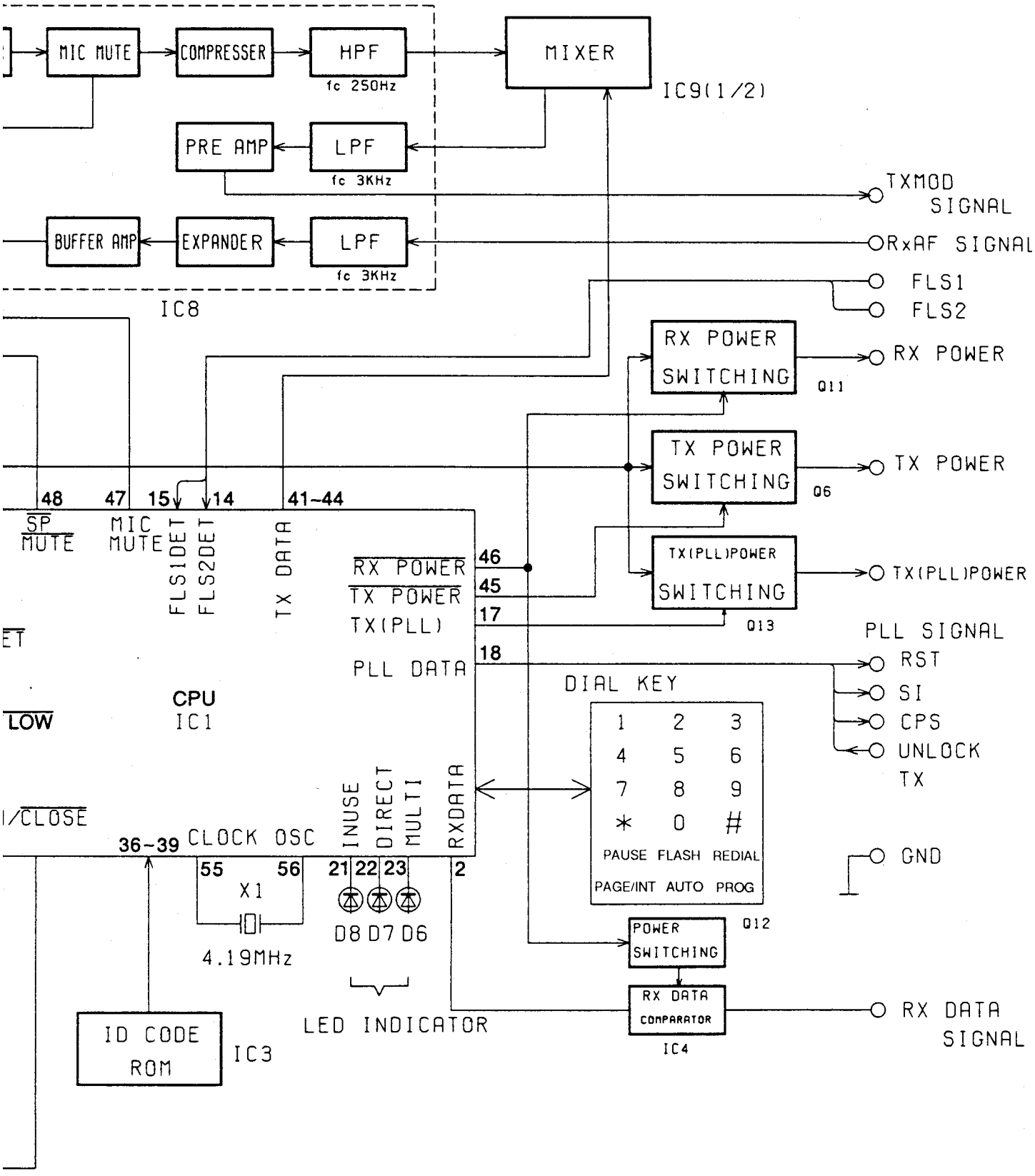


Fig. 33

BLOCK DIAGRAM (PORTABLE
(RF Unit)

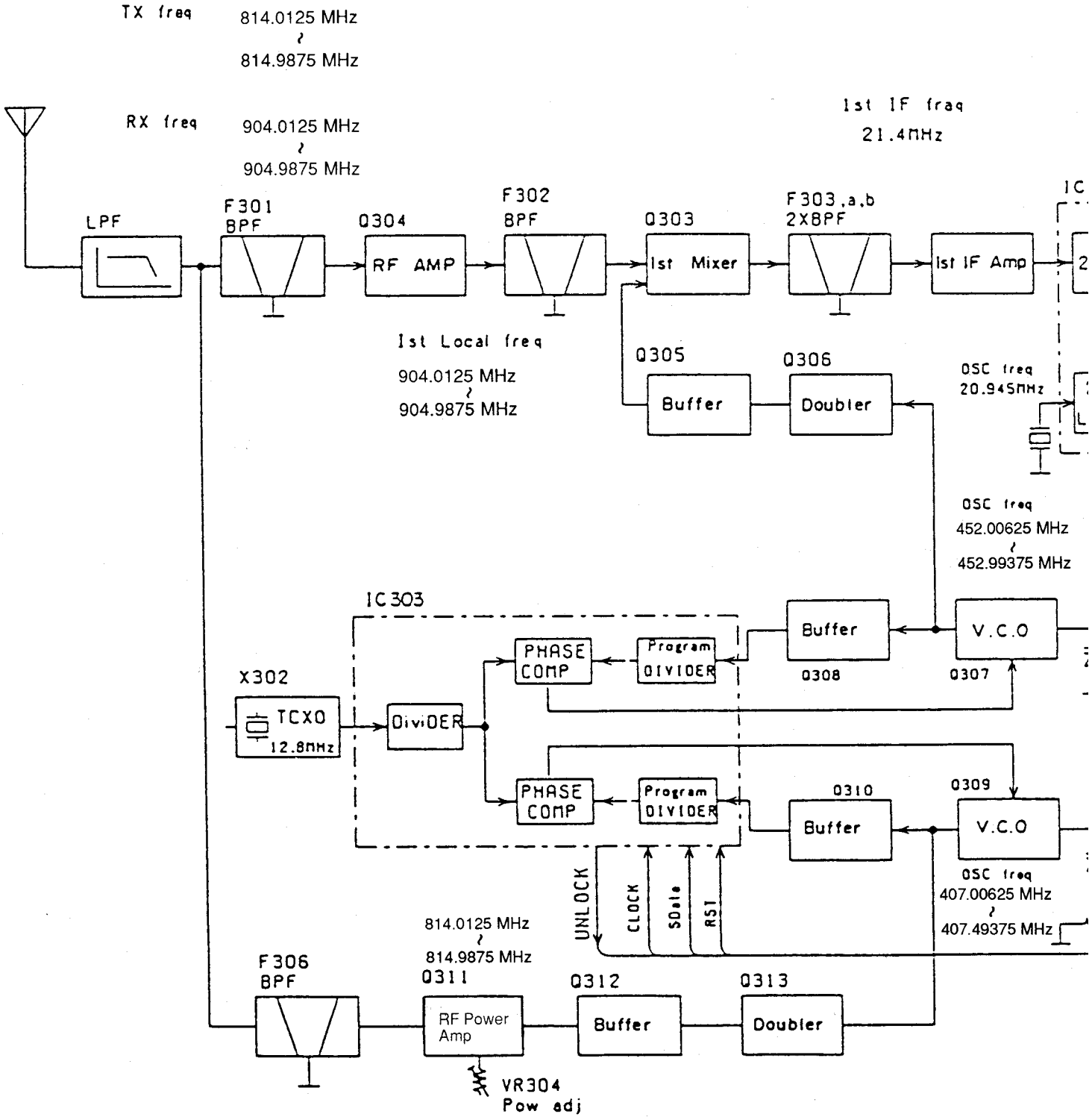


Fig. 34

AM (PORTABLE HANDSET)
(RF Unit)

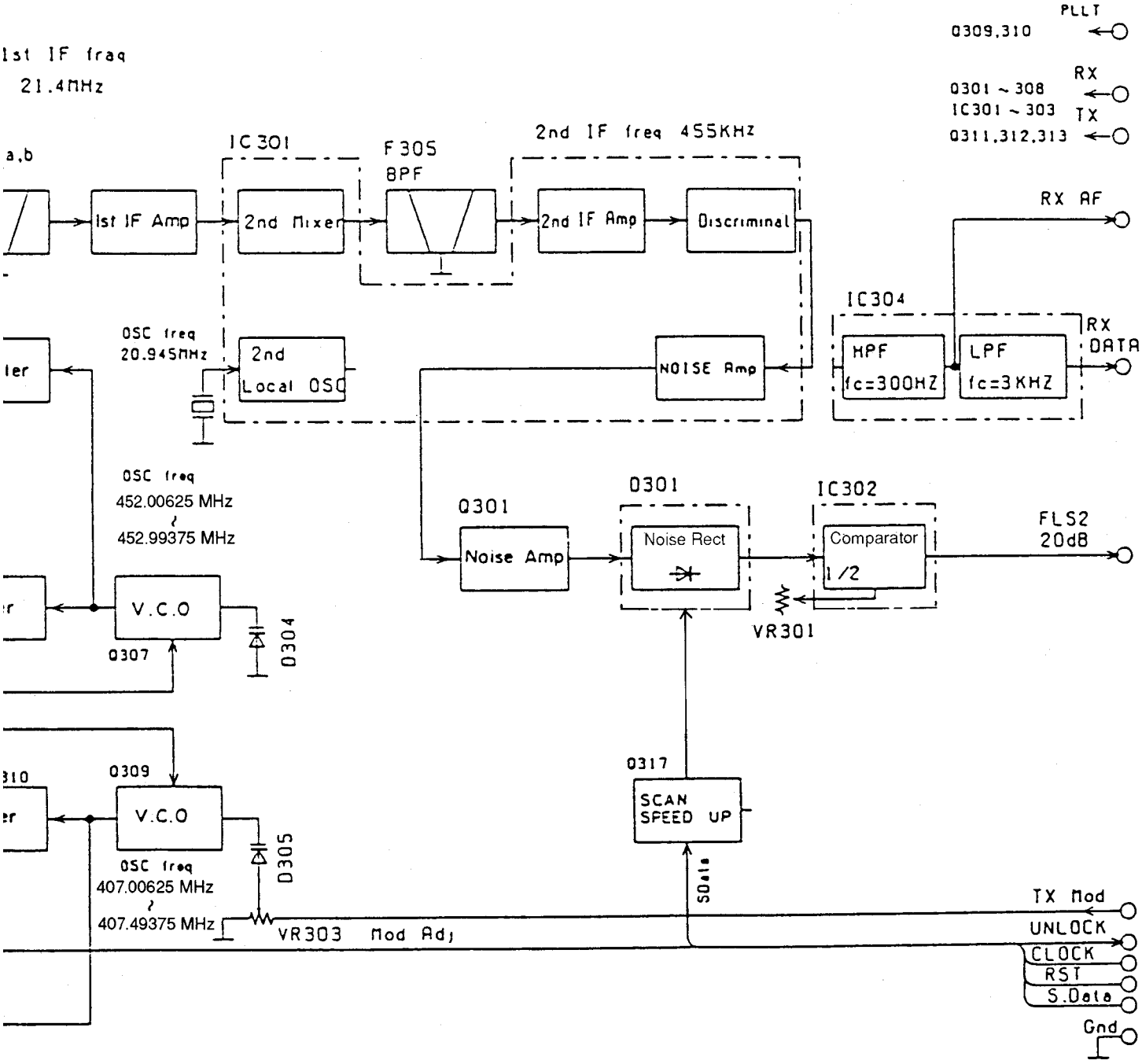


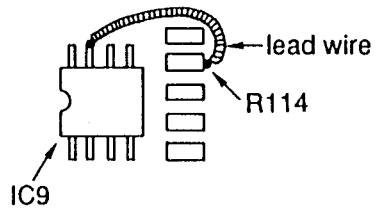
Fig. 34

HOW TO CHANGE ID CODE

(WHEN YOU HAVE NOT ID ROM WRITER)

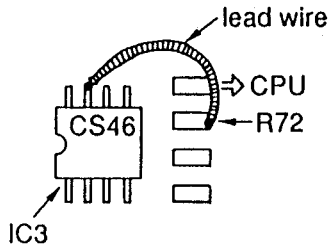
Base Unit:

Take off AC adaptor.
Connect the CPU side of R114 of Base Unit and the foil of pin 7 of IC9 with lead wire.
Set AC adaptor.
Consequently, ID code=00000



Portable Handset:

Connect the CPU side of R72 of Portable Handset and the foil of pin 7 of IC3 with lead wire.
Turn on the power switch.
Consequently, ID code=00000



CABINET AND ELECTRICAL PARTS LOCATION (BASE UNIT)

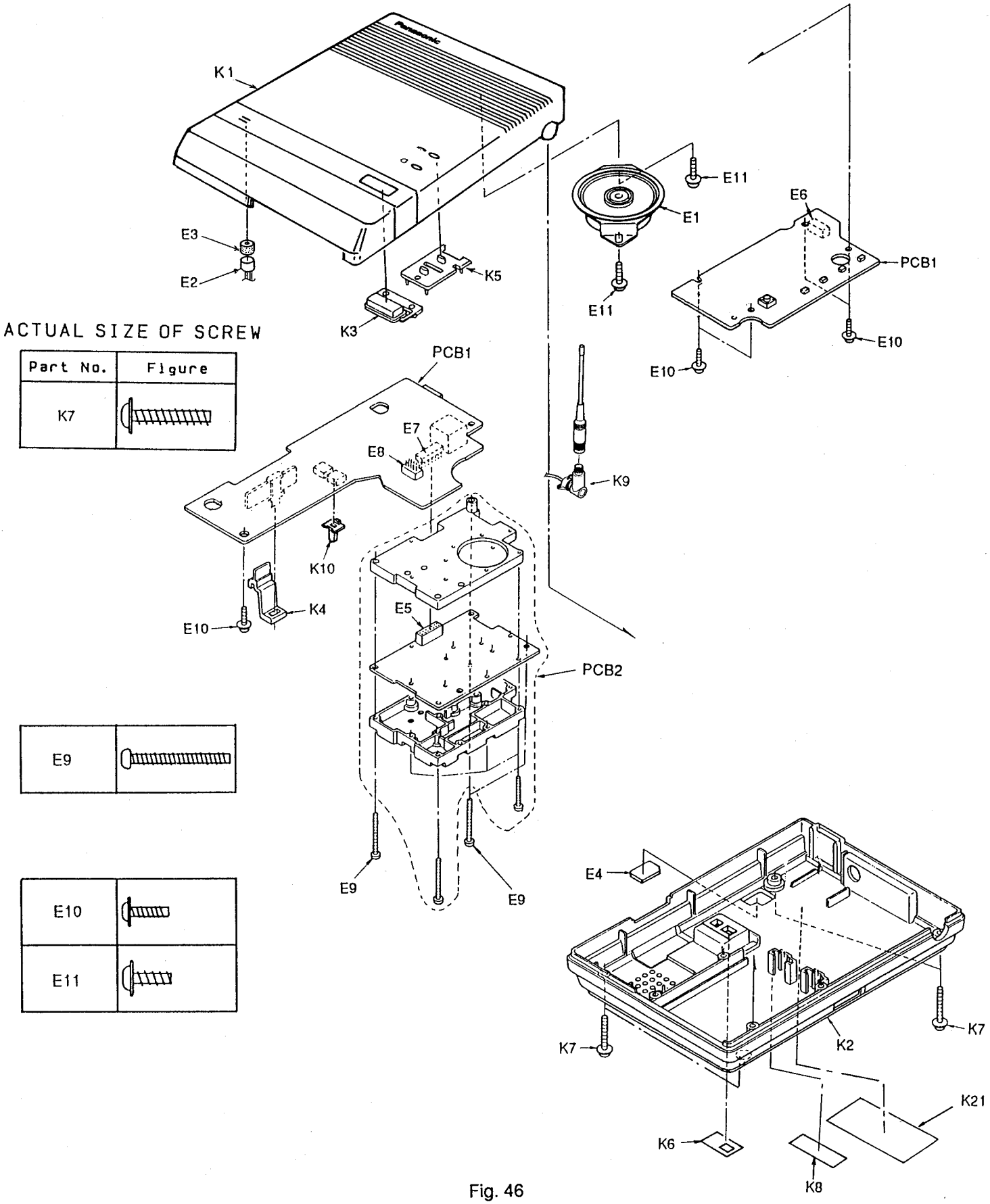
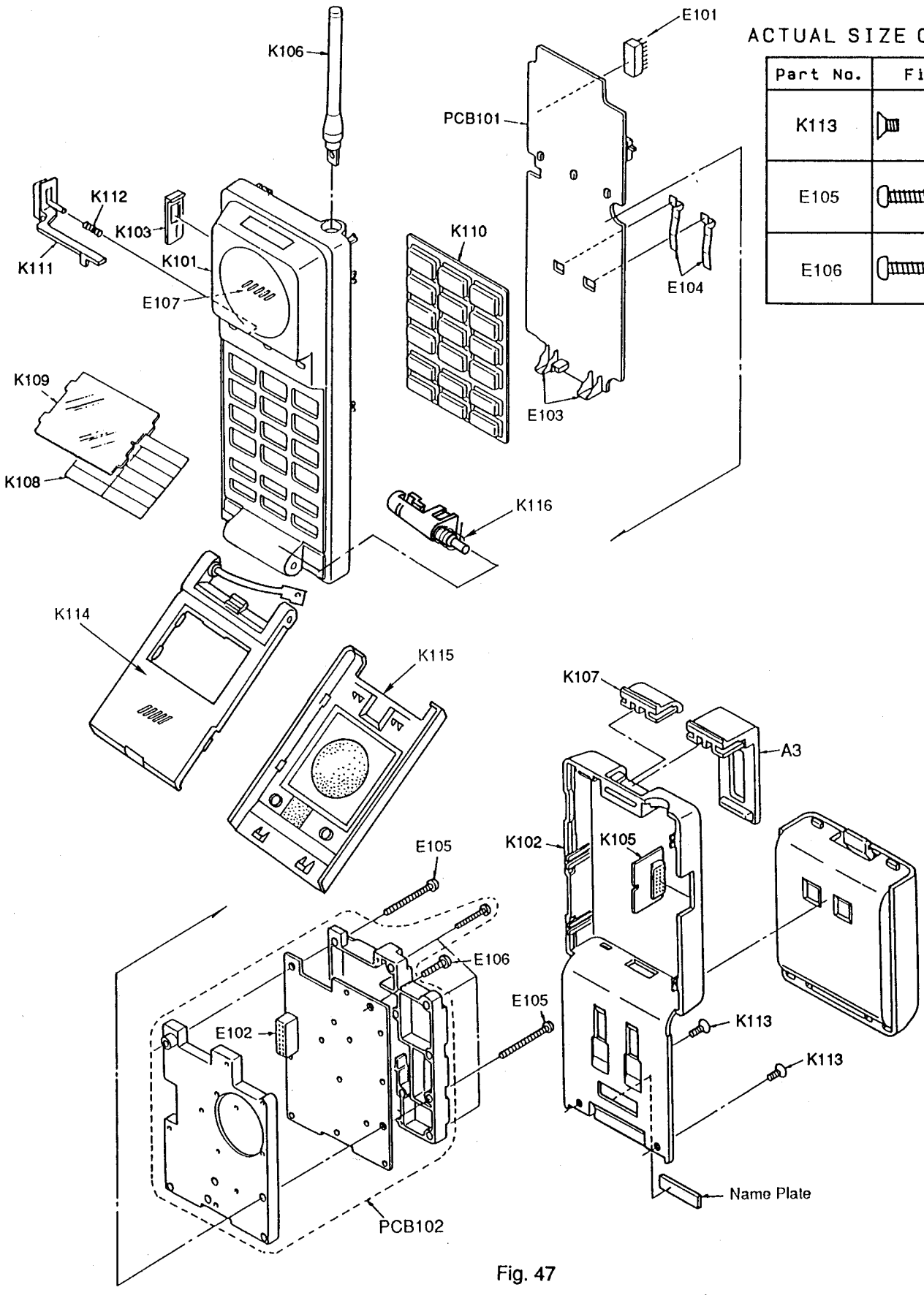


Fig. 46

CABINET AND ELECTRICAL PARTS LOCATION (PORTABLE HANDSET)



ACTUAL SIZE OF SCREW

Part No.	Figure
K113	
E105	
E106	

Fig. 47