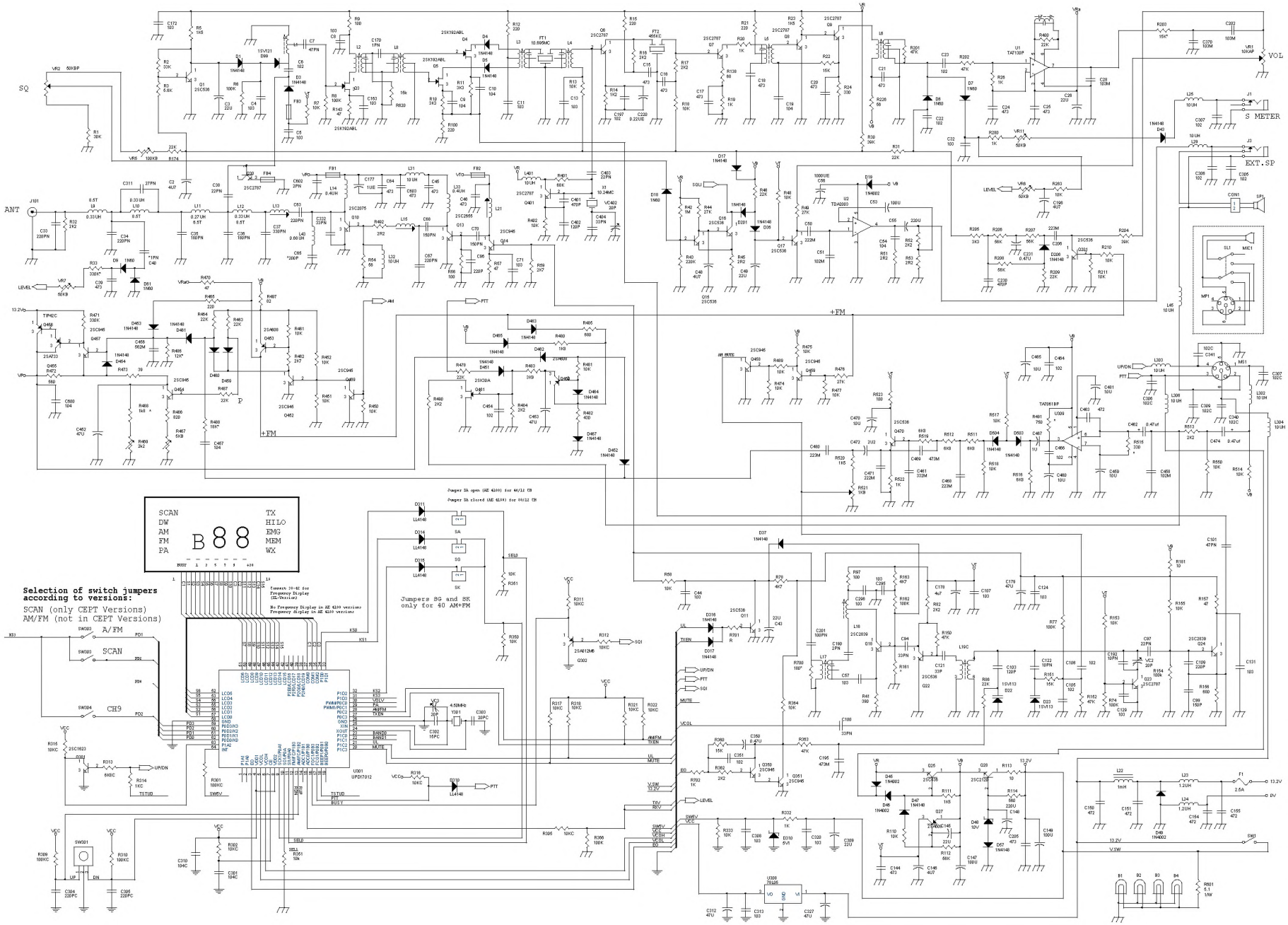

Version differences:

AE 4100 : AE 4180:
without Frequency display
with CH + Frequency display

40 Channels AM + FM
B, F, NL, E, P, CH, FIN

AE 4180 80/12:
80 CH FM, 12 CH AM
D-only

AE 4100 40/12:
40 CH FM, 12 CH AM
D-only

CEPT-PR 27 Versions:
40 CH FM only
All Countries

ALBRECHT	
Title	AE4100 Sept97 / AE 4180
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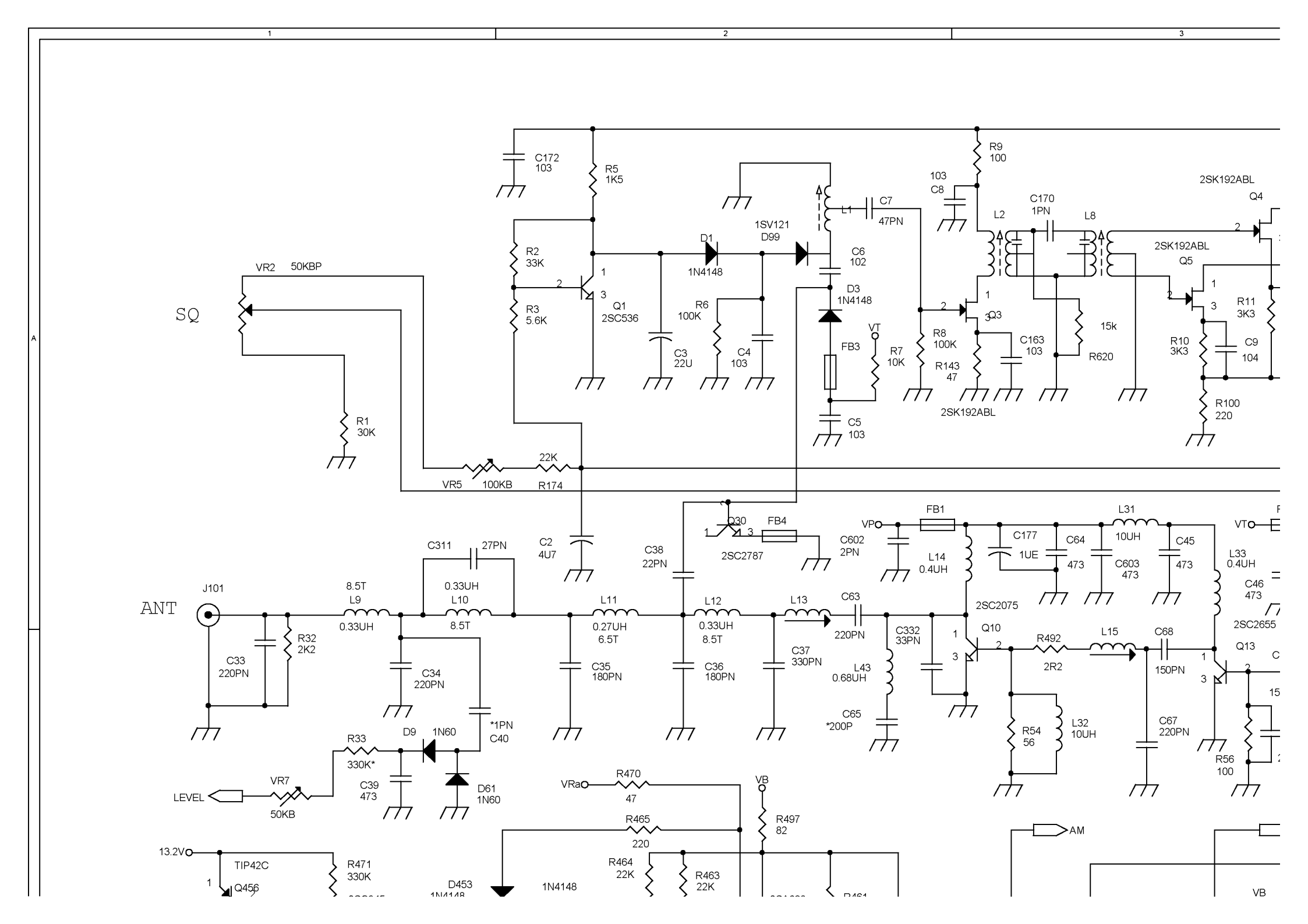
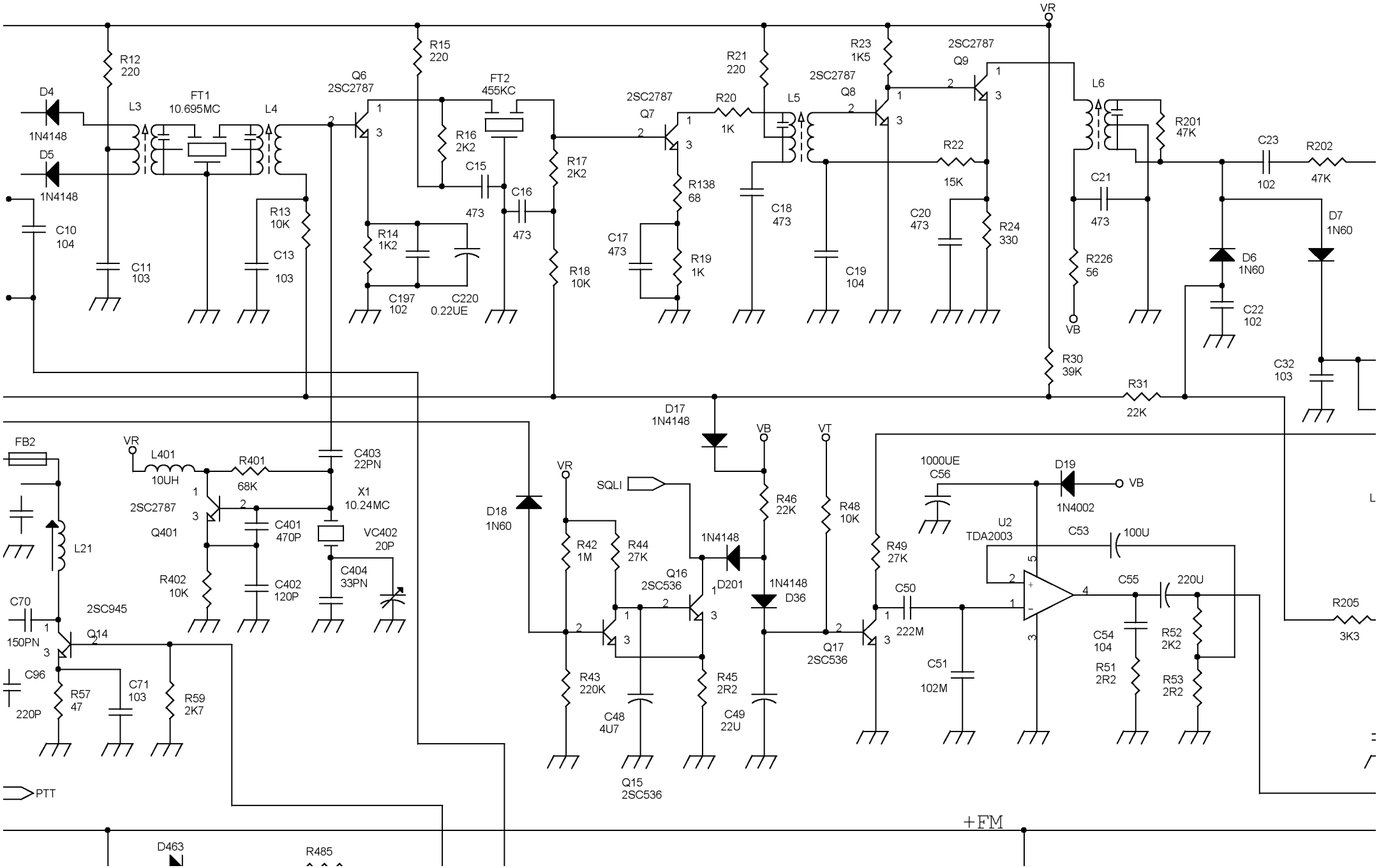
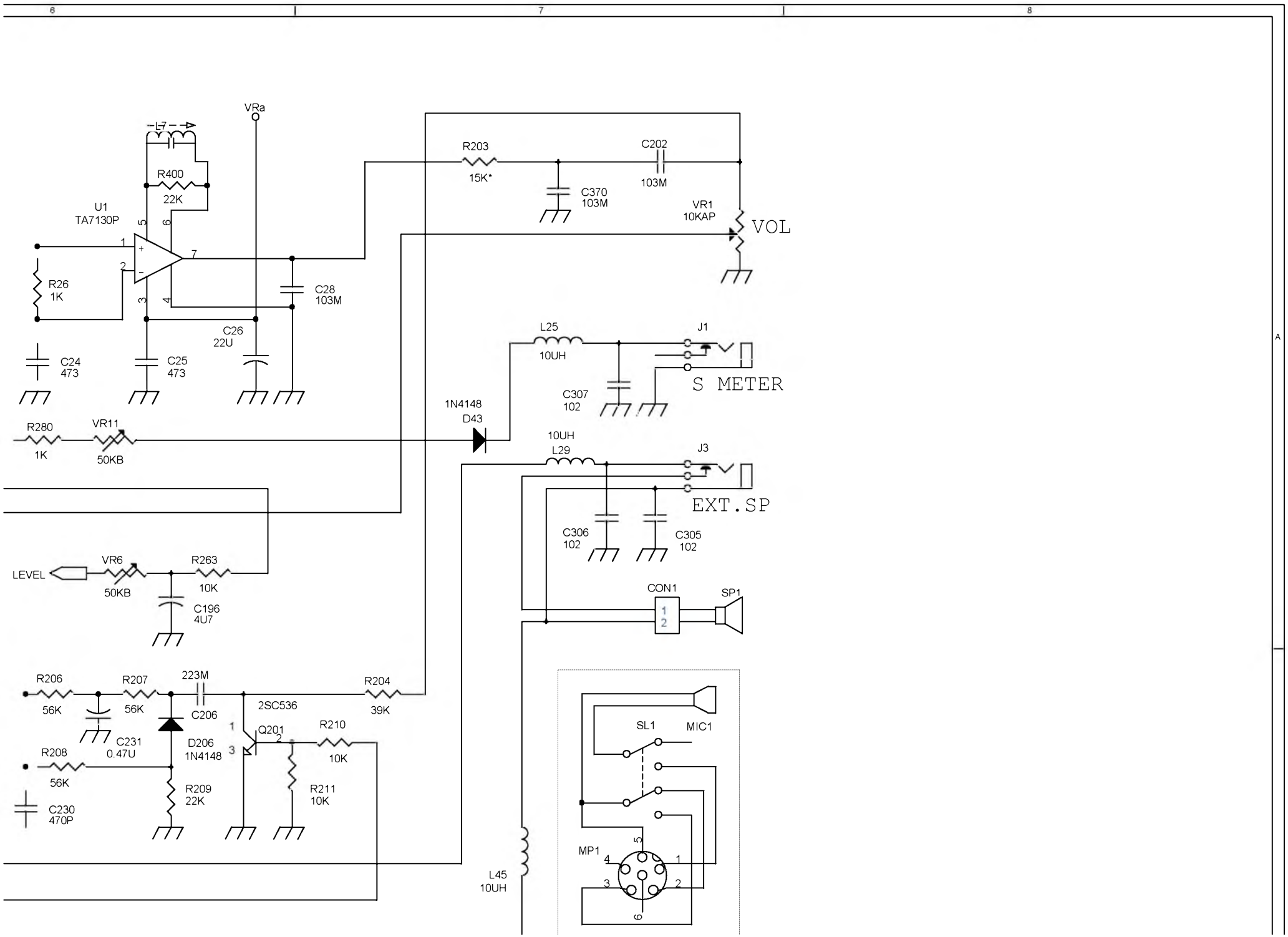
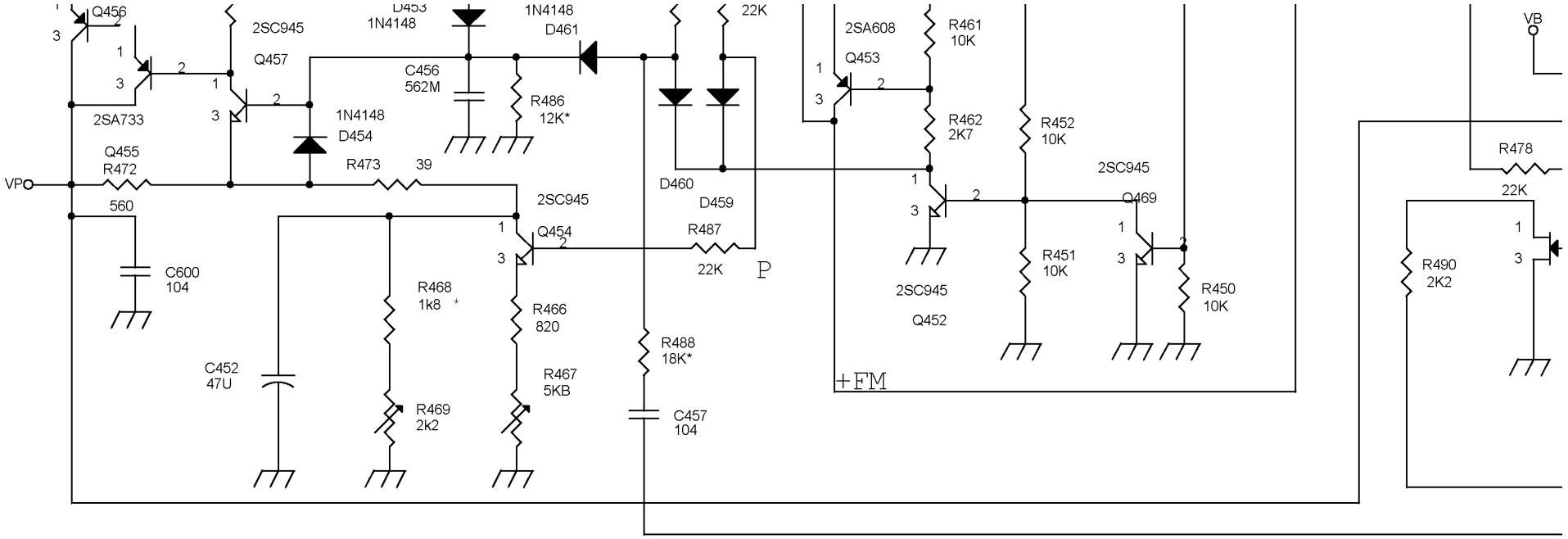
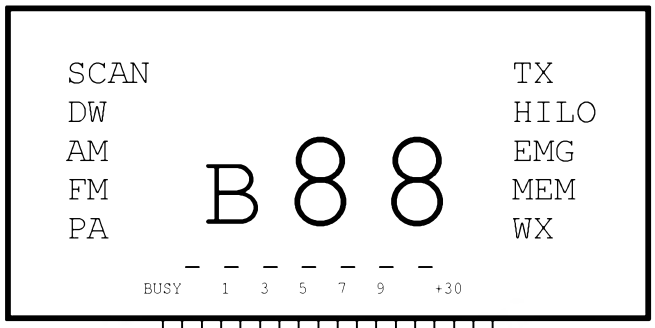
Rev:	
Date: Thursday, July 23, 1998	Sheet 1 of 1

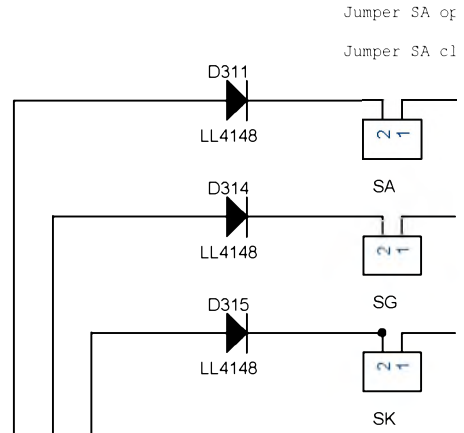

SQ
VR2 50KBP
R1 30K
VR5 100KB
22K
R174
C172 103
R5 1K5
R2 33K
R3 5.6K
Q1 2SC536
C3 22U
R6 100K
C4 103
D1 1N4148
1SV121 D99
L1
C7 47PN
C6 102
D3 1N4148
FB3
VT
R7 10K
C5 103
R9 100
103 C8
L2
C170 1PN
L8
R8 100K
R143 47
Q3
C163 103
15k
R620
2SK192ABL
Q4
Q5
R11 3K3
R10 3K3
C9 104
R100 220
C2 4U7
Q30
2SC2787
FB4
C38 22PN
VP
FB1
C602 2PN
L14 0.4UH
L31
C177 1UE
C64 473
10UH
C603 473
C45 473
L33 0.4UH
C46 473
2SC2655
ANT
J101
C311 27PN
8.5T L9 0.33UH
0.33UH L10 8.5T
L11 0.27UH 6.5T
L12 0.33UH 8.5T
L13
C63 220PN
C332 33PN
2SC2075
Q10
R492 2R2
L15
C68 150PN
Q13
C33 220PN
R32 2K2
C34 220PN
C35 180PN
C36 180PN
C37 330PN
L43 0.68UH
C65 *200P
R54 56
L32 10UH
C67 220PN
R56 100
R33 330K*
D9 1N60
*1PN C40
C39 473
D61 1N60
LEVEL
VR7 50KB
VRa
R470 47
VB
R465 220
R497 82
R464 22K
R463 22K
1N4148
D453
13.2V
TIP42C
Q456
R471 330K
AM
VB


VR
R12 220
D4 1N4148
D5 1N4148
L3
FT1 10.695MC
L4
Q6 2SC2787
R15 220
FT2 455KC
R16 2K2
C15 473
C16 473
R17 2K2
R18 10K
R14 1K2
C197 102
C220 0.22UE
C10 104
C11 103
R13 10K
C13 103
Q7 2SC2787
R20 1K
R138 68
C17 473
R19 1K
R21 220
L5
Q8 2SC2787
R23 1K5
Q9 2SC2787
R22 15K
C18 473
C19 104
C20 473
R24 330
L6
R201 47K
C21 473
R226 56
VB
C23 102
R202 47K
D6 1N60
D7 1N60
C22 102
C32 103
R30 39K
R31 22K
FB2
L21
C70 150PN
2SC945
Q14
C96 220P
R57 47
C71 103
R59 2K7
L401 10UH
R401 68K
Q401 2SC2787
C401 470P
C402 120P
R402 10K
C403 22PN
X1 10.24MC
VC402 20P
C404 33PN
PTT
D17 1N4148
D18 1N60
SQLI
R42 1M
R44 27K
Q16 2SC536
D201 1N4148
R43 220K
C48 4U7
R45 2R2
C49 22U
Q15 2SC536
R46 22K
1N4148 D36
R48 10K
Q17 2SC536
1000UE C56
D19 1N4002
U2 TDA2003
C53 100U
R49 27K
C50 222M
C51 102M
C55 220U
C54 104
R51 2R2
R52 2K2
R53 2R2
R205 3K3
+FM
D463
R485


6
7
8
A
VRa
L7
R400
22K
U1
TA7130P
R26
1K
C24
473
C25
473
C26
22U
C28
103M
R203
15K*
C370
103M
C202
103M
VR1
10KAP
VOL
L25
10UH
J1
S METER
C307
102
1N4148
D43
R280
1K
VR11
50KB
10UH
L29
J3
EXT.SP
C306
102
C305
102
CON1
SP1
LEVEL
VR6
50KB
R263
10K
C196
4U7
R206
56K
R207
56K
223M
C206
R204
39K
2SC536
Q201
R210
10K
C231
0.47U
D206
1N4148
R208
56K
R209
22K
R211
10K
C230
470P
L45
10UH
SL1
MIC1
MP1



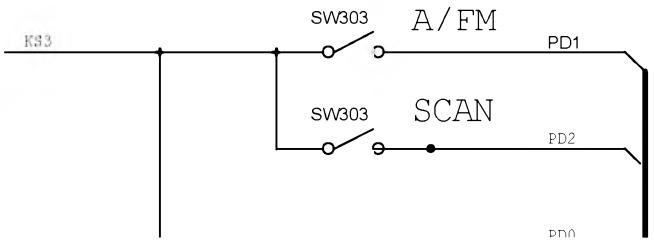


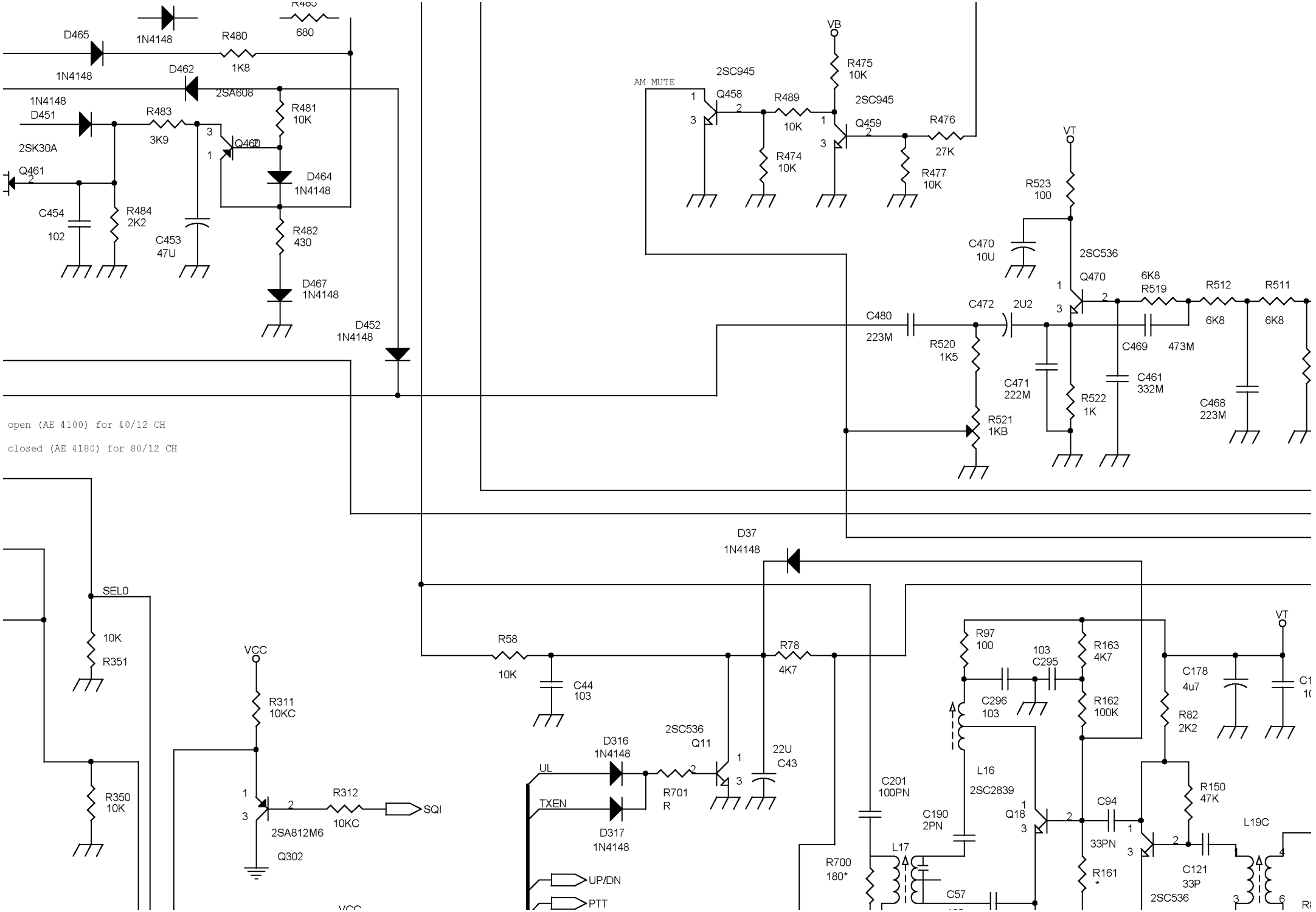


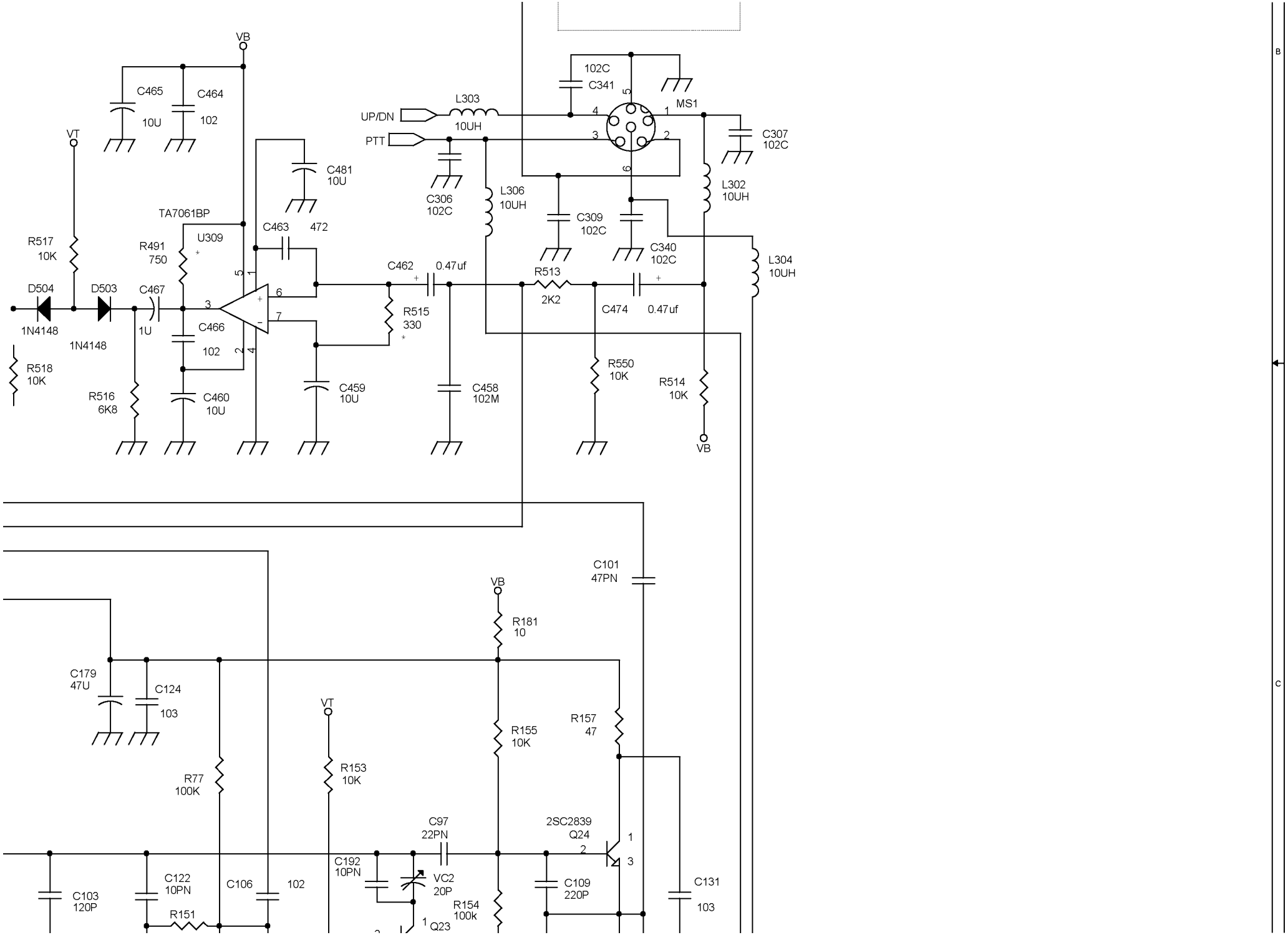
Jumpers SG and SK
only for 40 AM+FM

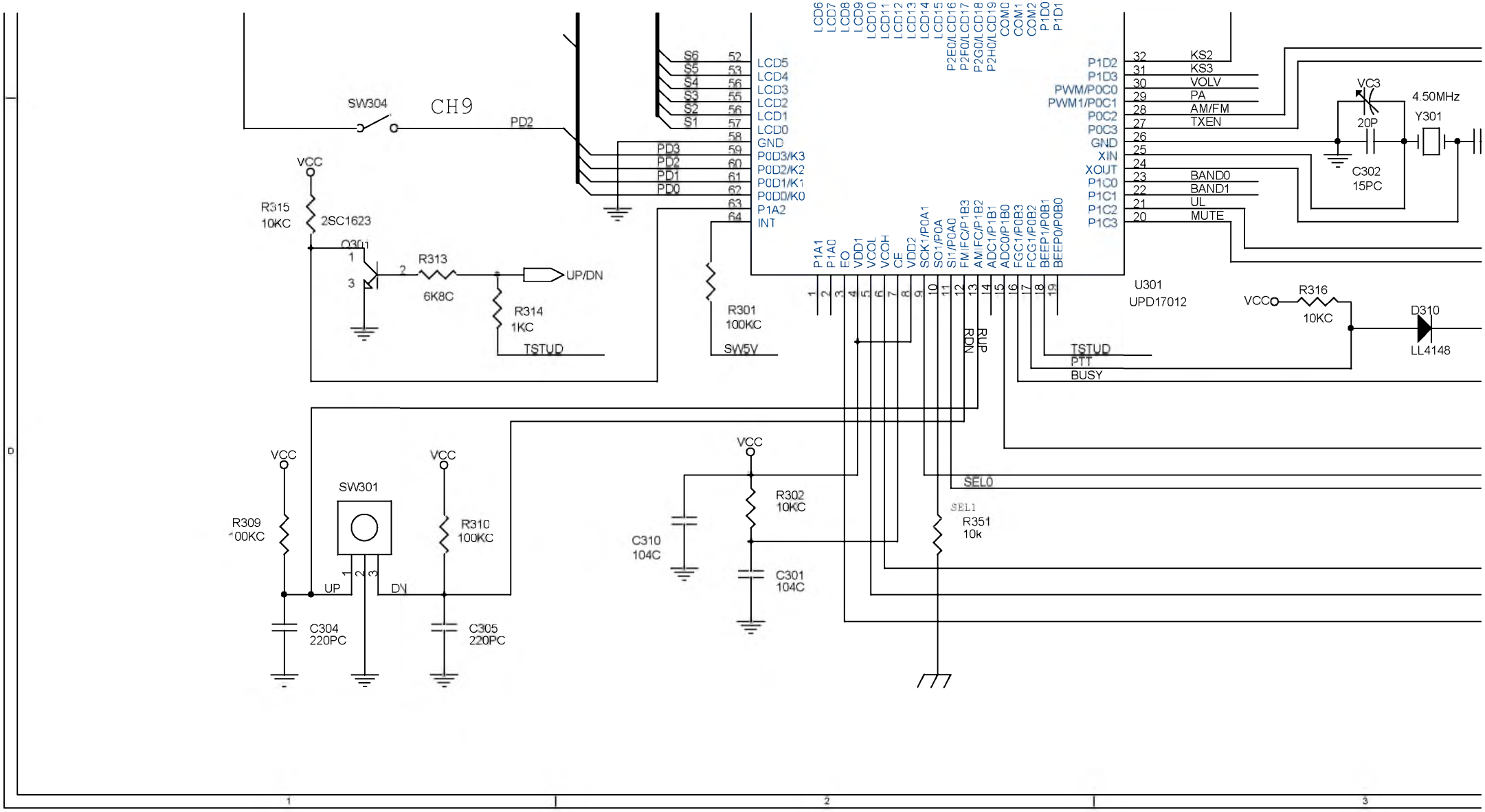
Selection of switch jumpers according to versions:

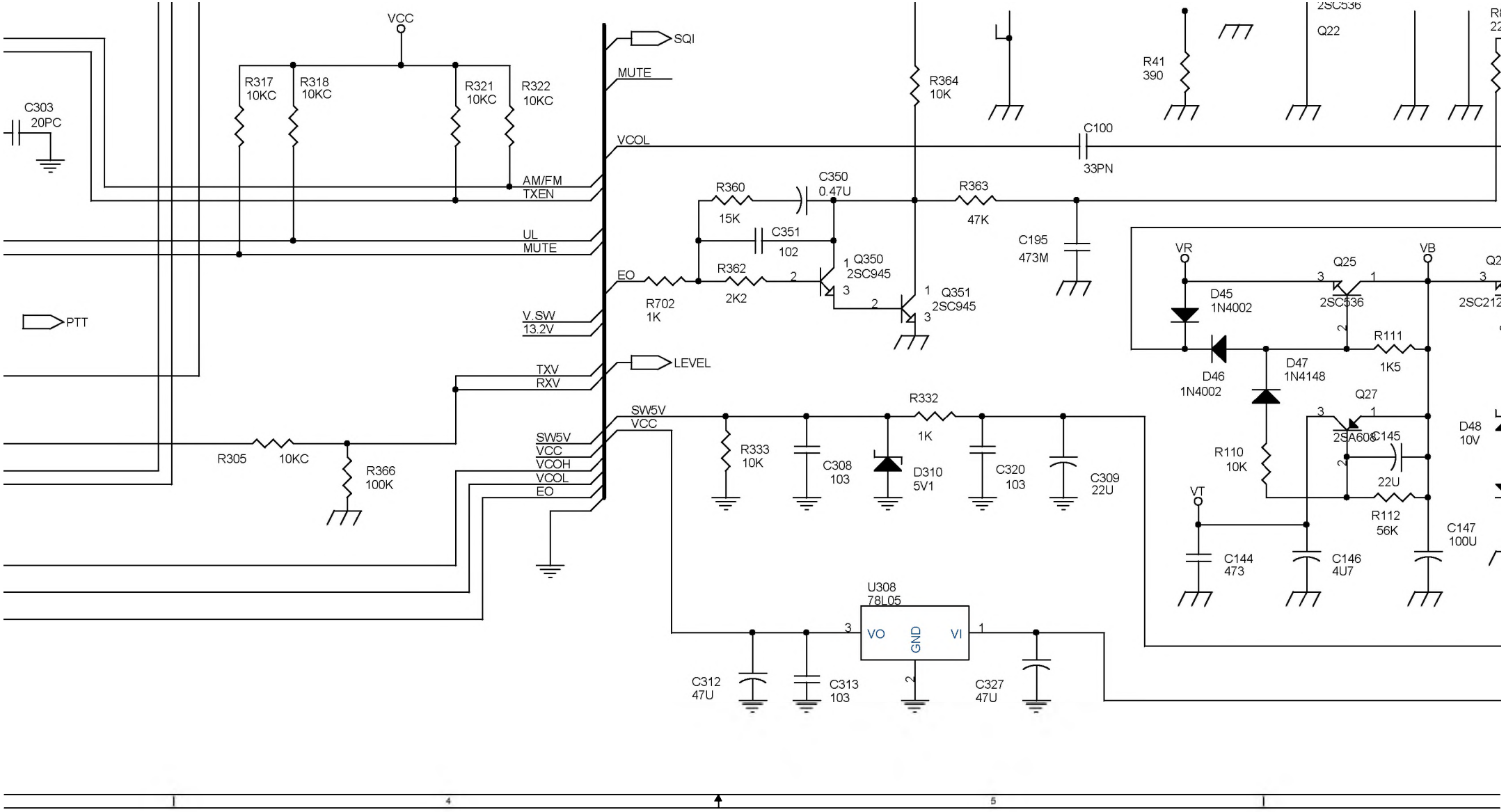
SCAN (only CEPT Versions)
AM/FM (not in CEPT Versions)

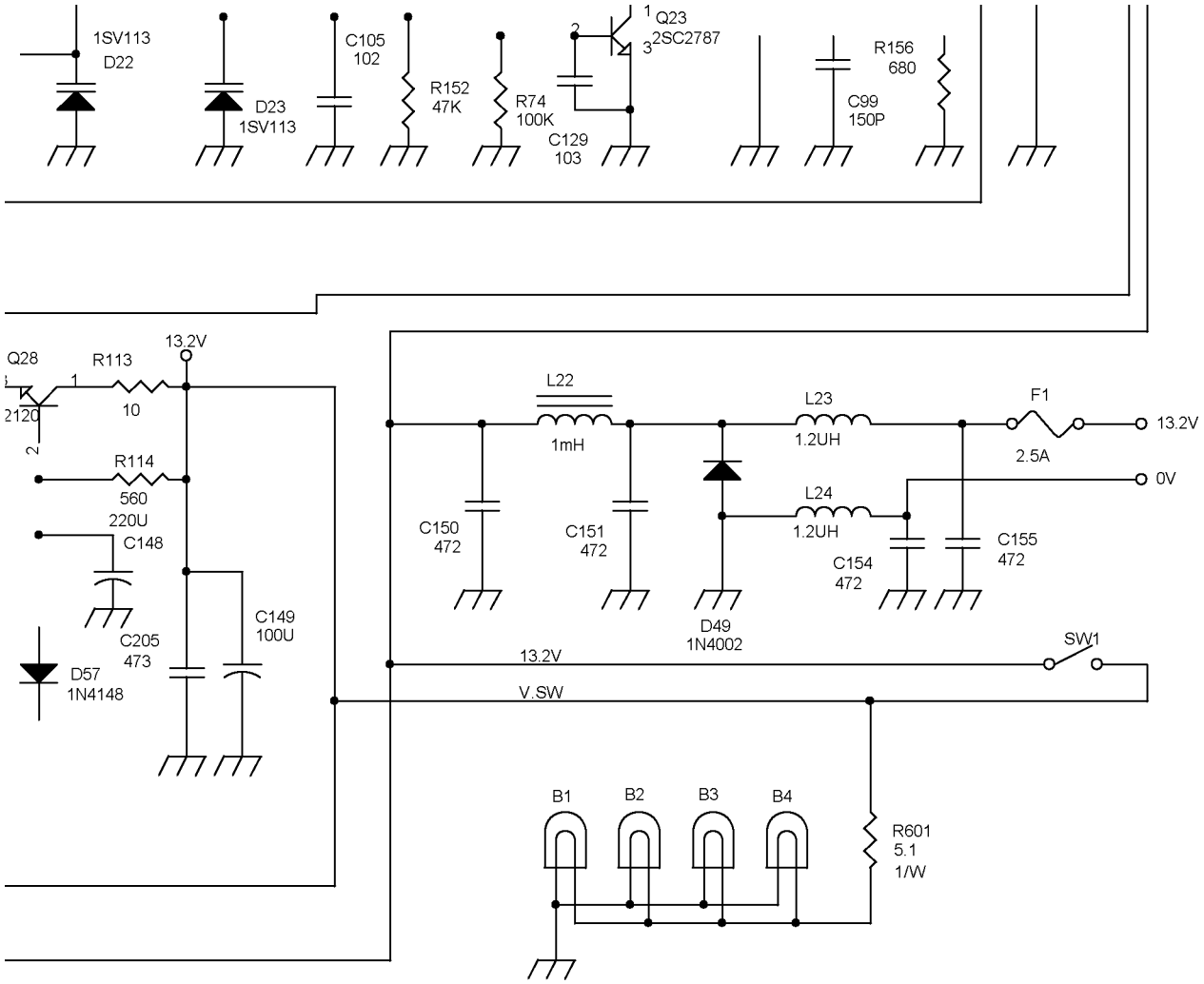



D465
1N4148
R480
1K8
680
D462
2SA608
1N4148
D451
R483
3K9
2SK30A
Q461
R481
10K
Q460
D464
1N4148
C454
102
R484
2K2
C453
47U
R482
430
D467
1N4148
D452
1N4148
open (AE 4100) for 40/12 CH
closed (AE 4180) for 80/12 CH
VB
R475
10K
AM MUTE
2SC945
Q458
R489
10K
2SC945
Q459
R476
27K
R474
10K
R477
10K
VT
R523
100
C470
10U
2SC536
Q470
6K8
R519
R512
6K8
R511
6K8
C472
2U2
C480
223M
R520
1K5
C469
473M
C471
222M
R522
1K
C461
332M
C468
223M
R521
1KB
SEL0
10K
R351
R350
10K
VCC
R311
10KC
R312
10KC
SQI
2SA812M6
Q302
D37
1N4148
R58
10K
C44
103
R78
4K7
D316
1N4148
2SC536
Q11
22U
C43
UL
TXEN
R701
R
D317
1N4148
UP/DN
PTT
C201
100PN
C190
2PN
L17
R700
180*
C57
L16
2SC2839
Q18
R97
100
103
C295
C296
103
R163
4K7
R162
100K
C94
33PN
R161
*
C178
4u7
R82
2K2
R150
47K
L19C
C121
33P
2SC536


VB
C465
10U
C464
102
VT
C481
10U
TA7061BP
C463
472
R517
10K
R491
750
U309
C462
0.47uf
D504
D503
C467
1N4148
1N4148
1U
C466
102
R515
330
R518
10K
R516
6K8
C460
10U
C459
10U
C458
102M
R513
2K2
C474
0.47uf
R550
10K
R514
10K
VB
102C
C341
L303
10UH
UP/DN
PTT
MS1
C307
102C
C306
102C
L306
10UH
L302
10UH
C309
102C
C340
102C
L304
10UH
C101
47PN
VB
R181
10
C179
47U
C124
103
VT
R155
10K
R157
47
R77
100K
R153
10K
C97
22PN
2SC2839
Q24
C192
10PN
VC2
20P
C103
120P
C122
10PN
C106
102
R151
R154
100k
Q23
C109
220P
C131
103


SW304
CH9
PD2
VCC
R315
10KC
2SC1623
Q301
R313
6K8C
UP/DN
R314
1KC
TSTUD
R301
100KC
SW5V
S6 52
S5 53
S4 56
S3 55
S2 56
S1 57
58
59
60
61
62
63
64
LCD5
LCD4
LCD3
LCD2
LCD1
LCD0
GND
P0D3/K3
P0D2/K2
P0D1/K1
P0D0/K0
P1A2
INT
LCD6
LCD7
LCD8
LCD9
LCD10
LCD11
LCD12
LCD13
LCD14
LCD15
P2E0/LCD16
P2F0/LCD17
P2G0/LCD18
P2H0/LCD19
COM0
COM1
COM2
P1D0
P1D1
P1D2 32 KS2
P1D3 31 KS3
PWM/P0C0 30 VOLV
PWM1/P0C1 29 PA
P0C2 28 AM/FM
P0C3 27 TXEN
GND 26
XIN 25
XOUT 24
P1C0 23 BAND0
P1C1 22 BAND1
P1C2 21 UL
P1C3 20 MUTE
VC3
20P
4.50MHz
Y301
C302
15PC
P1A1 1
P1A0 2
EO 3
VDD1 4
VCOL 5
VCOH 6
CE 7
VDD2 8
SCK1/P0A1 9
SO1/P0A 10
SI1/P0A0 11
FM/FC/P1B3 12
AM/FC/P1B2 13
ADC1/P1B1 14
ADC0/P1B0 15
FGC1/P0B3 16
FCG1/P0B2 17
BEEP1/P0B1 18
BEEP0/P0B0 19
U301
UPD17012
RDN
RUP
TSTUD
PTT
BUSY
VCC
R316
10KC
D310
LL4148
VCC
SW301
R309
100KC
R310
100KC
UP
DN
C304
220PC
C305
220PC
VCC
R302
10KC
C310
104C
C301
104C
SEL0
SEL1
R351
10k


VCC
SQI
MUTE
VCOL
AM/FM
TXEN
UL
MUTE
EO
V.SW
13.2V
TXV
RXV
LEVEL
SW5V
VCC
VCOH
VCOL
EO
PTT
C303
20PC
R317
10KC
R318
10KC
R321
10KC
R322
10KC
R305
10KC
R366
100K
R364
10K
R41
390
Q22
C100
33PN
R360
15K
C350
0.47U
R363
47K
C351
102
R362
2K2
R702
1K
Q350
2SC945
Q351
2SC945
C195
473M
VR
VB
Q25
2SC536
D45
1N4002
D46
1N4002
D47
1N4148
R111
1K5
Q27
2SA608
C145
22U
R110
10K
R112
56K
VT
C144
473
C146
4U7
C147
100U
D48
10V
R332
1K
R333
10K
C308
103
D310
5V1
C320
103
C309
22U
U308
78L05
VO
GND
VI
C312
47U
C313
103
C327
47U



Version differences:

AE 4100 : without Frequency display

AE 4180: with CH + Frequency display

40 Channels AM + FM
B, F, NL, E, P, CH, FIN

AE 4180 80/12:
80 CH FM, 12 CH AM
D-only

AE 4100 40/12:
40 CH FM, 12 CH AM
D-only

CEPT-PR 27
Versions:
40 CH FM only
All Countries

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