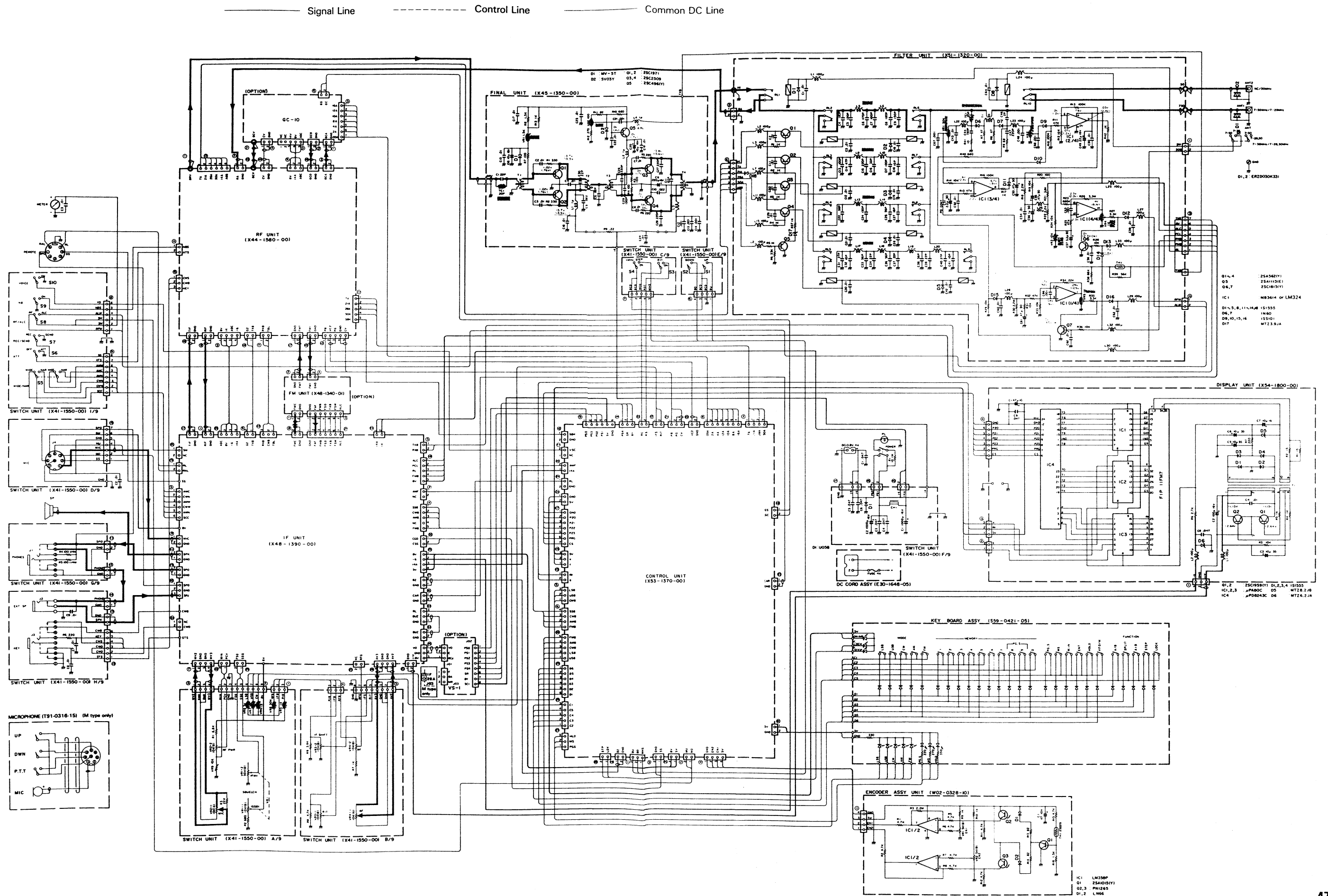
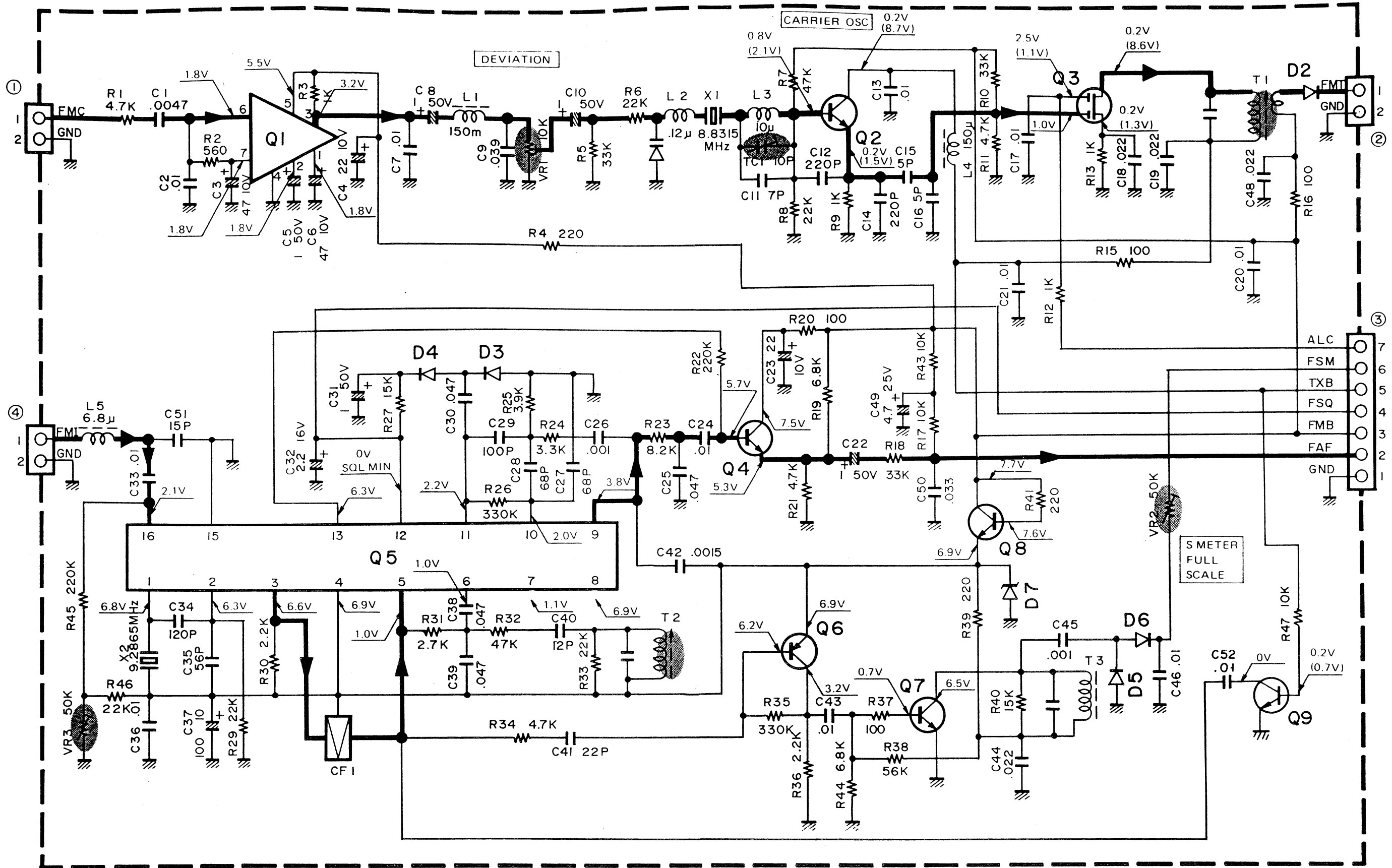


# SCHEMATIC DIAGRAM TS-670



# FM UNIT (X48-1340-01)



2SA1015 2SC1815  
2SC2240

2SC460

TA7061AP

Q1 : TA7061AP  
Q2 : 2SC460(B)  
Q3 : 3SK73(GR)  
Q4 : 2SC2240(GR)

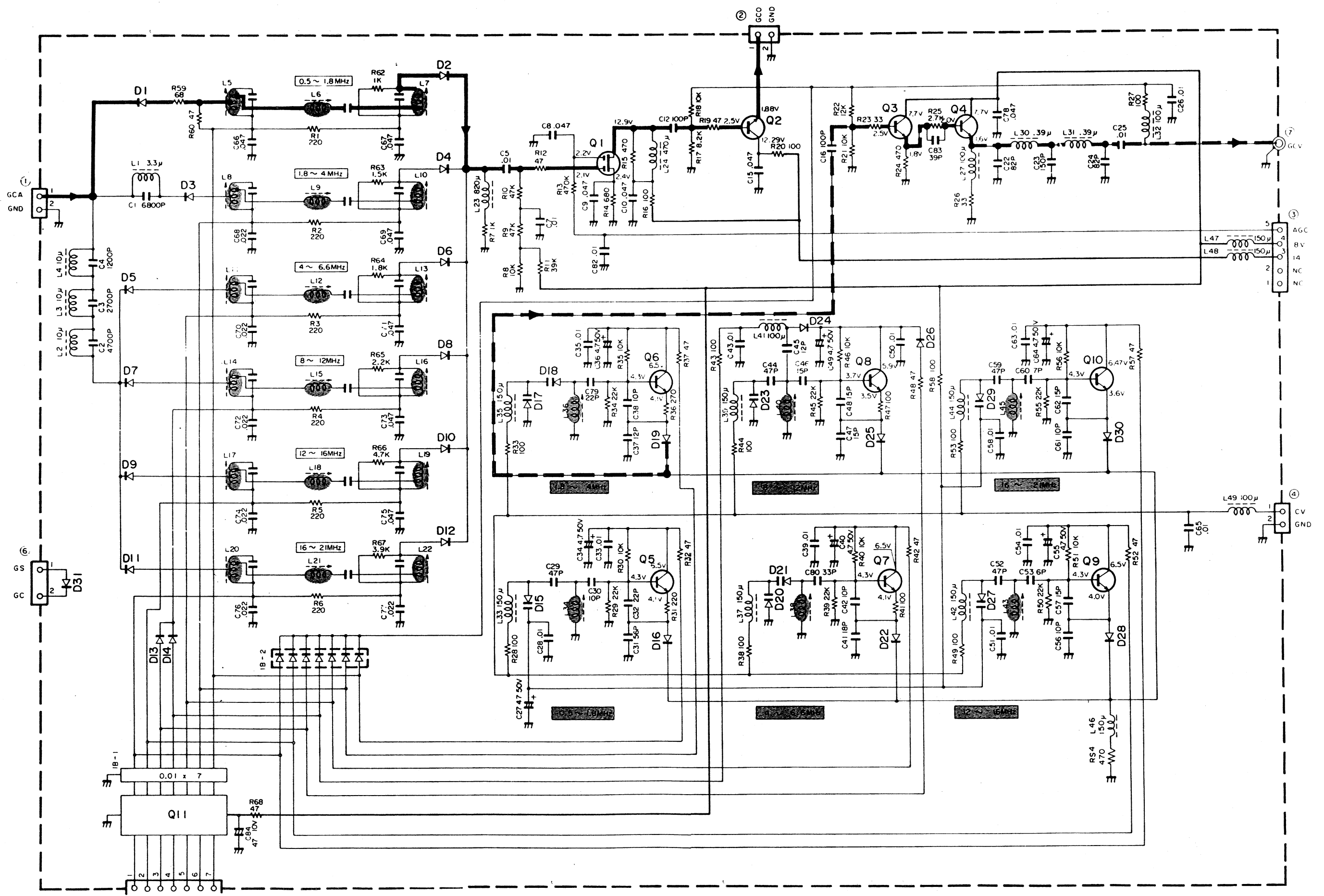
Q5 : MC3357P  
Q6 : 2SA1015(Y)  
Q7 ~ 9: 2SC1815(Y)

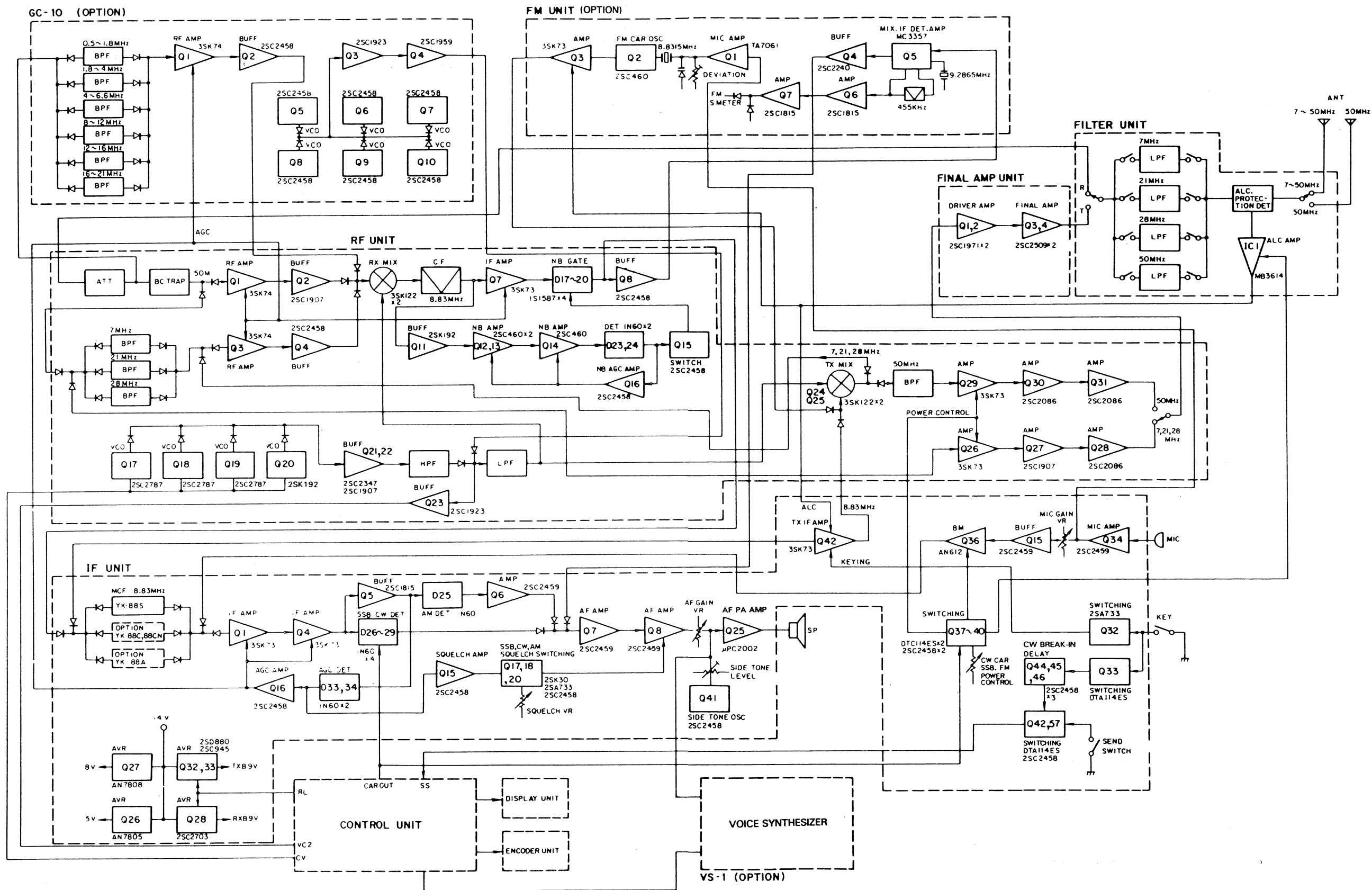
D1 : IS2208  
D2 : ISI555  
D3 ~ 6: IN60  
D7 : MTZ7.5JA



Q11 :  $\mu$ PC80C D1 ~ 12, 24 : 1S2588 D13, 14, 26, 31 :

1S1555 D15, 17, 18, 20, 21, 23, 27, 29 : 1TT310TE D16, 19, 22, 25, 28, 30 : 1S1587





**BLOCK DIAGRAM**

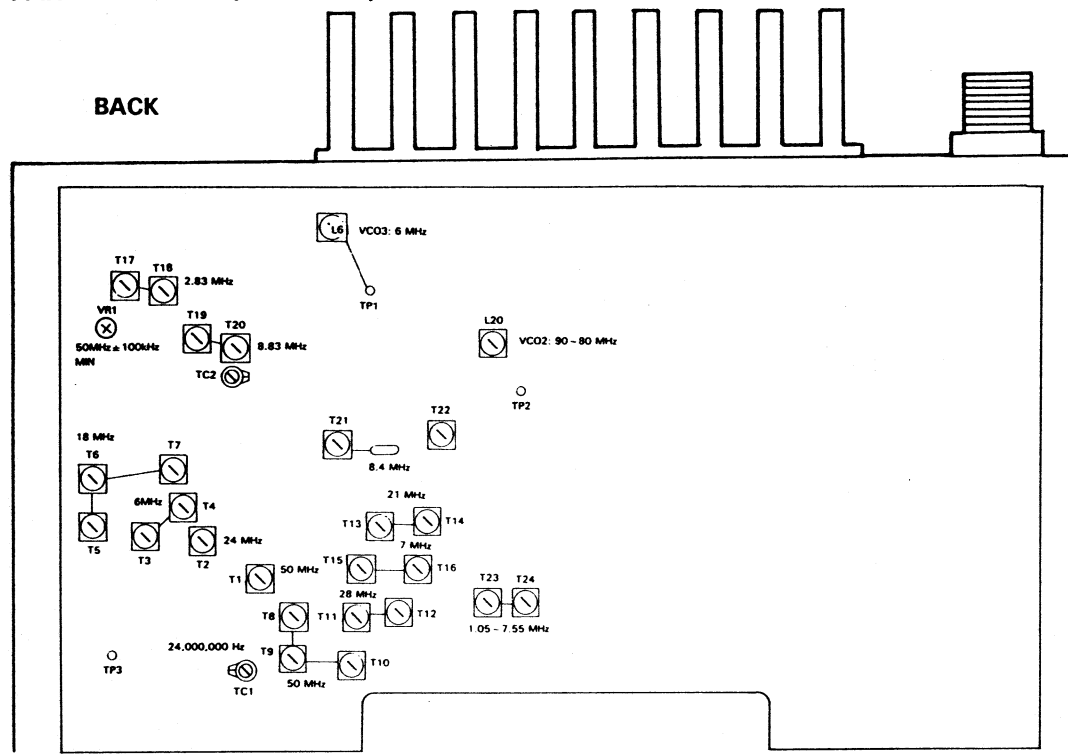
**TS-670**

# ADJUSTMENT

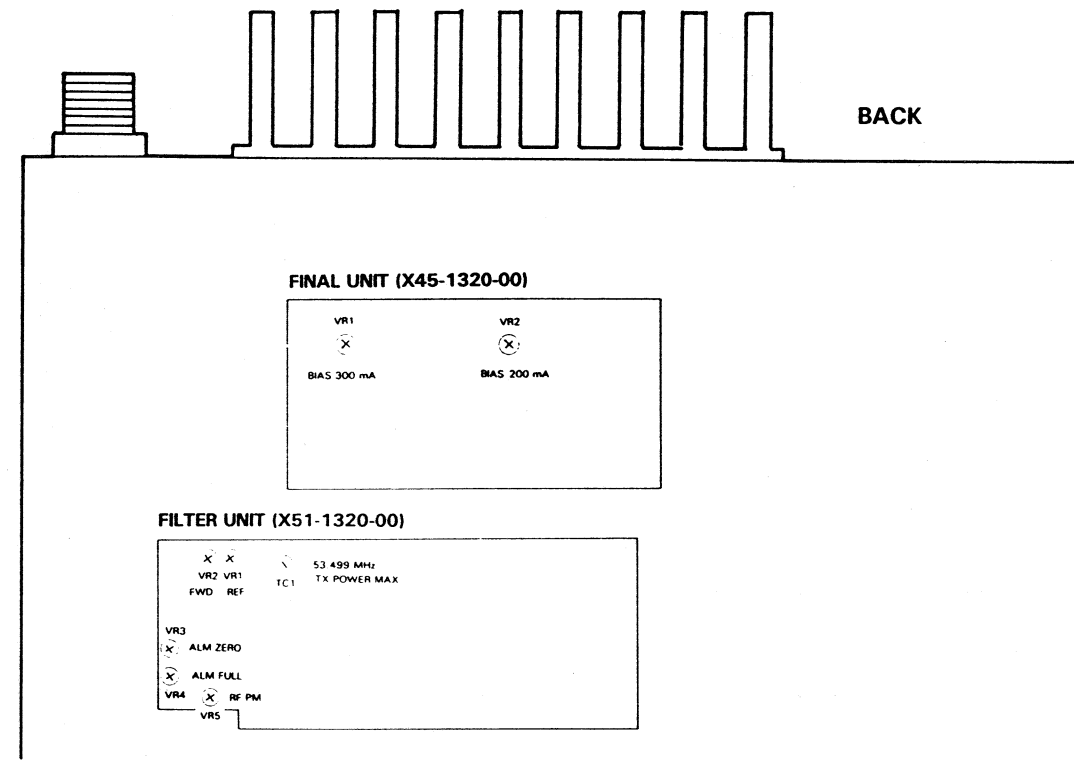
# ADJUSTMENT

ADJUSTMENT PART LOCATION (TOP VIEW)

ADJUSTMENT PART LOCATION (BOTTOM VIEW)

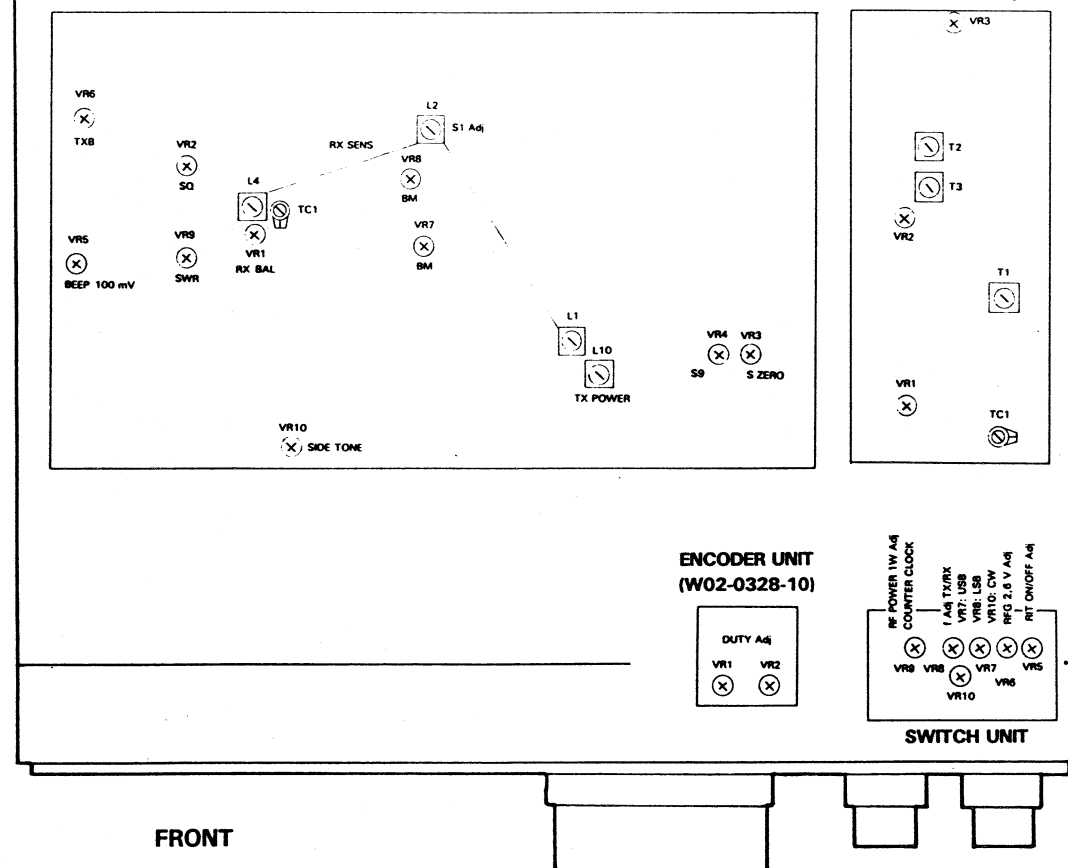


CONTROL UNIT (X53-1370-00)



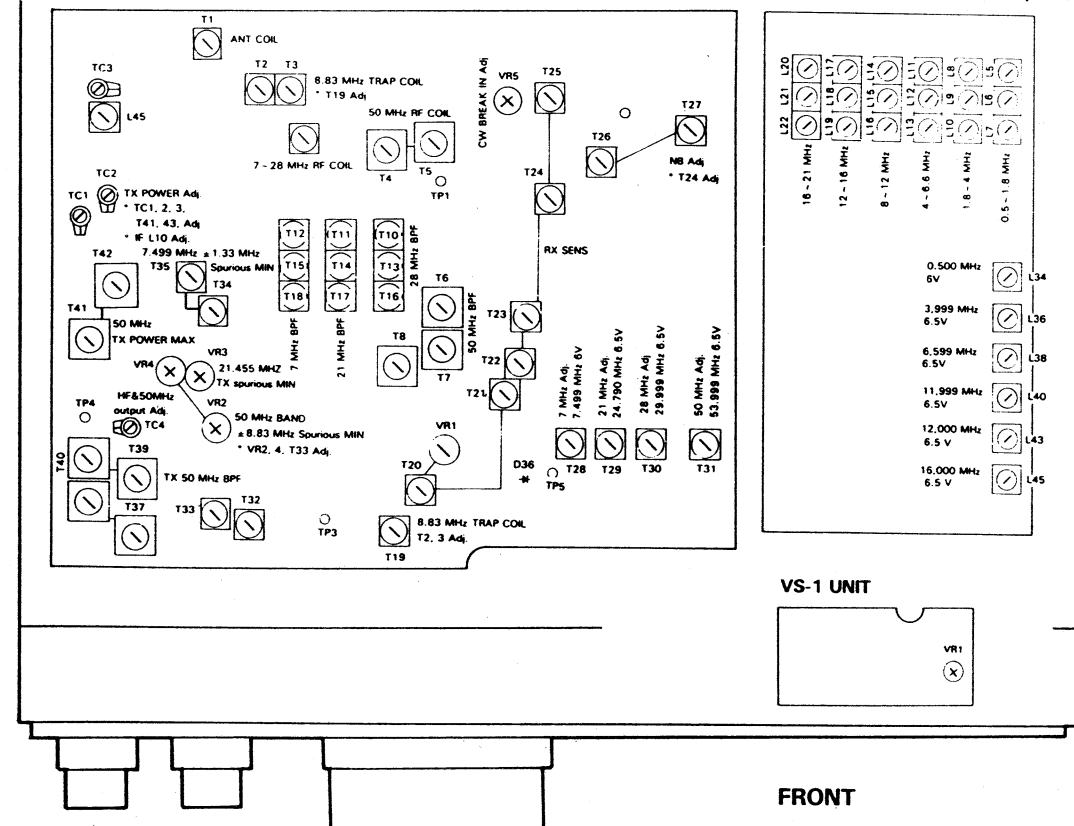
IF UNIT (X48-1390-00)

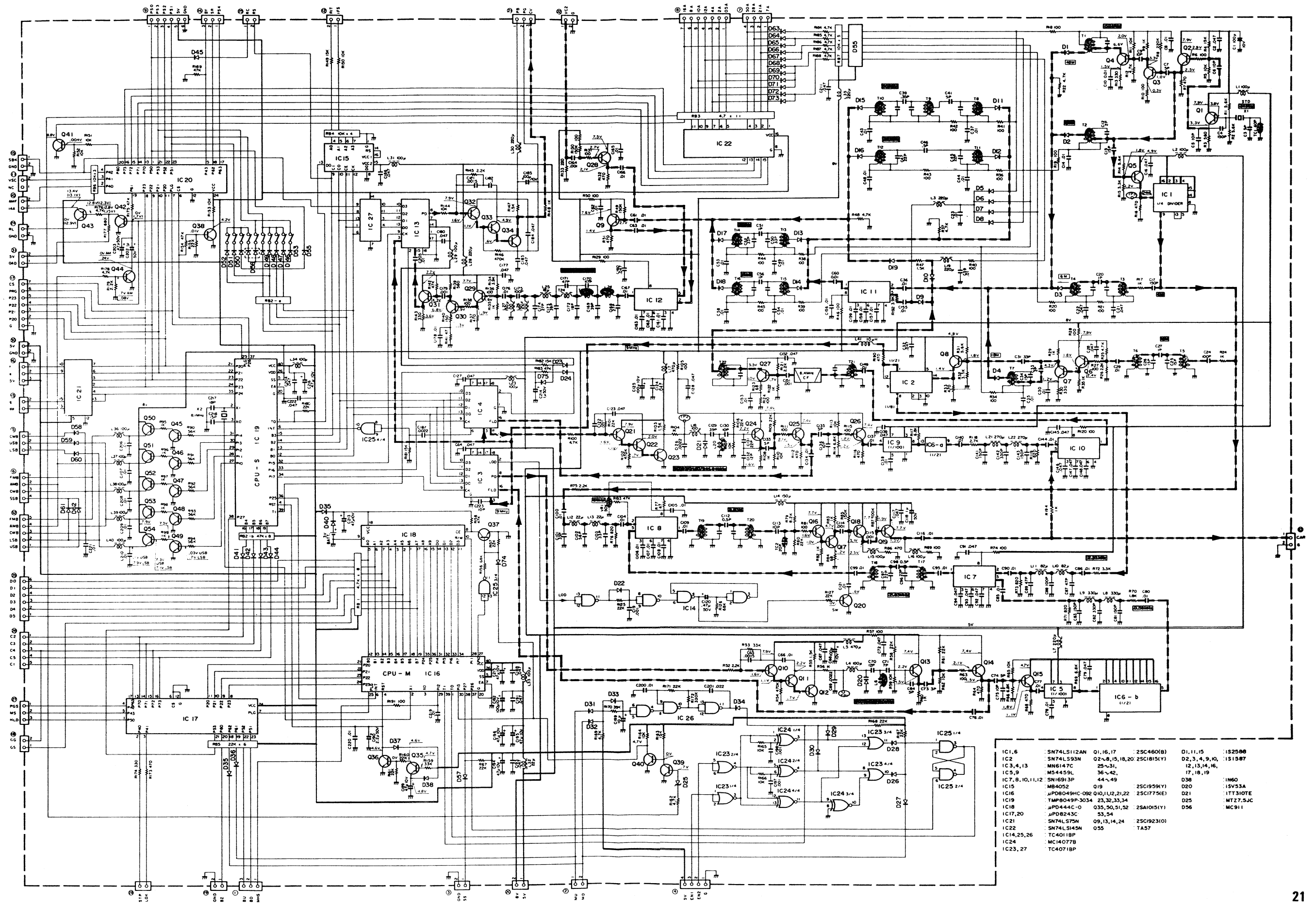
FM-430 UNIT (X48-1340-01) (Option)



RF UNIT (X44-1580-00)

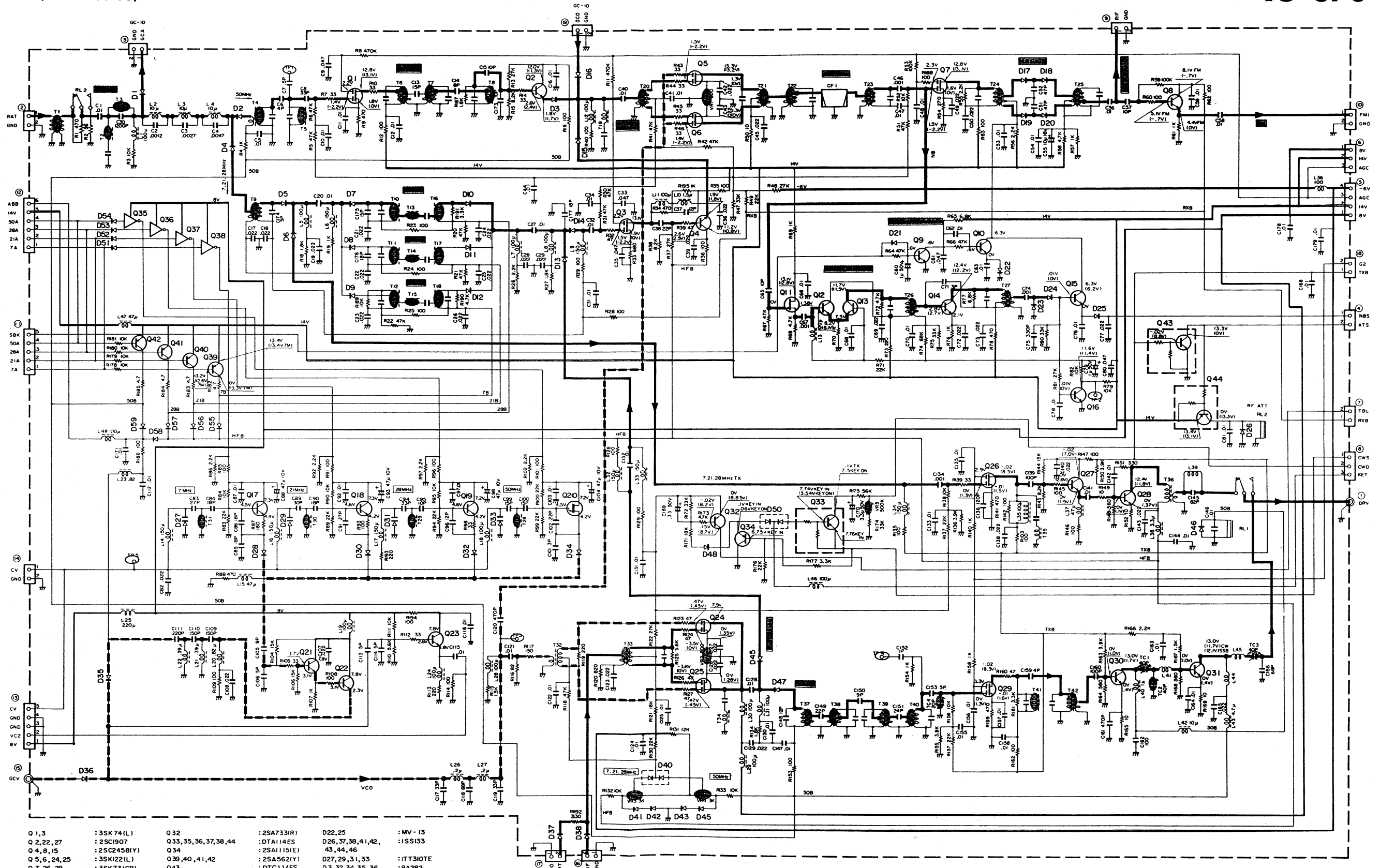
GC-10 UNIT (X44-1610-00) (option)



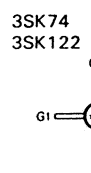


IC1,6	SN74LS112AN	01,16,17	25C460(B)	D1,11,15	IS2586
IC2	SN74LS93N	02,~8,15,18,20	25C1815(Y)	D2,3,4,9,10,	IS1587
IC3,4,13	MN6147C	25~31		12,13,14,16,	
IC5,9	M54459L	36~42		17,18,19	
IC7,8,10,11,12	SN16013P	44~49			IN60
IC15	MB4052	019	25C1959(Y)		ISV53A
IC16	μP08049HC-082	010,11,12,21,22	25C1775(E)	D21	IT310TE
IC19	TMP8049P-3034	23,32,33,34		D25	MTZ7.5UC
IC18	μP0444C-0	035,50,51,52	25A1015(Y)	D56	MC911
IC17,20	μP08243C	53,54			
IC21	SN74LS75N	09,13,14,24	25C19231(O)		
IC22	SN74LS145N	055	TA57		
IC14,25,26	TC40118P				
IC24	MC14077B				
IC23,27	TC40118P				

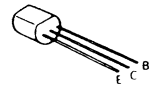




- |                |                            |                         |              |                  |            |
|----------------|----------------------------|-------------------------|--------------|------------------|------------|
| Q 1,3          | : 3SK 74(L)                | Q 32                    | : 2SA733(R)  | D22,25           | : MV-13    |
| Q 2,22,27      | : 2SC1907                  | Q33,35,36,37,38,44      | : DTA114ES   | D26,37,38,41,42, | : ISS133   |
| Q 4, 8, 15     | : 2SC2458(Y)               | Q 34                    | : 2SA1115(E) | 43,44,46         |            |
| Q 5, 6, 24, 25 | : 3SK122(L)                | Q39,40,41,42            | : 2SA562(Y)  | D27,29,31,33     | : ITT310TE |
| Q 7, 26, 29    | : 3SK73(GR)                | Q43                     | : DTC114ES   | Q3,32,34,35,36   | : BA282    |
| Q 9,10,16      | : 2SC2458(Y) or 2SC1815(Y) |                         |              | D40,50           | : MC921    |
| Q11            | : 2SK192(Y)                |                         |              | D48              | : MV-203   |
| Q12,13,14      | : 2SC460 91                |                         |              | D51,52,53,54,55, | : ISI555   |
| Q17,18,19      | : 2SC2787(L)               | D1,2,4,5,7,10,14        | : IS2588     | 56,57,58,59      |            |
| Q20            | : 2SK192A(GR)              | D6,8,9,11,12,13,15,16,  | : ISI587     |                  |            |
| Q21            | : 2SC2347                  | 17,18,19,20,28,30,45,47 | : IN60       |                  |            |
| Q23            | : 2SC1923(O)               | D 21,23,24              |              |                  |            |
| Q28,30,31      | : 2SC2086                  |                         |              |                  |            |



- 3SK74
- 3SK122



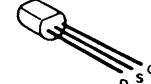
- 2SC1907
- 2SC1815
- 2SC2787
- 2SC2347
- 2SC1923
- 2SA733



- 2SC2458



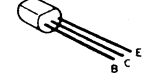
- 3SK73



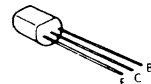
- 2SK192



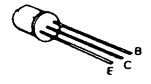
- 2SC460



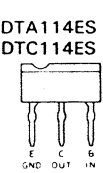
- 2SC2086



- 2SA1115

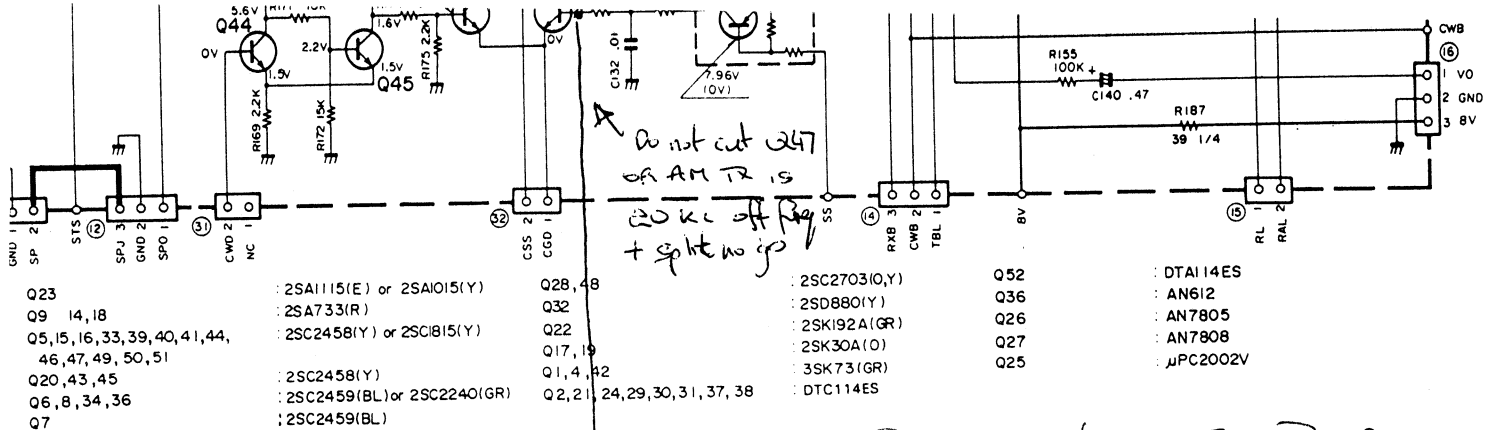


- 2SA562



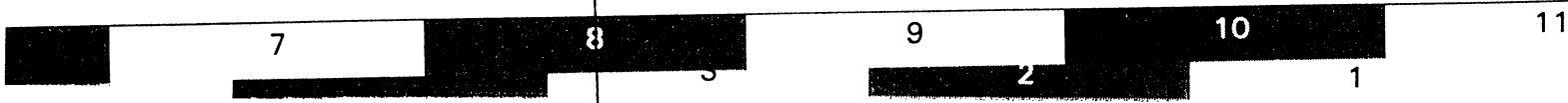
- DTA114ES
- DTC114ES





- |                                                    |                              |                                |                |     |                 |
|----------------------------------------------------|------------------------------|--------------------------------|----------------|-----|-----------------|
| Q23                                                | : 2SA1115(E) or 2SA1015(Y)   | Q28, 48                        | : 2SC2703(O,Y) | Q52 | : DTA114ES      |
| Q9 14, 18                                          | : 2SA733(R)                  | Q32                            | : 2SD880(Y)    | Q36 | : AN612         |
| Q5, 15, 16, 33, 39, 40, 41, 44, 46, 47, 49, 50, 51 | : 2SC2458(Y) or 2SC1815(Y)   | Q22                            | : 2SK192A(GR)  | Q26 | : AN7805        |
| Q20, 43, 45                                        | : 2SC2458(Y)                 | Q17, 19                        | : 2SK30A(O)    | Q27 | : AN7808        |
| Q6, 8, 34, 36                                      | : 2SC2459(BL) or 2SC2240(GR) | Q1, 4, 12                      | : 3SK73(GR)    | Q25 | : $\mu$ PC2002V |
| Q7                                                 | : 2SC2459(BL)                | Q2, 21, 24, 29, 30, 31, 37, 38 | : DTC114ES     |     |                 |

Located front left of middle PCB



MODIFICATION  
FOR GENERAL  
COVERAGE TX

TS 670  
General Coverage

MOD

24.8 to 30 mhz  
+ original Amateur Bands

CONTROL UNIT (X53-1370-00)

