

Rx Input Filter

1	T1	3TP-30TS/T37-2	Red
2	C1	100pF	101AIJ
3	TC1	11-70pF Trim Cap	GRY
4	C3	3pF	3.3
5	TC2	11-70pF Trim Cap	GRY
6	C2	100pF	101AIJ
7	T2	30TP-3TS/T37-2	Red
8	C17	0.01uF	103 mono

RF Amp +12dB

9	T6	1:4:11T/FT37-43	Gray
10	Q4	PN2222	TO-92 plastic EBC
11	FB1	Mix 43	Gray, very small
12	L2	100uH	BN BK BN GD
13	R11	68	BU GY BK GD
14	C14	0.1uF	104
15	D8	LED 2v	Red
16	R13	5.6K	GN BU RD GD
17	C16	0.1uF	104
18	R12	47	YL PR BK GD
19	C15	0.01uF	103

Double Balanced Mixer

20	T3	10T Trifular/FT37-43	Gray
21	D1	1N4148	1N4148
22	D2	1N4148	1N4148
23	D3	1N4148	1N4148
24	D4	1N4148	1N4148
25	T4	10T Trifular/FT37-43	Gray

Varactor Tuned, Buffered VFO

26	T5	16TP-8TS/FT37-61	Gray (separate)
27	C12	330pF (Select from 270-390pF for max output)	331 AIJ
28	Q3	PN2222	TO-92 plastic (EBC)
29	R9	390	OR WH BN GD
30	R8	220K	RD RD RD GD
31	R7	1K	BN BK RD GD
32	Q2	PN2222	TO-92 plastic (EBC)
33	R6	10K	BN BK OR GD
34	R5	1K	BN BK RD GD
35	Q1	PN2222	TO-92 plastic (EBC)
36	C10	0.001uF 5% Polyester	102J (Green)
37	C11	0.001uF 5% Polyester	102J (Green)
38	R3	5.6K	GN BU RD GD
39	R4	10K	BN BK OR GD
40	C9	47pF NPO	470 AIJ
41	TC4	8-50pF Trim Cap	Orange
42	C13	220pF NPO	221 AIJ
43	C8	330pF Polystyrene	330J clear poly
44	L1	44T/T50-7	White
45	TC3	3-10pF Trim Cap (optional)	White
46	C7	120pF NPO	121 AIJ
48	D7	MVAM109 Varactor	MVAM109 (2 leads)
49	R2	47K	YL PR OR GD
50	R10	15K	BN GN OR GD
51	C4	0.01uF	103
52	POT1	20K-10T	10 turn Black
53	C6	0.22uF	224
54	D6	1N4004	1N4004 (Black)
55	D5	1N4735A	1N4735 (Glass)
56	R1	560	GN BU BN GD
57	C5	0.22uF	224

Mixer Amp

58	L5	100uH	BN BK BN GD
59	R21	27	RD PR BK GD
60	Q5	PN2222	TO-92 plastic (EBC)
61	D13	1N4148	1N4148
62	C24	0.22uF	224
63	R22	2.7K	RD PR RD GD
64	L6	100uh	BN BK BN GD
65	C39	0.22uF	224
66	R38	270	RD.PR.BN.GD

Variable Xtal Filter 250-750Hz

67	C34	180pF	181 AIJ
68	Y2	4.915MHz	FOX 4.915MHz
69	D9	MV1662 Varactor	MV1662 (2 leads)
70	R19	100K	BN BK YL GD
71	C23	0.22uF	224
72	POT2	10K	10K pot
73	R39	1.8K	BN GY RD GD
74	D14	LED 2v	Red LED
75	D15	LED 2v	Red LED
76	Y3	4.915MHz	FOX 4.915MHz
77	D10	MV1662 Varactor	MV1662 (2 leads)
78	R20	100K	BN BK YL GD
79	Y4	4.915MHz	FOX 4.915MHz
80	C22	180pF	181 AIJ

IF Amp +40dB

81	T7	15TP-2TS/FT37-43	Gray
82	R36	47	YL PR BK GD
83	C38	0.22uF	224
84	Q6	PN2222	TO-92 plastic (EBC)
85	R14	4.7K	YL PR RD GD
86	C18	0.22uF	224
87	R23	47K	YL PR OR GD
88	R24	1K	BN BK RD GD
89	C35	0.22uF	224
90	R34	33	OR OR BK GD
91	T8	10T Bifular/FT37-43	Gray
92	C26	0.01uF	103
93	Q7	PN2222	TO-92 plastic (EBC)
94	R37	47	YL PR BK GD
95	R25	680	BU GY BN GD
96	C25	680pF	681 AIJ

Product Detector

97	T9	10T Trifular/FT37-43	Gray
98	D11	1N4148	1N4148
99	D12	1N4148	1N4148
100	D16	1N4148	1N4148
101	D17	1N4148	1N4148
102	C28	0.1uF	104
103	R26	1K	BN BK RD GD
104	C27	0.1uF	104

Rx Local Oscillator

105	C19	47pF	470 AIJ
106	L4	22uH	RD RD BK GD
107	R16	150	BN GN BN GD
108	R15	470	YL PR BN GD
109	Q8	PN2222	TO-92 plastic (EBC)
110	C37	0.22uF	224
111	R35	330	OR OR BN GD
112	R17	15K	BN GN OR GD
113	C20	100pF	101 AIJ
114	C21	180pF	181 AIJ
115	R18	10K	BN BK OR GD
116	Y1	4.915MHz	FOX 4.915 MHz
117	L3	39uH	OR WH BK GD
118	TC5	11-70pF	Gray

Audio Pre-Amp +20dBv

119	C44	0.22uF	224
120	R44	10K	BN BK OR GD
121	R43	33K	OR OR OR GD
122	C47	0.22uF	224
123	C45	0.02uF	223 CTK
124	R45	1K	BN BK RD GD
125	R48	390	OR WH BN GD
126	Q14	PN2222	TO-92 plastic (EBC)
127	R46	100	BN BK BN GD
128	R47	330	OR OR BN GD
129	C46	4.7uF (+)	4.7uF Orange radial (polarized)
130	C40	0.22uF	224

Rx Mute

131	R41	10K	BN BU OR GD
132	D19	1N34A	1N914 or 1N4148 (substitute)
133	D20	1N34A	1N914 or 1N4148 (substitute)
134	Q13	J176	J176 TO-92
135	R40	1M	BN BK GN GD
136	C43	0.1uF	104
137	R42	1M	BN BK GN GD
138	D18	1N4148	1N4148
139	C42	0.22uF	224

Audio Amp

140	POT3	10K	Black w/switch
141	C41	0.22uF	224
142	Q9	PN2222	TO-92 plastic (EBC)
143	R31	470	YL PR BN GD
144	Q10	PN2222	TO-92 plastic (EBC)
145	C31	4.7uF (+)	4.7uF Orange radial (polarized)
146	R29	39K	OR WH OR GD
147	C30	470uF (+)	470uF Orange radial (polarized)
148	R30	470	YL PR BN GD
149	R27	39K	OR WH OR GD
150	C29	470uF (+)	470uF Orange radial (polarized)
151	R28	470	YL PR BN GD
152	Q11	PN2222	TO-92 plastic (EBC)
153	R32	2.7K	RD PR RD GD
154	R33	2.7K	RD PR RD GD
155	Q12	PN2222	TO-92 plastic (EBC)
156	C33	470uF (+)	470uF Orange radial (polarized)
157	C32	0.22uF	224
158	C36	0.082uF	823K (Square brown)
159	T10	1200CT-8	Audio transformer
160	LS1	Speaker (or J1 - Stereo Phone Jack) (Has a spring)	

Tx Local Oscillator

161	TC6	11-70pF Trim Cap	Gray
162	L7	39uH	OR WH BK GD
163	Y5	4.915MHz	FOX 4.915 MHz
164	R50	10K	BN BK OR GD
165	R49	15K	BN GN OR GD
166	C48	100pF	101 AIJ
167	C49	180pF	181 AIJ
168	R51	1K	BN BK RD GD
169	Q15	PN2222	TO-92 plastic (EBC)
170	R52	330	OR OR BN GD
171	C54	0.01uF	103
172	C50	47pF	470 AIJ

Tx SB Mixer

173	T11	10T Trifular/FT37-43	Gray
174	C51	0.001uF	1N0J (Yellow)
175	D21	1N4148	1N4148
176	D22	1N4148	1N4148
177	D23	1N4148	1N4148
178	D24	1N4148	1N4148
179	T12	5TP-26TS/T37-2	Red
180	TC7	11-70pF Trim Cap	Gray
181	C52	390pF	391 AIJ
182	C53	270pF	271 AIJ

Tx Cascode RF Amp

183	R54	2.2K	RD RD RD GD
184	R53	10K	BN BK OR GD
185	Q16	PN2222	TO-92 plastic (EBC)
186	R57	100	BN.BK.BN.GD
182	Q17	PN2222	TO-92 plastic (EBC)
188	R55	10K	BN BK OR GD
189	C55	0.01uF	103
190	R56	10K	BN BK OR GD
191	C57	0.01uF	103
192	C56	120pF	121 AIJ
193	TC8	11-70pF Trim Cap	Gray
194	T13	26TP-5TS/T37-2	Red
195	POT4	100 Trim Pot	Blue

Tx RF Driver

196	C58	0.01uF	103
197	R59	1.5K	BN GN RD GD
198	R58	6.8K	BU GY RD GD
199	C60	0.01uF	103
200	Q18	2N2222A	TO-18 Metal (EBC)
201	R60	10	BN BL BK GD
202	C59	0.22uF	224
203	R61	82	GY RD BK GD
204	T14	10TP-2TS/FT37-43	Gray
205	C61	0.22uF	224
206	D25	1N4148	1N4148
207	R62	100	BN BK BN GD
208	D26	1N4752A	1N4752
209	L8	7T/FT37-43	Gray
210	C65	0.22uF	224
211	C66	0.22uF	224

TX RF Final Amp

212	Q19	2N2222A	TO-18 Metal (EBC)
213	R63	2.2	RD RD GD GD
214	C62	0.22uF	224
215	R64	2.2	RD RD GD GD
216	Q20	2N2222A	TO-18 Metal (EBC)
217	C63	0.22uF	224
218	R65	2.2	RD RD GD GD
219	Q21	2N2222A	TO-18 Metal (EBC)
220	C64	0.22uF	224

Tx Output Filter

221	C67	330 SM (Silver Mica) 5%	330 Burgundy
222	L9	17T/T37-2	Red
223	C68	820 SM	820 Burgundy
224	L10	17T/T37-2	Red
225	C69	430 SM	430 Burgundy
226	ANT	BNC Connector	BNC

Rx/Tx Driver

227	C70	0.01uF	103
228	R68	27K	RD PR OR GD
229	R69	2.7K	RD PR RD GD
230	R66	2.7K	RD PR RD GD
231	Q22	PN2222	TO-92 plastic (EBC)
232	Q23	PN2222	TO-92 plastic (EBC)
234	R67	4.7K	YL PR RD GD
235	C73	10uF (+)	10uF Orange radial (polarized)
236	J2	Mono Phone Jack (Key)	(No spring)

Rx T/R Switch

237	TC9	11-70pF Trim Cap	Gray
238	D27	1N4148	1N4148
239	D28	1N4148	1N4148
240	L11	12uH	BN RD BK GD
241	POT5	1K	BN BK RD GD

Input Power

242	F1	3A Fuse	Glass fuse
243	FH1	Fuse Holder	Black holder
244	D29	1N4744A Zener	1N4744
245	S1	SPST	inc. in POT3 volume

Adjustable Span RIT

246	C71	0.001uF	1N0J Yellow
247	R71	33K	OR OR OR GD
248	R70	10K	BN BK OR GD
249	R72	33K	OR OR OR GD
250	Q24	2N7000	TO-92 2N7000
251	R73	1.5K	BN GN RD GD
252	POT6	1K (R76?) Center Detent	1K POT
253	R75	47K	YL PR OR GD
254	C72	.01uF	103
255	D30	MV209 Varactor	MV209 (2 leads)
256	TC10	5-50pF Trim Cap	Orange

Misc. (Not provided)

257	PCB	5x7 Copperclad Board	
258	Manhattan Construction Pads/Islands		
259	Glue (if pads are used)		
260	Hook-up Wire		
261	COAX	Mini-coax for Antenna Connector/and some sections	
262	MagWire	Three colors of 28g or 26g Magwire	
263	Some people actually put these things in enclosures!		