

## Parts List

### RF Portion of the Universal QRP TX – MKII

Value	Designators	Quantity
Resistors		
12	R21	1
22	R13	1
47	R26	1
470	R17a (parallel with R17b to form R17)	1
510	R19	1
680	R10	1
1k	R12, R16	2
1.5k	R18	1
2.2k	R23, R24	2
3.3k	R11	1
4.7k	R2, R3, R15	3
10k	R1, R5, R6, R7, R8, R9, R14, R25	8
22k	R4	1
500 pot	R17b (parallel with R17a to form R17)	1
Capacitors		
65 pf trim	C10, C14	2
.1u	C15, C16, C17, C18, C19, C20, C21, C22, C23, C24	10
.68u	C11, C12	2
4.7u	C13	1
Transistors		
2N3904	Q1, Q6, Q7	3
2N3906	Q4, Q5, Q8	3
2SC5739	Q2, Q3	2
Misc		
FT37-43	T2, T3	2
Wire	Bifilar wire for T2 (10" #28) and T3 (7" #22)	2
3.9 uh	RFC1	1
1N967B	D1 (or 1N5260B)	1
1N4148	D2, D3	2
BNC	Antenna In, To Receiver	2
Key Jack	Key	1
Crystal	Y1	1
PB switch	S1	1
	Blank PC board	1

# T/R control Circuitry

Value	Designators	Quantity
Resistors		
68	R19	1
390	R16, R17, R18	3
1k	R2, R8	2
3.3k	R7	1
4.7k	R4, R5	2
10k	R1, R10	2
12k	R3, R11, R13	3
22k	R6	1
47k	R14, R15	2
150k	R9, R12	2
Capacitors		
.01u	C2, C3, C7, C8	4
.22u	C4	1
22u	C1	1
100u	C5, C6	2
Transistors		
2N3904	Q2, Q3, Q5, Q7	4
2N3906	Q1, Q4, Q6	3
Misc		
1N4148	D1	1
1N4001	D2	1
K1	12V DPDT Relay	1
Jacks	Audio In, Audio Out	2
	Blank PC Board	1

Band Specific Components (only one band is supplied with each kit)

Band MHz	T1 Turns core wire	C1	C2	C3	R20	R22	L1 turns core wire	L2 turns core Wire	C4	C5	C6	C7	C8	C9
3.5 note 6	51,3 T68-2 26	270	270	82	33	18	26 T37-2 28	20 T37-2 28	1000	390	1000	1000	300 Note 1	1000
7	32,4 T50-6 28	390	100	82	33	33	19 T37-2 26	14 T37-2 22	470	200	560	470	150	470
10.1	32,4 T50 -6 28	390	100	0	33	33	19 T37-6 28	13 T37-6 28	330	120	390	330	100	330
14	32,4 T50 -6 28	390	100	0	33	33	16 T37-6 28	11 T37-6 28	220	100	270	220	75	220
18.1	20,3 T37-6 28	100	33	0	33	33	14 T37-6 28	9 T37-6 28	180	75	220	180	56	180
21	20,3 T37-6 28	100	33	0	18	33	12 T37-6 28	9 T37-6 28	150	62 Note 2	180	150	50 Note 3	150
24.9	20,3 T37-6 28	33	18	0	18	33	11 T37-6 28	8 T37-6 28	133 Note 4	56	150 Note 5	133 Note 5	43 Note 7	133 Note 4
28	20,3 T37-6 28	33	18	0	18	33	10 T37-6 28	7 T37-6 28	120	47	140 Note 5	120 Note 5	39	120

Note 1 – 300 pf supplied as two 150 pf caps to be used in parallel

Note 2 – 68 pf cap supplied in place of the 62 pf specified

Note 3 – 47 pf cap supplied in place of the 50 pf specified

Note 4 – 133 pf supplied as 100 pf and 33 pf which are connected in parallel

Note 5 – C6 an C7 are in parallel in the output circuit. One 270 pf cap is used in place of the 150 and 133 pf caps in parallel on 12 meters, and one 270 pf cap is used in place of the 140 and 120 pf on 10 meters

Note 6 – 33 Ohm resistor added to xtal oscillator stage. See 80 M Oscillator Schematic.

Note 7 – Supplied as two 22pf caps which ar connected in parallel.