

Tuning Procedure

1. Tune C48, C46, C42, T3, T2, T1 to maximize the main wave output and syntony wave minimize.
2. The frequency is determined and stabilized by the crystal. Ranged from 174.71 MHz ~ 196.51 MHz is met and fixed by the proper crystal frequency. As the cartridge doesn't have high sensitivity so there is no such kind a circuit for suppression of spurious radiation, and limiting modulation.
3. As the output power is usually less than 15 dBm, there is no circuit for limiting power. If it is necessary to lower the power then please change L4 to be a resistor or get the R37's value higher.

Part	Used	PartType	Designators
1	1	0.1U	C28
2	1	1.5K	R5
3	5	1K	R13 R17 R23 R29 R33
4	1	1P	C47
5	1	1S2638	D2
6	1	1U	C19
7	2	2.2K	R7 R26
8	5	2.2U	C3 C15 C16 C17 C22
9	1	3.3K	R18
10	5	4.7U	C6 C8 C26 C27 C52
11	2	4T	L3 L5
12	2	5.6K	R24 R35
13	2	5T	L6 L7
14	1	9V	B1
15	1	10	R37
16	6	10K	R10 R19 R20 R25 R28 R32
17	2	10P	C43 C50
18	4	10uH	L4 L8 L9 R15
19	1	15K	R14
20	1	15P	C38
21	1	17.439MHz	Z1
22	3	20P	C7 C33 C34
23	4	22K	R9 R11 R12 R21
24	2	30P	C32 C49
25	2	33K	R27 R31
26	2	47K	R16 R22
27	2	47U	C12 C20
28	1	50K	R8
29	2	50P	C31 C39
30	1	78L05	U3
31	1	89	T1
32	1	96	T3
33	1	98	T2
34	2	100K	R3 R4
35	3	100P	C4 C11 C35
36	1	100U	C30
37	11	102	C2 C23 C36 C37 C40 C41 C44 C45 C51 C53 C54
38	2	102J	C10 C25
39	2	103	C29 C55
40	1	103J	C9
41	1	104	C18
42	1	200P	C14
43	1	470	R36
44	2	680	R30 R34
45	4	C1923	Q1 Q2 Q3 Q4

Wht15a.bom

46	3	CVN620	C42 C46 C48
47	1	G3	D1
48	1	MC4558	U1
49	1	MIC	M1
50	1	NE571	U2