

## NBPU PARTS LIST

Bill of Materials

770597A.S01

Quan	Type	Value	Ref Designators
1	1200B	AT90S1200	U3
1	570AC	NE570	U2
1	7025	TRF2050	U4
1	9DA	LM833	U1
1	C	.0015UF	C12
4	C	100PF	C16,C3,C44,C49
6	C	.1UF	C20,C25,C26,C27,C5,C8
1	C	22PF	C21
1	C	33PF	C22
11	C	.001UF	C23,C24,C28,C30,C34,C37, C40,C41,C42,C43,C51
1	C	10PF	C32
1	C	5.6PF	C33
1	C	NO PART	C35
1	C	12PF	C36
1	C	1.5PF	C38

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Quan	Type	Value	Ref Designators
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2	C	3.9PF	C39,C47
1	C	1PF	C45
1	C	3.3PF	C46
1	C	*	C50
1	C	47PF	C6
10	CE	10UF	C1,C10,C13,C14,C19,C2, C29,C4,C7,C9
1	CE	.22UF	C11
3	CE	1UF	C15,C17,C31
1	CE	2.2UF	C18
1	CV	5-20PF	VC1
1	D	1N5817	D1
1	DD2	BAV99	D2
2	DL	VAL	DS1,DS2
5	E	VAL	E1,E2,E3,E4,E5
7	LA	.22UH	L1,L10,L2,L3,L5,L6,L7

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Quan	Type	Value	Ref Designators
=====			
2	LA	8NH	L4,L9

1	LA	27NH	L8
1	P	+	B1
1	P	-	B2
3	QNEBC	MMBR901	Q11,Q7,Q8
2	QNEBC	MMBT3904	Q3,Q9
2	QNT	ZVN4106	Q1,Q2
4	QPEBC	MMBT3906	Q10,Q4,Q5,Q6
1	R	3.01K	R1
6	R	*	R10,R21,R22/C48,R3,R50, R51
7	R	1K	R11,R15,R16,R17,R18,R19, R20
7	R	10K	R12,R14,R30,R31,R38,R7, R8
1	R	3.9M	R13
2	R	475	R2,R35

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Quan	Type	Value	Ref Designators
1	R	24.3K	R23
2	R	4.99K	R26,R29
1	R	13K	R27

1	R	16.2K	R28
1	R	150K	R32
1	R	511K	R33
2	R	221	R34,R52
2	R	4.75K	R36,R46
2	R	47.5	R37,R40
2	R	47.5K	R39,R6
2	R	100	R4,R42
1	R	22.1K	R41
1	R	22	R43
1	R	6.81K	R44
2	R	100K	R45,R9

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Quan	Type	Value	Ref Designators
1	R	10	R47
1	R	26.7	R48
1	R	20K	R5
1	RS	*	R49
1	RVA	100K	VR1

1	RVA	100	VR2
1	S10	VAL	S3
2	SSS	VAL	S1,S2
9	TP		TP1,TP2,TP3,TP4,TP5,TP6, TP7,TP8,TP9
1	VCO-500SQ	VAL	HY1
1	Y	4MHZ	Y1

Total Parts: 153

## NBPU ALIGNMENT PROCEDURE

1. Set channel switch to 0. Set mic gain (VR1) max CW.
2. Feed 7.8mV at 1 kHz across E2 (hot) and E1 (gnd).
3. Connect a frequency counter and deviation meter from E5 (rf out) to ground.
4. Connect the battery contacts to 9 volts DC.
5. Turn unit on and adjust VC1 for the channel 0 frequency.
6. Adjust VR2 for +/- 40 kHz deviation.