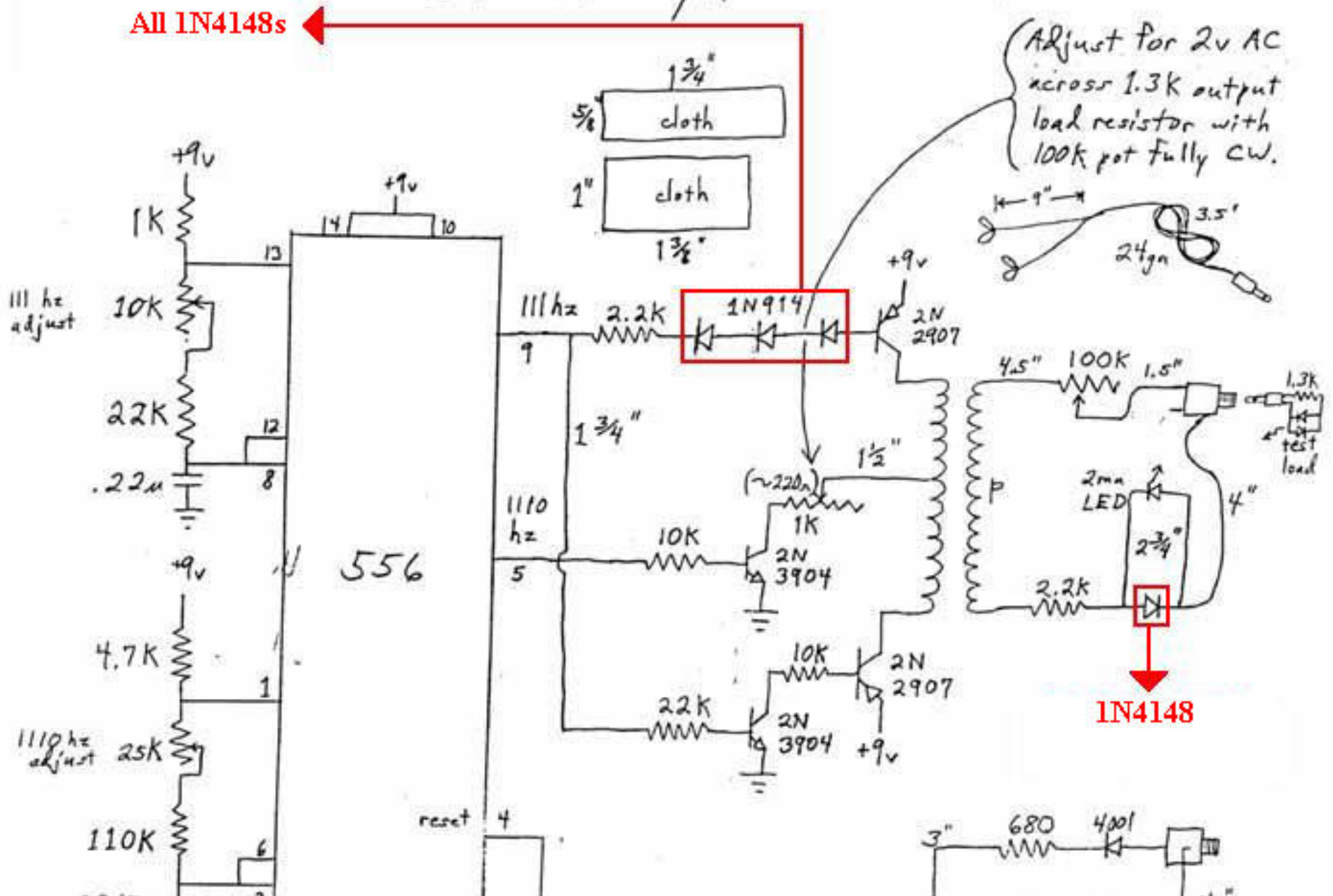
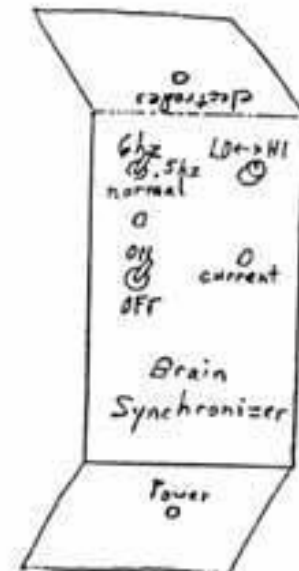
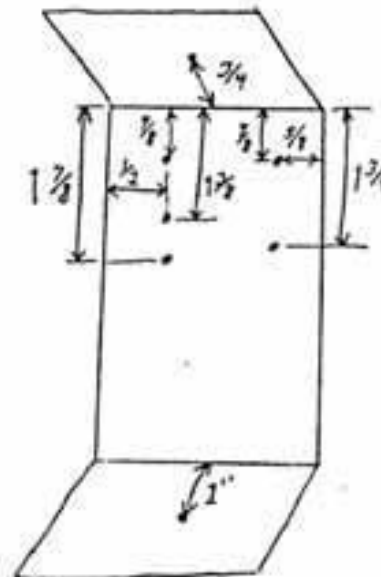
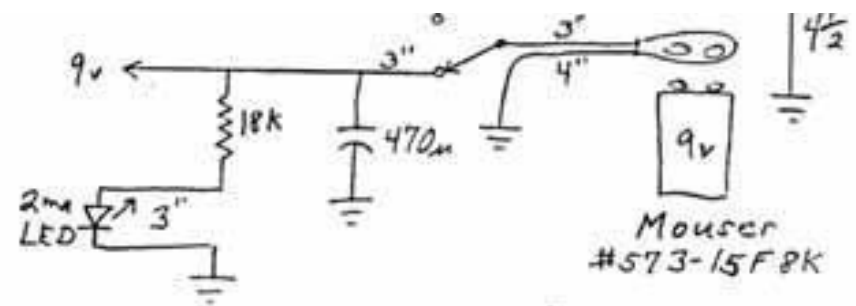
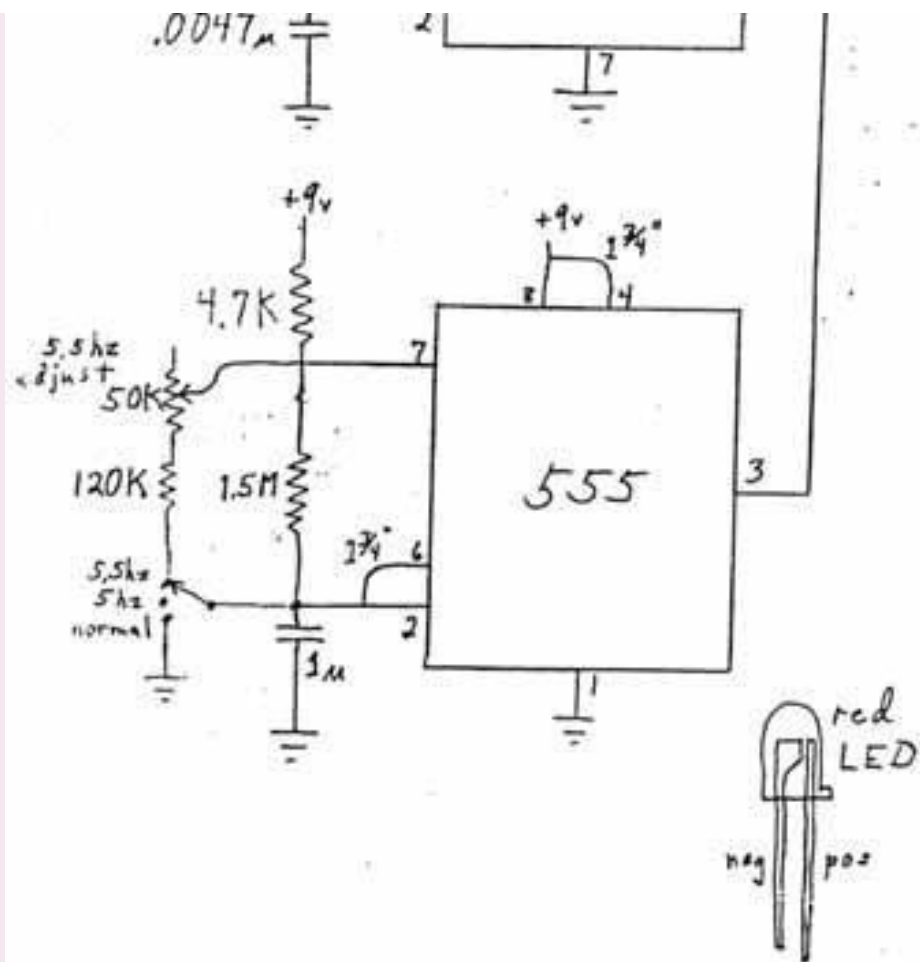


# Brain Tuner Schematic

## Brain Synchronizer





## Parts List:

Qty	Mouser	#	cost	Backup
1	project box	400-1542	3.70	RS: 270-231 2.32
1	9v rechargeable battery	573-15F8K	7.99	
1	9v battery clip	12BC160	.54	
1	output transformer	42TM006	2.41	
1	C555 timer IC	511-TS555CN	.46	
1	C556 timer IC	511-TS556CN	.62	
1	8 pin IC socket	571-26404633	.11	
1	14 pin IC socket	571-26403573	.13	
1	100K pot	31VA501	1.25	

1	pot knob	450-2070	.99
1	25K mini pot	569-72PM-25K	.99
2	3.5mm female jack	16PJ137	.52
2	3.5mm male plug	17PP103	.86
1	12v 200ma Adaptor	412-1101	4.90
1	470uf capacitor	140-XRL10V470	.18
1	1uf capacitor	540-1.0M35	.33
1	.22uf capacitor	540-0.22M35	.33
1	.0047uf capacitor	581-UEC472J1	.62
1	130K 1/4w resistor	30B-J250-130K	.22
1	120K resistor	30B-J250-120K	.22
1	33K resistor	30B-J250-33K	.22
2	22K resistor	30B-J250-22K	.44
2	4.7K resistor	30B-J250-4.7K	.44
1	680 ohm resistor 1/2W	30B-J500-680	.22
1.5"	1/16" shrink tubing, 4'	5174-11162	4'/.78

Qty	Radio Shack #		cost
2	2ma LED	276-044	2.12
1	PC board	276-150	.64
3.5'	24ga speaker wire	278-1301	.27

Qty	JDR	#	cost
1	SPDT switch	SP/DT	1.25
1	SPDT-CO switch	SW22	1.29
1	1.5M resistor	R1.5M	.05
1	18K resistor	R18K	.05
2	10K resistor	R10K	.10
2	2.2K resistor	R2.2K	.10
1	50K mini pot	72PR50K	.79
1	10K mini pot	72PR10K	.79
1	1K mini pot	72PR1.0K	.79
2	2907 transistor	2N2907A	.29
2	3904 transistor	2N3904	.10
4	1N4148 diode	1N4148	.04
1	1N4001 diode	1N4001	.06
4	rubber feet	3M5012-BL	100/6.95
3.5'	24ga single wire	WIRE-24YSR100	100'/3.95

2 ear clips from Beads N Beyond part #125 \$.25ea  
(sew 100% cotton cloth on them. Wet with saltwater before using)