

Sound Card EMG, Ham Radio Unit BOM, Rev 0								5/29/2008	
Quantity	Value	Tolerance	Voltage Rating	Package	Parts				MFG/Comments
Integrated Circuits									
4	AD706	NA	10V	DIL-08	J1A, U1BU3A,U3B	U4A,U4B	U5A,U5B		Analog Devices
1	INA114	NA	10V	DIL-08	U2				Analog Devices
1	LM311	NA	5-15V	DIL-08	U6				Various Vendors
2	IL-1	NA		DIL-08	U8	U9			Various Vendors
1	ICM7555	NA	10V	DIL-08	U7				Various Vendors
1	TMV0505D	NA	5V	CUSTOM	U10				TRACO Electronics AG
1	LM2931Z-5	na	20V	TO-92	U11				National Semiconductor
Discrete Semiconductors									
12	1N4148	NA	100V	DO-35	D1-D8				Various Vendors
2	1N4001	na	1kv	DO-35	D10,D11				Various Vendors
1	2N222A	NA	15V	TO-92	Q1				Various Vendors
Resistors									
1	100	5%		R-10	R2,R15				
1	200	5%		R-10	R36				
2	1K	1%		R-10	R6,R7				
7	1K	5%		R-10	R3,R4,R9,R28,R35,37,R38				
1	2.7K	5%		R-10	R39				
2	4.7K	5%		R-10	R23,R30				
7	10K	5%		R-10	R1,R8,R10,R11,R19,R22,R34				
5	20K	5%		R-10	R17,R18,R20,R21,R31				
2	22K	5%		R-10	R14				
2	39K	5%		R-10	R12,R13				
2	47K	5%		R-10	R27,R29				
	100K	5%		R-10	R16,R25,R32				
1	200K	5%		R-10	R5				
1	330K	5%		R-10	R26				
1	5K	NA			R24				10 Turn Potentiometer
1	100K	NA			R33				10 Turn Potentiometer

Capacitors									
1	100pf	10%	100V	C-5	C1				Ceramic
2	0.001uf	10%	100V	C-5	C3,C4				Ceramic
1	0.01 uf	10%	100V	C-5	C17				
2	0.02uf	10%	50V	C-5	C7,C8				Ceramic
10	0.1uf	20%	50V	C-5	C2,C5,C9,C10,C13,C14,C16,C18,C20				Ceramic
1	2.0uf	20%	15V	EL25B	C6				Tantalum
3	22uf	20%	15V	EL25B	C19,C23,C24				Tantalum
Inductors									
2	100uh	10%			L1,L2				
2	33 UH	10%			L3,L4				
Miscellaneous Parts									
1	Conn				P1				9-Pin RS-232 Conn.
2	Jack				J1,P2				Mono, miniture phone jack
1	Jack				J2				Power Connector
1	TTC-02				T1	(Tamura)			1100 volt isolation transformer
9	8-Pin								IC Socket
1	Relay				K1	5 VDC Relay			Radio Shack, 275-232
1	PCB					PCB with ground plane			
1	Enclosure					Plastic enclosure, 3.3" x 5.25" x 1.25"			PAC-TEC, Model CM3-100
2	RCA Phono								Femal jacks for electrodes
1	Ground Plug								For DRL
2	Electrodes				AgCl				
1	Cable					Stereo Cable with RCA Male Phono Plugs			
Notes:									
All resistors are metal film, 1/4 watt, to reduce noise									