

MIKE WIRING
Some have bare wires or

⊕ - Red or White

⊖ - Black

PARTS LIST

R2	1K RESISTOR (BRN BLK RED)	C5	1uF to 5uF CAP ELECTROLYTIC
R1, R3	10K RESISTOR (BRN BLK ORA)	C3, C4	47uF CAP ELECTROLYTIC
R4, R5	100K RESISTOR (BRN BLK YEL)	U1	LM1458 IC
R6	270 OHM RES (RED VIO BRN)	U2	LM386N-1 IC
R7	10K POT PC MOUNT VERTICAL	X1	MICROPHONE
9 VOLT BATTERY CONNECTOR		P C BOARD	
C1, C2	.1uF MONO		

ASSEMBLY INSTRUCTIONS

1. INSERT AND SOLDER ALL 6 RESISTORS
2. INSERT AND SOLDER R7 VARIABLE RESISTOR
3. INSERT AND SOLDER C1, C2 MONOLETHIC
4. INSERT AND SOLDER C5 ELECTROLYTIC CAPACITOR, NOTE POLARITY
5. INSERT AND SOLDER C3, C4 ELECTROLYTIC CAPACITOR, NOTE POLARITY
6. INSERT AND SOLDER U1 - LM1458 I.C., NOTE POLARITY PIN #1 IS INDICATED ON PARTS LAYOUT
7. INSERT AND SOLDER U2 LM386N I.C., NOTE POLARITY PIN #1 IS INDICATED ON PARTS LAYOUT
8. INSERT AND SOLDER POWER CONNECTOR, NOTE POLARITY
9. INSERT AND SOLDER MICROPHONE, NOTE POLARITY
10. AT THE OUTPUT, - HOOK UP A 8 OHM SPEAKER OR HEAD SET. (YOUR KIT DOES NOT COME WITH THIS ITEM)

OPERATION AND TESTING

1. SET THE VOLUME CONTROL (R7) FOR MID RANGE
2. CONNECT A 9V BATTERY TO THE BATTERY CONNECTOR
3. WHEN YOU SPEAK INTO THE MICROPHONE YOU SHOULD HEAR YOUR VOICE IN THE SPEAKER. IF YOU HAVE THE SPEAKER TOO CLOSE TO THE MICROPHONE OR THE VOLUME (R7) IS TURNED UP TOO HIGH YOU WILL HEAR A LOUD SQUEAL IN THE SPEAKER. THIS IS NORMAL AND INDICATES YOUR AMPLIFIER IS OPERATING.
4. IF THE AMPLIFIER DOES NOT OPERATE, CHECK ALL OF YOUR CONNECTIONS AND ESPECIALLY THE ORIENTATION OF THE IC'S AND CAPACITORS. IF ONE OF THE CAPACITORS IS BACKWARDS IT CAN CAUSE THE SOUND TO BE DISTORTED. ALSO A CAPACITOR BACKWARDS CAN ALLOW YOUR AMPLIFIER TO OPERATE FOR A WHILE, BECOME DISTORTED AND FINALLY STOP OPERATING. THEN AFTER POWER IS REMOVED THE SAME SEQUENCE CAN REOCCUR.

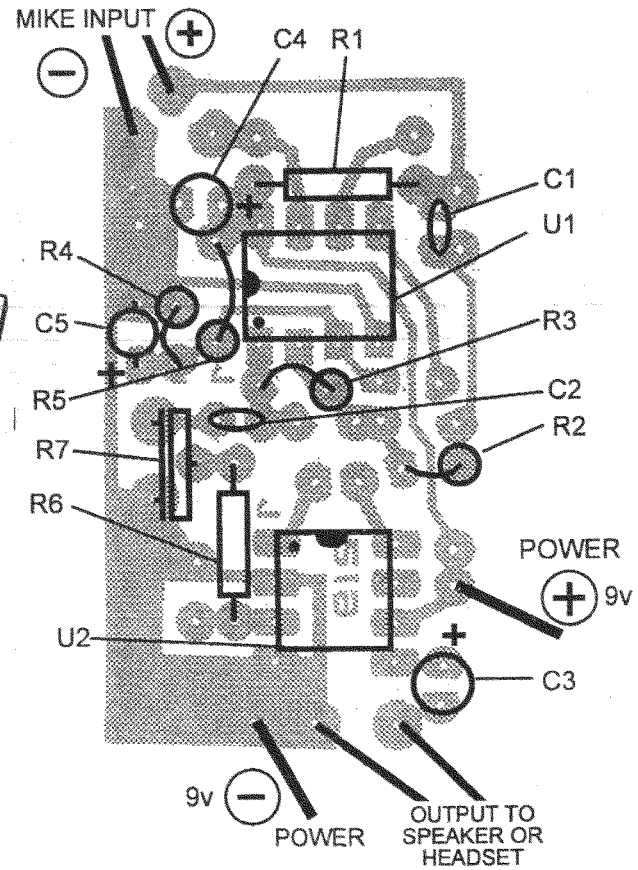
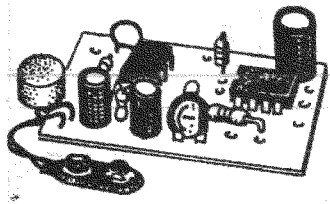
ADDITIONAL INFORMATION

YOU MAY WANT TO MOUNT THE MICROPHONE INSIDE OF A TUBE OR YOU MAY PLACE THE MICROPHONE IN FRONT OF A PARABOLIC REFLECTOR. EITHER OF THESE WILL ALLOW YOU TO HEAR CONVERSATIONS FROM A MUCH LONGER DISTANCE. THEY MAKE THE MICROPHONE VERY DIRECTIONAL AND CAN ALSO REDUCE THE BACKGROUND NOISE.

THERE HAVE BEEN SEVERAL ARTICLES PUBLISHED ABOUT THESE AND OTHER WAYS OF USING AMPLIFIERS AND DIRECTIONAL MICROPHONES. YOU MAY WISH TO READ SOME OF THESE ARTICLES FOR OTHER IDEAS ABOUT USING YOUR AUDIO AMPLIFIER. LOOK IN ELECTRONIC AND AMATEUR RADIO BOOKS.

THE PC BOARD HAS SEVERAL UNUSED HOLES. YOU MAY WANT TO EXPERIMENT BY PUTTING CAPACITORS ACROSS R2 AND R3. (100pf TO 1uF) THIS WILL LIMIT THE FREQUENCY RESPONSE OF YOUR AMPLIFIER AND CAN BE USEFUL TO REDUCE WIND NOISE FOR LISTENING TO CONVERSATION A LONG WAY AWAY. YOU CAN ALSO CHANGE THE FREQUENCY RESPONSE BY CHANGING THE VALUE OF R6 (UP TO 5K) AND ADDING A CAPACITOR TO GROUND. (100pf TO 1uF)

THIS KIT IS SOLD FOR EDUCATIONAL PURPOSES ONLY. IT MAY BE ILLEGAL TO USE ANY DEVICE TO LISTEN TO A PRIVATE CONVERSATION WITHOUT THE CONSENT OF ALL PARTIES INVOLVED.



JAMECO[®]
ELECTRONIC COMPONENTS
COMPUTER PRODUCTS

1355 Shoreway Road
Belmont CA 94002
650-592-8097

AA-1

151204

**Super Snooper
Big Ear**

10/21/99

NO REPAIR WILL BE LOOKED AT UNTIL REPAIR COST IS RECEIVED

ATTENTION KIT BUILDER:
BEFORE SOLDERING ANY BOARD MAKE SURE YOU HAVE THE ABILITY TO COMPLETELY ASSEMBLE THE KIT PROPERLY!

RETURN POLICY:
Electronic Rainbow will refund purchase price on any unopened kit **LESS postage and a 15% restocking fee.**

NO refunds will be made on any kit that has been touched with solder. Electronic Rainbow will repair any of our kits sent back for the following costs, which includes return postage to the customer:

KIT#	CHARGE	KIT#	CHARGE	KIT#	CHARGE
AA-1	\$10.00	LCD-T1	\$15.00	ST-1	\$10.00
AD-8	\$15.00	LD-1	\$ 8.50	TC-2	\$ 8.50
AP-1	\$10.00	LG-2	\$ 8.50	TEL-B1	\$10.00
AXT-10	\$15.00	LPS-1	\$25.00	TEL-LITE	\$ 8.50
CA-1	\$10.00	MB-2	\$ 8.50	TEL-SW1	\$ 8.50
CL-1	\$10.00	MMPT-2	\$15.00	TIR-1	\$15.00
COD-K1	\$12.00	MMWM-5	\$15.00	TM-1	\$25.00
DIS-1	\$35.00	OSC-2	\$ 8.50	TP-1	\$ 7.50
DJGB-2	\$ 8.00	OVA-1	\$10.00	TT-16	\$10.00
DJRB-2	\$ 8.00	PNS-1	\$15.00	VM-1	\$ 8.50
DF-222	\$ 8.50	PTG-1	\$20.00	VM-110	\$ 8.50
DSSA-1	\$17.50	RB-2	\$ 8.50	VOX-1	\$10.00
DT-3	\$ 8.50	REC-2	\$15.00	WBA-4 & 6	\$10.00
DTMF-1	\$25.00	RP-1	\$ 7.50	WBA-64	\$15.00
ET-1	\$ 8.50	RSD-1	\$10.00	WD-2	\$10.50
ETC-2	\$ 8.50	RS-232	\$10.00	WM-2	\$10.00
FMST-100	\$15.00	RX-1	\$12.00		
IA-2	\$10.00	SB-1	\$15.00		
IR-2	\$10.00	SDF-1	\$15.00		

IT DOESN'T WORK.....NOW WHAT?

If assembled properly, all kits will work, almost all of the kits we receive for repair have assembly errors!

Here are some of the common errors we find:

1. Parts in wrong holes.
2. Solder shorts
3. Parts in backwards
4. Parts which are not soldered or have cold solder joints.
5. Wires which are "frayed" & touching other parts.

It is very difficult to objectively check your own work. Have someone else look over your completed kit. This can save a lot of time, frustration and money. If you need technical assistance, you are welcome to write or call. If you must return a kit we must charge for our technicians time. If a part is found to be defective, your repair fee will be refunded. We cannot warrant the kit builders ability, only the parts. No kit will be repaired if it has been modified or if mounted in an enclosure other than our own.

For repair send your kit to:

JAMECO[®]
ELECTRONIC COMPONENTS
COMPUTER PRODUCTS
6227 Coffman Rd.
Indianapolis IN 46268
317-291-7262

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