

CONDENSOR MIC WITH PRE-AMP
CODE 648 **LEVEL 1**

This mic-condensor preamplifier circuit. This circuit is small and has only few components. This circuit has premic and mic-condensor, it is high sensitivity than normal circuit.

Specification:

- Supply voltage : 9 VDC
- Consumption : 5mA.max
- Dimension : 0.67 x 1.50 inches.

How it works:

Connecting TR1 as class A amplified circuit. MIC signal will transfer through C1 to the base of TR1 to amplify signal to the collector of TR1. The amplified signal will then transfer to C2 to OUT. R1 acts as R loader of MIC. C3 bypasses high frequency.

PCB assembly:

Shown in Figure 3 is the assembled PCB. Starting with the lowest height components first, taking care not to short any tracks or touch the edge connector with solder. Some tracks run under components, and care should be taken not to short out these tracks. If the pins will not enter the holes with ease, use a small drill to slightly enlarge the opening. All components with axial leads should be carefully bent to fit the position on the PCB and then soldered into place. Make sure that the electrolytic capacitors are inserted the correct way around. Some components are particularly sensitive to heat (ie: Transistors, IC's, diodes etc.) extra care must be taken to only apply the iron for as little time as possible, using a pair of pliers to grip the leads will help conduct heat away. Trim components leads with wire cutters to prevent excess lengths causing a short circuit.

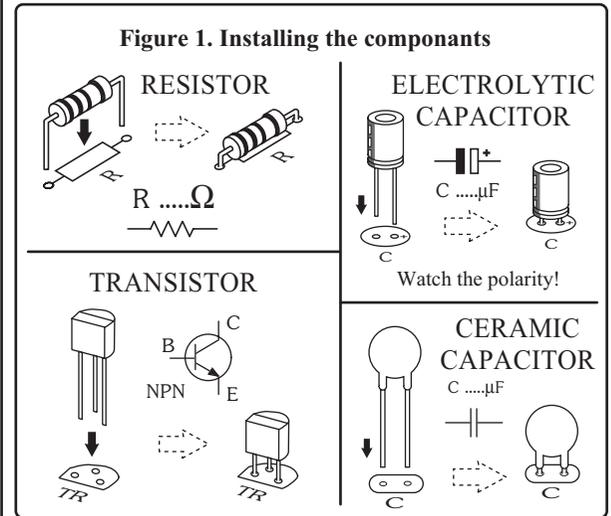
Now check that you really did mount them all the right way round!

Testing:

Connecting OUT of pre-mic with amplifier before connecting tone control. Giving supply through switch according to the figure. Turning amplifier volume and speaking at microphone, voice from speaker should be amplified.

Application:

If there is sharp voice, turning microphone far from speaker. If circuit is high sensitivity, taking of C 33/16 or decreasing values.



Troubleshooting:

The most problem like the fault soldering. Check all the soldering joint suspicious. If you discover the short track or the short soldering joint, re-solder at that point and check other the soldering joint. Check the position of all component on the PCB. See that there are no components missing or inserted in the wrong places. Make sure that all the polarised components have been soldered the right way round.

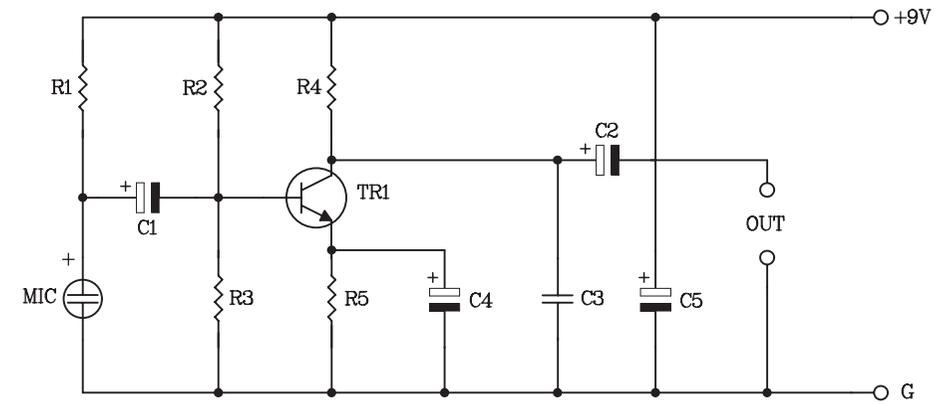


Figure 2. The condenser mic with pre-amp circuit

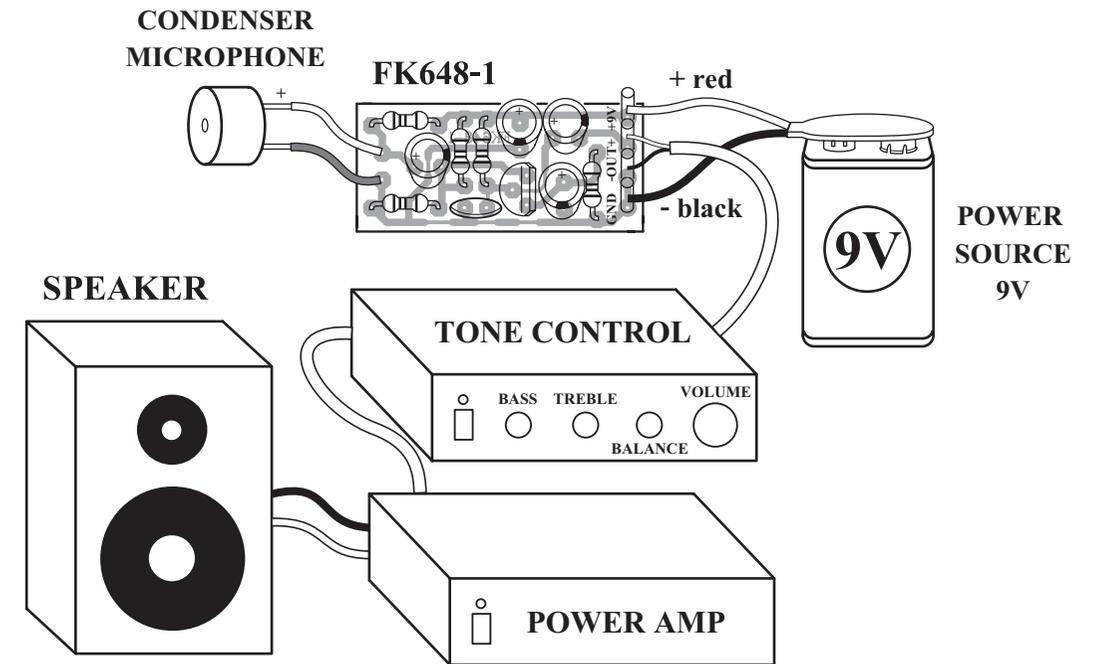


Figure 3. Connections

NEW KIT SET

CODE FK	DESCRIPTION	POWER
168	NO SMOKING FLASHER 46 LED	9-12VDC.
169	DANCING ROBOT FLASHER 33 LED	9-12VDC.
170	DANGER FLASHER 42 LED	9-12VDC.
171	TWO LAMP FLASHER	3VDC.
172	THREE STEP FLASHER 19 LED	9-12VDC.
173	HALLOWEEN PUMPKIN FLASHER 23 LED	9-12VDC.
174	5x7 ANIMATED LED SIGNBOARD	3-5VDC.
816	VARIABLE REGULATOR 0-50V. 3A.	50VDC.
817	TRANSFORMERLESS POWER SUPPLY 6-9-12V 50mA	220-240VAC.