

HUMAN TO ROBOT VOICE CHANGER
CODE 930 **LEVEL 1**

This circuit is changing the voice of humen to high or low following adjust the signal. Idel for party and fun.

Technical specifications:

- power supply : 9VDC.
- consumption : 100mA max.
- PCB dimensions : 1.88 x 3.07 inches.

How to works:

When have the signal into MIC, this signal is changed from the audio signal to the electric signal. IC1/1 is configured as a pre-amplifier. The output of IC1/1 at pin 8 is fed to the input of IC2 at pin 8 through C9 and the volume control (VR1). The signal is toggle on and off in accordance with the oscillations of IC1/2. IC1/2 is configured as low and high frequency with adjust from 50Hz to 1KHz by VR2. The on/off action of IC2, caused by the signal applied to it, creates to it, creates a new signal. The is fed to amplifier IC1/3, TR1 and TR2, before into the 8 ohm 0.25W loudspeaker.

PCB assembly:

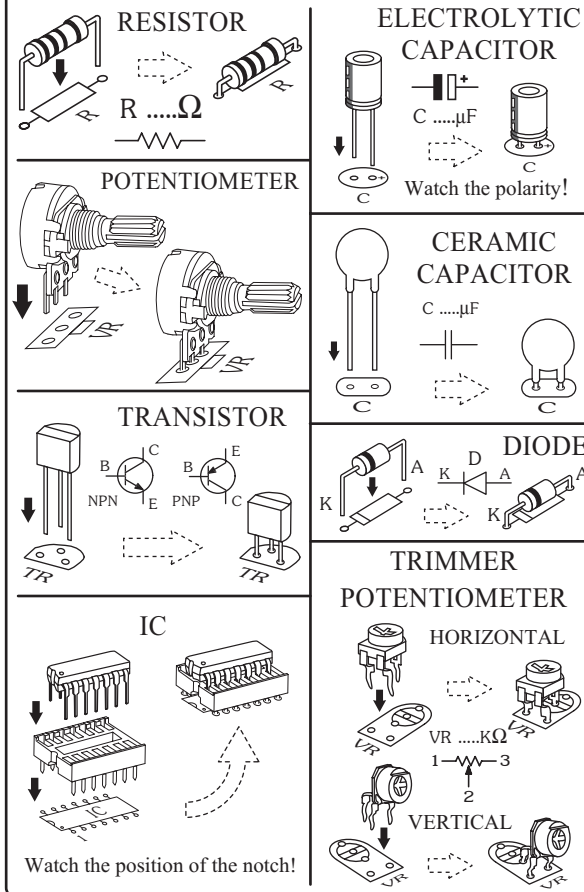
Shown in Figure 3 is the assembled PCB. Starting with the lowest height components first, taking care not to short any tracks or touch the edge connector with solder. Some tracks run under components, and care should be taken not to short out these tracks. If the pins will not enter the holes with ease, 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:

Connect the loudspeaker to "SP" point, rotate VR100K max. counterclockwise and rotate VR10K center. Connect the power supply 9VDC. to "+9V" and "G" point. Speaking to MIC and rotate VR100K clockwise change the audio.

Figure 1. Installing the componants



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.

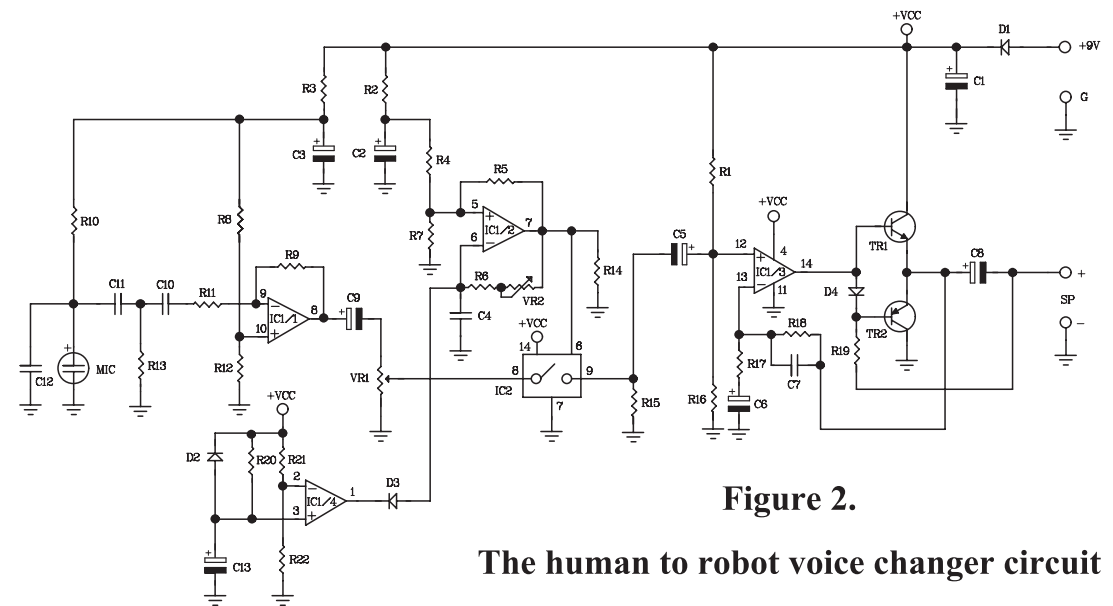


Figure 2.
The human to robot voice changer circuit

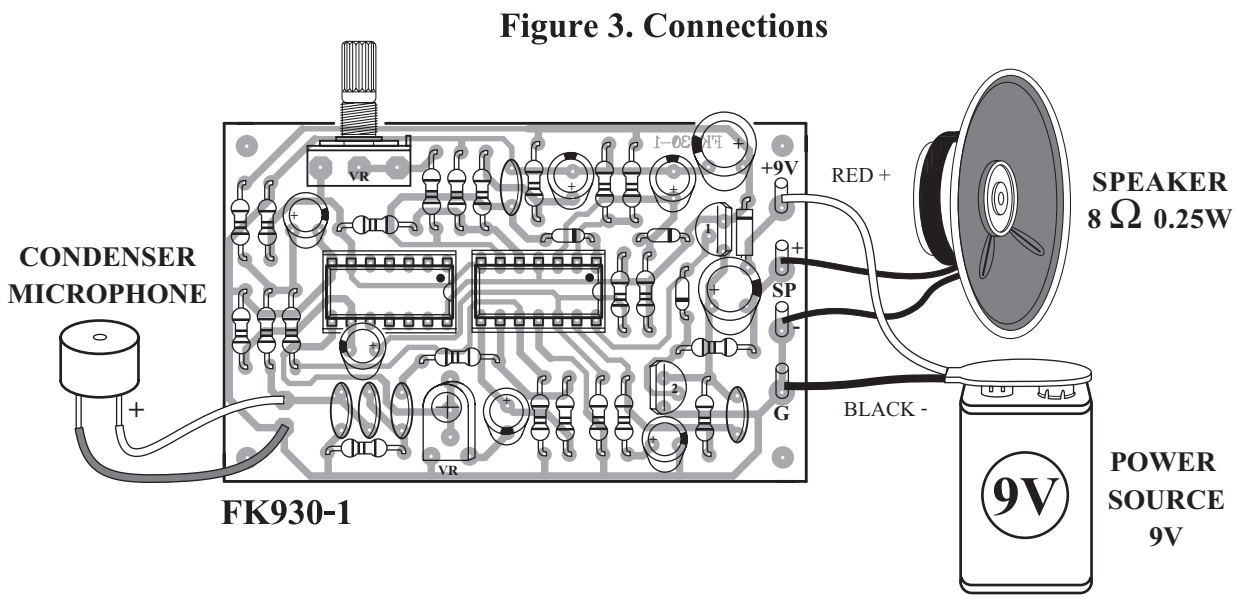
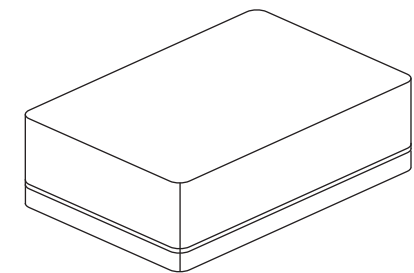


Figure 3. Connections



NOTE:
FUTURE BOX FB04 are suitable for this kit.