

# SOUND ACTIVATED BARKING DOG ALARM (SOUND IC EXCHANGEABLE)

**CODE 279** 



Make a sharp sound and the circuit will produce barking dog alarm. FK279 can be also used for controlling the operation of other sound circuits. In addition, the sound IC can be changed into other sounds. It is ideal for toys and advertising.

### **Technical Specifications**

- Power supply: 3VDC.
- Consumption: 370mA. max. (Standby) and 45mA. max. (Working)
- Using condensor microphone for detecting the sound.
- Sound IC can be changed into other sounds.
- There is OUT point for control the other sound circuits.
- PCB dimensions : 1.76 x 1.80 in.

#### How to Work

The circuit diagram is shown in Figure 1. The circuit is composed of two parts: sound control and dog barking circuits.

The sound control circuit will start working when there is sound into MIC, TR1 will amplify this signal and send it to TR2 and TR3. TR2 and TR3 are working, causing dog barking sound into speaker. VR1 will control the sound level.

#### Circuit Assembling

External connecting and fitting of components are shown in Figure 2. It is recommended to assemble the circuit starting with a lower component i.e. diodes, resistor, electrolite capacitors and transistors etc. Be careful while assembling and check for the matching of PCB poles and components before soldering as

shown in Figure 3. Use a max. 40W. solder and soldering lead with a tin and lead ratio of 60/40 together with a joint solution inside. Recheck the assembled circuit for your own assurance. Better using a lead sucker or a lead wire absorber in case of misplacing component to protect PCB from damage.

CAUTION:- As the IC is the main component of the circuit, it is recommended to avoid any over-heat within the IC while soldering.

#### Testing

Supply 9VDC to the circuit and connecting J1. Make a sound into MIC, dog barking alarm can be heard 3 times through the speaker. When there is sound into MIC, the circuit will start producing a new sound.

#### **Working Procedure with Other Sound Circuits**

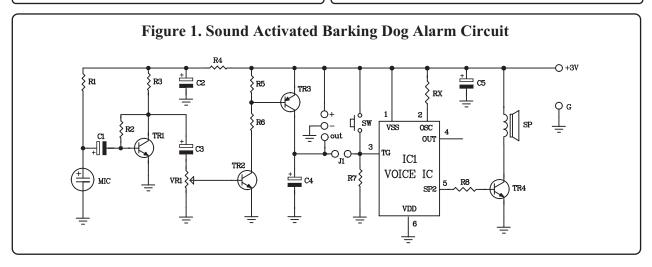
OUT, -, + points are used for connecting the other sound circuits of future kit product. Connecting OUT point at pin 3 of the sound IC and removing J1.

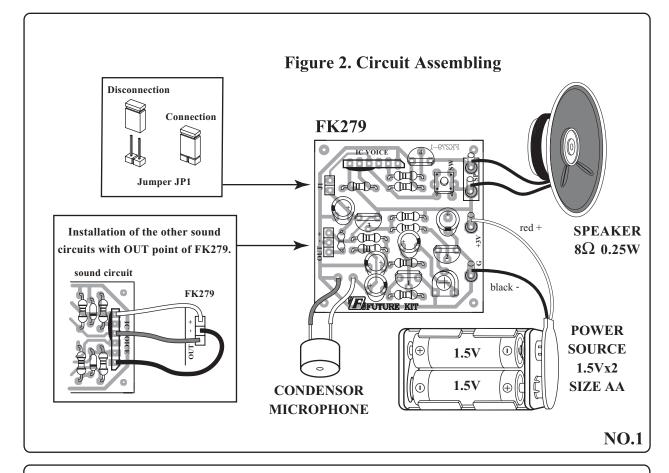
The sound circuits can be used with FK279 included FK201-208, FK210-212, FK214-217, FK221-225, FK254, FK257-260 and FK276-277.

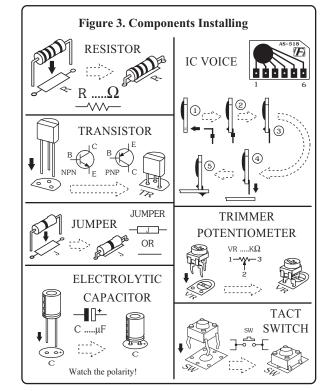
#### Sound IC Exchange

The followings are sound ICs that can be exchangeable.

Code	Sound	Code	Sound	Code	Sound
IC201	Monkey	IC212	Tiger	IC226	Ghost
IC202	Cow	IC214	Frog	IC254	Duck
IC203	Wolf	IC215	Chicken	IC257	Parrot
IC204	Lion	IC216	Cat	IC258	Hen
IC205	Dinosaur	IC217	Birds	IC259	Kid Laughter
IC206	Elephant	IC221	Glass Broken	IC260	Whistle
IC207	Dog Barking	IC222	Witch	IC276	Owl
IC208	Cock	IC223	Laughter	IC277	Lovely
IC210	Sheep	IC224	Screaming		Massage
IC211	Horse	IC225	Baby Cry		







## **Troubleshooting:**

As the circuit has only a few components, the main cause of troubles will come from component misplacing and defaulted soldering. When found out that the circuit does not work, check for the proper component placings and various soldering points.

# NOTE: FUTURE BOX FB28 is suitable for this kit.