

The IC circuit utilizes the principle of digital memory. The digital signal and program which cannot be changed is put in IC produced from the IC factory. This is called as rom. The future kit apply IC ROM in microchip from sealed with the imprinted connected pattern.

Technical specifications:

- power supply: 3VDC.
- consumption: 70mA max. at 3VDC.
- dimensions: 1.39 x 1.08 inches.

How to works:

The pin 5 of IC1 is connected to the base of TR1 in order to amplify a tone frequency throughout a speaker. The pin 2 of IC1 is connected through R2 to control the value of frequency. The pin3 of IC1 is a trickier. If you want the operation continue to jumping the jumper J. The circuit necessitates the voltage at 3-volt and 2 inches 8 ohms speaker. The circuit consists of two imprinted connected pattern. One is IC pattern. The other is amplifier.

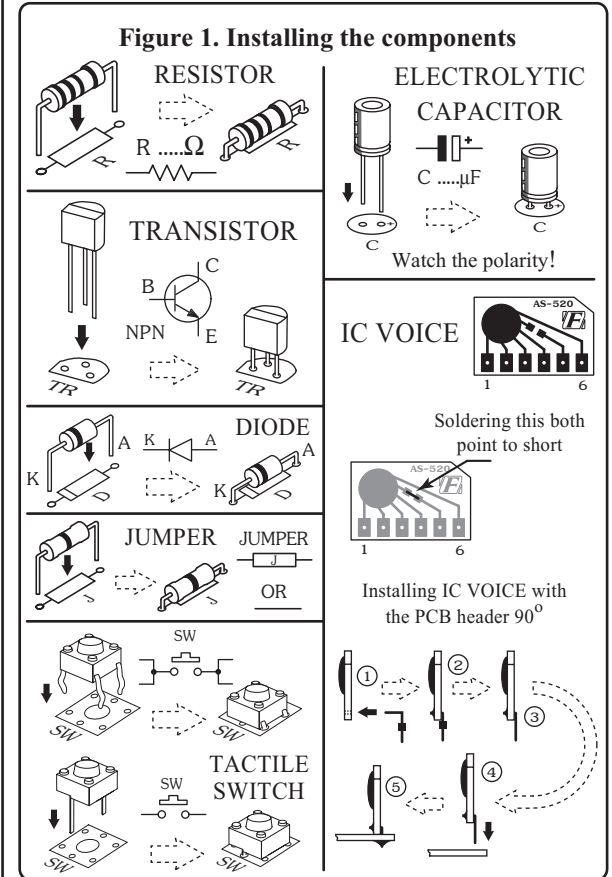
PCB assembly:

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. 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. Now check that you really did mount them all the right way round! For IC VOICE, you must be soldering IC VOICE with the PCB header 90° before soldering with PC-board.

Testing:

This kit has an operating voltage range of 3 VDC. Apply power supply to circuit. Push switch, you will hear the sound from speaker and automatically stop. If jumper J is jumping, the circuit will sequentially

function again. The sound is not loud can be amplified by connecting with microchip amplifier set of FUTURE KIT FK602.



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.

CAUTION:- The circuit has IC microchip as important component so be careful when soldering avoiding to make it so not because it is fragile. The imprinted connected pattern should not be bent since the IC inside is easy to broken. Over or reserse distribution may caused IC to unpractical.

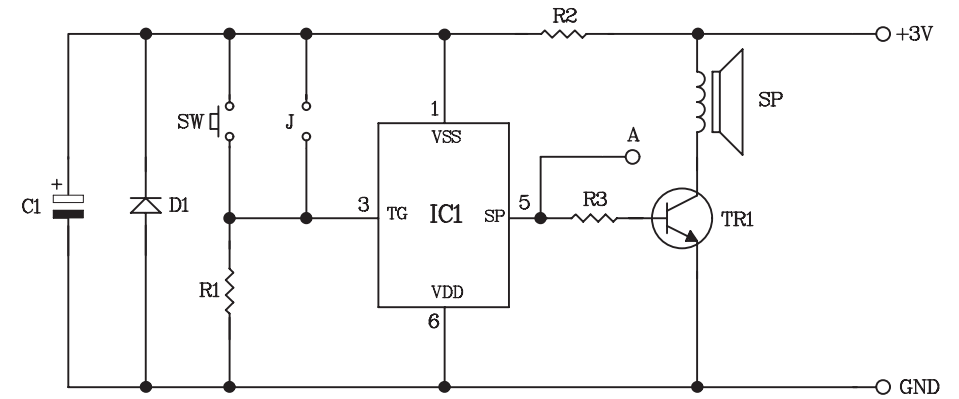
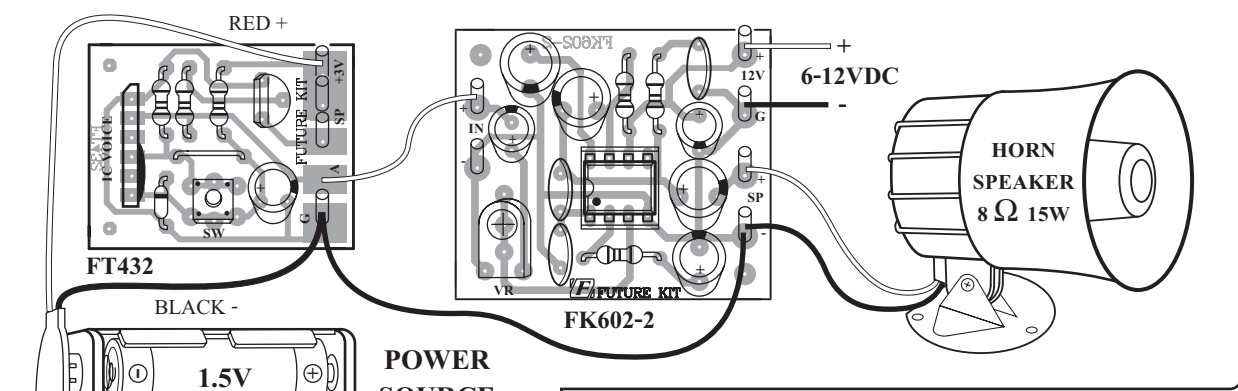
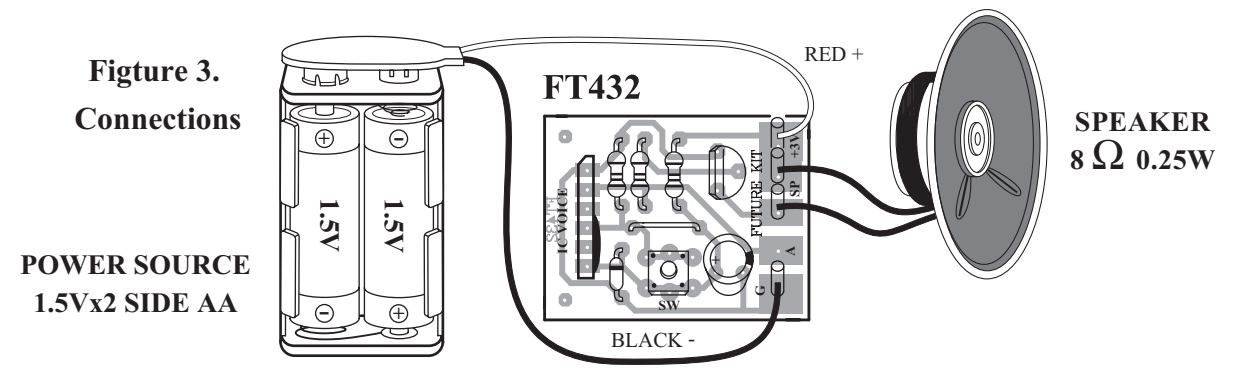


Figure 2. The voice IC digital circuit

Figure 3. Connections



NOTE:
FUTURE BOX FB17 is suitable for this kit.

NEW KIT SET **NEW**

CODE FK	DESCRIPTION	POWER
167	FIREFLY LIGHT (NIGHT ACTIVATE)	3VDC
275	THREE TRAIN SOUNDS (IC DIGITAL)	3VDC
276	OWL VOICE (IC DIGITAL)	3VDC
326	DUAL STATION INTERCOM&DOOR BELL (WITH 2 SPEAKER)	6-12VDC
436	UHF REMOTE CONTROL 1 CH.	TX. 9VDC RX. 12VDC
673	MINI POWER AMP 1+1W. STEREO	3-12VDC